

Entrepreneurial Incentives Among University Students in Georgia and Portugal

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Abstract: The study of entrepreneurial incentives among students is a highly relevant issue because it is of utmost importance for the economic development of the country to cultivate generations of entrepreneurs who will create high-value technological start-ups and contribute to the transformation of Georgia into a technological hub, a goal that we have been calling a priority for years. In recent years, there has been a tendency among young adults to show entrepreneurial initiative, although this is modest compared to what could truly change the image of the country. Funds and angel investors have emerged in the country, ready to invest in interesting business projects with global potential. In this process, the role of universities could be invaluable. The primary obstacle that Georgia's and Portugal's education systems are still facing is incorporating entrepreneurial skills into formal and vocational education. Scant is the rundown of colleges that have coordinated this new test in their educational programs.

The region is characterized by precarious and unsystematic skill-based professional schooling, reflecting inadequate funding initiatives lacking sustainability. The article studies the factors influencing students' entrepreneurial incentives in Georgia and Portugal, identifies the interests and opportunities of Georgian and Portuguese university students in starting a business, and discusses the best foreign practices for encouraging students' entrepreneurial activity. The article reports a study, based on a survey, which identified the main facilitating and hindering factors that influence students' entrepreneurial incentives. The paper also analyzes the environment supporting students' entrepreneurial activities in Georgia and Portugal, discusses the possibilities of finding financing, and identifies the main obstacles that students face when starting a business.

Keywords: *education, entrepreneurial incentives, Georgia, Portugal*

1. Introduction

In both established and emerging countries, entrepreneurship contributes to economic growth, job creation, and innovation. Governments and educational institutions around the world are increasingly concerned with cultivating an entrepreneurial culture and enabling prospective entrepreneurs as the global economy is becoming more dynamic and competitive. The university student population, in particular, represent a promising group capable of driving entrepreneurial activity and contributing significantly to the development of their countries.

This study explores and compares entrepreneurial incentives among university students in Georgia and Portugal. Students from the business schools of Grigol Robakidze University (GRUNI) from Georgia and the Polytechnic Institute of Bragança (IPB) from Portugal took part in the survey. The ecologies of Georgia, situated at the crossroads of Europe and Asia, and Portugal in southwestern Europe present distinct economic, social, and cultural characteristics. By analyzing the factors impacting entrepreneurial intention and motivation in these two countries, this study aims to shed light on the similarities and differences between their university student populations.

Georgia and Portugal have both demonstrated a commitment to encouraging entrepreneurship and innovation as important drivers of economic development, so the decision to focus on university students was made based on several factors. Both Georgian and Portuguese policymakers and educational institutions increasingly recognize the importance of preparing young people for global competition by developing entrepreneurial mindset and skillsets.

The second reason for researching university students in the context of entrepreneurship is that they are exposed to many different ideas, experiences, and opportunities, which shape their career paths and objectives during the school years. To develop educational programs, support networks, and legislation that would encourage and facilitate entrepreneurial initiatives, it is crucial to understand the entrepreneurial motivations and aspirations of the younger generation.

Additionally, even though entrepreneurship has become increasingly recognized as a key component of economic growth, little research has been conducted on entrepreneurial incentives across countries, especially among university students. Exploring these incentives in Georgia and Portugal could provide insights into how various factors affect entrepreneurial aspirations in different socioeconomic conditions.

This research into the entrepreneurial incentives of Georgian and Portuguese university students holds relevance to current affairs. By investigating the factors that drive entrepreneurial intention in various countries, this study will contribute to understanding the role of entrepreneurship in economic growth, as well as propose specific measures that could help motivate young entrepreneurs. Furthermore, the comparison of Georgia and Portugal offers valuable insights for policymakers and educational institutions in the two countries and beyond, regarding the cultural, social, and economic aspects driving entrepreneurial aspirations.

There are many variables that have been shown to influence the entrepreneurial incentives of business students. The desire for financial independence is one of the important ones (Kvirkvaia *et al.*, 2018). Entrepreneurship promises financial benefits, including the freedom to determine one's income and financial future, which is often a motivator for business students. A desire to be one's own boss, a desire to innovate, a passion for a specific industry or field, and a desire to make a positive impact on society are additional variables that have been discovered.

While starting one's own firm can have many advantages, it can also present many challenges for business students. One of the biggest obstacles for entrepreneurs is financial constraints, which is especially true for business students who may have limited access to financial resources. Another difficulty is a lack of business expertise or experience, as well as competition from well-established businesses, technological specifics, legal barriers, and restricted market opportunities (Lashkhi *et al.*, 2022a; 2022b) for their goods or services.

Universities and professors play a crucial role in encouraging entrepreneurship among business students. This can be done by providing access to funding or mentoring opportunities, providing entrepreneurship courses or programs, organizing related events or competitions, and raising awareness about the benefits of entrepreneurship. Business students who participate in entrepreneurial activities or programs are more likely to start their own companies after graduation, according to research.

The research hypothesis of the current study is that entrepreneurial incentives among business students are low because of the lack of practical knowledge and financial resources. The research objective is to identify the factors motivating business students to become entrepreneurs and examine the entrepreneurial incentives among them. The key research questions are as follows: What are the factors that motivate business students to become entrepreneurs? What measures can universities use to encourage entrepreneurship among business students?

This article is structured as follows. The next section presents a literature review about the topic. Then, the methodology is presented, followed by the research analysis. The concluding section formulates conclusions and proposes recommendations which would contribute to raising the entrepreneurial incentives among students.

2. Literature review

One of the most significant factors that motivate business students to become entrepreneurs is the potential for financial rewards. According to a study by Liñán and Chen (2009), the most significant factor in predicting entrepreneurial ambitions among business students was found to be financial incentives.

Another factor that motivates business students to become entrepreneurs is the desire for autonomy. A study by Wu and Wu (2008) revealed that business students who had a high need for autonomy were more likely to have entrepreneurial intentions. Similarly, Cardon *et al.* (2009) found that the desire for autonomy was one of the most significant predictors of entrepreneurial intention among business students. Research has also shown that education and skills are significant predictors of entrepreneurial intention among business students.

Fayolle and Gailly (2015) found that education was positively related to entrepreneurial intention among business students. Similarly, a study by Hsu, Wiklund and Cotton (2017) argued that business students with higher levels of perceived entrepreneurship education and entrepreneurial self-efficacy were more likely to have entrepreneurial intentions.

Universities can be instrumental in fostering entrepreneurship among business students. According to a study by Nabi *et al.* (2018), entrepreneurship education and training programs offered by universities are positively related to entrepreneurial intention among business students. Similarly, a study by Kuratko, Hornsby and Covin (2015) found that universities can support entrepreneurship among business students by offering mentorship, funding, and networking opportunities.

In general, authors reveal various factors influencing entrepreneurial intention among students. According to Haque *et al.* (2017), neglecting knowledge-based innovation is the most common challenge in startups, being one's own boss is one of the main reasons to start a business, parents and families are the primary motivators for young entrepreneurs to start companies, and financial risk is one of the greatest demotivators.

Zhang *et al.* (2021) argued that entrepreneurship education, government entrepreneurship policies and measures, and entrepreneurship education are all strongly related to the entrepreneurial activities of college students. Since the background of college students changes every year, so does their relevant entrepreneurial background. College students can benefit more from entrepreneurial educational programs and related initiatives if they are continually revised to better reflect their situation. According to Mustafa *et al.* (2016), students' entrepreneurial intention is significantly impacted by a proactive attitude and concept development support. The findings also indicated that a student's proactive attitude had a stronger influence on their entrepreneurial goals than the university support environment.

The study by Hossain *et al.* (2023) looks at the many barriers that inhibit Bangladeshi young, especially Generation Z college students, from engaging in business. The research further investigates the impact of entrepreneurial attitude, subjective entrepreneurial norms, entrepreneurial perceived behavioral control, and entrepreneurial resilience on the entrepreneurial intention of Bangladeshi Generation Z university students. The research presents an empirical investigation to gain a better understanding of the behaviors that discourage Generation Z students from engaging in entrepreneurial activities. The decisions are influenced by sociopsychological constructions that integrate entrepreneurial resilience with the theory of planned behavior model. The study also explores the triple, quadruple, and quintuple helix models as supporting hypotheses to shed light on how to address these barriers.

Liu *et al.* (2022) demonstrate a positive correlation between entrepreneurial education and college students' plans to start their own business; however, this relationship is adversely moderated by a proactive personality and favorably moderated by the family's economic status. The moderating role of narcissistic personality, however, has not been proven. The study offers significant empirical evidence about the heterogeneity of the impact of entrepreneurship education, including the negative moderating effect of proactive personality and the positive moderating effect of the family's economic status on the relationship between entrepreneurship education and entrepreneurial intention.

Lopes *et al.* (2023) study predictive factors affecting the entrepreneurial inclinations of students at higher education institutions (HEIs) in a remote European region. Using structural equation modeling to analyze data from 594 students, the study demonstrates a favorable relationship between behavioral attitude and perceived behavioral control, and entrepreneurial intention. Additionally, subjective norms have a positive influence on how people view their ability to control behavior. "Closer" valuation (such as that of family, friends, etc.) affects behavioral attitudes, and social valuation has a beneficial impact on subjective norms. Song, Thominathan and Khalid (2021) aim to identify the variables that influence graduating students' entrepreneurial aspirations and the mediating impact of entrepreneurship education on entrepreneurial intention through attitude, perceived behavioral control, and self-efficacy. The data, analyzed using partial least squares and factor analysis, reveal that attitude, perceived behavioral control, and entrepreneurship education have a strong association to entrepreneurial intention, whereas there is no significant connection with self-efficacy. The

study did discover that self-efficacy is fully mediated by entrepreneurship education, but that entrepreneurship education only partially mediates the association between attitude and perceived behavioral control toward business intention.

Several authors have studied the factors influencing entrepreneurial stimuli among Georgian youth and students. Using the data on Georgia in the Global Entrepreneurship Monitor dataset, Bzhalava *et al.* (2017) find that general education and business training after completing school education are significantly and favorably associated with opportunity-based entrepreneurial inclinations. Additionally, according to the study, there is no appreciable difference between opportunity and necessity entrepreneurs in terms of their performance on the global stage. In contrast, new businesses founded on both necessity and opportunity outperform those founded on just one of the two objectives in international marketplaces. A paper by Papiashvili (2015) contributes to discussions on how universities shape students' attitudes towards entrepreneurship, based on a structured questionnaire survey among randomly selected bachelor's and master's students of the International Black Sea University in Tbilisi, Georgia. The SPSS software was used to encode the survey findings. According to the research, business and entrepreneurship education provides the necessary foundation for entrepreneurship in terms of fundamental knowledge, skills, and the required drive and intentions. More than half of the university's poll respondents associate entrepreneurship with their future career aspirations and feel prepared for entrepreneurship. A study by Natsvlishvili (2018) demonstrates the positive expectations, good attitudes toward entrepreneurship, and aspirations for entrepreneurial endeavors among the younger generation. Most young respondents indicate a favorable attitude towards the private sector, regarding the latter as more desirable for job opportunities, compared to the public sector. Along with having optimistic long-term forecasts for entrepreneurship, the respondents also had relatively pessimistic short-term outlooks. The survey's findings offer valuable information on the potential sources of the unique competence needed for entrepreneurship. Most of the students who were interviewed believed they lacked the skills and knowledge necessary to start their own businesses.

It is worth mentioning that Georgia's government has implemented various programs to support young entrepreneurs, and has done it quite successfully. Zivivadze *et al.* (2021) state that the Support Program for Young Entrepreneurs in Georgia was successful, fully achieving the

anticipated outcomes of its annual targets. Another important aspect was the implementation of different government programs during the economic crisis (Papava & Charaia, 2020; 2021), supporting overall stability, including among students.

Several authors have studied entrepreneurial intention among students in Portugal. De la Cruz *et al.* (2016) reveal that university students have a very favorable opinion of wanting to start their own business; 90% of students expressed this desire, and 83.5% expressed their intention to do so. Furthermore, 57.5% of the respondents believed that it is harder to act during a crisis than it used to be before. The study gives us insights into a student pursuing a degree in tourism and his entrepreneurial attitudes. It might be the first step toward awakening and fostering students' entrepreneurial aspirations. Sousa-Filho and Almeida (2023) show that entrepreneurial intention depends on a variety of personal, organizational, and environmental factors. Regardless of a student's profile, the aim of the students to start their own business is unchanged. However, prior volunteer work contributes to a larger frequency of individual variables, whereas students' professional experience is a more important factor for the identification of organizational aspects related to curriculum and critical pedagogy. Mónico *et al.* (2021) highlight the indirect impact of entrepreneurial universities on students' intention to become entrepreneurs through their entrepreneurial inclinations. Due to the intriguing beneficial direct and indirect effects on students' entrepreneurial motives and intention, this study demonstrates the value of studying, supporting, and funding entrepreneurial education in HEIs to achieve a more entrepreneurial level.

The literature review has shown that financial incentives, the desire for autonomy, education and skills, and university support are significant predictors of entrepreneurial intention among business students. These findings highlight the importance of universities in fostering entrepreneurship among business students by providing them with education, skills, and support. Further research in this area should explore effective ways of supporting entrepreneurship among business students and identifying additional factors that influence their entrepreneurial intentions.

3. Methodology

Quantitative research was selected as the research method, for which a questionnaire was developed. The questions in the questionnaire are built around the important variables that were identified as a result of the literature review. The questionnaire is based on a Likert scale, requiring students to rate statements from 1 to 5. Multiple regression analysis was used to process the students' responses and to study the impact of independent variables on the dependent variable.

The research used quantitative methods, with 205 respondents surveyed, 99 from GRUNI and 106 from IPB. In the research model, Entrepreneurial Incentives of Students (EIS) were defined as dependent variables, and Personal Attitude (PA), Subjective Norm (SN), Perceived Behavioral Control (PBC), Entrepreneurial Intention (EI) (Muhammad, Aliyu & Ahmed, 2015), Perceived Educational Support (PES), Perceived Structural Support (PSS) (Ambad & Damit, 2016), Proactive Personality (PP) (AlHaj, Yusof & Edama, 2011), and Relational Support (RS) (Ghofarany & Satrya, 2021) were defined as independent variables.

The data was collected through an online survey. A set of closed-ended questions based on a 5-point Likert scale was developed for the survey, which was carried out online, and students received them through their university's electronic system (see Appendix for the questionnaire). The sample for this study was drawn from among business students enrolled at the IPB and GRUNI.

A regression model was created, defining the Entrepreneurial Incentives of Students as dependent variable and Personal Attitude, Subjective Norm, Perceived Behavioral Control, Entrepreneurial Intention, Perceived Educational Support, Perceived Structural Support, Proactive Personality, and Relational Support as independent variables. The dependent variable of entrepreneurial incentives of students was analyzed considering the students' responses to three survey questions—namely, the interest, motivation, and intention of students about entrepreneurship. Data on the dependent and independent variables were collected from a representative sample of business students.

The equation for the regression model was the following:

$$\text{EIS} = \beta_0 + \beta_1 \text{PA} + \beta_2 \text{SN} + \beta_3 \text{PBC} + \beta_4 \text{EI} + \beta_5 \text{PES} + \beta_6 \text{PSS} + \beta_7 \text{PP} + \beta_8 \text{RS} + \beta_9 \text{Gender} + \beta_{10} \text{Country} + \beta_{11} \text{Degree} + \beta_{12} \text{Program} + \varepsilon. \quad \{1\}$$

The variables used in this model are the sum of the students' responses to each questionnaire question within a group (the regression variables are the sum of responses to each question detailed in the descriptive analysis in Tables 2 and 3, Panel by Panel). The control variables in this study include Gender (the dummy variable is 1 if the student is female and 0 otherwise, like male), Country (the dummy variable is 1 if the student is from Georgia, and 0 otherwise, like Portugal), Degree (the dummy variable is 1 if the student has a master's degree and 0 otherwise, like a bachelor's degree) and Program (the dummy variable is 1 if the student is from a management course or 0 otherwise, such as finance, marketing and tourism courses). β_0 is the intercept or constant term, β_1 to β_{12} are the coefficients or slopes of the independent variables, and ε is the error term.

4. Results and discussion

The data collected through the survey were analyzed, using the OLS regression methodology aimed to identify the influence of variables on student interest, motivation, and intention to become an entrepreneur. The survey allowed to collect 205 responses from students in business science courses, that is, 98 students from GRUNI and 107 from IPB.

At the beginning of this analysis, it is important to understand the student's profile of the survey respondents. Table 1 presents the main characteristics of the respondents to the questionnaire. The data collected from the survey reveal that there are 118 female and 87 male respondents, with 177 students in bachelor's courses and 28 in master's programs. Table 1 also reveals the respondents' academic year and field of study, with most of them being from management.

The following analysis focuses on some descriptive statistics of the questionnaire responses, which are based on a Likert scale, ranging from 1 to 5. According to the main goal of this study, it is important to understand the students' attitudes about entrepreneurship and the establishment of a start-up. The results summarized in Table 2 show that the students have a positive attitude towards entrepreneurship. On average, students in this

study exhibit interest in entrepreneurship (mean score 3.81), they also have a high motivation to start a business (3.85), and an intention to start a business within five years (3.71). The values in this table reflect an overall positive attitude of students towards entrepreneurship.

Table 1. Students' profile.

Gender		Country of HEI	
Female	118	Georgia	98
Male	87	Portugal	107
Total	205	Total	205
Course		Program	
Bachelor	177	Accounting	50
Master	28	Engineering	1
Total	205	Finance	8
Academic year		Management	90
First year	43	Marketing	26
Second year	52	MBA	6
Third year	68	Tourism	24
Fourth year	14	Total overall	205
Master's first year	18		
Master's second year	10		
Total overall	205		
Age			
Mean	22.32	Min	18
Median	21	Max	46
StdDev	4.90		

Source: Authors' calculations.

Table 2. Students' attitudes towards entrepreneurship.

	1	2	3	4	5	Mean
I have an interest in entrepreneurship	12	18	30	81	64	3.81
I have a motivation to start a business	12	20	30	68	75	3.85
I have an intention to start a business within 5 years	19	17	43	52	74	3.71

Source: Authors' calculations.

Considering that students are at a suitable stage of their life and are more prone to taking risks, it is important to understand their behavior. Therefore, the literature suggests several issues pertinent to entrepreneurship. Table 3 shows the results of questionnaire responses from students. Students' attitudes presented in Panel A of Table 3 are very high in general. With the highest score of 4.56, students express that "I believe that starting a business requires hard work, but it is worth the effort," followed with the score of 4.23 by "I am excited about the prospect of being my own boss." They also consider the statement "that becoming an entrepreneur is a good career choice" as very relevant. In Panel B, with a score of 4.19, it seems very important that "People who are important to me would support my decision to start a business." However, statements like "pressure from others to become an entrepreneur" and that "others expect me to become an entrepreneur" are not highly valued.

Regarding students' behavior, Panel C shows that students regard highly the statement "I am confident in my ability to overcome obstacles and challenges in starting and running a business," but attribute a low score (below 3) to answers like "I have access to the resources I need to start and run a business" and "I have the skills and knowledge necessary to start and run a business."

Table 3. Students' entrepreneurship behavior and opinions.

Panel A: Student's attitude	1	2	3	4	5	Mean
I think that becoming an entrepreneur is a good career choice.	4	8	34	89	70	4.04
I have a positive attitude towards taking risks in business.	3	15	52	78	57	3.83
I believe that starting a business requires hard work, but it is worth the effort.	0	3	8	66	128	4.56
I feel confident in my abilities to start and manage a business.	10	20	40	80	55	3.73
I am excited about the prospect of being my own boss.	5	9	27	57	107	4.23
Panel B: Student's subjective norm	1	2	3	4	5	Mean
People who are important to me (e.g., family, friends, mentors) think that becoming an entrepreneur is a good idea.	9	8	51	73	64	3.85
People who are important to me would support my decision to start a business.	5	7	24	77	92	4.19
I feel pressure from others to become an entrepreneur.	77	37	49	26	16	2.35
Others expect me to become an entrepreneur.	50	29	67	33	26	2.79
Panel C: Student's behavior	1	2	3	4	5	Mean
People who are important to me (e.g., family, friends, mentors) think that becoming an entrepreneur is a good idea.	11	31	57	84	22	3.37
I have access to the resources I need to start and run a business.	23	46	68	51	17	2.97
I have the skills and knowledge necessary to start/run a business.	23	46	68	51	17	2.97
I am confident in my ability to overcome obstacles and challenges in starting and running a business.	10	19	35	83	58	3.78
I have a plan in place to start and run a business.	28	35	57	51	33	3.13

Panel D: Student's entrepreneurial intention	1	2	3	4	5	Mean
I am actively planning to start my own business in the near future.	25	30	50	58	42	3.30
I am seriously considering starting my own business.	20	21	39	59	66	3.63
I have thought about starting my own business, but I am not sure if I will do it.	30	35	46	70	24	3.11
Panel E: Student's education	1	2	3	4	5	Mean
My educational program has provided me with the knowledge and skills necessary to start and run a business.	11	27	41	83	43	3.59
My professors and advisors have encouraged me to pursue entrepreneurship.	17	27	75	59	27	3.25
My educational program has offered courses and resources specifically designed for aspiring entrepreneurs.	15	24	60	69	37	3.43
My educational program has provided me with networking opportunities that could help me in starting and running a business.	17	32	65	61	30	3.27
Panel F: Student's support	1	2	3	4	5	Mean
There are resources available in my community (e.g., incubators, accelerators, co-working spaces) that could help me in starting and running a business.	24	32	65	60	24	3.14
There are funding opportunities available in my community (e.g., grants, loans, angel investors) that could help me in starting and running a business.	21	32	63	66	23	3.19
There are mentoring and coaching opportunities available in my community that could help me in starting and running a business.	15	32	62	70	26	3.29

There are networking opportunities available in my community that could help me in starting and running a business.	13	32	60	72	28	3.34
Panel G: Student's personality	1	2	3	4	5	Mean
I am comfortable taking risks and making decisions that could have a big impact.	7	22	50	79	47	3.67
I am always looking for new opportunities to learn and grow.	3	7	28	85	82	4.15
I am not afraid to speak up and share my ideas.	3	17	52	74	59	3.82
I am confident in my ability to take on new challenges.	2	10	49	75	69	3.97
Panel H: Student's relations	1	2	3	4	5	Mean
I have a mentor or coach who supports me in my entrepreneurial pursuits.	56	44	68	23	14	2.49
I have a network of peers who are also interested in entrepreneurship.	31	31	55	65	23	3.09
I have access to successful entrepreneurs who could offer me advice and guidance.	39	37	53	58	18	2.90
I have a supportive spouse or partner who encourages me to pursue entrepreneurship	63	19	52	38	33	2.80

Source: Authors' calculations.

Panel D shows the students' entrepreneurial intention, with high scores on answers such as "I am seriously considering starting my own business" and "I am actively planning to start my own business in the near future."

Panel E of Table 3 reveals that students believe that the education system can also be important in entrepreneurship. They score highly statements "My educational program has provided me with the knowledge and skills necessary to start and run a business" and "My educational program has offered courses and resources specifically designed for aspiring entrepreneurs." Despite moderate scores in Panel F on the results of community support, students consider that "There are networking opportunities available in my community that could help me in starting and running a business." Regarding students' personality, Panel G shows evidence of the high importance of the

statement “I am always looking for new opportunities to learn and grow” (4.15) and “I am confident in my ability to take on new challenges” (3.97). From Panel H it is possible to verify that students’ relations are not very relevant to entrepreneurship since the scores on the response options are low.

After this initial step, it is important to understand the determinants of students’ attitudes towards entrepreneurship, following the regression specification on methodology. Table 4 shows the OLS estimation regression. The model’s level of fit is considered adequate, as it has an adjusted R-squared value of 58.1%, indicating a positive and statistically significant relationship, at a significance level of less than 5%, between the dependent variable and some explanatory variables.

While Panel A allows analyzing the determinants of students’ attitudes towards entrepreneurship without control variables, Panel B with the same determinants also considers control variables (Gender, Country, Degree, and Program). The main variables represent the same behavior in Panel A and B. The variable “Personal Attitude” shows that students with a more positive attitude towards entrepreneurship are more interested in starting a business. The signal of this variable is positive and statistically significant. This stronger influence from students’ proactive attitudes towards their entrepreneurial goals has been found also by Mustafa *et al.* (2016). The variables SN and PBC, although positively related with their interest on entrepreneurship, are not statistically significant.

The students who exhibit entrepreneurial intention and perceive educational support are effectively motivated to become entrepreneurs. This is demonstrated by the variables EI and PES, which present a positive and statistically significant coefficient. Identical results were achieved in the study carried out by Mónico *et al.* (2021).

An environment more conducive to entrepreneurship with student’s support (e.g., from mentoring, networking, funding, and resources), supposedly provides better conditions for students to become entrepreneurs. However, the results presented in Table 4 contradict this assumption. The coefficient for the variable PSS is negative, although not statistically significant. The same is observed with the variables PP and RS.

Table 4. Determinants of students' attitudes towards entrepreneurship.

Variables	Panel A			Panel B		
	β	t-Value	P-Value	β	t-Value	P-Value
Constant	-4.147	0.991	<0.001	-3.890	-3.712	<0.001
Personal Attitude (PA)	0.546	0.064	<0.001	0.526	7.522	<0.001
Subjective Norm (SN)	0.033	0.077	0.668	0.035	0.438	0.662
Perceived Behavioral Control (PBC)	0.049	0.047	0.296	0.051	1.074	0.284
Entrepreneurial Intention (EI)	0.146	0.066	0.028	0.149	2.229	0.027
Perceived Educational Support (PES)	0.122	0.051	0.017	0.129	2.427	0.016
Perceived Structural Support (PSS)	-0.056	0.047	0.234	-0.067	-1.334	0.184
Proactive Personality (PP)	-0.002	0.064	0.975	0.005	0.082	0.935
Relational Support (RS)	-0.044	0.047	0.351	-0.040	-0.802	0.424
Gender				-0.115	-0.388	0.699
Country				0.148	0.434	0.665
Degree				-0.179	-0.409	0.683
Program				-0.147	-0.481	0.631
n		205			205	
R2		0.604			0.606	
Adj R2		0.588			0.581	
Durbin-Watson		1.783			1.771	

Notes: 1) This table shows the results of OLS estimation regression. 2) Model: $EIS = \beta_0 + \beta_1 PA + \beta_2 SN + \beta_3 PBC + \beta_4 EI + \beta_5 PES + \beta_6 PSS + \beta_7 PP + \beta_8 RS + \beta_9 \text{Gender} + \beta_{10} \text{Country} + \beta_{11} \text{Degree} + \beta_{12} \text{Program} + \varepsilon$. 3) Variables definition: The dependent variable is Entrepreneurial Incentives of Students (EIS). The control variables used in this study are Gender (the dummy variable is 1 if student is female and 0 otherwise, like male), Country (the dummy variable is 1 if student is from Georgia, and 0 otherwise, like Portugal), Degree (the dummy variable is 1 if the student has a master's degree and 0 otherwise, like a bachelor's degree) and Program (the dummy variable is 1 if the student is from a management course or 0 otherwise, finance, marketing and tourism courses).

Source: Authors' calculations.

Panel B of Table 4 incorporates some control variables and confirms the previous results. Male students seem to have more propensity to become entrepreneurs. The same is true for students in Georgia, as compared to Portuguese students, although the variables are not statistically significant.

Regarding the control variables Degree and Program, students with master's degrees seem to be less motivated to start a business than students with bachelor's degrees and students studying in management field are less motivated to start a business than students of finance, marketing, and tourism.

5. Conclusion

This study emphasizes the multidimensional nature of *interest*, *motivation*, and *intent*, emphasizing the significant influence of different personal, environmental, and contextual elements on people's levels of interest, motivation, and intent in the studied scenario. These findings offer useful insights particularly for educators, policymakers, and practitioners, who aim to better understand and support youth involvement and commitment in entrepreneurial efforts.

The article also gives examples from foreign countries, where important and successful steps have been taken by the state on the one hand and businesses on the other hand to increase student incentives.

The results of the regression analysis suggest that universities can adopt various strategies to foster entrepreneurship among business students. These initiatives seek to boost students' interest, motivation, and intent, ultimately encouraging an entrepreneurial attitude. Here are a few suggestions:

1. *Promote mentoring programs*: Create mentoring programs that connect students with business owners or other professionals with relevant experience. Students can benefit greatly from the guidance, insights, and counseling that mentoring can provide.
2. *Curriculum integration*: Incorporate courses and modules on entrepreneurship in the curriculum. Offering specialized courses can provide students with the fundamental information and skills they need.
3. *Promote experiential learning*: Encourage students to take part in entrepreneurial endeavors such as company competitions, start-up incubators, or practical projects. Hands-on experiences may positively affect students' entrepreneurial intent.

4. *Create a supportive community*: Make the university a welcoming community for entrepreneurs. Universities can organize gatherings, workshops, and networking events to bring like-minded people together.

Further research should explore other potential activities to promote and maintain high levels of interest, motivation, and intent among students in pursuing entrepreneurial activities.

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References

- AlHaj, B. K.; Yusof, M. Z. & Edama, N.** (2011), 'Entrepreneurial Intention: An Empirical Study of Community College Students in Malaysia,' *Jurnal Personalia Pelajar*, vol. 14, pp. 45–58.
- Ambad, S. N. A. & Damit, D. H. A. D.** (2016), 'Determinants of Entrepreneurial Intention Among Undergraduate Students in Malaysia,' *Procedia Economics and Finance*, vol. 37, no. 16, pp. 108–114.
[https://doi.org/10.1016/S2212-5671\(16\)30100-9](https://doi.org/10.1016/S2212-5671(16)30100-9)
- Bzhalava, L.; Jvarsheishvili, G.; Brekashvili, P. & Lezhava, B.** (2017), 'Entrepreneurial Intentions and Initiatives in Georgia,' in A. Sauka & A. Chepurensko (eds.) *Entrepreneurship in Transition Economies: Diversity, Trends, and Perspectives*, Societies and Political Orders in Perspective, Cham: Springer. https://doi.org/10.1007/978-3-319-57342-7_15
- Cardon, M. S.; Wincent, J.; Singh, J. & Drnovsek, M.** (2009), 'The Nature and Experience of Entrepreneurial Passion,' *Academy of Management Review*, vol. 34, no. 3, pp. 511–532. <https://doi.org/10.5465/amr.2009.40633190>
- De la Cruz del Río-Rama, M.; Peris-Ortiz, M.; Álvarez-García, J. & Rueda-Armengot, C.** (2016), 'Entrepreneurial Intentions and Entrepreneurship Education to University Students in Portugal,' *Technology, Innovation and Education*, vol. 2, art. 7. <https://doi.org/10.1186/s40660-016-0013-5>
- Fayolle, A. & Gailly, B.** (2015), 'The Impact of Entrepreneurship Education on Entrepreneurial Attitudes and Intention: Hysteresis and Persistence,' *Journal of Small Business Management*, vol. 53, no. 1, pp. 75–93.
<https://doi.org/10.1111/jsbm.12065>
- Ghofarany, E. M. & Satrya, A.** (2021), 'Entrepreneurial Intention Among Students During the COVID-19 Pandemic: Exploring Contextual Factor of Entrepreneurial Intention,' *Advances in Economics, Business and Management Research*, vol. 192, pp. 309–316. <https://doi.org/10.2991/aebmr.k.211117.074>
- Haque, M. R.; Kabir, M. Z.; Rahman, M. M.; Chowdhury, S. P. & Islam, S.** (2017), 'Entrepreneurial Intentions: A Study on Students from Countryside University,' *Asian Economic and Financial Review*, vol. 7, no. 10, pp. 972–980.
<https://doi.org/10.18488/journal.aefr.2017.710.972.980>

- Hossain, M. I.; Tabash, M. I.; Siow, M. L.; Ong, T. S. & Anagreh, S.** (2023), 'Entrepreneurial Intentions of Gen Z University Students and Entrepreneurial Constraints in Bangladesh,' *Journal of Innovation and Entrepreneurship*, vol. 12, art. 12. <https://doi.org/10.1186/s13731-023-00279-y>
- Hsu, D. K.; Wiklund, J. & Cotton, R. D.** (2017), 'Success, Failure, and Entrepreneurial Reentry: An Experimental Assessment of the Veracity of Self-Efficacy and Prospect Theory,' *Entrepreneurship Theory and Practice*, vol. 41, no. 1, pp. 19–47. <https://doi.org/10.1111/etap.12166>
- Kuratko, D. F.; Hornsby, J. S. & Covin, J. G.** (2015), 'Diagnosing a Firm's Internal Environment for Corporate Entrepreneurship,' *Business Horizons*, vol. 57, no. 1, pp. 37–47. <https://doi.org/10.1016/j.bushor.2013.08.009>
- Kvirkvaia, M.; Kikutadze, V.; Sikharulidze, D.; Shaburishvili, S. & Charaia, V.** (2018), 'Study of Factors Affecting Young People's Professional Orientation in Georgia,' *Globalization and Business*, vol. 3, no. 6, pp. 233–242. <https://doi.org/10.35945/gb.2018.06.035>
- Lashkhi, M.; Charaia, V.; Boyarchuk, A. & Ebralidze, L.** (2022a), 'The Impact of Fintech on Financial Institutions: The Case of Georgia,' *TalTech Journal of European Studies*, vol. 12, no. 2. <https://doi.org/10.2478/bjes-2022-0010>
- Lashkhi, M.; Ogbaidze, S.; Lashkhi, M. & Charaia, V.** (2022b), 'Startup Access to Finance in Georgia and International Experience,' *Ekonomisti*, no. 2, pp. 48–59. <https://doi.org/10.36172/EKONOMISTI.2022.XVIII.02>
- Liñán, F. & Chen, Y. W.** (2009), 'Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions,' *Entrepreneurship Theory and Practice*, vol. 33, no. 3, pp. 593–617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>
- Liu, Y.; Li, M.; Li, X. & Zeng, J.** (2022), 'Entrepreneurship Education on Entrepreneurial Intention: The Moderating Role of the Personality and Family Economic Status,' *Frontiers in Psychology*, vol. 13, art. 978480. <https://doi.org/10.3389/fpsyg.2022.978480>
- Lopes, J. M.; Laurett, R.; Ferreira, J. J.; Silveira, P.; Oliveira, J. & Farinha, L.** (2023), 'Modeling the Predictors of Students' Entrepreneurial Intentions: The Case of a Peripheral European Region,' *Industry and Higher Education*, vol. 37, no. 2, pp. 208–221. <https://doi.org/10.1177/09504222221117055>
- Mónico, L.; Carvalho, C.; Nejati, S.; Arraya, M. & Parreira, P.** (2021), 'Entrepreneurship Education and Its Influence on Higher Education Students' Entrepreneurial Intentions and Motivation in Portugal,' *BAR—Brazilian Administration Review*, vol. 18, no. 3, e190088. <https://doi.org/10.1590/1807-7692bar2021190088>
- Muhammad, A. D.; Aliyu, S. & Ahmed, S.** (2015), 'Entrepreneurial Intention Among Nigerian University Students,' *American Journal of Business Education (AJBE)*, vol. 8, no. 4, pp. 239–248. <https://doi.org/10.19030/ajbe.v8i4.9419>

- Mustafa, M. J.; Hernandez, E.; Mahon, C. & Chee, L. K.** (2016), 'Entrepreneurial Intentions of University Students in an Emerging Economy: The Influence of University Support and Proactive Personality on Students' Entrepreneurial Intention,' *Journal of Entrepreneurship in Emerging Economies*, vol. 8, no. 2, pp. 162–179. <https://doi.org/10.1108/JEEE-10-2015-0058>
- Nabi, G.; Liñán, F.; Fayolle, A.; Krueger, N. & Walmsley, A.** (2018), 'The Impact of Entrepreneurship Education in Higher Education: A Systematic Review and Research Agenda,' *Academy of Management Learning & Education*, vol. 16, no. 2, pp. 138–168. <https://doi.org/10.5465/amle.2015.0026>
- Natsvlishvili, I.** (2018), 'Youth's Entrepreneurial Attitudes and Students' Views on Entrepreneurship in Georgia,' *Foresight-Management: Best World Practice of Development and Integration of Education, Science and Business*, Materials of I International Scientific and Practical Conference (Oct 24–30, 2017; Tbilisi, Georgia). TSU, 2017 & Kyiv National Economic University named after Vadym Hetman, pp. 10–13.
- Papava, V. & Charaia, V.** (2020), 'The Coronomic Crisis and Some Challenges for the Georgian Economy,' *GFSIS, Expert Opinion*, no. 136. <https://doi.org/10.2139/ssrn.3572124>
- Papava, V. & Charaia, V.** (2021), 'The Problem of the Growth of Georgia's Public Debt during the Economic Crisis under the COVID-19 Pandemic.' Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3773635 [accessed Feb 2024]
- Papiashvili, T.; Ghlonti, G. & Koberidze, K.** (2015), 'Is Entrepreneurship Education a Gate to Startups? A Case Study in Georgia,' *International Journal of Economics, Commerce and Management*, vol. 3, no. 11, pp. 276–284.
- Song, S.-I.; Thominnathan, S. & Khalid, N. A.** (2021), 'Entrepreneurial Intention of UiTM Students and the Mediating Role of Entrepreneurship Education,' *Asian Journal of University Education (AJUE)*, vol. 17, no. 2, pp. 236–251. <https://doi.org/10.24191/ajue.v17i2.13405>
- Sousa-Filho, J. M. & Almeida, F.** (2023), 'Factors Affecting Social Entrepreneurial Intentions in a Portuguese Higher Education Institution,' *International Journal of Innovation Science*, vol. 16, no. 2, pp. 265–285. <https://doi.org/10.1108/IJIS-07-2022-0120>
- Wu, S. & Wu, L.** (2008), 'The Impact of Higher Education on Entrepreneurial Intentions of University Students in China,' *Journal of Small Business and Enterprise Development*, vol. 15, no. 4, pp. 752–774. <https://doi.org/10.1108/14626000810917843>
- Zhang, C.; Zhao, L.; Liang, X. & Li, J.** (2021), 'Research on the Effectiveness of Education and Training Incentive Mechanism to Promote College Students' Entrepreneurship,' *E3S Web of Conferences*, vol. 235, art. 02078. <https://doi.org/10.1051/e3sconf/202123502078>

Zivzivadze, L.; Taktakishvili, T.; Zviadadze, E. & Machavariani, G. (2021),
'Evaluation of Support Program for Young Entrepreneurs: Evidence from
Georgia,' *Open Journal of Business and Management*, vol. 9, pp. 2977–2987.
<https://doi.org/10.4236/ojbm.2021.96166>

Appendix

This survey is intended to study students' aptitude for entrepreneurship. The questionnaire aims to collect information that will allow to characterize and analyze entrepreneurship among university students. The data will be used for scientific purposes only and are anonymous and confidential.

Thank you for your collaboration!

Informed consent

Answering 'I agree', indicates that you are 18 years of age or over, agree to participate in this study, confirming that you have been informed of the research conditions and have no doubts. To not answer the questionnaire, please indicate 'No'. Data collection will follow current European law and will be used exclusively, in the context and for the purposes described above, in an explicit and legitimate way. The data collected will be used compatible with the General Data Protection Regulation (GDPR). There will be no dissemination or communication of individual results.

I agree

I do not agree

1. Classify your attitude about entrepreneurship and creation of a start-up company:

Use the following scales: 1—Not interested; 2—Less interested; 3—Indifferent; 4—Very interested, 5—Extremely interested

I have an interest in entrepreneurship.	1	2	3	4	5
I have a motivation to start a business.	1	2	3	4	5
I have an intention to start a business within 5 years.	1	2	3	4	5

2. Indicate the degree of importance attributed to each of the situations listed below related with the students' entrepreneurship attitude.

Use the following scales: 1—Absolutely disagree; 2—Disagree; 3—Indifferent; 4—Agree, 5—Totally agree

2.1. Student's attitude

I think that becoming an entrepreneur is a good career choice.	1	2	3	4	5
I have a positive attitude towards taking risks in business.	1	2	3	4	5
I believe that starting a business requires hard work, but it is worth the effort.	1	2	3	4	5
I feel confident in my abilities to start and manage a business.	1	2	3	4	5
I am excited about the prospect of being my own boss.	1	2	3	4	5

2.2. Student's subjective norm

People who are important to me (e.g., family, friends, mentors) think that becoming an entrepreneur is a good idea.	1	2	3	4	5
People who are important to me would support my decision to start a business.	1	2	3	4	5
I feel pressure from others to become an entrepreneur.	1	2	3	4	5
Others expect me to become an entrepreneur.	1	2	3	4	5
People who are important to me (e.g., family, friends, mentors) think that becoming an entrepreneur is a good idea.	1	2	3	4	5

2.3. Student's behavior

I have the skills and knowledge necessary to start and run a business.	1	2	3	4	5
I have access to the resources I need to start and run a business.	1	2	3	4	5
I am confident in my ability to overcome obstacles and challenges in starting and running a business.	1	2	3	4	5
I have a plan in place to start and run a business.	1	2	3	4	5

2.4. Student's entrepreneurial intention

I am actively planning to start my own business in the near future.	1	2	3	4	5
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I am seriously considering starting my own business.	1	2	3	4	5
I have thought about starting my own business, but I am not sure if I will do it.	1	2	3	4	5
I have no intention of starting my own business in the near future.	1	2	3	4	5

2.5. Student's education

My educational program has provided me with the knowledge and skills necessary to start and run a business.	1	2	3	4	5
My professors and advisors have encouraged me to pursue entrepreneurship.	1	2	3	4	5
My educational program has offered courses and resources specifically designed for aspiring entrepreneurs.	1	2	3	4	5
My educational program has provided me with networking opportunities that could help me in starting and running a business.	1	2	3	4	5

2.6. Student's support

There are resources available in my community (e.g., incubators, accelerators, co-working spaces) that could help me in starting and running a business.	1	2	3	4	5
There are funding opportunities available in my community (e.g., grants, loans, angel investors) that could help me in starting and running a business.	1	2	3	4	5
There are mentoring and coaching opportunities available in my community that could help me in starting and running a business.	1	2	3	4	5
There are networking opportunities available in my community that could help me in starting and running a business.	1	2	3	4	5

2.7 Student's personality

I am comfortable taking risks and making decisions that could have a big impact.	1	2	3	4	5
I am always looking for new opportunities to learn and grow.	1	2	3	4	5
I am not afraid to speak up and share my ideas.	1	2	3	4	5
I am confident in my ability to take on new challenges.	1	2	3	4	5

2.8. Student's relations

I have a mentor or coach who supports me in my entrepreneurial pursuits.	1	2	3	4	5
I have a network of peers who are also interested in entrepreneurship.	1	2	3	4	5
I have access to successful entrepreneurs who could offer me advice and guidance.	1	2	3	4	5
I have a supportive spouse or partner who encourages me to pursue entrepreneurship	1	2	3	4	5

Group II - Student profile

1. Age: _____

2. Gender:

Female Male I prefer to skip this question

3. Nationality: _____

4. Educational Level

1st year bachelor 2nd year bachelor 3rd year bachelor 1st year master 2nd year master

5. Course

- Accounting
- Engineering
- Finance
- International Business Management
- Management
- Marketing
- Tourism
- Business administration (master's)

6. School / University

- Grigol Robakidze University (GRUNI)
- Polytechnic Institute of Bragança (IPB)