

# Environmental support and entrepreneurial intentions: Exploring the mediating role of attitude and behavioural control and moderating effect of family background

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## ABSTRACT

**Objective:** The objective of the article is to investigate the relationship between environmental support and entrepreneurial intention, as well as the mediating and moderating effects involved.

**Research Design & Methods:** A web-based survey was conducted among a sample of 612 students from institutions of higher education in Spain and Poland. Structural equation modelling (SEM) was used to evaluate the conceptual framework and hypotheses.

**Findings:** The findings revealed a positive impact of environmental support (ENSUP) on attitude, behavioural control, and intentions. Furthermore, the research reveals that attitude and behavioural control act as mediating factors in the relationship between ENSUP and intentions. The research showed that environmental support significantly predicted attitudes and intentions among Spanish students but not Poles. Moreover, the influence of support on perceived behavioural control was greater for individuals from non-entrepreneurial backgrounds compared to those with entrepreneurial backgrounds. Lastly, the influence of a person's attitude towards entrepreneurship on their level of entrepreneurial intentions was stronger in families with entrepreneurship backgrounds compared to families without such a history.

**Implications & Recommendations:** The practical implications of this research extend to universities and policymakers, providing recommendations for supporting young entrepreneurs and their networks.

**Contribution & Value Added:** This article contributes to the existing entrepreneurship literature by enhancing the understanding of the connection between environmental support and intentions, the mediating role of attitude and behavioural control, and the moderating effect of family background.

**Article type:** research article

**Keywords:** environmental support; attitude; perceived behavioural control/entrepreneurial self-efficacy; Spain; Poland

**JEL codes:** I23, L26

Received: 9 August 2023

Revised: 31 October 2023

Accepted: 14 November 2023

## Suggested citation:

Amofah, K., Gameli Dziwornu, M., Rachwał, T., Saladrígues, R., & Agyarko, F.F. (2024). Environmental support and entrepreneurial intentions: Exploring the mediating role of attitude and behavioural control and moderating effect of family background. *Entrepreneurial Business and Economics Review*, 12(1), 195-213. <https://doi.org/10.15678/EBER.2023.120111>

## INTRODUCTION

Entrepreneurs are positively influenced by a robust business environment, while they are likely to be adversely affected by a weak one (Davidsson & Henrekson, 2002; Van Stel & Storey, 2004). Consequently, those who perceive regulatory organizations or supportive environments as beneficial are more inclined to initiate their businesses. Del Brío González *et al.* (2022) assert that students' intentions to become entrepreneurs are significantly and positively affected by environmental awareness. The extent of environmental support can have a substantial impact on entrepreneurial intention (EIs). This support may

manifest in various forms, such as resource accessibility, available financing, supportive government policies, favourable cultural attitudes, and well-established entrepreneurial networks (Iershova *et al.*, 2022).

Previous studies predominantly utilize data from the Global Entrepreneurship Monitor (GEM) to explore how institutions influence EI. However, due to data limitations, these studies provide only limited insights into entrepreneurs' goals and personal motivations for starting new businesses (Cinar *et al.*, 2018). Though data obtained from secondary sources has been identified as valid, they do not always provide precise information (Aragon-Mendoza *et al.*, 2016). Consequently, it is crucial to utilize primary data sources and conduct comprehensive country-level investigations (Valdez & Richardson, 2013). Furthermore, the investigation of students' entrepreneurial intention is still in its nascent stages, marked by ongoing theoretical and conceptual advancements (Fayolle & Liñán, 2014; Liñán & Chen, 2009). Consequently, Fayolle and Liñán (2014) posited that a deeper understanding of entrepreneurial intention has the potential to enhance the development of more effective educational initiatives. In light of this, we utilized primary data to examine the relationship between environmental support and EI among Spanish and Polish students. Moreover, there is a limited understanding of how institutional dynamics interact with personal entrepreneurial motivations, particularly concerning the mediating roles played by micro-level variables (Mickiewicz *et al.*, 2021).

Despite the growing research on entrepreneurial aspirations, there is limited knowledge about how various aspects of institutions, such as environmental support, influence the development of individuals' EI (Chew, 2022). Therefore, in response to recommendations to examine individual-level mediating factors in the link between institutional support and intentions (Chew, 2022), this study investigates two European economies through the framework of the theory of planned behaviour.

Stabingis and Raupelienė (2023) conducted a study examining factors influencing students' intentions to start their businesses. They collected data from a total of 10 054 students in Estonia, Finland, Lithuania, Poland, and Sweden. The authors argue that students represent the most dynamic and motivated subset of youth. Therefore, identifying the factors impacting students' EI and the relative importance of each factor has significant relevance for multiple stakeholders – including the students themselves, institutions of higher education, labour market analysts, and policymakers (Stabingis & Raupelienė, 2023).

We excluded the subjective norm (SN) component from this study due to the conflicting, inconsistent, and inconclusive results. Contrary to numerous assertions in diverse global contexts, scholars observed that SNs do not hold a pivotal role in catalyzing EI in Poland (Wach & Bilan, 2023). Nawi *et al.* (2022) and Hoda *et al.* (2021) both found no significant relationship between SN and entrepreneurial intention. Similarly, in a combined sample of Indian and Saudi students, SN had no significant impact on EI (Hoda *et al.*, 2021). Kobylńska's study (2022) involving 330 Polish students also revealed that SNs do not significantly influence the intention for self-employment. These conclusions were supported by other authors (Steinbrink & Ströhle, 2023; Yasir *et al.*, 2023). Previous research by Barba-Sánchez *et al.* (2022) and Liñán and Chen (2009) showed that subjective norms have the least influence on EI among individuals in Spain. Anjum *et al.* (2022) conducted a study of factors impacting the EI of business students in Pakistan. They suggested exploring and comparing regions like Europe and countries including Austria, Belgium, Latvia, Spain and Sweden to gain deeper insights. Though Spain and Poland have similar public sector contributions to GDP, Spain tends to rank as more innovative than Poland across various criteria (Kobylńska & Vila-Biglieri, 2015). Stabingis and Raupelienė (2023) noted that limited international surveys on EI do exist. Many scholars agree that personal attitude and perceived behavioural control (PBC) are the predominant determinants. Moreover, Mbuya and Schachtebeck (2016) found that most researchers identify personal inclination and perceived ability as the two key factors influencing aspirations towards entrepreneurship and self-employment. Stabingis and Raupelienė (2023) further showed attitude and PBC exert the strongest influence on students' EI across the Baltic region regardless of nationality. As European Union members, Spain and Poland share comparable historical, cultural, economic and social backgrounds. Moreover, the theory of planned behaviour is an established model in entrepreneurship research, which may serve as a justification for understanding the similarities and differences between Poland and Spain in relation to EI.

Notwithstanding the burgeoning corpus of research on the subject, additional empirical explorations are crucial to elucidate the mediating role that individual motives play in the relationship be-

tween institutional support and entrepreneurial endeavours (Bağış *et al.*, 2023). This study contributes to the understanding of entrepreneurial intention in two ways: firstly, by examining the mediating effects of attitude and behavioural control on intention, and secondly, by exploring the interaction or moderating influence of family support on these relationships. The article comprises five sections: introduction, literature review, materials and methods, findings and discussions, and conclusion.

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### Entrepreneurial Intention and Theory of Planned Behaviour

Entrepreneurial intention refers to an individual's inclination, interest, or aspiration to engage in entrepreneurial behaviour or business formation (Thompson, 2009; Sabary *et al.*, 2023; Sabary & Ključnikov, 2023). It represents a deliberate mental state that guides actions towards planned entrepreneurial conduct (Bird, 1988; Le *et al.*, 2023; Duong, 2023). The theory of planned behaviour (TPB) is a widely used framework for modelling EI. This study empirically examined two TPB precursors – attitude and PBC – in relation to environmental support factors. Attitude towards entrepreneurship refers to how positively or negatively an individual views performing a specific behaviour (Miralles *et al.*, 2017; Bałandynowicz-Panfil *et al.*, 2023). Perceived behavioural control demonstrates the perceived ease or difficulty of carrying out a behaviour (Miralles *et al.*, 2017). Entrepreneurial intention can be understood as the cognitive mindset (Karimi *et al.*, 2016) that motivates an individual to pursue self-employment rather than traditional employment (Martínez-González *et al.*, 2019; Androniceanu & Georgescu, 2023; Androniceanu *et al.*, 2023).

The TPB is a psychological concept that establishes a connection between thoughts and actions. Ajzen (1991) argued that the intention to establish a new venture can be considered the best predictor for the actual venture creation. As per TPB, an individual's intentions and behaviours are shaped by their attitude, social norms, and perceived control over their actions (Ajzen, 1991). In TPB, Ajzen (1991) further elaborates that the propensity of an individual to engage in a specific activity is directly proportional to the likelihood of them executing it.

### Attitude Towards Entrepreneurship and Perceived Behavioural Control

Wach and Wojciechowski (2016) contend that students' attitude toward entrepreneurship (ATE) and their PBC shape their EI. However, their article focused on Polish universities. The correlation between attitude and intention, as well as PBC and intention, demonstrated a significant positive relationship (Steinbrink & Ströhle, 2023). The same is proved for the digital entrepreneurship intention of students (Alkhalaileh *et al.*, 2023). Entrepreneurial intention exhibits a positive correlation with an entrepreneur's PBC (Nguyen, 2020). This study contributes to the field by expanding upon the work of Nguyen (2020) by applying the research to diverse regions. Gubik (2021) contends that students who exhibit a more positive attitude are inclined to consider entrepreneurship as a viable career path. Furthermore, Gubik (2021) posits that students are more likely to exhibit an entrepreneurial mindset when they possess a robust sense of self-efficacy, as evidenced by the application of binary logistic regression analysis. Hamdani *et al.* (2023) affirm that self-efficacy significantly influences women's intentions to become entrepreneurs. The sustainable business startup intentions of university students in Punjab, Pakistan are influenced by attitudes and PBC (Dat & Hung, 2023). Yasir *et al.* (2023) further indicate that PBC and attitude positively impact intention. Wang *et al.* (2010) propose that self-efficacy positively affects intentions. Loan (2023) emphasizes that entrepreneurial self-efficacy strongly influences students' intentions to initiate their businesses. Mahmoud *et al.* (2023) argue that entrepreneurial self-efficacy positively affects intention. Urban and Ratsimanetrimanana (2019) report that PBC and attitude exert a favourable influence on intention among students in Madagascar. Martínez-González *et al.* (2019) posited that there are no significant discrepancies between the causal frameworks of Spain and Poland concerning the precursors of EI. Moreover, the authors underscored the significance of a unifying generational strategy on a global scale, which facilitates the implementation of policies aimed at fostering EI. Mamun *et al.* (2017) found that the EI of university students in Malaysia are

significantly positive, influenced by their attitudes towards entrepreneurship. Moreover, the intentions of women entrepreneurs are positively impacted by entrepreneurial attitudes (Jalil *et al.*, 2023). The plans to start a business among Malaysian university students are highly influenced by PBC (Mamun *et al.*, 2017). The study conducted by Barba-Sánchez *et al.* (2022) provides valuable insights into the factors that influence entrepreneurial intention among university students in Spain. Specifically, the research reveals that attitudes towards entrepreneurial behaviour and PBC are significant determinants of entrepreneurial intention. Noteworthy, the present study is cross-cultural in nature.

Based on the aforementioned arguments, we hypothesised:

- H1:** Entrepreneurial attitude positively impacts EI for both genders across Spain and Poland.
- H2:** Behavioural control positively impacts EI for both genders across Spain and Poland.

### Environmental Support

Inspired by the work of Dubey and Sahu (2022), we define environmental support as the various factors that assist with entrepreneurial ventures, either directly or indirectly. These factors include private associations, public support bodies, specialized training for young entrepreneurs, favourable loan terms, technical aid for business start-ups, and business centres (Domańska & Zajkowski, 2022). A growing body of scholarly research suggests that the institutional framework (Diaz Tautiva *et al.*, 2023), as defined by Estrin *et al.* (2013), plays a significant role in shaping entrepreneurial intention (Ilczuk *et al.*, 2023). In a study conducted in Malaysia, Mamun *et al.* (2017) observed that government funding significantly impacts university students' perceptions of behavioural control. The study further revealed that entrepreneurial development programs exert a substantial positive influence on the behavioural control perceptions among these students. Furthermore, Loan (2023) highlights the pivotal role of entrepreneurship-supporting policies in moulding students' intentions to embark on entrepreneurial ventures. The important role in this regard has a higher education and promoting entrepreneurship in university (Barrientos-Báez *et al.* 2022).

Hamdani *et al.* (2023) conducted a study examining the impact of various forms of support on EI among women business owners in the micro, small, and medium enterprises sector of the batik craft industry in West Java, Indonesia. The study surveyed 150 women business owners and found that material, practical, and emotional assistance did not significantly influence EI among women. While Hamdani *et al.* (2023) focused exclusively on women, we aimed to expand on their findings by investigating EI among both men and women in two countries, *i.e.* Spain and Poland. Chew (2022) argues that encouraging and advantageous government policies can significantly contribute to the successful launch and management of businesses, both for existing and aspiring entrepreneurs. Positive associations exist between the development of EI and favourable perceptions of regulatory agencies or environmental support (Chew, 2022).

Shahid *et al.* (2018), sampled 37 universities in Pakistan and revealed a positive correlation between environmental support and EI. In the Indian state of Chhattisgarh, environmental factors significantly influence engineering students' intentions to initiate their businesses (Dubey & Sahu, 2022). Elali and Al-Yacoub (2015) highlight the significant role of social networks in stimulating EI. However, they determined that the impact of both identifying opportunities and the availability of resources (environmental support) on the EI of individuals from Kuwait is not statistically significant. Unlike Elali and Al-Yacoub (2015), who used correlations and regression statistics to assess EI, this article uses the SEM approach. Wang *et al.* (2010) discovered that environmental variables, such as social networks and governmental support, indirectly affect the intention to start a business. Access to finance, as a form of environmental support, increases the likelihood of individuals starting their businesses (De Clercq *et al.*, 2013; Urban & Ratsimanetrimanana, 2019). Nguyen (2020) suggests that students' perceptions of their ability to manage entrepreneurial activities are greatly influenced by perceived environmental factors, and support positively affects PBC. Furthermore, the perception of entrepreneurial behavioural control has a positive correlation with financial accessibility (Nguyen, 2020).

Jalil *et al.* (2023) argue that social capital and psychological capital, as forms of environmental support, have a favourable impact on the intentions of women entrepreneurs. These results are aligned

with the findings on social capital overall influence on personal development and entrepreneurial success obtained by Mishchuk *et al.* (2023). According to Yasir *et al.* (2023), who gathered survey data from 418 students in Lahore and Faisalabad, Pakistan, environmental values, such as supportive cultural attitudes, positively affect attitudes and PBC. Yasir *et al.* (2023) also provide evidence demonstrating the positive effects of environmental values, like supportive cultural attitudes, on EI. Previous studies (*e.g.* Estrin *et al.*, 2013; Raza *et al.*, 2020; Stephan *et al.*, 2015) have shown the beneficial impact of supportive and helpful regulations on various aspects of entrepreneurship. However, these previous studies have employed the GEM cross-sectional panel dataset of various countries, whereas our investigation utilized primarily primary data. Environmental support has been found to positively influence EI among German, Russian, and American students, as observed by Engle *et al.* (2011). However, the generalizability of these findings was limited due to the sampling of only business students. To address this limitation, the present study used a more comprehensive and varied sample in terms of age, gender, program, and field of study, to uncover greater cross-country differences. For instance, Bağış *et al.* (2023) suggested that future investigations should utilize broader cross-national samples and provide a nuanced explanation of the impact of institutions on entrepreneurial aspirations. Lemire and Rouillard (2005) examined 132 Canadian civil servants using bivariate analysis and found a strong relationship between psychological factors, environmental support, and behavioural control. Moreover, Yasir *et al.* (2023) suggested that comparing the perspectives of university students on intentions across various regions of the globe has the potential to yield more comprehensive insights.

In light of these arguments, we hypothesised:

**H3:** Environmental support positively impacts the attitude towards entrepreneurship.

**H4:** Environmental support positively impacts perceived behavioural control.

**H5:** Environmental support positively impacts entrepreneurial intention.

#### **Mediation Effect of Attitude and Perceived Behavioural Control Between Environmental Support and Entrepreneurial Intention**

In a recent study published by Villanueva-Flores *et al.* (2023), the authors examined the relationship between psychological capital (environmental support) and entrepreneurial intention among 632 students at the University of Cadiz in Spain. Their findings revealed the presence of a mediating function performed by PBC and subjective norms in this association. However, the present study aims to extend this research by focusing specifically on the mediating role of attitude and PBC in shaping EI. Mamun *et al.* (2017) posit that the impact of support (governmental assistance, entrepreneurial development programs, etc.) on the entrepreneurial inclination of Malaysian university students is intermediated by PBC. Hamdani *et al.* (2023) as well as Rodríguez Llor and Muñoz-Fernández (2022) suggest that self-efficacy acts as an intermediary in the connection between support and women's aspirations to initiate their businesses. Bağış *et al.* (2023) conducted research investigating, among other factors, the influence of institutions on individuals' entrepreneurial intent and how personal motivations mediate this relationship. Employing quantitative research methods, they analyzed a sample of 678 questionnaires from Kosovo and Turkey. The findings demonstrate a partial mediating relationship between normative and cultural-cognitive institutions (support) and EI, as well as a complete mediation between personal attitudes and PBC. Nguyen (2020) states that the relationship between financial accessibility (environmental support) and entrepreneurial intent is mediated by the perception of behavioural control. Moreover, the entrepreneurial attitude was found to have a partial mediating role in the motivations or intentions of women entrepreneurs with respect to social capital (Jalil *et al.*, 2023). Furthermore, the influential connection between psychological capital and the EI of women was discovered to be partially mediated by entrepreneurial attitudes (Jalil *et al.*, 2023). A comprehensive review of the existing scholarship has revealed a dearth of empirical evidence about the intermediate role of PBC and ATE in the relationship between environmental support and EI. This study aimed to address this gap in the current body of knowledge and provide empirical validation of the intermediate influence of PBC and ATE in the connection between environmental support and EI among university students, with a particular focus on the Spanish and Polish contexts. Consequently, we formulated the subsequent hypothesis:

- H6:** Irrespective of the country, ATE and PBC mediate the relationship between environmental support and intentions.

### **The Moderating Effect of Entrepreneurial Family Background on Attitude and Perceived Behavioural Control**

Family support and an ancestral connection to the family enterprise emerge as crucial elements in the realm of entrepreneurship and the establishment of new businesses (Gubik & Farkas, 2016). This arises from the fact that students who have parents with entrepreneurial backgrounds often develop entrepreneurial skills through their interactions with their parents and exposure to their business endeavours. Research conducted by Nguyen (2017) and Ranwala (2016) has consistently shown a strong correlation between the entrepreneurial backgrounds of families and the entrepreneurial intent displayed by their offspring. Specifically, exposure to a family business environment has been found to have a positive impact on students' aspirations to pursue entrepreneurship (Shahid *et al.*, 2018). Furthermore, Engle *et al.* (2011) discovered that in both German and U.S. samples, students who held a more positive perception of their parents' entrepreneurial background were more likely to start their firm compared to those who held a less positive perception. However, this relationship was not observed in the Russian sample. The inclination of students to pursue entrepreneurial endeavours gains strength when they have family members who epitomize entrepreneurship (Del Brío González *et al.*, 2022). Gubik (2021) contends that the impact of familial entrepreneurial experiences on students' career choices holds substantial weight. The connection between entrepreneurial self-assurance and EI is influenced by one's family background (FB) (Mahmoud *et al.*, 2023).

From the foregoing, we hypothesize that:

- H7:** Family background moderates the positive relationship between entrepreneurial support and the antecedents of the TPB (ATE and PBC).
- H8:** Family background moderates the positive relationship between the antecedents of the TPB (ATE and PBC and entrepreneurial intention).

In light of the preceding review of literature, the following conceptual framework (Figure 1) explains the relationship between environmental support and intentions by examining the mediating and moderating effects.

## **RESEARCH METHODOLOGY**

### **Variables/research instrument**

The research employed previously validated instruments to assess the key variables of the study. These instruments were developed by Liñán and Chen (2006, 2009), Gubik (2021), and Liñán *et al.* (2013).

### **Measure**

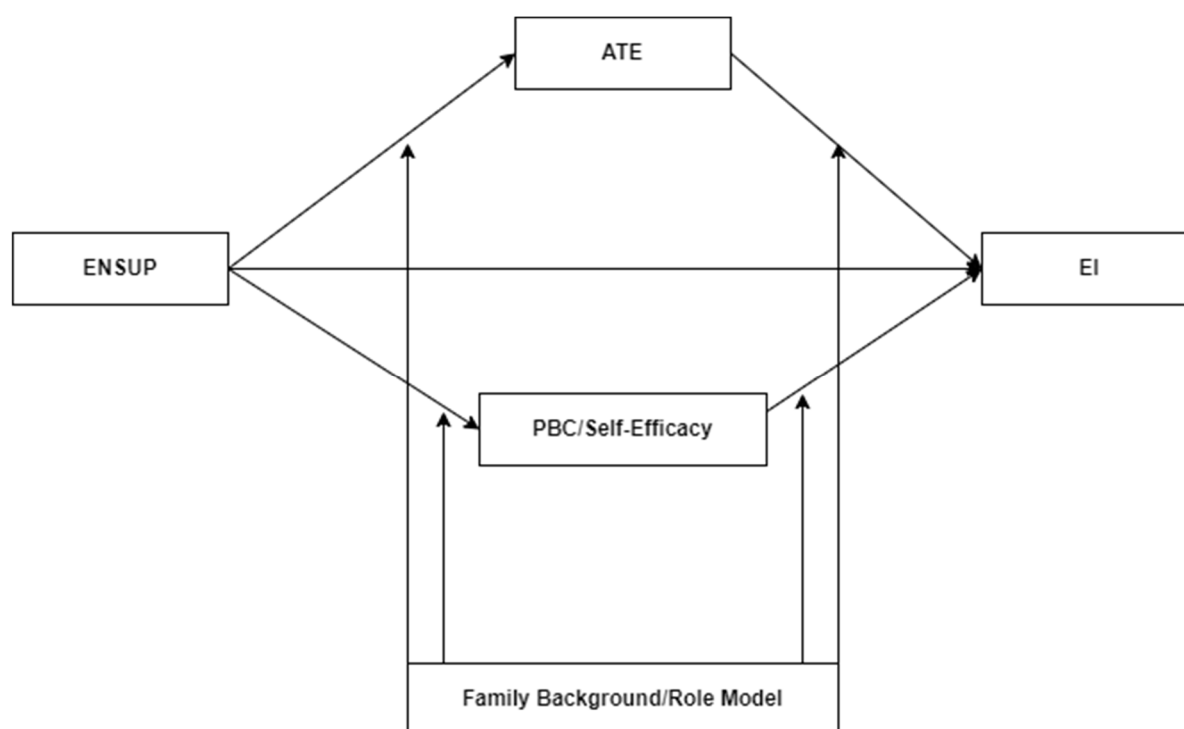
We measured all factors using a 5-point Likert scale, with 1 indicating strong disagreement and 5 indicating strong agreement, unless otherwise stated. We measured the dependent variable, entrepreneurial intention using a six-item questionnaire developed by Liñán and Chen (2006). Sample items include statements such as 'I am willing to do whatever it takes to become an entrepreneur,' 'My professional aspiration is to become an entrepreneur,' and 'I am determined to establish a company in the future.' We assessed the questionnaire's reliability using Cronbach's alpha coefficient, which was reported to be 0.95 in the original study by Liñán and Chen and 0.966 in the present study.

We used the following independent variables:

### **Attitude**

In this study, we evaluated the students' attitudes toward entrepreneurship using the methodology established by Liñán and Chen (2009). The assessment included a series of statements such as 'To me, being an entrepreneur has more benefits than drawbacks,' 'I find the prospect of a career as an entrepreneur appealing,' 'Given the opportunity and resources, I would pursue entrepreneurship,'

'I believe that being an entrepreneur would bring me great satisfaction,' and 'Of all the options available to me, I would prefer to become an entrepreneur.' The reliability of this measurement by Liñán and Chen (2009) using Cronbach's Alpha, was reported to be 0.955. In our study, Cronbach's alpha was found to be 0.860 as indicated in Table 2.



**Figure 1. Conceptual framework**

Source: own elaboration.

### Perceived Behavioural Control

In terms of PBC, we employed the scales developed by Liñán and Chen (2009). Examples of items on the scale include statements such as 'I am equipped to launch a viable business,' 'If I were to start a business, my chances of success would be high,' and 'I possess the knowledge necessary to execute an entrepreneurial venture.'

### Entrepreneurial Family Background

This study evaluated the students' entrepreneurial FB using the methodology established by Gubik (2021), who introduced a variable called 'has/does not have a family business background.'

### Entrepreneurial Support

In terms of entrepreneurial support, the study assessed environmental support using the approach developed by Liñán *et al.* (2013). Examples of items on the scale include 'private associations,' 'public support bodies,' and 'specific training for young entrepreneurs.'

### Sampling and Data Collection

The information was gathered via an online survey conducted using the Google Docs application, involving students from two universities located in Spain and Poland. Spain and Poland are both part of the broader European economic landscape, yet possess distinct geographical and demographic profiles. However, Poland has been converging with Spain across various economic indicators. For example, when adjusted for purchasing power parity, Poland's GDP per capita is now at a similar level to

Spain's.<sup>1</sup> Stabingis and Raupelienė (2023) suggest that understanding the factors that influence EI within nations with similar mentalities can prove beneficial in enhancing research initiatives, fostering the development of entrepreneurship-friendly infrastructure, establishing business incubators, and formulating policies that support start-ups.

The students were given the choice to participate in the survey voluntarily, with the understanding that they were not obligated to complete the questionnaire. The respondents' personal information was kept strictly confidential and used solely for research purposes. Table 1 presents the demographic characteristics of the respondents. The majority (67.4%) of survey respondents were women. The most common age group was 20-24 years old. First-year students made up the largest proportion of respondents. The field of study distribution was relatively balanced across categories. The majority of respondents were from Spain.

**Table 1. Demographic characteristics of respondents**

Variables	Characteristics	Frequency (%)
Gender	Male	199 (32.5%)
	Female	413 (67.5%)
Age	Under 20 years	98 (16.0%)
	20-24 years	299 (48.9%)
	25-29 years	101 (16.5%)
	30-34 years	65 (10.6%)
	35 years and over	49 (8.0%)
Year of study	1st year	202 (33.0%)
	2nd year	109 (17.8%)
	3rd year	107 (17.5%)
	4th year	155 (25.3%)
	5th year	39 (6.3%)
Fields of study	Economics and management	309 (50.5%)
	Engineering and others (exact and natural sciences)	303 (49.5%)
Country	Spain	369 (60.3%)
	Poland	243 (39.7%)
Entrepreneurial family background	Yes	206 (33.7%)
	No	406 (66.3%)

Source: own study based on survey, 2021.

## RESULTS AND DISCUSSION

### The Measurement Model

We examined the evaluation model to verify the internal consistency reliability, convergent validity, and discriminant validity of the constructs employed in this research. Internal consistency reliability gauges the extent to which the items accurately represent the underlying constructs (Hair *et al.*, 2014a). We used composite reliability to evaluate internal consistency (Hair *et al.*, 2017). If the composite reliability of each construct exceeded the threshold value of 0.7, the measurement model was considered satisfactory (Richter *et al.*, 2016). As shown in Table 2, only items that met the cut-off point were included in further analysis. Discriminant validity measures the extent to which a construct is distinct from other constructs in the model (Hair *et al.*, 2017). We used two methods to assess discriminant validity (Table 3). Initially, we utilized the Fornell-Larcker criterion (1981), which entails comparing the correlation between constructs with the square root of the average variance extracted (AVE) for each construct. According to Fornell and Larcker (1981), discriminant validity is achieved when the square root of the AVE for each latent variable surpasses the correlation value for that construct. As

<sup>1</sup> According to Eurostat (<https://ec.europa.eu/eurostat/databrowser/view/tec00114/default/table>) and International Monetary Fund (<https://www.imf.org/external/datamapper/PPP@WEO/POL/ESP>) data for 2022.



demonstrated in Table 3, the results suggest satisfactory discriminant validity, as the square root values of the AVE exceed the correlation values across both rows and columns (Fornell & Larcker, 1981).

### The Structural Model

We evaluated the structural model using the PLS method and the bootstrap resampling technique (Henseler *et al.*, 2009), with 5000 iterations to ensure stability (Hair *et al.*, 2014). This process allows for the testing of hypotheses and the examination of relationships between constructs using established procedures. Table 4 presents the results of our analysis. Table 6 also shows the findings of the moderation analysis. It indicates that FB has a moderating effect on the relationship between support and intention. Table 5 displays the variance explained (R square) in the dependent constructs and the path coefficients for the model; attitude (91.1%), intention (86.1%), and behavioural control (26.5%), which are promising when compared to previous studies.

**Table 2. Full-sample measurement model (reliability indicators)/composites and measures**

Code	Variables	Loadings	Composite Reliability	AVE	Cronbach's Alpha	rho_A
<b>ATE</b>	<b>Attitude towards entrepreneurship (Author)</b>		<b>0.934</b>	<b>0.876</b>	<b>0.860</b>	<b>0.878</b>
ATE2	A career as an entrepreneur is attractive for me	<b>0.947</b>				
ATE4	Being an entrepreneur would entail great satisfaction for me	<b>0.925</b>				
<b>EI</b>	<b>Entrepreneurial intention</b>		<b>0.978</b>	<b>0.936</b>	<b>0.966</b>	<b>0.966</b>
EI2	My professional goal is to be an entrepreneur	<b>0.962</b>				
EI4	I am determined to create a firm in the future	<b>0.970</b>				
EI6	I have got the firm intention to start a company someday	<b>0.970</b>				
<b>PBC</b>	<b>Perceived behavioural control</b>		<b>0.951</b>	<b>0.906</b>	<b>0.897</b>	<b>0.897</b>
PBC2	I am prepared to start a viable firm	<b>0.951</b>				
PBC5	If I tried to start a firm, I would have a high probability of succeeding	<b>0.953</b>				
<b>ENSUP</b>	<b>Environmental support</b>		<b>0.949</b>	<b>0.758</b>	<b>0.936</b>	<b>0.937</b>
ENSUP1	Private associations	<b>0.847</b>				
ENSUP2	Public support bodies	<b>0.842</b>				
ENSUP3	Specific training for young entrepreneurs	<b>0.886</b>				
ENSUP4	Loans in especially favourable terms	<b>0.872</b>				
ENSUP5	Technical aid for business start-ups	<b>0.900</b>				
ENSUP6	Business centres	<b>0.875</b>				

Source: own study based on survey, 2021.

**Table 3. Discriminant validity**

Items	ATE	EI	ENSUP	PBC
<b>ATE</b>	0.936			
<b>EI</b>	0.891	0.968		
<b>ENSUP</b>	0.437	0.492	0.871	
<b>PBC</b>	0.767	0.850	0.515	0.952

Source: own study based on survey, 2021.

**Table 4. Predictive measure**

Items	R Square
<b>ATE</b>	0.191
<b>EI</b>	0.861
<b>PBC</b>	0.265

Source: own study based on survey, 2021.

The research results confirmed hypotheses 1-5, as shown in Table 4. These results are in line with previous research. According to TPB (Mamun *et al.*, 2017), individuals who perceive a supportive and favourable entrepreneurship Support Policy – such as easy access to capital, information,

and infrastructure – are more likely to engage in entrepreneurial decision-making (Huang *et al.*, 2021). According to Martínez-González *et al.* (2019), self-efficacy positively impacts entrepreneurial intention among young adults in both Spain and Poland. Entrepreneurship support policies, as described by Mamun *et al.* (2017), encompass a range of measures that facilitate the establishment of a business, including the creation of a favourable business environment (Turker & Selcuk, 2009) and the provision of training for new businesses (Gasse & Tremblay, 2011). Entrepreneurship support policies provide infrastructure, financial assistance, access to business networks, and trade information to facilitate business launches (Huang *et al.*, 2021).

Hypothesis (H6) aims to determine whether the effect of ENSUP or support on EI is mediated by changes in both ATE and PBC. As shown in Table 4, the direct effect of ENSUP on EI was found to be partially statistically significant. This is consistent with Nguyen (2020), who argued that the relationship between support and entrepreneurial intention is mediated by PBC. The indirect effect of ENSUP on EI with ATE as the mediating variable was found to be statistically significant. The same result was obtained when PBC was used as the mediating variable for the indirect effect of ENSUP on EI. Thus, based on our data, it can be concluded that both ATE and PBC fully mediate the relationship between ENSUP and EI. This means that the impact of ENSUP on EI is completely mediated by both ATE and PBC. However, partial mediation was reported in Jalil *et al.* (2023)'s study. Our findings align with the study by Bağış *et al.* (2023), which suggests that individual motives of ATE and PBC act as intervening variables in the relationship between environmental support, including government backing, policies, financial aid, and EI. These results are also consistent with prior research (Ofstedal *et al.*, 2018; Schlaegel *et al.*, 2013; Schlaegel & Koenig, 2014). Notably, Barba-Sánchez *et al.* (2022) have found that the perception of entrepreneurial behaviour plays a critical role within our model, as it directly influences entrepreneurial intention and serves as a mediator for the relationship between other variables associated with this intention.

Concerning Hypothesis 7 (H7: FB moderates the positive relationship between ENSUP and the antecedents of TPB (ATE and PBC)), Table 6 shows that the interaction effect of FB on the relationship between ATE and EI is statistically significant at the 5% level, with an estimate of 0.171. This suggests that a family's entrepreneurial background positively moderates the relationship between an individual's attitude towards entrepreneurship and their EI. In other words, a family's history of entrepreneurship strengthens the link between an individual's attitude and their EI. Rachmawan *et al.* (2015) posited that there exists a significant disparity in EI between students lacking experience in entrepreneurship and those possessing familiarity with entrepreneurial endeavours. Moreover, it is asserted that families who expose their offspring to their business ventures at a young age and actively involve them in the operations of said enterprises foster potent entrepreneurial bonds (Bandura, 1977; Carr & Sequeira, 2007). According to Escolar-Illamazares *et al.* (2019), few Spanish young individuals demonstrated a noteworthy level of entrepreneurial interest and among those who did, the majority were males who hailed from a lineage of entrepreneurial parents. Figure 2 provides a visual representation of how a family's entrepreneurial background moderates the relationship between ATE and EI. The slope analysis shows that CPSE (entrepreneurial FB) at one and FB at zero represent families with and without a history of entrepreneurship, respectively. The left-hand side of Figure 2 depicts the moderating effect of a family's entrepreneurial background on the relationship between ATE and EI. The slope for families with an entrepreneurial background is steeper than that for families without such a history. This indicates that the influence of an individual's attitude towards entrepreneurship on their level of EI is stronger in families with an entrepreneurial background compared to those without such a history. According to del Brío González *et al.* (2022), having family members who are entrepreneurs reinforces students' desire to pursue entrepreneurship. On the other hand, the estimate for PBC recorded a p-value of 0.927, which is greater than the threshold value of 0.05, indicating that entrepreneurial FB does not have a statistically significant moderating effect on the relationship between PBC and EI. This is evident in the diagram on the right-hand side of Figure 2, which shows that both the red and green lines are parallel, indicating that a family's entrepreneurial background does not influence the relationship between an individual's PBC and their level of EI. However, a study by Mahmoud *et al.* (2023) found that FB does moderate the relationship between entrepreneurial self-efficacy and EI.

Hypothesis 8 aims to investigate the moderating effect of a family's entrepreneurial background on the relationship between support and the antecedents of TPB (ATE and PBC). Noteworthy, the interaction effect of a family's entrepreneurial background on the relationship between ENSUP and ATE is not statistically significant, indicating that FB does not moderate the relationship between support and attitude. However, the interaction effect of a family's entrepreneurial background on the relationship between ENSUP and PBC is statistically significant at the 1% level, with an estimate of -0.278. This suggests that families without an entrepreneurial background have a stronger moderating effect on the relationship between ENSUP and PBC compared to families with an entrepreneurial background. The diagram on the right-hand side of Figure 3 provides a visual representation of the moderating effect of FB on the relationship between support and PBC. The interaction plot shows a steeper gradient for families without an entrepreneurial background compared to families with a history of entrepreneurship. This diagram also indicates that the impact of support on PBC is greater in families without an entrepreneurial background compared to those with a history of entrepreneurship. Evidence suggests that family support can promote EI and serve as a primary source of support in unfavourable business environments (Manolova *et al.*, 2019). Evidence indicates that family support can foster EI and act as a primary pillar of support in challenging business climates (Manolova *et al.*, 2019). Conversely, certain studies have discovered that family support can potentially have an adverse effect on a young individual's decision to initiate a business. Young entrepreneurs might exhibit reluctance to accept financial aid from their families due to the potential risks it could pose to both the venture and the family's future (Welsh *et al.*, 2018).

**Table 5. Structural model results**

Construct	Complete	HYPOTHESIS	Spain	Poland
ATE → EI	0.581***	Accepted	0.595***	0.544***
ENSUP → ATE	0.437***	Accepted	0.392***	-0.201
ENSUP → PBC	0.515***	Accepted	0.141***	0.026
ENSUP → EI	0.04*	Accepted	0.559***	-0.162
PBC → EI	0.404***	Accepted	0.243***	0.338***
ENSUP → ATE → EI	0.254***	Accepted	0.233***	-0.109
ENSUP → PBC → EI	0.208***	Accepted	0.136***	-0.055

Note: Significance codes \*\*\* $P < 0.001$ , \*\* $P < 0.01$ , \* $P < 0.05$ .

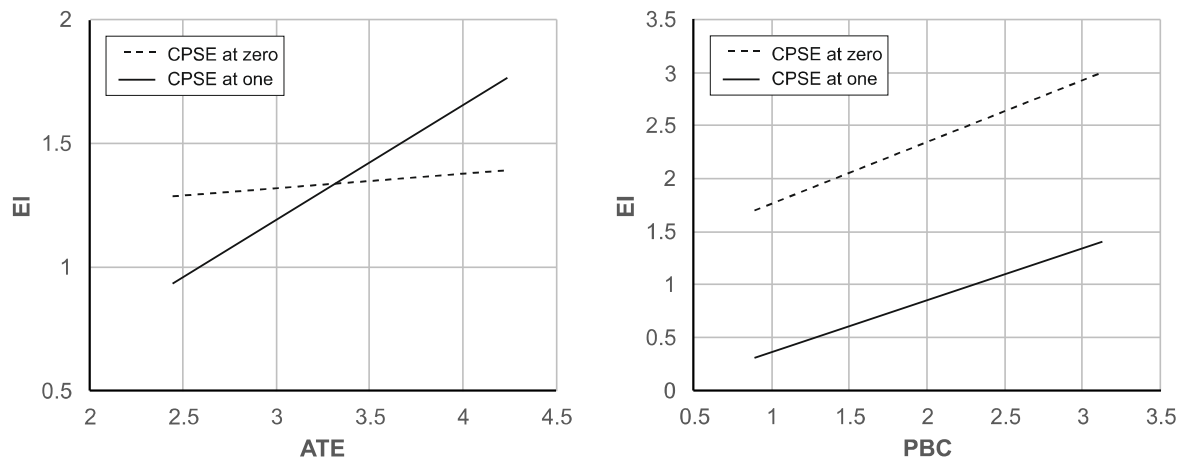
Source: own study based on survey, 2021.

Although the path coefficients recorded for the complete sample were all statistically significant, the majority of the path coefficients were not statistically significant at 5% for Poland. Thus, environmental support had no significant effect on the attitude towards entrepreneurship in Poland (Table 5). Again, environmental support had no significant effect on PBC and EI amongst the people in Poland. However, the impact of PBC on EI was greater amongst the residents in Poland as compared to those in Spain.

**Table 6. Interaction effect of FB on the relationship between ATE and EI**

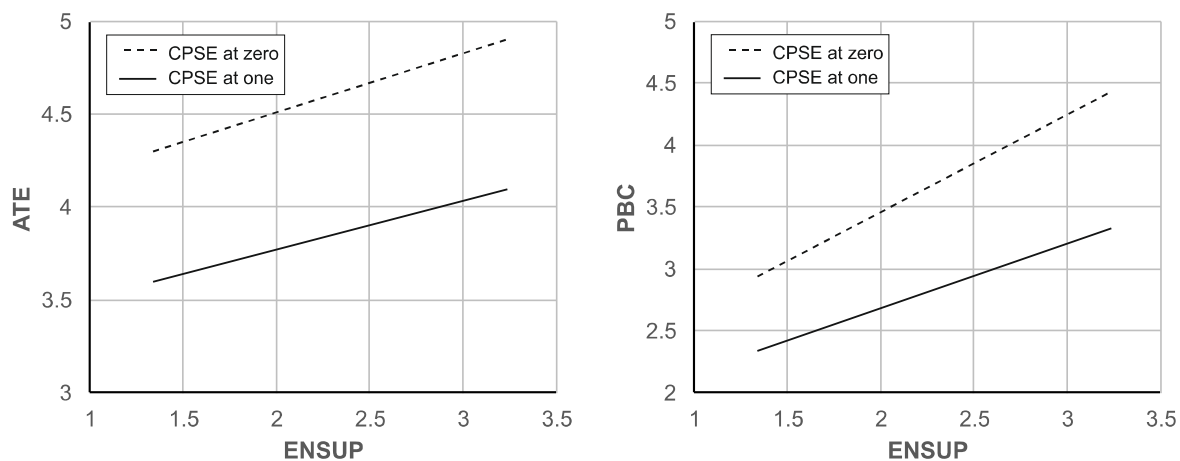
INTERACTION	STANDARDISED ESTIMATES	STANDARD ERROR	P-VALUE
CPSE (FB) x ATE → EI	0.171	0.075	0.028
CPSE (FB) x PBC → EI	-0.011	0.068	0.927
CPSE (FB) x ENSUP → ATE	-0.049	0.076	0.500
CPSE (FB) x ENSUP → PBC	-0.278	0.085	0.001

Source: own study based on survey, 2021.



**Figure 2. Interaction plot of family's entrepreneurship background on the relationship between entrepreneurial intention and TPB**

Source: own elaboration.



**Figure 3. Interaction plot of family's entrepreneurship background on the relationship between ENSUP and TPB**

Source: own elaboration.

## CONCLUSIONS

We aimed to investigate the relationship between environmental support and entrepreneurial intention while examining the mediating and moderating effects in the process. This article makes significant theoretical contributions to the entrepreneurship literature by deepening our understanding of the mediating and moderating effects of the theory of planned behaviour in an international context. The results demonstrate that while environmental support does not fully determine entrepreneurial intention, it significantly impacts attitude and behavioural control. While environmental support did not significantly impact perceived control for either group, this factor more strongly shaped EI in Poland versus Spain. Thus, differences emerged between countries regarding how external conditions shape entrepreneurial cognitive drivers. The findings imply external support may play a more limited role in motivating Polish youth towards entrepreneurship compared to their Spanish counterparts. This research has practical implications for both academics and policymakers. Firstly, it provides insights into the environmental factors that can foster entrepreneurial inclinations. The findings suggest that supportive environmental factors can encourage and promote EI. Therefore, policymakers should give greater consideration to environmental support systems, such as business centres, technical assistance for business start-ups, and specialized training for young entrepreneurs, which can foster entrepreneurial inclination

in Spain and Poland. As a result, politicians and related organizations seeking to promote entrepreneurial ambitions can establish support mechanisms that align favourably with the EI of these two countries. The theoretical implications for the governments of Spain and Poland, as well as other private institutions, include the development of support systems for individuals intending to start their businesses. This research can be useful in determining the support needs of those with EI for economic viability. However, we acknowledge that this study may have several limitations that could be addressed in future research. Firstly, it is important to recognize that intentions do not necessarily culminate in behaviour, thus, future investigations may concentrate on the behavioural aspect. Secondly, there is a need to expand the scope of research to include a greater number of European countries, as well as other nations, to enhance the generalizability of the findings. Future studies may employ qualitative methods, which may provide a more comprehensive understanding of the topic.

## REFERENCES

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behaviour and Human Decision Processes*, 50(2), 179-211.
- Androniceanu, A., & Georgescu, I. (2023). Digital competences and human development: a canonical correlation analysis in Romania. *Polish Journal of Management Studies*, 28(1), 43-61. <https://doi.org/10.17512/pjms.2023.28.1.03>
- Androniceanu, A., Sabie, O.M., Georgescu, I., & Drugău-Constantin, A.L. (2023). Main factors and causes that are influencing the digital competences of human resources. *Administratie si Management Public*, 41, 26-53. <https://doi.org/10.24818/amp/2023.41-02>
- Alkhalileh, M.Y., Kovács, S., & Katonáné Kovács, J. (2023). Factors influencing digital entrepreneurship intention among undergraduate business students in Jordan. *Human Technology*, 19(3), 400-418. <https://doi.org/10.14254/1795-6889.2023.19-3.5>
- Anjum, T., Amoozegar, A., Farrukh, M., & Heidler, P. (2022). Entrepreneurial intentions among business students: the mediating role of attitude and the moderating role of university support. *Education and Training*, 65(4), 587-606. <https://doi.org/10.1108/ET-01-2021-0020>
- Aragon-Mendoza, J., del Val, M.P., & Roig-Dobón, S. (2016). The influence of institutions development in venture creation decision: A cognitive view. *Journal of Business Research*, 69(11), 4941-4946. <https://doi.org/10.1016/j.jbusres.2016.04.056>
- Bağış, M., Altınay, L., Kryeziu, L., Kurutkan, M.N., & Karaca, V. (2023). Institutional and individual determinants of entrepreneurial intentions: evidence from developing and transition economies. *Review of Managerial Science*, 1-30. <https://doi.org/10.1007/s11846-023-00626-z>
- Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*, 84(2), 191-215. <https://doi.org/10.1007/978-3-319-75361-4>
- Barba-Sánchez, V., Mitre-Aranda, M., & Brío-González, J. del. (2022). The entrepreneurial intention of university students: An environmental perspective. *European Research on Management and Business Economics*, 28(2), 100184. <https://doi.org/10.1016/j.iedeen.2021.100184>
- Bałandynowicz-Panfil, K., Łosiewicz, M., & Czechowska-Derkacz, B. (2023). Entrepreneurial attitudes as driving forces in times of European uncertainty: The role of entrepreneurial education. *International Entrepreneurship Review*, 9(4), 37-57. <https://doi.org/10.15678/IER.2023.0904.03>
- Barrientos-Báez, A., Martínez-González, J.A., García-Rodríguez, F.J., & Gómez-Galán, J. (2022). Entrepreneurial competence perceived by university students: Quantitative and descriptive analysis. *Journal of International Studies*, 15(2), 40-49. <https://doi.org/10.14254/2071-8330.2022/15-2/3>
- Bird, B. (1988). Implementing Entrepreneurial Ideas: The Case for Intention. *Academy of Management Review*, 13(3), 442-453. <https://doi.org/10.5465/amr.1988.4306970>
- Carr, J.C., & Sequeira, J.M. (2007). Prior family business exposure as intergenerational influence and entrepreneurial intent: A Theory of Planned Behavior approach. *Journal of Business Research*, 60(10), 1090-1098. <https://doi.org/10.1016/j.jbusres.2006.12.016>
- Chew, T.C. (2022). The Development of Entrepreneurial Intentions: An Institutional Perspective. *Lecture Notes in Networks and Systems*, 486, 983-998. [https://doi.org/10.1007/978-3-031-08087-6\\_68](https://doi.org/10.1007/978-3-031-08087-6_68)

- Cinar, E.M., Du, Y., & Hienkel, T. (2018). Chinese entrepreneurship attributes: a comparative GEM data analysis. *Journal of Entrepreneurship in Emerging Economies*, 10(2), 217-248. <https://doi.org/10.1108/JEEE-03-2017-0016>
- Dat, P.T., & Hung, H.T. (2023). Determinants of Sustainable Development: A Case Study in Vietnam. *Montenegrin Journal of Economics*, 19(2), 97-107. <https://doi.org/10.14254/1800-5845/2023.19-2.8>
- Davidsson, P., & Henrekson, M. (2002). Determinants of the prevalence of start-ups and high-growth firms. *Small Business Economics*, 19(2), 81-104. <https://doi.org/10.1023/A:1016264116508>
- De Clercq, D., Lim, D.S.K., & Oh, C.H. (2013). Individual-level resources and new business activity: The contingent role of institutional context. *Entrepreneurship: Theory and Practice*, 37(2), 303-330. <https://doi.org/10.1111/j.1540-6520.2011.00470.x>
- del Brío González, J.Á., Mitre Aranda, M., & Barba-Sánchez, V. (2022). Environmental awareness and the entrepreneurial intention in university students: Direct and mediating effects. *The International Journal of Management Education*, 20(3), 100719. <https://doi.org/10.1016/j.ijme.2022.100719>
- Diaz Tautiva, J.A., Salvaj Carrera, E., Vásquez-Lavín, F., & Ponce Oliva, R.D. (2023). Understanding the role of institutions and economic context on entrepreneurial value creation choice. *Oeconomia Copernicana*, 14(2), 405-447. <https://doi.org/10.24136/oc.2023.011>
- Domańska, A., & Zajkowski, R. (2022). Barriers to gaining support: A prospect of entrepreneurial activity of family and non-family firms in Poland. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 17(1), 191-224. <https://doi.org/10.24136/eq.2022.008>
- Dubey, P., & Sahu, K.K. (2022). Examining the effects of demographic, social and environmental factors on entrepreneurial intention. *Management Matters*, 19(1), 91-108. <https://doi.org/10.1108/manm-12-2021-0006>
- Duong, C.D. (2023). A moderated mediation model of perceived barriers, entrepreneurial self-efficacy, intentions, and behaviors: A social cognitive career theory perspective. *Oeconomia Copernicana*, 14(1), 355-388. <https://doi.org/10.24136/oc.2023.010>
- Elali, W., & Al-Yacoub, B. (2015). Factors affecting entrepreneurial intentions among Kuwaitis. *World Journal of Entrepreneurship, Management and Sustainable Development*, 12(1), 18-34. <https://doi.org/10.1108/WJEMSD-07-2015-0029>
- Engle, R.L., Schlaegel, C., & Dimitriadi, N. (2011). Institutions and entrepreneurial intent: A cross-country study. *Journal of Developmental Entrepreneurship*, 16(2), 227-250. <https://doi.org/10.1142/S1084946711001811>
- Escolar-Illamazares, M.C., Luis-rico, I., Torre-cruz, T. De, & Jim, A. (2019). The Socio-educational, Psychological and Family-Related Antecedents of Entrepreneurial Intentions among Spanish Youth. *Sustainability*, 11(1252), 1-21. <https://doi.org/10.3390/su11051252>
- Estrin, S., Korosteleva, J., & Mickiewicz, T. (2013). Which institutions encourage entrepreneurial growth aspirations?. *Journal of Business Venturing*, 28(4), 564-580. <https://doi.org/10.1016/j.jbusvent.2012.05.001>
- Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67(5), 663-666. <https://doi.org/10.1016/j.jbusres.2013.11.024>
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Gasse, Y., & Tremblay, M. (2011). Entrepreneurial beliefs and intentions: A cross-cultural study of university students in seven countries. *International Journal of Business*, 16(4), 303-314. Retrieved from [https://www.researchgate.net/profile/Yvob\\_Gasse/publication/268435424\\_Entrepreneurial\\_Beliefs\\_and\\_Intentions\\_A\\_Cross-Cultural\\_Study\\_of\\_University\\_Students\\_in\\_Seven\\_Countries/links/54db5f540cf2ba88a68ff88f.pdf](https://www.researchgate.net/profile/Yvob_Gasse/publication/268435424_Entrepreneurial_Beliefs_and_Intentions_A_Cross-Cultural_Study_of_University_Students_in_Seven_Countries/links/54db5f540cf2ba88a68ff88f.pdf) on July 1, 2023.
- Gubik, A.S. (2021). Entrepreneurial career: Factors influencing the decision of Hungarian students. *Entrepreneurial Business and Economics Review*, 9(3), 43-58. <https://doi.org/10.15678/EBER.2021.090303>
- Gubik, A.S., & Farkas, S. (2016). Student Entrepreneurship in Hungary: Selected Results Based on GUESSS Survey. *Entrepreneurial Business and Economics Review*, 4(4), 123-139. <https://doi.org/10.15678/EBER.2016.040408>
- Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., & Thiele, K.O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modelling methods. *Journal of the Academy of Marketing Science*, 45(5), 616-632. <https://doi.org/10.1007/s11747-017-0517-x>
- Hair, J.F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V.G. (2014). Partial least squares structural equation modelling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121. <https://doi.org/10.1108/EBR-10-2013-0128>

- Hamdani, N.A., Ramadani, V., Anggadwita, G., Maulida, G.S., Zuferi, R., & Maalaoui, A. (2023). Gender stereotype perception, perceived social support and self-efficacy in increasing women's entrepreneurial intentions. *International Journal of Entrepreneurial Behavior & Research*, 29(6), 1290-1313. <https://doi.org/10.1108/IJEBr-02-2023-0157>
- Henseler, J., Ringle, C.M., & Sinkovics, R.R. (2009). The use of partial least squares path modelling in international marketing. *Advances in International Marketing*, 20(January), 277-319. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- Hoda, N., Ahmad, N., Gupta, S.L., Alam, M.M., & Ahmad, I. (2021). Application of entrepreneurial intention model in comparative international entrepreneurship research: A cross-cultural study of India and Saudi Arabia. *Sustainability (Switzerland)*, 13(23). <https://doi.org/10.3390/su132313369>
- Huang, Y., An, L., Wang, J., Chen, Y., Wang, S., & Wang, P. (2021). The Role of Entrepreneurship Policy in College Students' Entrepreneurial Intention: The Intermediary Role of Entrepreneurial Practice and Entrepreneurial Spirit. *Frontiers in Psychology*, 12(March). <https://doi.org/10.3389/fpsyg.2021.585698>
- Iershova, N.Y., Portna, O.V., Uhrimova, I.V., & Chaika, T.Y. (2022). The Impact of Employee Attitudes on the Effectiveness of Corporate Governance and Social External Effects: Business Analytics Platform. *Montenegrin Journal of Economics*, 18(2), 73-84. <https://doi.org/10.14254/1800-5845/2022.18-2.7>
- Ilczuk, D., Dopierała, Ł., & Bednarz, J. (2023). What are the real motivations and experiences of silver entrepreneurs? Empirical evidence from Poland. *Journal of Entrepreneurship, Management, and Innovation*, 19(3), 129-167. <https://doi.org/10.7341/20231934>
- Jalil, M.F., Ali, A., & Kamarulzaman, R. (2023). The influence of psychological capital and social capital on women entrepreneurs' intentions: the mediating role of attitude. *Humanities and Social Sciences Communications*, 10(1), 1-14. <https://doi.org/10.1057/s41599-023-01908-3>
- Karimi, S., Biemans, H.J.A., Lans, T., Chizari, M., & Mulder, M. (2016). The Impact of Entrepreneurship Education: A Study of Iranian Students' Entrepreneurial Intentions and Opportunity Identification. *Journal of Small Business Management*, 54(1), 187-209. <https://doi.org/10.1111/jsbm.12137>
- Kobylińska, U. (2022). Attitudes, subjective norms, and perceived control versus contextual factors influencing the entrepreneurial intentions of students from Poland. *WSEAS Transactions on Business and Economics*, 19, 94-106. <https://doi.org/10.37394/23207.2022.19.10>
- Kobylińska, U., & Vila-Biglieri, J. (2015). Public sector innovativeness in Poland and in Spain—comparative analysis. *International Journal of Contemporary Management*, 14(2), 7-22. Retrieved from [http://www.ejournals.eu/ijcm/2015/Numer-14\(2\)/art/5964](http://www.ejournals.eu/ijcm/2015/Numer-14(2)/art/5964) on July 2, 2023.
- Le, T.L., Pham, H.T., & Nguyen, N.D. (2023). How empathy and social entrepreneurial self-efficacy interact to affect social entrepreneurial intention: A polynomial regression with response surface analysis. *Oeconomia Copernicana*, 14(4), 1341-1366. <https://doi.org/10.24136/oc.2023.039>
- Lemire, L., & Rouillard, C. (2005). An empirical exploration of psychological contract violation and individual behaviour. The case of Canadian federal civil servants in Quebec. *Journal of Managerial Psychology*, 20(2), 150-163. <https://doi.org/10.1108/02683940510579786>
- Liñán, F., & Chen, Y. (2006). Testing the Entrepreneurial Intention Model on a Two-country Sample. *Documents de Treball*, 06/7(May 2014), 1-37.
- Liñán, F., & Chen, Y. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. *Entrepreneurship Theory & Practice*, 33(3), 593-617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>
- Liñán, F., Nabi, G., & Kueger, N. (2013). British and Spanish entrepreneurial intentions: A comparative study. *Revista de Economía Mundial*, (33), 73-103. Retrieved from <http://www.redalyc.org/articulo.oa?id=86626373004> on July 5, 2023.
- Loan, N.T. (2023). Does University business incubator boot the Entrepreneurial Intention and Entrepreneurial Decision among students: A case Study in Vietnam. *Journal of Namibian Studies: History Politics Culture*, 33, 1945-1964. <https://doi.org/10.59670/jns.v33i.825>
- Lortie, J., & Castogiovanni, G. (2015). The theory of planned behavior in entrepreneurship research: what we know and future directions. *International Entrepreneurship and Management Journal*, 11, 935-957. <https://doi.org/10.1007/s11365-015-0358-3>

- Mahmoud, A.B., Berman, A., Reisel, W.D., & Fuxman, L. (2023). Entrepreneurial Marketing Intentions and Behaviours among Students : Investigating the Roles of Entrepreneurial Skills, Entrepreneurial Self- efficacy, and Family Business Exposure. *International Review of Entrepreneurship*, 21(1), 1-26.
- Mamun, A.A., Nawi, N.B.C., Mohiuddin, M., Shamsudin, S.F.F.B., & Fazal, S.A. (2017). Entrepreneurial intention and startup preparation: A study among business students in Malaysia. *Journal of Education for Business*, 92(6), 296-314. <https://doi.org/10.1080/08832323.2017.1365682>
- Manolova, T.S., Edelman, L.F., Shirokova, G., & Tsukanova, T. (2019). Youth entrepreneurship in emerging economies: can family support help navigate institutional voids?. *Journal of East-West Business*, 25(4), 363-395. <https://doi.org/10.1080/10669868.2019.1624672>
- Martínez-González, J.A., Kobylinska, U., García-Rodríguez, F.J., & Nazarko, L. (2019). Antecedents of entrepreneurial intention among young people: Model and regional evidence. *Sustainability*, 11(24), 6993. <https://doi.org/10.3390/su11246993>
- Mbuya, J.-M., & Schachtebeck, C. (2016). Student Entrepreneurial Intention At an Urban University in South Africa. In *Proceedings of the 28th Annual Conference of the Southern African Institute of Management Scientists*, 28, 384-397 Retrieved from <https://www.researchgate.net/publication/307607189> on July 5, 2023.
- Mickiewicz, T., Stephan, U., & Shami, M. (2021). The consequences of short-term institutional change in the rule of law for entrepreneurship. *Global Strategy Journal*, 11(4), 709-739. <https://doi.org/10.1002/gsj.1413>
- Miralles, F., Giones, F., & Gozun, B. (2017). Does direct experience matter? Examining the consequences of current entrepreneurial behavior on entrepreneurial intention. *International Entrepreneurship and Management Journal*, 13(3), 881-903. <https://doi.org/10.1007/s11365-016-0430-7>
- Mishchuk, H., Bilan Y., Androniceanu, A., & Krol, V. (2023). Social capital: Evaluating its roles in competitiveness and ensuring human development. *Journal of Competitiveness*, 15(2), 1-17. <https://doi.org/10.7441/joc.2023.02.01>
- Nawi, N.C, Mamun, A.A., Hassan, A.A., Wan Ibrahim, W.S.A.A., Mohamed, A.F., & Permarupan, P.Y. (2022). Agro-Entrepreneurial Intention among University Students: a study under the premises of Theory of Planned Behavior. *SAGE Open*, 12(1), 21582440211069144. <https://doi.org/10.1177/21582440211069144>
- Nguyen, C. (2017). Entrepreneurial intention of international business students in Viet Nam: a survey of the country joining the Trans-Pacific Partnership. *Journal of Innovation and Entrepreneurship*, 6(1), 7. <https://doi.org/10.1186/s13731-017-0066-z>
- Nguyen, T.T. (2020). The impact of access to finance and environmental factors on entrepreneurial intention: The mediator role of entrepreneurial behavioural control. *Entrepreneurial Business and Economics Review*, 8(2), 127-140. <https://doi.org/10.15678/EBER.2020.080207>
- Oftedal, E.M., Iakovleva, T.A., & Foss, L. (2018). University context matter: An institutional perspective on entrepreneurial intentions of students. *Education and Training*, 60(7-8), 873-890. <https://doi.org/10.1108/ET-06-2016-0098>
- Ogba, F.N., Ogba, K.T.U., Ugwu, L.E., Emma-Echiegu, N., Eze, A., Agu, S.A., & Aneke, B.A. (2022). Moderating Role of Initiative on the Relationship Between Intrinsic Motivation, and Self-Efficacy on Entrepreneurial Intention. *Frontiers in Psychology*, 13(October). <https://doi.org/10.3389/fpsyg.2022.866869>
- Rachmawan, A., Lizar, A.A., & Mangundjaya, W.L. (2015). The role of parent's influence and self-efficacy on entrepreneurial intention. *The Journal of Developing Areas*, 49(3), 417-430. <https://doi.org/10.1353/jda.2015.0157>
- Ranwala, R.S. (2016). Family Background, Entrepreneurship Specific Education and Entrepreneurial Knowledge in Venture Creation. *International Journal of Scientific and Research Publications*, 6(9), 495. Retrieved from [www.ijsrp.org](http://www.ijsrp.org) on July 4, 2023.
- Raza, A., Muffatto, M., & Saeed, S. (2020). Cross-country differences in innovative entrepreneurial activity: An entrepreneurial cognitive view. *Management Decision*, 58(7), 1301-1329. <https://doi.org/10.1108/MD-11-2017-1167>
- Richter, N.F., Sinkovics, R.R., Ringle, C.M., & Schlägel, C. (2016). A critical look at the use of SEM in international business research. *International Marketing Review*, 33(3), 376-404. <https://doi.org/10.1108/IMR-04-2014-0148>
- Sabary, G.S., Durda, L., Asad, A.I., & Ključnikov, A. (2023). Key motivational factors behind Asian immigrant entrepreneurship: A causal relationship analysis employing the DEMATEL approach for Germany. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 18(1), 287-318. <https://doi.org/10.24136/eq.2023.009>
- Sabary, G.S., & Ključnikov, A. (2023). Barriers to immigrant entrepreneurship: A causal relationship analysis of the Asian immigrant entrepreneurs in Germany employing the DEMATEL approach. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 18(2), 491-522. <https://doi.org/10.24136/eq.2023.015>



- Rodríguez Lóor, R., & Muñoz-Fernández, G.A. (2022). Entrepreneurship in university: A logit methodological evaluation in an emerging economy. *Economics and Sociology*, 15(4), 114-128. <https://doi.org/10.14254/2071-789X.2022/15-4/5>
- Schlaegel, C., & Koenig, M. (2014). Determinants of Entrepreneurial Intent: A Meta-Analytic Test and Integration of Competing Models. *Entrepreneurship: Theory and Practice*, 38(2), 291-332. <https://doi.org/10.1111/etap.12087>
- Schlaegel, C., He, X., & Engle, R. (2013). The Direct and Indirect Influences of National Culture on Entrepreneurial Intentions: A Fourteen Nation Study. *International Journal of Management*, 30(2), 597-609. Retrieved from <https://www.proquest.com/scholarly-journals/direct-indirect-influences-national-culture-on/docview/1367068912/se-2> on July 1, 2023.
- Shahid, M.S., Imran, Y., & Shehryar, H. (2018). Determinants of entrepreneurial intentions: An institutional embeddedness perspective. *Journal of Small Business and Entrepreneurship*, 30(2), 139-156. <https://doi.org/10.1080/08276331.2017.1389053>
- Stabingis, L., & Raupelienė, A. (2023). Factors influencing entrepreneurial intentions among the students in the Baltic Sea region countries. *Business: Theory and Practice*, 24(1), 301-311. <https://doi.org/10.3846/btp.2023.18948>
- Steinbrink, K.M., & Ströhle, C. (2023). The entrepreneurial intention of top athletes—does resilience lead the way?. *International Entrepreneurship and Management Journal*, (0123456789). <https://doi.org/10.1007/s11365-023-00860-7>
- Stephan, U., Uhlener, L.M., & Stride, C. (2015). Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies*, 46(3), 308-331. <https://doi.org/10.1057/jibs.2014.38>
- Thompson, E.R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33(3), 669-694. <https://doi.org/10.1111/j.1540-6520.2009.00321.x>
- Turker, D., & Selcuk, S.S. (2009). Which factors affect entrepreneurial intention of university students?. *Journal of European Industrial Training*, 33(2), 142-159. <https://doi.org/10.1108/03090590910939049>
- Urban, B., & Ratsimanetrimanana, F. (2019). Access to finance and entrepreneurial intention: An empirical study of Madagascan rural areas. *Journal of Enterprising Communities*, 13(4), 455-471. <https://doi.org/10.1108/JEC-12-2018-0106>
- Valdez, M.E., & Richardson, J. (2013). Institutional determinants of macro-level entrepreneurship. *Entrepreneurship: Theory and Practice*, 37(5), 1149-1175. <https://doi.org/10.1111/etap.12000>
- Van Stel, A.J., & Storey, D.J. (2004). The link between firm births and job creation: Is there a Upas Tree effect?. *Regional Studies*, 38(8), 893-909. <https://doi.org/10.1080/0034340042000280929>
- Villanueva-Flores, M., Hernández-Roque, D., Díaz-Fernández, M., & Bornay-Barrachina, M. (2023). Exploring the mediation role of perceived behavioural control and subjective norms in the relationship between psychological capital and entrepreneurial intention of university students. *The International Journal of Management Education*, 21(3), 100865. <https://doi.org/10.1016/j.ijme.2023.100865>
- Wach, K., & Bilan, S. (2023). Creativity of students in favour of their entrepreneurial intentions: Empirical evidence from Poland. *Creativity Studies*, 16(1), 211-224. <https://doi.org/10.3846/cs.2023.15028>
- Wach, K., & Wojciechowski, L. (2016). Entrepreneurial Intentions of Students in Poland in the View of Ajzen's Theory of Planned Behaviour. *Entrepreneurial Business and Economics Review*, 5(3), 83-94. <https://doi.org/10.15678/EBER.2016.040106>
- Wang, L., Prieto, L., & Hinrichs, K.T. (2010). Direct and indirect effects of individual and environmental factors on motivation for self-employment. *Journal of Developmental Entrepreneurship*, 15(4), 481-502. <https://doi.org/10.1142/S1084946710001671>
- Welsh, D.H.B., Kaciak, E., Trimi, S., & Mainardes, E.W. (2018). Women Entrepreneurs and Family Firm Heterogeneity: Evidence from an Emerging Economy. *Group Decision and Negotiation*, 27(3), 445-465. <https://doi.org/10.1007/s10726-017-9544-8>

- Yasir, N., Babar, M., Mehmood, H.S., Xie, R., & Guo, G. (2023). The Environmental Values Play a Role in the Development of Green Entrepreneurship to Achieve Sustainable Entrepreneurial Intention. *Sustainability (Switzerland)*, 15(8). <https://doi.org/10.3390/su15086451>
- Yasir, N., Mahmood, N., Mehmood, H.S., Rashid, O., & Liren, A. (2021). The integrated role of personal values and theory of planned behaviour to form a sustainable entrepreneurial intention. *Sustainability (Switzerland)*, 13(16), 1-21. <https://doi.org/10.3390/su13169249>
- Yasir, N., Xie, R., & Zhang, J. (2022). The Impact of Personal Values and Attitude toward Sustainable Entrepreneurship on Entrepreneurial Intention to Enhance Sustainable Development: Empirical Evidence from Pakistan. *Sustainability*, 14(11), 6792. <https://doi.org/10.3390/su14116792>


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**Acknowledgements and Financial Disclosure**

The article in the part co-authored by Tomasz Rachwał presents the result of Project no 020/EEZ/2023/POT financed from the subsidy granted to the Krakow University of Economics, Poland. We have no other funding to report.

The data supporting the findings of this study are available upon request from the corresponding author (Michael Gemelli Dziwornu) and are included within the article. However, due to privacy and ethical considerations, the data are not publicly accessible.

**Conflict of Interest**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Published by Krakow University of Economics – Krakow, Poland



Ministry of Education and Science  
Republic of Poland

The journal is co-financed in the years 2022-2024 by the Ministry of Education and Science of the Republic of Poland in the framework of the ministerial programme "Development of Scientific Journals" (RCN) on the basis of contract no. RCN/SP/0583/2021/1 concluded on 13 October 2022 and being in force until 13 October 2024.

