

Entrepreneurial Intentions among Hungarian University Students: The Role of Gender, Age, and Educational Background

Anel A. Kireyeva¹, Akan Nurbatsin², Rab Nawaz Lodhi³ & Nailya K. Nurlanova⁴

Abstract

The social environment, economic considerations, individual personality traits, and the educational context considerably affect young people's entrepreneurial intentions. This study aims to examine the impact of demographic and educational factors on entrepreneurial intentions among economics students and offers recommendations to enhance educational policy and pedagogy in Hungarian universities. The empirical foundation consists of survey data from 357 Hungarian bachelor's and master's students. Hypotheses were tested using regression analysis and Mann-Whitney U test. Results show that male students have significantly higher entrepreneurial intentions than female students, and age also affects these intentions. Undergraduate students show lower entrepreneurial intentions compared to graduate students. Although university support has a limited effect on fostering entrepreneurial intentions, many students develop a clear entrepreneurial career vision during their studies. The study concludes with recommendations to strengthen universities' roles in fostering students' entrepreneurial competencies.

Keywords: *Entrepreneurial intention, higher education, Hungary, university student support*

Introduction

Entrepreneurship is a key factor in socio-economic development, particularly amid rapidly changing labor markets and emerging social challenges faced by young people. Higher education is particularly important in this context, serving as a key social institution that not only imparts knowledge but also actively cultivates students' entrepreneurial competencies and intentions. Entrepreneurial skills are increasingly important for university graduates' personal growth and labor market success. Entrepreneurial activity largely hinges on self-efficacy, defined as an individual's confidence in their ability to independently manage a business and achieve goals. While educational priorities, cultural diversity, and family influence significantly shape

¹ PhD, Associate Professor, Institute of Economics SC MSHE RK, Almaty, Kazakhstan, kireyeva.anel@ieconom.kz

² PhD, Kenzhegali Sagadiyev University of International Business, Almaty, Kazakhstan, nurbatsin.a@uib.kz

³ PhD, Associate Professor, Hailey College of Commerce, University of the Punjab, Lahore, Pakistan, rabnawazlodhi@hcc.edu.pk

⁴ PhD, Professor, Institute of Economics SC MSHE RK, Almaty, Kazakhstan, n.k.nurlanova@gmail.com

entrepreneurial aptitude, a distinction exists between genuine entrepreneurial interest and superficial entrepreneurial intentions (Rudnak et al., 2025). The interaction between individual traits and environmental factors is increasingly acknowledged as fundamental to developing an entrepreneurial attitude (Cavallo et al., 2019; Shah & Soomro, 2017).

The formation of an entrepreneurial identity is more complex, shaped not only by self-perception but also by how individuals frame and negotiate their entrepreneurial role through interactions with others (Vörös et al., 2025; Wach & Głodowska, 2021). Empirical research indicates that demographic variables such as gender, age, and education level significantly influence entrepreneurial personality and behavior (Kobylińska & Lavios, 2020; Yurtkoru et al., 2014). Gender, age, and educational background are critical because their interaction with entrepreneurial intent can be contextually dependent, especially within the unique economic and cultural landscape of the post-communist Hungarian context, which requires specific investigation.

The primary goal of entrepreneurship education is to prepare young people for employment while developing their entrepreneurial skills. Thus, the ability of national education systems to adapt to the evolving skill demands of globalization is critical, especially in post-communist countries (Rachwal et al., 2016). Illés et al. (2015) highlight that in Hungary and Poland, universities aim to foster entrepreneurial activity and prepare future entrepreneurs. This is achieved by nurturing an entrepreneurial mindset, awareness, and capabilities, often through modern pedagogical approaches like project-based learning, which foster critical thinking and enhance self-efficacy (George et al., 2016; Ilie & Budac, 2025). Economics programs, in particular, aim to prepare students for business careers, making it advisable for such institutions to offer courses specifically designed to enhance entrepreneurial motivation (Szabó & Aranyossy, 2024). Although several studies examine young people's entrepreneurial intentions internationally, research explicitly focused on Hungary is limited. This is notable given the popularity of business and management programs at Hungarian universities, where many graduates first gain experience in competitive sectors before starting their own businesses. The novelty of the research is that it examines economics students graduating from Hungarian higher education. Furthermore, the systematic analysis of the influence of demographic factors, such as gender, age, and educational background on entrepreneurial intention and self-efficacy within this specific regional and institutional sample is currently absent from existing literature. The research specifically focuses on the extent to which the identified demographic factors influence entrepreneurial intention and self-efficacy within the

Hungarian higher education context. Context-specific insights gained can assist universities in developing more effective educational and development programs for strengthening students' entrepreneurial skills. Thus, this study aims to examine the impact of demographic and educational factors on entrepreneurial intentions among economics students and offers recommendations to enhance educational policy and pedagogy in Hungarian universities.

The research was guided by the following questions:

RQ1. Does the gender of the students influence entrepreneurial intention? If yes, is there a significant difference in the perception of entrepreneurial intention between male and female students?

RQ1. Does the age of the students influence entrepreneurial intention? If yes, is there a significant difference in the perception of entrepreneurial intention between younger and older students?

Does the level of study influence entrepreneurial intention? If yes, is there a significant difference in the perception of entrepreneurial intention based on students' level of education?

Based on these questions, the following hypotheses were formulated:

H1. Male students are more likely to have entrepreneurial intention than female students.

H2. The older the student, the stronger the entrepreneurial intention.

H3. The development of entrepreneurial intention is more typical among master's degree students than among undergraduate students.

Literature Review

Entrepreneurial intention is widely regarded as a critical first step toward starting a business. The most widely accepted theoretical lens for examining entrepreneurial intention is Ajzen's (1991) Theory of Planned Behavior (TPB). The TPB posits that behavioral intention is predicted by three constructs: attitude toward the behavior, subjective norm, and perceived behavioral control. According to this theory, stronger intentions increase the likelihood that the behavior will eventually occur, making entrepreneurial intention a strong predictor of subsequent action (Liñán, 2008). A central psychological factor in this process is Entrepreneurial Self-Efficacy (ESE), which is derived from Bandura's (1977) broader social cognitive theory. ESE is defined as the belief in one's ability to successfully execute specific entrepreneurial tasks and manage a business. The theoretical importance of ESE is profound as it is conceptually aligned with the Perceived Behavioral Control (PBC) construct within the TPB model. Consequently, ESE is often found to

be the strongest cognitive predictor of entrepreneurial intention (Boyd & Vozikis, 1994; Zhao et al., 2005). Entrepreneurial intention is shaped not only by these internal traits but also by broader factors such as education, culture, and family background (Ganefri et al., 2024; Czako et al., 2023; Du Toit, 2023; Isaacs et al., 2007; Ndlovu, 2024). Research shows that exposure to entrepreneurial role models, family entrepreneurial activity, and cultural attitudes affect young people's likelihood of viewing entrepreneurship as a viable career option (Utemisova et al., 2025; Wu & Rudnak, 2021; Zampetakis et al., 2009). Students with practical business experience or entrepreneurial family backgrounds are more likely to start their own ventures (Bigagli, 2021; Nguyen, 2018; Ward et al., 2019). Similar trends appear in Hungary, where positive entrepreneurial attitudes combined with prior entrepreneurial experience or family support strongly predict students' entrepreneurial activity (Gubik, 2021; Makai & Dory, 2023).

The inclusion of gender, age, and educational background is critical, as international studies highlight their significant influence on entrepreneurial personality and behavior. Empirical evidence suggests that entrepreneurial competence and intention are shaped not only by demographic characteristics but also by gendered perceptions of entrepreneurial control and role expectations (Daliman et al., 2019). Regional studies consistently highlight gender-related differences in entrepreneurial intentions, with research from Central and Eastern Europe often showing that male students are generally more inclined toward entrepreneurial careers than female students (Camelo-Ordaz et al., 2016; Tomal & Szromnik, 2022). Male students often report higher self-confidence and entrepreneurial self-efficacy, while female students tend to exhibit more anxiety and hesitation (Daim et al., 2016; Wen et al., 2020). This disparity is often attributed to Social Role Theory and differential access to resources and networks (Brush et al., 2006). Some studies find that women with lower risk tolerance may still feel confident about starting a business after graduation (Gurel et al., 2021). Other research reveals a gap between intentions and actual entrepreneurial behavior: although no significant gender difference in intentions was observed among students, women were less likely than men to pursue these intentions in practice and consistently reported lower confidence in their entrepreneurial abilities (Becsky-Nagy & Fazekas, 2025). This research also suggests that university support is particularly important for women, indicating that higher education plays a critical role in fostering female entrepreneurial development. Holienka et al. (2017) identify gender as a decisive factor in entrepreneurial intention and recommend stronger support for female students' ambitions. Similar patterns exist in Serbia,

where men are more likely to pursue entrepreneurship, while women show less involvement, signaling the need for targeted educational programs (Dvouletý & Orel, 2020; Jovičić-Vuković et al., 2020). Conversely, Popescu et al. (2016) find that demographic factors like gender, age, and education do not significantly affect entrepreneurial intentions in Romania. However, other Romanian studies report lower entrepreneurial intentions among female business and engineering students (Vodă & Florea, 2019).

Age and education level also influence intentions, as they correlate with the accumulation of human capital and career planning seriousness near graduation. Age may lead to greater practical experience, which in turn boosts Entrepreneurial Self-Efficacy. Vasilescu et al. (2025) highlight that young people with lower education levels, such as secondary and vocational school graduates, tend to show higher entrepreneurial intentions than university students. Increased entrepreneurial activity is also noted among urban youth compared to rural youth. Other research shows no significant age differences but highlights the influence of prior work experience and marital status (Layoo et al., 2025).

Regarding educational background, the specific program matters greatly. Entrepreneurial training, economic studies, and family entrepreneurial background contribute to intention development (Holiienka et al., 2017; Suryono et al., 2022). Szabó et al. (2022) found that master's students in business development are more likely to start businesses, often gaining initial experience at multinational firms before launching their ventures. Kárpáti-Daróczi (2020) found that many institutions now prioritize foundational knowledge in economics, marketing, and finance along with entrepreneurial skills. Students' entrepreneurial intentions are profoundly influenced by the quality of their educational environment and specific entrepreneurial training. Entrepreneurial training that promotes autonomy, creativity, and innovation plays a key role in shaping students' professional orientation. Integrating entrepreneurship into university curricula fosters positive attitudes and skill development. Additionally, personal traits like self-confidence, risk tolerance, and openness to innovation further impact entrepreneurial behavior (Betáková et al., 2021; Hosseininia et al., 2022). Entrepreneurship courses and training programs are increasingly common in higher education worldwide and are often linked to stronger entrepreneurial intentions among graduates (Khawar et al., 2022).

In the Hungarian context, Wu et al. (2022) found that risk tolerance, opportunity recognition, and managerial self-efficacy positively affect entrepreneurial intentions among international students,

while weak interpersonal or teamwork skills may hinder them. Demographic factors like prior entrepreneurial exposure, family business background, and self-financing increase the likelihood of independent entrepreneurship. Encouraging entrepreneurship within higher education further strengthens intentions, with Hungarian students showing relatively high involvement compared to other European countries (Gubik & Farkas, 2016). While family entrepreneurial background plays a crucial role, university courses have less direct impact on intentions (Holiienka et al., 2017). Practical experience programs should be widely accessible since classroom learning mainly delivers theoretical knowledge (Kárpáti-Daróczi, 2020). Although students are generally satisfied with university support for startups, they seek greater involvement from entrepreneurs and mentors to foster their entrepreneurial attitudes (Szabó et al., 2022).

Methodology

Research Design

This empirical study employed a quantitative, cross-sectional research design to examine the extent to which gender, age, and education level influence entrepreneurial intention among university students enrolled in economics programs (Ajzen, 1991; Liñán, 2008; Holiienka et al., 2017). The study followed an explanatory comparative approach, testing statistically whether demographic characteristics are associated with differences in entrepreneurial intention. The dependent variable were gender, age and education level. The independent variables were statements about entrepreneurial intention, measured using Likert-scale items.

The research process consisted of four stages: instrument development, data collection, statistical analysis, and interpretation of findings.

Sample

To verify the sampling ratio estimate, a specific formula was applied.

$$e = Z * \sqrt{\frac{p * (1 - p)}{N}}$$

Based on the formula, the margin of error was calculated using a Z-value of 1,96, corresponding to the desired confidence level, assuming a proportion of $p = 0.5$ and a sample size of $N = 357$.

$$e = 1,96 * \sqrt{\frac{0,5*(1-0,5)}{357}} = 0,0518$$

The calculation yielded 0,0518, corresponding to a $\pm 5,18\%$ margin of error. Thus, with a sample size of $N = 357$, the estimate has an approximate margin of error of $\pm 5,18\%$ at the 95% confidence level, which we deemed sufficient for drawing scientifically meaningful conclusions from the study's results. Table 1 presents the sample composition. Statistical analysis indicates no under- or over-representation by gender. Respondents are on average 19–21 years old and primarily enrolled in bachelor's programs. Most study Business Administration and Management (34,7%) or Commerce and Marketing (30,5%). Except for gender and educational level, the sample shows considerable variation in age and field of study and can therefore be characterized as heterogeneous.

Table 1*Description of the Research Sample*

Variable	Category	Number of respondents	Percentage (%)	Mean	Std. Deviation
Gender	Male	177	49,6	1,50	,501
	Female	180	50,4		
Age	from 19 to 21	193	54,1	1,89	1,125
	from 22 to 24	64	17,9		
	from 25 to 30	46	12,9		
Level of study	from 31 to 40	54	15,1	1,34	,476
	Bachelor	234	65,5		
	Master	123	34,5		
Study program	Commerce and Marketing	109	30,5	2,421	3,16
	Business Administration and Management	124	34,7		
	International Economy and Business	17	4,8		
	Mathematics	4	1,1		
	Lean manager	5	1,4		
	Engineering Management	8	2,2		
	Other	90	25,2		
Total		N=357			

Source: Own editing, 2025.

Participants

The study was conducted among undergraduate and graduate students enrolled in economics programs at Hungarian universities. The target group consisted of students enrolled in bachelor's, or master's, programs in business and economics. A non-probability convenience sampling strategy was used due to accessibility and feasibility. Participation was voluntary and anonymous, and all respondents provided informed consent.

Data Collection Tools

The empirical research used a structured online questionnaire created with Google Forms for data collection. The authors developed the questionnaire based on a review of previous literature (e.g., Isaacs et al., 2007). It comprised 20 questions, including both closed-ended and Likert-scale items.

The Likert-scale questions were rated on a 5-point scale, where 1 indicated “not at all typical” and 5 indicated “completely typical”.

For the scale-type questions, reliability was assessed using Cronbach's alpha coefficient. Its value ranges between 0 and 1, with a reference value of 0,7. In connection with scale-type questions, Hotelling's T-square multivariate statistical test was also run, which shows at a significance level ($p < 0,05$) whether the means of two or more groups are significantly different from each other. The questionnaire was divided into four sections: the first collected demographic data (e.g., gender, age), the second focused on educational background (e.g., education level, study program), the third examined links between education and entrepreneurship, and the fourth included statements about students' entrepreneurial intentions and attitudes, asking respondents to evaluate their preferences.

Data Collection Procedure

Data collection took place in early 2025, using online distribution through university mailing lists and student platforms. To reach students, data collection took place in the spring semester, as they are more easily accessible during the teaching period than during exam period. No personally identifiable information was collected, and data handling followed GDPR-compliant standards. Participants were informed about the aim of the study, voluntary participation, and research publication plans.

Data Analysis Techniques

Data analysis was conducted using SPSS program, a software for numerical data analysis. Prior to coding, incomplete and duplicate responses were removed. Descriptive statistics, including frequency, mean, and standard deviation, were used to characterize the sample. To the test hypotheses H1, H2, H3 conducted a regression analysis to assess which factors influence students' entrepreneurial intention. In regression analysis, the significance condition $p < 0,05$ is followed, the beta (β) is correlation coefficient, and B shows the direction (positive or negative) of the relationship between the two variables. It was also examined whether there are differences between students in terms of entrepreneurial intention based on influencing factors. For this purpose, the Mann-Whitney U test was applied, a non-parametric method for comparing medians between two independent groups.

Results

Table 2 presents the questions concerning university students' entrepreneurial intentions. The first question examined the proportion of students who currently own or hold a stake in a business. According to the responses, 28,9% reported operating or being involved in a business. The second question examined the extent to which students utilized university-provided support for launching and managing their businesses. Only 15,7% reported making use of such opportunities. The third question assessed students' interest in university support services for establishing and managing a start-up. Only 39,5% expressed such interest, a relatively low proportion considering that the respondents study economics, where the theoretical knowledge gained should, in principle, provide a solid foundation for future independent business creation.

Table 2

Entrepreneurial Involvement and Interest in University Support

		Q1: Do you run a business or are you a shareholder in a company?	Q2: Have you ever used the University support in setting up and running a business?	Q3: Are you interested in taking advantage of the start-up and business assistance offered by the University?
N Valid		357	357	357
Missing		0	0	0
Frequency	Yes	103	56	141
	No	254	301	216
Percent (%)	Yes	28,9%	15,7%	39,5%
	No	71,1%	84,3%	60,5%
Mean		1,71	1,84	1,61
Median		2,00	2,00	2,00
Mode		2	2	2
Std. Deviation		,454	,364	,490
Variance		,206	,133	,240

Source: Own editing, 2025.

Table 3 summarizes students' expectations regarding university support. Across all categories, negative responses outweighed positive ones, reflecting limited expectations of institutional assistance. Most students did not anticipate support in areas such as business plan development, legal and financial advice, access to financing, or training programs. Consequently, their entrepreneurial intentions are likely shaped more by demographic and personal factors than by institutional conditions.

Table 3

Expectations of University Support for Entrepreneurship

		US1	US2	US3	US4	US5	US6	US7	US8	US9	US10
N	Valid	357	357	357	357	357	357	357	357	357	357
	Missing	0	0	0	0	0	0	0	0	0	0
	Yes	150	153	115	62	91	79	68	97	83	76

Frequency	No	207	204	242	295	266	278	289	260	274	281
Percent (%)	Yes	42,0%	42,9%	32,2%	17,4%	25,5%	22,1%	19,0%	27,2%	23,2%	21,3%
	No	58,0%	57,1%	67,8%	82,6%	74,5%	77,9%	81,0%	72,8%	76,8%	78,7%
Mean		1,58	1,57	1,68	1,83	1,75	1,78	1,81	1,73	1,77	1,79
Median		2,00	2,00	2,00	2,00	2,00	2,00	2,00	2,00	2,00	2,00
Mode		2	2	2	2	2	2	2	2	2	2
Std. Deviation		,494	,496	,468	,379	,436	,416	,393	,445	,423	,410
Variance		,244	,246	,219	,144	,190	,173	,155	,198	,179	,168

University Support (US):

US1: Assistance in the preparation of a business plan

US2: Financial and accounting advice

US3: Legal advice

US4: Direct financial support from the University

US5: Participation in thematic training courses

US6: Support in the development of a business model

US7: Assistance in choosing the organizational and legal form of business activity

US8: Assistance in the procedure of registering business activity

US9: Assistance in obtaining funds for starting a business activity

US10: Possibility to consult business ideas with practitioners

Source: Own editing, 2025.

Table 4 presents the descriptive statistics (mean and standard deviation) for the independent variables included in the hypotheses, along with the reliability test results. The number of scale items is 4, the Cronbach’s alpha value of 0,824 exceeds the commonly accepted threshold of 0,7, indicating high scale reliability. On average, respondents’ agreement with the statements reflecting entrepreneurial intentions was slightly above moderate. The Hotelling’s $T^2 = 22,708$ at ($p = 0,000 < 0,05$) significance level is significant. This means that there is a significant difference between the means of the variables examined. This means that the students evaluated variables to a different extent.

Table 4

Descriptive Statistics of Dependent Variables Included in Hypothesis

	N	Mean	Std. Deviation
I am an entrepreneurial person	357	3,79	,926
My family and friends consider me an entrepreneurial person	357	3,72	1,017
I am seriously thinking about starting a business	357	3,61	1,203
I am ready to do anything to become an entrepreneur	357	3,51	1,297
Reliability Statistics			
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items		N of Items
,824	,828		4
Hotelling's T-Squared Test			
Hotelling's T-Squared	F	df1	df2
22,708	7,527	3	354
			Sig
			,000

Source: Own editing, 2025

Our hypothesis testing began with the assumption that entrepreneurial personality traits are linked to demographic characteristics such as gender, age, and level of study, which are presumed to influence the development of entrepreneurial intention (Kobylińska & Lavios, 2020; Yurtkoru et al., 2014). The aim was to identify fundamental correlations and differences in the formation of entrepreneurial intentions among university students based on their demographic profiles. In total, four statements were examined, each reflecting characteristics of a stable entrepreneurial intention. The first statement assessed whether students, in their own judgment, considered themselves entrepreneurial. The second examined whether their family and friends shared this perception. The third and fourth addressed whether students were seriously considering starting a business and whether they felt prepared to manage an independent venture. These statements are analyzed in relation to various demographic characteristics.

Regarding hypothesis H1, we used regression analysis to examine the effect of students' gender (independent variable) on entrepreneurial intention (dependent variable). For all of statements (S1-S4), the $p = 0,000 < 0,05$ condition applies, stating that the gender of students has a significant effect on the development of entrepreneurial intention (see Table 5). With this in mind, was applied the Mann-Whitney U test to compare the two groups and identify differences.

Table 5
Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
S1	-,321	,030	-,594	-10,560	,000
S2	,148	,027	,301	5,536	,000
S3	,164	,028	,393	5,940	,000
S4	-,248	,025	-,643	-9,917	,000

a. Independent Variable: Gender

Dependent Variables:

I am an entrepreneurial person (S1)

My family and friends consider me an entrepreneurial person (S2)

I am seriously thinking about starting a business (S3)

I am ready to do anything to become an entrepreneur (S4)

Source: Own editing, 2025.

Table 6 presents the mean and sum of ranks for male and female students across the four statements, indicating which group was more strongly associated with each. Given the sample size ($N = 357$), the Z-approximation was employed for statistical inference, with ranks, test statistics, and means calculated for interpretation. The results showed statistically significant gender differences across all statements, with Z-values of S1 ($-9,663$), S2 ($-2,540$), S3 ($-4,613$), and S4 ($-9,780$), all yielding p-values below 0,05. It can be stated that statements supporting entrepreneurial intentions more strongly present in the case of male students than in the case of

female students. Hypothesis H1 confirms a statistically significant gender difference in perceptions of entrepreneurial intention.

Table 6*Mann-Whitney U Test*

Statement=S	Gender	N	Mean Rank	Sum of Ranks
S1: I am an entrepreneurial person	Male	177	229,24	40575,50
	Female	180	129,60	23327,50
S2: My family and friends consider me an entrepreneurial person	Male	177	192,29	34035,50
	Female	180	165,93	29867,50
S3: I am seriously thinking about starting a business	Male	177	203,49	36018,00
	Female	180	154,92	27885,00
S4: I am ready to do anything to become an entrepreneur	Male	177	231,34	40948,00
	Female	180	127,53	22955,00
<i>Test Statistics</i>				
Statement=S	S1: I am an entrepreneurial person	S2: My family and friends consider me an entrepreneurial person	S3: I am seriously thinking about starting a business	S4: I am ready to do anything to become an entrepreneur
Mann-Whitney U	7037,500	13577,500	11595,000	6665,000
Wilcoxon W	23327,500	29867,500	27885,000	22955,000
Z	-9,663	-2,540	-4,613	-9,780
Asymp. Sig. (2-tailed)	,000	,011	,000	,000

a. Grouping Variable: Gender

Source: Own editing, 2025.

The results show that male students are more likely than female students to perceive themselves as entrepreneurial, a view also reflected in the perceptions of their families and close friends. Male students further demonstrated stronger entrepreneurial intention, reporting that they seriously consider starting a business and feel adequately prepared to launch and manage one. These findings align with Holienka et al. (2017), who identified gender as a decisive factor in the development of entrepreneurial intention among students, and with Vasilescu et al. (2025), who found men significantly more open to entrepreneurship. Daim et al. (2016) likewise observed gender differences, noting women's higher susceptibility to anxiety and insecurity, which hinders entrepreneurial activity. Dvouletý and Orel (2020) similarly reported that women are less likely to pursue entrepreneurial careers. Studies across diverse contexts corroborate these findings. Jovičić-Vuković et al. (2020) in Serbia, Wen et al. (2020) in China, Nguyen (2018) in Vietnam, and Vodă and Florea (2019) in Romania all found male students displaying stronger entrepreneurial intentions than female students. However, contrasting evidence exists. Popescu et al. (2016) found demographic factors, including gender, to have little effect on Romanian students' entrepreneurial intentions, while Ward et al. (2019) reported that Spanish female students exhibit greater

entrepreneurial propensity than male students, driven by professional aspirations for autonomy, novelty, and achievement, particularly in fields such as pedagogy and sociology.

Table 7 presents the results of the regression analysis in relation to Hypothesis H2. In the hypothesis test, the independent variable is age, and the dependent variables are entrepreneurial intention indicators (S1–S4). Based on the regression analysis age has a significant effect on students' entrepreneurial intention at significance level of $p = 0,000 < 0,05$. In the case of age ($\beta = ,205$; $B = ,169$) it can be stated that the older the student, the stronger the entrepreneurial personality. In the case of age ($\beta = ,290$; $B = ,262$) it can be stated that the older the student, the more the family and friends consider that the student has an entrepreneurial personality. In the case of age ($\beta = -,219$; $B = -,253$) it can be stated that the younger the student, the less ready the student is to become an entrepreneur. No significant relationship can be demonstrated between the age and the S3 ($p = 0,920 > 0,05$). The fundamental differences based on age can be interpreted based on B value, so there is no need for a comparison by age group. Based on this, it can be concluded that there is a fundamental difference between the two younger (from 19 to 21, from 22 to 24) age groups and the two older (from 25 to 30, from 31 to 40) age groups. The older the student, the stronger the entrepreneurial intention. Conversely, the younger the student, the weaker the entrepreneurial intention. Regarding Hypothesis H2, our analysis shows that the development of entrepreneurial intention among university students is significantly influenced by age. The more mature the student, the stronger the entrepreneurial intention.

Table 7
Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
S1	,169	,055	,205	3,088	,002
S2	,262	,067	,290	3,911	,000
S3	-,008	,079	-,007	-,100	,920
S4	-,253	,073	-,219	-3,448	,001

a. Independent Variable: Age

Dependent Variables:

I am an entrepreneurial person (S1)

My family and friends consider me an entrepreneurial person (S2)

I am seriously thinking about starting a business (S3)

I am ready to do anything to become an entrepreneur (S4)

Source: Own editing, 2025.

Similar to our findings, Holienka et al. (2017) identified age as a decisive demographic factor in the development of entrepreneurial intention among students. In contrast to our findings, Vasilescu et al. (2025) emphasized that individuals aged 15–24 are more likely to become entrepreneurs. In

contrast, Layoo et al. (2025) found no significant age-related differences in entrepreneurial intention among university students, a result echoed by Nguyen (2018) in Vietnam, who also reported that age does not significantly affect entrepreneurial intention among business students. However, Nguyen noted that prior self-employment experience increases the likelihood of pursuing entrepreneurship. These mixed results underscore the divergence in empirical evidence regarding age and entrepreneurial intention, and our findings contribute to this ongoing debate.

Regarding hypothesis H3, we used regression analysis to examine the effect of students' educational level (dependent variable) on entrepreneurial intention (independent variable). For three statements (S1, S2, S4), the $p = 0,000 < 0,05$ condition applies, stating that the educational level of students has a significant effect on the development of entrepreneurial intention (see Table 8). With this in mind, we applied the Mann-Whitney U test to compare the two groups and identify differences.

Table 8
Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
S1	-,103	,037	-,200	-2,749	,006
S2	,130	,033	,277	3,928	,000
S3	-,045	,034	-,113	-1,322	,187
S4	,145	,031	,394	4,694	,000

a. Dependent Variable: Level of study

Independent Variables:

I am an entrepreneurial person (S1)

My family and friends consider me an entrepreneurial person (S2)

I am seriously thinking about starting a business (S3)

I am ready to do anything to become an entrepreneur (S4)

Source: Own editing, 2025.

Table 9 presents the mean ranks for the statements by level of education. Master's students showed significantly higher average ranks across all four statements, indicating a stronger entrepreneurial self-perception and intention than bachelor's students. As shown in Table, all four statements revealed statistically significant differences: S1 ($Z = -2,471$), S2 ($Z = -4,633$), S3 ($Z = -4,254$), and S4 ($Z = -6,159$), with p-values below 0,05. It can be stated that entrepreneurial intention is formulated earlier in students who are more advanced in their studies. Entrepreneurial intention is stronger in students in master's programs than in students in bachelor's programs. Overall, Hypothesis H3, which posits differences in entrepreneurial intention between bachelor's and master's students, received statistical confirmation.

Table 9
Mann-Whitney U Test

	Level of study	N	Mean Rank	Sum of Ranks
I am an entrepreneurial person	Bachelor	234	169,76	39725,00
	Master	123	196,57	24178,00
My family and friends consider me an entrepreneurial person	Bachelor	234	161,57	37807,50
	Master	123	212,16	26095,50
I am seriously thinking about starting a business	Bachelor	234	162,76	38086,50
	Master	123	209,89	25816,50
I am ready to do anything to become an entrepreneur	Bachelor	234	155,30	36340,00
	Master	123	224,09	27563,00
Test Statistics				
Statement=S	S1: I am an entrepreneurial person	S2: My family and friends consider me an entrepreneurial person	S3: I am seriously thinking about starting a business	S4: I am ready to do anything to become an entrepreneur
Mann-Whitney U	12230,000	10312,500	10591,500	8845,000
Z	-2,471	-4,633	-4,254	-6,159
Asymp. Sig. (2-tailed)	,013	,000	,000	,000

a. Grouping Variable: Level of study

Source: Own editing, 2025.

The results indicate that master's students are more likely to perceive themselves as entrepreneurial, believe their social networks share this perception, and express greater willingness to start a business. Holienka et al. (2017) similarly found that education level plays a decisive role in shaping entrepreneurial intention, and Szabó et al. (2024) reported that master's students in business development are significantly more likely to pursue entrepreneurship. In contrast, Vasilescu et al. (2025) argued that young people with lower qualifications, such as secondary or vocational education, are more inclined to start a business. Popescu et al. (2016) likewise found no connection between education level and entrepreneurial intention among Romanian students, a conclusion echoed by Nguyen (2018) in Vietnam. These contrasting findings highlight a broader inconsistency in empirical literature, and our results contribute to this debate on the influence of education stage on entrepreneurial orientation. We also note that research often underemphasizes the role of specific education levels, focusing instead on factors such as entrepreneurial knowledge acquisition, the quality of internships, and the development of entrepreneurial skills.

Conclusion

An increasing body of research investigates young people's entrepreneurial intentions and the role of higher education in shaping entrepreneurial competencies. This study examined how demographic characteristics influence the entrepreneurial intentions of Hungarian economics students. The findings confirm that gender, age, and educational stage are statistically significant

predictors of entrepreneurial intention, with male, older, and master's-level students showing higher levels of entrepreneurial commitment.

The study contributes to the existing literature by providing empirical evidence from a post-transition Central European context, where the mechanisms described in global entrepreneurship theories show both convergence with and deviation from international patterns. The results reinforce the importance of demographic variables within models of entrepreneurial intention, while also indicating that formal education alone does not fully explain intention formation.

Several limitations must be acknowledged. First, convenience sampling restricts the generalizability of results, and the sample, while statistically sufficient, is not nationally representative. Second, the research relied on self-reported data, which may introduce social desirability bias. Third, only demographic determinants were included in the model, without controlling for institutional support, socioeconomic background, personality traits, or prior entrepreneurial exposure, all of which may influence intention formation. Finally, the cross-sectional design prevents any causal interpretation of the results.

For higher education institutions, the findings suggest the need for differentiated entrepreneurship education strategies:

- (1) gender-responsive programs that address lower entrepreneurial confidence among women,
- (2) age-targeted interventions that support early-career decision-making, and
- (3) curriculum structures that offer advanced experiential learning opportunities at master's level.

For policymakers, the results highlight the value of early-stage entrepreneurial role models and mentoring networks, particularly for women and younger students.

Future research should integrate psychological, cultural, and institutional variables into the explanation of entrepreneurial intention. Longitudinal designs are especially recommended, as repeated measurements on the same cohort would reveal whether students' intentions translate into real entrepreneurial activity after graduation. Comparative studies with other post-socialist countries could further contextualize the Hungarian results.

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