


# “Youth attitude to entrepreneurship in Eastern and Central European countries: Gender aspect”

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# YOUTH ATTITUDE TO ENTREPRENEURSHIP IN EASTERN AND CENTRAL EUROPEAN COUNTRIES: GENDER ASPECT

## Abstract

Current business conditions pose new challenges to youth entrepreneurship, which is a significant component of countries' economic growth. In addition, Generation Z differs from previous generations and requires new approaches. In this context, a comprehensive study of the peculiarities and various aspects of youth entrepreneurship development is highly-demanded and relevant. Furthermore, the lower representation of women among entrepreneurs prompts the study to seek answers about the causes of this phenomenon.

This study aims to investigate the gender aspect of young people's attitude (students who just started their university education) from Eastern and Central European countries to entrepreneurship. Notably, their entrepreneurial intentions, attitudes toward entrepreneurship, perceived threats of setting up the business, and determination to start/run a family business compared to working for a big corporation, from a gender perspective, are worth investigating. The study employed the survey with structured printed questionnaires spread in campuses among 3,636 first-year (bachelor) students of technical universities in Ukraine, Poland, Latvia, Lithuania, and Bulgaria. The results show that male students are more determined to set up firms; however, the difference compared to the females is only 3.3%. No gender differences were observed in the vision of the attractiveness of running own business or in the perception of threats in running a business. Students of both genders do not suppose that working in a corporation is more attractive than a family business. Nevertheless, respondents of both genders gave the maximum score for the statement that corporations provide more excellent opportunities to develop competencies.

## Keywords

entrepreneurship intentions, gender, attitude toward entrepreneurship, student

## JEL Classification

J16, J23, M13, O57

## INTRODUCTION

In recent years, the world's youth labor market has been characterized by an increase in unemployment, self-employment, and number of workers with non-standard working conditions (including a part-time working day), and the share of young people in the "gig" economy (OECD/European Commission, 2020). In addition, young people face new challenges related to automation-robotics, the narrow focus of a significant part of professional training. In general, the youth labor force participation rates as of 2019 were 41.2% worldwide, 43.8% in Northern, Southern, and Western Europe, and 32.3% in Eastern Europe. According to OECD/European Commission (2021), almost half of university students (45%) will start their business within five years of graduation. Nevertheless, only five percent of people aged 18-30 work on a start-up.

Youth entrepreneurship plays a key role in countries' economies, creating new small businesses and additional jobs. After all, young people are more ambitious in their entrepreneurial intentions than the



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older generation (Prokopyshyn, 2009). In particular, almost half of young people prefer working for themselves to working as an employee, while for people 40+ years of age, this figure is 30% (European Commission, 2013). However, not everyone should and have skills to run a business. As Adom and Affum-osei (2019) point out, people's ability to be aware of entrepreneurial opportunities is a crucial determinant for their decision to run a business as a future career. However, this is only the beginning of a long journey as an entrepreneur.

In addition, when considering youth entrepreneurship, it is necessary to consider each generation's specifics (Schlee et al., 2020). In particular, Otieno and Nyambegeera (2019) and Struckell (2019) note that Generation Z is dissimilar to previous generations because they are highly defined, involved, purposeful, appraise adjustability, etc. This generation is seen as more entrepreneurial than the previous generation mainly because they are intuitively innovative, uber-productive, goal-oriented, and realistic (Merriman, 2015). There is a noticeable imbalance when analyzing the participation of women among entrepreneurs and their entrepreneurial intentions, regardless of the generation.

In the current conditions, it is also essential to take into account the impact of the pandemic on the development of youth entrepreneurship. As indicated by Eurofound (2021), youth was expected more than senior groups to encounter means of livelihood loss and mental health problems. For example, 12% of people aged 18 to 29 mentioned that they were significantly affected by the restrictions of the pandemic; more often, they worked on temporary contracts or part-time, or lost their jobs, 12% of students also faced unemployment. Furthermore, if to consider the gender aspect, women in Europe are 50% more likely to report business closures due to the pandemic (Global Entrepreneurship Monitor, 2021).

A lower level of women's activity in both the labor market and entrepreneurship is a loss for economies. However, women's entrepreneurship is increasingly seen as a significant factor in creating new jobs, reducing the stratification of households by income, and spreading social inclusion.

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## 1. LITERATURE REVIEW AND HYPOTHESES

The issues of identifying entrepreneurial intentions in people of different age groups and gender are popular among scientists (Du Rietz & Henrekson, 2000; Kopets et al., 2008; Santos et al., 2016; Suárez-Ortega & Gálvez-García, 2017; De Groot et al., 2017; Tariq et al., 2018; Welter, 2019). A fairly common approach is to use variables from Ajzen's theory of planned behavior (Ajzen, 1985) in combination with additional personality traits and contextual variables. Cognitive theories, especially of Shapero-Krueger and Ajzen, help to describe the impact of perception of phenomena on entrepreneurial intentions. This perception concerns, above all, personal attractiveness – reflecting the expected value, which affects the attitude toward current subjective norms regarding the acceptance of a given activity. It may contribute to increasing the motivation in making decisions about starting an entrepreneurial career and, finally, perceived feasibility.

In particular, Rajh et al. (2018) and Al Saiqal et al. (2019) showed that students' attitudes to entrepreneurship and mental control of behavior positively influence their entrepreneurial intentions. In turn, Jena (2020), using the example of management students, found that entrepreneurial intentions are enhanced by positive students' attitudes to entrepreneurial education and entrepreneurial environment. Furthermore, in developing countries, the social status of a family, subjective norms, and informed choice of students themselves also significantly influence youth's entrepreneurial intentions (Al Saiqal et al., 2019).

The Theory of Planned Behavior (TPB) is derived from social psychology. It assumes that intentions are a substantive precursor of human social behavior. At the same time, intentions are determined by attitudes toward the behavior (that come from behavioral beliefs), subjective norms, and perceived behavioral control (Ajzen, 1991). The meta-analysis by Armitage and Conner (2001) shows the high success of Ajzen's model in pre-

dicting behavior and intentions. Moreover, despite few critical voices (Sniehotta et al., 2014), it is successfully used for research in many areas (Si et al., 2019), as well as in the field of entrepreneurship (Tornikoski & Maalaouri, 2019). Past studies have repeatedly confirmed the relationship between self-efficacy (ESE), perceived behavioral control (PBC), social norms (SN), and entrepreneurial intentions (Wilson et al., 2007; Hallam et al., 2016; Joensuu-Salo et al., 2015).

Haus et al. (2013), using the theory of planned behavior and role matching theory, focused their research on identifying the relationship between gender and entrepreneurial intentions. This study shows that despite the slight predominance of men in the level of entrepreneurial intent, it is impossible to talk about the presence of significant gender differences when starting a business. Moreover, Steinmetz et al. (2021), supporting Haus et al. (2013), found a tendency to reduction of gender differences in the entrepreneurial intentions of young people.

Despite this, studying the peculiarities of entrepreneurial intentions among young people should continue. Research on the example of students is especially relevant because this is the group of people at the stage of highly specialized training and obtaining their first professional experience, as well as more courageous in their intentions than the older generation.

Mahmood et al. (2020) found that self-efficacy has a worthy of attention mediating consequence on the correlation between entrepreneurial opportunity and entrepreneurial intentions, while social norms have little impact. However, Eesley and Wang (2017) showed that students in higher education whom entrepreneurial mentors support have a higher likelihood of becoming entrepreneurs, particularly those with parents who are not entrepreneurs. Belas et al. (2017), while evaluating the social and economic determinates of students' bias in favor of entrepreneurship, found the determinants that strongly influence students' entrepreneurial intentions. They are: interest in a business in general, possession of abilities to do business, existence of an entrepreneur in the household, high-class educational structure of the alma mater university, preferable climate for start-

ing a new business, advancement of business conditions within the last five years in a country, uneven income, and proper credit rules of commercial banks in a country as the most important factors of doing business. The relationship between social context of the country to which a person belongs, and the activity of males and females in entrepreneurship, is also proved by Choo (2021).

Cultural differences also overlap with the above-described differences resulting from objective conditions. With the cultural distance from the USA, the differences in risk-propensity, internal locus of control, and energy level increase. Moreover, all of this is made up of the differences between men and women. Both objective conditions and cultural differences will influence individual perceptions of the advantages and disadvantages of being an entrepreneur (Neergård & Aadland, 2021). Therefore, research in different countries may produce different results (Nowiński et al., 2017).

Being an entrepreneur, however, comes with many disadvantages. For example, some general obstacles hinder youth entrepreneurship in European countries: low levels of awareness and few entrepreneurship role models, lack of entrepreneurship skills, difficulty accessing finance, and small entrepreneurship networks (Panas & Tkach, 2017; OECD/European Commission, 2020). In addition, there are specific ones, depending on the country of origin. For example, countries of Eastern and Central Europe entered the tracks of the market economy relatively recently and are still struggling with many of the backlogs of centrally planned economies. In particular, the latter in Ukraine include: lack of a full-fledged legislative framework; weak development of the system of financing business projects; high tax and credit rates; lack of an information resource in which young people could find the necessary information about existing programs to support entrepreneurship; corruption barriers and the "shadow" economy (Petrenko & Karnaushenko, 2019; Shpak et al., 2021).

It should be noted that Poland and Latvia are leaders among the EU countries in terms of the proportion of youth (18-30 years old) having the skills and knowledge to begin a business: more than 50% (OECD/European Commission, 2020). However, the leading obstacles to starting new firms and do-

ing business in Poland are high salaries, changing legislation, bureaucrats, and overly complicated regulations of accounting and taxes (ZPP, 2018). Lithuania stands out qualitatively where low announced entrepreneurship skills, as well as unfavorable access to financial resources for new businesses repeatedly, is below the European Union median (OECD/European Commission, 2020). Latvia also continues to actively support the entrepreneurial environment and introduce innovations, in particular, by simplifying business registration on the internet, increasing the evidence of digital public services, and implementing a number of measures to improve access to finance. In Bulgaria, however, business conditions remain challenging, primarily due to the administrative barriers and the complexity of the access to finance. Ukraine is not EU country yet and less developed and business friendly, comparing to the other countries in the research.

In reality, however, the same adversities are perceived through the prism of one's abilities, which shapes entrepreneurial intention (Santos et al., 2016).

The nature of the context within which women entrepreneurs' function is being highlighted by recently surfacing research; e.g., in certain lines of trade/geographical areas, it is women's businesses that have a higher rate of survival (Kalnins & Williams, 2014). However, when the context is not considered, this situation is inverted. The context can be of essential or methodological character (Johns, 2001). This relationship should be studied in more detail on the example of Eastern and Central Europe, especially in the ace of new business environment conditions. There is little research on entrepreneurship, including primarily entrepreneurial intentions in Eastern Europe (Nowiński et al., 2017). Most research on this subject is conducted in Western Europe and the USA (Valliere, 2017). Analyzing women's entrepreneurship in a geographical context is consistent with recently suggested economic research that takes into account the context of functioning (Baker & Welter, 2018; Welter et al., 2019).

The hypothesis about the influence of gender on entrepreneurial intentions has been verified by many researchers (Joensuu-Salo et al., 2015; Nowiński et al., 2017).

Gender equality is one of the sustainable development goals of 2030. However, this goal was not achieved in 2019: women held only 39% of global employment and only 27% of global management positions, with negative dynamics in the least developed countries (Boston Consulting Group, 2019). At the same time, in the youth labor market, the gender gap (male-female) in the world accounted for 16.2%, Northern, Southern, and Western Europe – 4.7%, and Eastern Europe – 7.5% (International Labour Organization, 2020). If to compare this data to the data for 1999, the gender gap is narrowing yearly in the labor market and in entrepreneurship activities, but it is still visible.

The level of entrepreneurial activity among European women is only 5.7%, compared to the global average of 11%. Women entrepreneurs in Europe had a much more even distribution across industries, with some of the highest rates of entrepreneurship in the internet, communications, and technology sectors (Global Entrepreneurship Monitor, 2021). In particular, in the Baltic countries, most women entrepreneurs are individual entrepreneurs that run their own firms, independent professionals, or engaged solo in trade (Rugina, 2018).

To deepen the knowledge in this sphere, the aim of this paper is to investigate the gender aspect of the attitude of young people (students who just started their university education) from Eastern and Central European countries to entrepreneurship. Mainly, their entrepreneurial intentions, attitudes toward entrepreneurship, perceived threats of setting up the business, and determination to start/run a family business compared to working for a big corporation through gender perspective are of great interest. With this in mind, the following hypotheses are suggested:

*H1: Male students are more determined about their entrepreneurial intentions than females; however, the difference is not so high.*

*H2: There are no gender differences in the attitude toward entrepreneurship.*

*H3: Women are more concerned about threats in running a business.*

*H4: Women prefer to work in a corporation than in a family business.*



## 2. DATA AND METHODS

The presented materials were obtained in an international research project “Survey on Entrepreneurial Attitude of Students (SEAS)” led by Gdansk University of Technology, in a frame of which a survey of students from Eastern and Central Europe (Ukraine, Poland, Latvia, Lithuania, and Bulgaria) was conducted in 2019 that goes beyond analyzed here answers. All the surveyed students were the first (bachelor’s) level of higher education and studied at the technological universities in their countries (Lviv Polytechnic National University, Gdansk University of Technology, Technical University-Sofia, Riga Technical University, and Vilnius Gediminas Technical University). A total of 3,636 students were surveyed, including 56% (2,024) male and 44% (1,589) female students. The analysis of data revealed 23 invalid answers; in the system, they are marked as omitted variables.

The entrepreneurial intentions have been measured by asking about predictions about starting a company. The main interest was paid to two extreme answers: “yes, in the next three years,” and “no, I am not going to start a company.” The attitude toward entrepreneurship was measured with the assessment of perceived attractiveness of different aspects of running a business: flexible working hours; higher income; independence; self-realization; prestige; the opportunity to implement own ideas; variety of undertaken tasks; opportunity to realize own hobby (business as a hobby); chance to change the world; flexible office (flexibility to work anywhere/anytime); create new workplaces, contribute to economic development; create own dream team. The Likert scale was used for each item.

In search of an answer to the question about perceived behavioral control, students were asked to assess whether they would be afraid of different aspects of starting their own business. There were 11 items to select from: lack of capital; the risk of failure; high competition; lack of experience and knowledge; lack of free time; underdeveloped idea for a business; income insecurity; complicated procedures and regulations; lack of state support; lack of support from family and friends; too high costs of running a business. Again, the Likert scale was used.

The second question regarded personal attitude toward entrepreneurship concerned the assessment of the attractiveness of work in a corporation versus a family business from the point of view of work security, ability to develop competencies, remuneration, and overall attractiveness. With this question, the perception by students of small businesses as employers was investigated. Moreover, at the same time, some conclusions about the attractiveness of entrepreneurship were made.

## 3. RESULTS

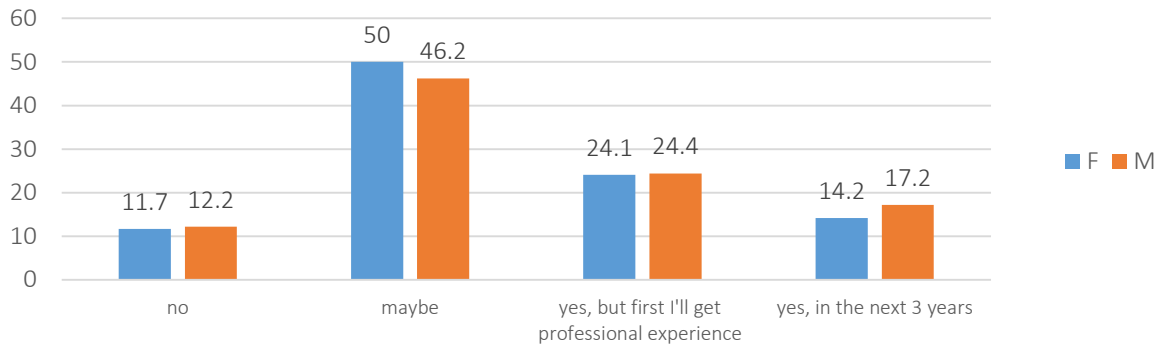
As the aim of the study was not to confirm the dependence within the Ajzen’s model and taking into account that the three dimensions in the Ajzen’s model are typically treated as independent determinants, the study concentrated to find out the differences or similarities of antecedents of intentions, particularly attitude toward the behavior and perceived threats of being an entrepreneur.

### 3.1. Students’ readiness to start their own business

According to the survey results, 38.3% of female and 41.6% of male students have a clear vision of their readiness to start a business soon (Figure 1). However, most of them tend to gain professional experience before that. Others plan to do that in the next three years. At the same time, unlike men, there are more female students who hesitate and do not exclude the possibility of starting their own business. Male students gave clearer affirmative or negative answers, which means they are more determined than female students concerning their entrepreneurial intentions. However, looking at the negative answer, the difference is not significant.

### 3.2. Attractiveness of running own business

In the research project, respondents provided an assessment (by scale: 1 – no; 2 – rather not; 3 – neither yes nor no; 4 – rather yes; 5 – yes) of the attractiveness of running own business in terms of 12 aspects (Table 1). These aspects include flexible working hours (1); higher income (2); independence (3); self-realization (4); prestige (5); the op-



**Figure 1.** Students' readiness to start their own business, %

portunity to implement own ideas (6); variety of undertaken tasks (7); opportunity to realize own hobby (business as a hobby) (8); chance to change the world (9); flexible office (flexibility to work anywhere/anytime) (10); create new workplaces, contribute to economic development (11); create own dream team (12).

The consistency of the views of female and male students on the ordering of the level of importance of the statements given in Table 1 indicates a complete coincidence of the ranks of the average centered rank. The TOP-3 maximum scores (in descending order of importance) include:

- 1) higher income;
- 2) self-realization;
- 3) opportunity to implement own ideas.

The TOP-3 minimum scores (in descending order of importance) include:

- 1) flexible office;
- 2) create new workplaces, contribute to economic development;
- 3) chance to change the world.

Positive evaluations of female students in all positions dominated the evaluations of male students.

For only one position – 2 (higher income) – it is possible to prove with a probability of 95% that there are statistically significant differences between the opinions of respondents of different sexes. The highest correlation values were found for statements 7 (variety of undertaken tasks) and 9 (flexible office).

### 3.3. Assessment of the threats to starting own business

During the survey, respondents rated (by scale: 1 – no; 2 – rather not; 3 – neither yes nor no; 4 – rather yes; 5 – yes) threats for doing business in

**Table 1.** Attractiveness of the different aspects of running a business

Number of the statement	$\bar{R}_0$			$R(\bar{R}_0)$			$d_{1+2}$			$\chi^2$	C
	f	m	m-f	f	m	m-f	f	m	m-f		
1	1.792	1.711	-0.081	6	6	0	5.6	7.4	1.9	14.1	0.063
2	2.001	1.959	-0.042	1	1	0	2.1	3.4	1.3	8.5*	0.049
3	1.887	1.828	-0.059	4	4	0	2.3	4.0	1.6	15.6	0.066
4	1.979	1.847	-0.132	2	2	0	2.1	3.6	1.5	24.6	0.083
5	1.551	1.414	-0.137	11	11	0	7.7	11.2	3.5	21.0	0.077
6	1.938	1.837	-0.101	3	3	0	2.4	3.9	1.5	14.4	0.064
7	1.718	1.571	-0.148	8	8	0	3.5	7.1	3.7	35.7	0.100
8	1.840	1.780	-0.060	5	5	0	4.1	6.3	2.2	10.8	0.055
9	1.394	1.233	-0.161	12	12	0	11.0	16.9	6.0	34.9	0.099
10	1.650	1.555	-0.095	9	9	0	7.5	9.6	2.1	15.2	0.066
11	1.559	1.463	-0.096	10	10	0	7.2	11.2	4.0	25.5	0.085
12	1.744	1.576	-0.168	7	7	0	5.1	8.5	3.5	37.0	0.102

Note: \*  $\leq \chi^2_{0.95}(2-1) \times (5-1) = 9.5$ .

**Table 2.** Assessment of the threats to starting own business

Number of the statement	$\bar{R}_0$			$R(\bar{R}_0)$			$d_{1+2}$			$\chi^2$	C
	f	m	m-f	f	m	m-f	f	m	m-f		
1	1.290	1.206	-0.085	2	2	0	13.0	15.0	2.0	7.7*	0.046
2	1.308	1.172	-0.136	1	3	2	14.6	16.9	2.2	15.2	0.065
3	1.044	0.986	-0.058	7	8	1	18.4	20.8	2.4	6.3*	0.042
4	1.199	1.221	0.022	4	1	-3	16.5	17.1	0.6	7.0*	0.045
5	0.757	0.777	0.021	10	10	0	31.1	29.6	-1.5	8.3*	0.048
6	1.001	0.990	-0.010	8	7	-1	20.0	19.9	-0.1	3.9*	0.033
7	1.227	1.101	-0.126	3	5	2	14.5	17.2	2.7	11.7	0.057
8	1.146	1.128	-0.018	6	4	-2	17.9	19.2	1.3	2.6*	0.027
9	0.947	0.924	-0.023	9	9	0	23.2	24.4	1.3	8.3*	0.049
10	0.572	0.468	-0.104	11	11	0	38.0	40.3	2.3	6.9*	0.044
11	1.156	1.051	-0.105	5	6	1	15.2	18.4	3.2	11.1	0.056

Note: \*  $\leq \chi^2_{0.95}(2-1) \times (5-1) = 9.5$ .

terms of 11 aspects (Table 2). They included lack of capital (1); the risk of failure (2); high competition (3); lack of experience and knowledge (4); lack of free time (5); underdeveloped idea for a business (6); income insecurity (7); complicated procedures and regulations (8); lack of state support (9); lack of support from family and friends (10); too high costs of running a business (11). The consistency of the views of female and male students on the ordering of the level of treats for doing business, which are shown in Table 2, indicates a positive sign, close to 1, and above the critical value of the Spearman's rank correlation coefficient ( $\rho = 0.891$ ;  $\rho_{0.95}(11) = 0.61$ ).

Only for three positions – 2 (the risk of failure), 7 (income insecurity), 11 (too high costs of running a business) – there is no proof with the probability of 95% the existence of statistically significant differences between the opinions of respondents of different genders. Nevertheless, male students are most frightened by the lack of experience and knowledge, female students – by the risk of failure.

TOP-3 minimum assessments of the level of fears (in descending order of importance) for female and male students do not differ:

- 1) lack of state support;
- 2) lack of free time;
- 3) lack of support from family and friends.

The positive values of the average centered rank for all positions indicate that respondents of both genders tend to admit that they are frightened by

the threats considered in the survey. However, differences in assessment indicate that it is women who are more concerned.

Female students are more predisposed to set up small businesses (1-5 employees). The share of such answers was 33.1%, which is 2.1 percentage points higher than male students. The share of female students who chose the number of employees from 6 to 19 also prevailed (37.4% vs. 35.4%). Instead, the share of female students who chose the number of employees from 20 or more (29.4%) by 4.2 percentage points is lower than the similar share for male students.

### 3.4. Benefits of working in corporations as compared to family businesses

The next block of the questionnaire concerned the assessment of the level of students' agreement with the statements about the differences between working in corporations compared to family businesses (Table 3). Such a scale was proposed to assess the level of consent: 1 – I strongly disagree; 2 – I do not agree; 3 – I agree to the same extent and disagree; 4 – I agree; 5 – I definitely agree.

For all positions, the students presented a positive assessment. Respondents of both genders gave the maximum score for the statement that corporations provide higher opportunities to develop competencies. The statement that work is more attractive in corporations received a minimum score for both female and male students. Males



**Table 3.** Benefits of working in corporations as compared to family businesses

No	Statement	$\bar{R}_0$			$R(\bar{R}_0)$			$d_{1+2}$			$\chi^2$	C
		f	m	m-f	f	m	m-f	f	m	m-f		
1	Work is more attractive	0.800	0.733	-0.067	4	4	0	23.3	25.8	2.6	11.2	0.056
2	Job insecurity is higher	0.821	0.893	0.071	3	2	-1	23.0	21.8	-1.2	8.3*	0.048
3	Opportunities to develop competencies are higher	1.103	1.093	-0.010	1	1	0	14.7	14.4	-0.3	2.7*	0.027
4	Work is better rewarded	0.928	0.887	-0.041	2	3	1	18.3	20.4	2.2	15.8	0.066

Note: \*  $\leq \chi^2_{0.95}(2-1) \times (5-1) = 9.5$ .

were generally less categorical about the differences between working in corporations and family businesses. Their agreement prevailed only over the claim that job insecurity is higher. The calculated values of the criterion  $\chi^2$  allow at significance levels of 0.05 to confirm the provision of statistically significant differences between the opinions of respondents of a different gender for positions on better reward and higher attractiveness of work in corporations compared to family businesses.

#### 4. DISCUSSION

Certain limitations on the study results are imposed by conducting the student survey only in technical universities. However, they did not affect the quality and reliability of the results obtained to confirm/refute the hypotheses put forward in the study.

The results give hope for a further reduction of the gender gap in the field of entrepreneurship. In particular, the first hypothesis that the difference in female and male students' intention exists (however, it is not high) was confirmed. More in-depth studies of this aspect were conducted in the previous research. However, they are quite correlated with the results of the OECD/European Commission (2021), which indicate that during 2016–2020, less than 5% of women in the EU participated in creating a start-up or running a new business (up to 3.5 years) relative to 8% of men. At the same time, this difference is explained by obstacles in financial markets, lack of skills, and institutional environment that influence motivations. Rugina (2018) also notes that women in the Baltic states are less confident in their skills, knowledge, and experience to start a business. It also seems true for Central and Eastern European countries.

The second hypothesis that there are no gender differences in the vision of the attractiveness of running own business was also confirmed. Young people's expectations for their entrepreneurial future were usually the same for both young men and women: higher income; self-realization; and the opportunity to implement their own ideas. Students of both genders do not believe that working in corporations is more attractive than working in family businesses. At the same time, they are convinced that the opportunities to develop competencies are higher in corporations. In general, this issue is quite controversial and requires further research.

Women, however, perceive work in a corporation as more profitable and attractive than in a family business, which is a synonym for entrepreneurship. It may also mean that in their search for these two traits, they will also prefer to work rather than start their own business.

No significant differences in students' vision of the threats to starting their own business were found. When starting their own business, students are least likely to rely on external support (the state, family, and friends). However, the biggest threats to starting a business are considered to be the lack of capital, risk of failure, lack of experience and knowledge, and income insecurity. This is confirmed by the OECD/European Commission (2021), which shows that fear of failure is one of the most common obstacles to successful business creation among EU young people (one in four out of ten respondents), as well as a lack of entrepreneurial skills. It is also worth considering that according to the millennials and Generation Z, flexibility/adaptability is the most critical employee characteristic for business success (Deloitte, 2021). To eliminate the

threat of “lack of experience and knowledge,” it is worth reviewing and modernizing professional training programs to meet the changing requirements of the digital economy because professional skills provided by professional training tend to become obsolete faster than general education skills (International Labour Organization, 2020; Halkiv et al., 2021).

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## CONCLUSION

The current study aimed to investigate the gender aspect of the attitude of young people (students) from Eastern and Central European countries toward entrepreneurship. The paper shows that male students in this part of the world are more determined concerning their entrepreneurial intentions than female students. Young people rely on their own strength when starting a business and do not consider the lack of support from the state, family, or friends as a critical threat. Students of both genders do not suppose that working in corporations is more attractive than family businesses.

To test/refute the presented hypotheses, the student survey was conducted in the technical universities in Ukraine, Poland, Latvia, Lithuania, and Bulgaria. The obtained survey results made it possible to confirm all four hypotheses. In particular, men and women’s assessments of typical threats to running a business were found (lack of capital; high competition; lack of experience and knowledge; lack of free time; underdeveloped idea for a business; complicated procedures and regulations; lack of state support; lack of support from family and friends). The level of attractiveness of the different aspects of running a business does not differ significantly. Female students find work in corporations prestigious and paid better than male students.

The identified differences do not serve as a basis for stating that the entrepreneurial students’ intentions differ by gender. Students’ answers in terms of blocks of statements are consistent (Spearman’s rank correlation coefficient is close to one, in some cases even equal to one, and has a positive value). Instead, Pearson’s correlation coefficient (*C*), showing low values, indicates a low level of differences between male and female students’ responses.

Thus, the obtained results make it possible to identify the areas of support for youth entrepreneurship development. At the academic level, they are: pay special attention to the timely updating of student professional training programs (especially those related to entrepreneurship) in accordance with the requirements of the time, and the possibility of conducting courses on strengthening self-confidence of female students who have entrepreneurial intentions. At the state level, it is vital to introduce programs to support youth and women entrepreneurship, in particular, to take measures to promote access to finance for start-ups (for example, through start-up and micro-loans, portfolio guarantees, programs to strengthen venture capital, etc.).

Further research may identify cross-country comparisons of the peculiarities in the development of youth entrepreneurship on the example of the countries in Eastern and Central Europe.

## AUTHOR CONTRIBUTIONS

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## REFERENCES

- Adom, E., & Affum-osei, E. (2019). Entrepreneurship as a career choice: The impact of locus of control on aspiring entrepreneurs' opportunity recognition. *Journal of Business Research*, 98, 227-235. <https://doi.org/10.1016/j.jbusres.2019.02.006>
- Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In J. Kuhl & J. Beckmann (Eds.), *Action Control* (pp. 11-39). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-69746-3\\_2](https://doi.org/10.1007/978-3-642-69746-3_2)
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Al Saiqal, N. Y., Ryan, J. C., & Parcerero, O. J. (2019). Entrepreneurial Intention and UAE Youth: Unique Influencers of Entrepreneurial Intentions in an Emerging Country Context. *Journal of East-West Business*, 25(2), 144-165. <https://doi.org/10.1080/10669868.2018.1536012>
- Armitage, C. J., & Conner, M. (2001). Efficacy of the Theory of Planned Behaviour : A Meta-Analytic Review. *British Journal of Social Psychology*, 40(4), 471-499. <https://doi.org/10.1348/014466601164939>
- Baker, T., & Welter, F. (2018). Contextual entrepreneurship: An interdisciplinary perspective. *Foundations and Trends in Entrepreneurship*, 14(4), 357-426. <https://doi.org/10.1561/03000000078>
- Belas, J., Gavurova, B., Schonfeld, J., Zvarikova, K., & Kacerauskas, T. (2017). Social and Economic Factors Affecting the Entrepreneurial Intention of University Students. *Transformations in Business & Economics*, 16(3), 220-239. Retrieved from [https://www.researchgate.net/publication/322438421\\_Social\\_and\\_economic\\_factors\\_affecting\\_the\\_entrepreneurial\\_intention\\_of\\_university\\_students](https://www.researchgate.net/publication/322438421_Social_and_economic_factors_affecting_the_entrepreneurial_intention_of_university_students)
- Boston Consulting Group. (2019). *Gender Pay Gap Report*. Retrieved November 20, 2021, from <https://www.bcg.com/offices/gender-pay-gap-report.aspx>
- Choo, S. (2021). Gender Differences in Entrepreneurship: The Impact of Social Context. *Journal of Digital Convergence*, 19(10), 119-132. <https://doi.org/10.14400/JDC.2021.19.10.119>
- De Groot, J., Mohlakoana, N., Knox, A., & Bressers, H. (2017). Fuelling women's empowerment? An exploration of the linkages between gender, entrepreneurship and access to energy in the informal food sector. *Energy Research & Social Science*, 28, 86-97. <https://doi.org/10.1016/j.erss.2017.04.004>
- Deloitte. (2021). *2021 Deloitte Global Millennial and Gen Z*. Retrieved November 29, 2021, from <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/2021-deloitte-global-millennial-survey-report.pdf>
- Du Rietz, A., & Henrekson, M. (2000). Testing the female underperformance hypothesis. *Small Business Economics*, 14(1), 1-10. Retrieved from <https://ideas.repec.org/a/kap/sbusec/v14y2000i1p1-10.html>
- Eesley, C., & Wang, Y. (2017). Social influence in career choice: Evidence from a randomized field experiment on entrepreneurial mentorship. *Research Policy*, 46(3), 636-650. <https://doi.org/10.1016/j.respol.2017.01.010>
- Eurofound. (2021). *Impact of COVID-19 on young people in the EU*. Luxembourg: Publications Office of the European Union. Retrieved from <https://www.eurofound.europa.eu/publications/report/2021/impact-of-covid-19-on-young-people-in-the-eu>
- European Commission. (2013). *Flash Eurobarometer No. 354: Entrepreneurship in the EU and Beyond*. Retrieved November 20, 2021, from [https://data.europa.eu/data/datasets/s1024\\_354?locale=en](https://data.europa.eu/data/datasets/s1024_354?locale=en)
- Global Entrepreneurship Monitor. (2021). *The GEM 2020/21 Women's Entrepreneurship Report: Thriving Through Crisis*. Retrieved November 20, 2021, from <https://www.gemconsortium.org/report/gem-202021-womens-entrepreneurship-report-thriving-through-crisis>
- Halkiv, L., Halaz, L., & Bihus, M. (2021). Educational component of human potential: financial-statistical and labor perspectives. *Journal of Lviv Polytechnic National University. Series of Economics and Management Issues*, 5(2), 11-21. <https://doi.org/10.23939/semi2021.02.011>
- Hallam, C., Zanella, G., Dorantes Dosamantes, C. A., & Cardenas, C. (2016). Measuring entrepreneurial intent? Temporal construal theory shows it depends on your timing. *International Journal of Entrepreneurial Behavior and Research*, 22(5), 671-697. <https://doi.org/10.1108/IJEBR-09-2015-0202>
- Haus, I., Steinmetz, H., Isidor, R., & Kabst, R. (2013). Gender effects on entrepreneurial intention: A meta-analytical structural equation model. *International Journal of Gender and Entrepreneurship*, 5(2), 130-156. <https://doi.org/10.1108/17566261311328828>
- International Labour Organization. (2020). *Global Employment*

- Trends for Youth 2020: Technology and the future of jobs*. Geneva: ILO. Retrieved from [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_737648.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_737648.pdf)
21. Jena, R. K. (2020). Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107, 106275. <https://doi.org/10.1016/j.chb.2020.106275>
  22. Joensuu-Salo, S., Varamäki, E., & Viljamaa, A. (2015). Beyond intentions – what makes a student start a firm? *Education and Training*, 57(8/9), 853-873. <https://doi.org/10.1108/ET-11-2014-0142>
  23. Johns, G. (2001). In praise of context. *Journal of Organizational Behavior*, 22(1), 31-42. <https://doi.org/10.1002/job.80>
  24. Kalnins, A., & Williams, M. (2014). When do female-owned businesses out-survive male-owned businesses? A disaggregated approach by industry and geography. *Journal of Business Venturing*, 29(6), 822-835. <https://doi.org/10.1016/j.jbusvent.2013.12.001>
  25. Kopets, G., Golynskyy, V., & Grybyk, I. (2008). Aspects of Research Paper Design for Graduate Students in Radioelectronics and Computer Science. *Proceedings of International Conference on Modern Problems of Radioelectronics, Telecommunication and Computer Engineering. TCSET'2008*. Lviv-Slavske, Ukraine.
  26. Mahmood, S., Lateef, A., & Paracha, A. T. (2020). Determining the Entrepreneurial Intentions of Youth/Generation Z: A Study of Youth Intent towards Entrepreneurship. *Global Management Journal for Academic & Corporate Studies*, 10(2), 137-152. Retrieved from <https://gmjacs.bahria.edu.pk/index.php/ojs/article/view/153>
  27. Merriman, M. (2015). *What if the Next Big Disruptor Isn't a What but a Who?* Ernst & Young. Retrieved September 15, 2021, from <https://www.yumpu.com/en/document/view/54544003/what-if-the-next-big-disruptor-isnt-a-what-but-a-who>
  28. Neergård, G.-B., & Aadland, T. (2021). Barriers of Entrepreneurial Nursing: A New Agenda for Higher Education. *Proceedings of 3E, NTNU* (pp. 1-15).
  29. Nowiński, W., Haddoud, M. Y., Lančarič, D., Egerová, D., & Czeplédi, C. (2017). The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries. *Studies in Higher Education*, 44(2), 1-19. <https://doi.org/10.1080/03075079.2017.1365359>
  30. OECD/European Commission. (2020). *Policy brief on recent developments in youth entrepreneurship* (OECD SME and Entrepreneurship Papers No. 19). Paris: OECD Publishing. <https://doi.org/10.1787/5f5c9b4e-en>
  31. OECD/European Commission. (2021). *The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-Employment*. Paris: OECD Publishing. <https://doi.org/10.1787/71b7a9bb-en>
  32. Otieno, J. O., & Nyambegera, S. M. (2019). Millennials and Generation Z Employees are here: Is your Organization ready? *Journal of Language, Technology & Entrepreneurship in Africa*, 10(2), 68-85. Retrieved from <https://www.ajol.info/index.php/jolte/article/view/192974>
  33. Panas, Y., & Tkach, S. (2017). The features of innovation management at Ukrainian and European enterprises. *Baltic Journal of Economic Studies*, 3(2), 101-106. <https://doi.org/10.30525/2256-0742/2017-3-2-101-106>
  34. Petrenko, V. S., & Karnaushenko, A. S. (2019). Formuvannia molodizhnogo pidpriemnytstva v Ukraini ta analiz faktoriv vplyvu na yoho rozvytok [Formation of youth entrepreneurship in Ukraine and analysis of factors influencing its development]. *Finansovyi Prostir – Financial Space*, 3(35), 139-147. (In Ukrainian). [https://doi.org/10.18371/fp.3\(35\).2019.190170](https://doi.org/10.18371/fp.3(35).2019.190170)
  35. Prokopyshyn, L. M. (2009). Mekhanizm formuvannia ta vykorystannia upravlynskoho potentsialu na pidpriemstvakh mashynobuduvannia [Mechanism of managerial potential formation and its usage at machine-building enterprises]. *Aktualni Problemy Ekonomiky – Actual Problems of Economics*, 7(97), 138-145. (In Ukrainian). Retrieved from [http://base.dnsgb.com.ua/files/journal/Aktualni-problemy-ekonomiky/Akt-prob-ekonomiky-2009-7/Akt-prob-ekonomiky-2009-7\\_138-145.pdf](http://base.dnsgb.com.ua/files/journal/Aktualni-problemy-ekonomiky/Akt-prob-ekonomiky-2009-7/Akt-prob-ekonomiky-2009-7_138-145.pdf)
  36. Rajh, E., Apasieva, T. J., Budak, J., Ateljević, J., Davčev, L., & Ognjenović, K. (2018). Youth and Entrepreneurial Intentions in Four South-East European Countries. *International Review of Entrepreneurship*, 16(3), 335-381.
  37. Rugina, S. (2018). Female entrepreneurship in the Baltics: formal and informal context. *International Journal of Gender and Entrepreneurship*, 11(1), 58-74. <https://doi.org/10.1108/IJGE-05-2018-0055>
  38. Santos, F. J., Roomi, M. A., & Lián, F. (2016). About Gender Differences and the Social Environment in the Development of Entrepreneurial Intentions. *Journal of Small Business Management*, 54(1), 49-66. <https://doi.org/10.1111/jsbm.12129>
  39. Schlee, R. P., Eveland, V. B., & Harich, K. R. (2020). From Millennials to Gen Z: Changes in student attitudes about group projects. *Journal of Education for Business*, 95(3), 139-147. <https://doi.org/10.1080/08832323.2019.1622501>
  40. Shpak, N., Kulyniak, I., Gvozdz, M., Pyrog, O., & Sroka, W. (2021). Shadow economy and its impact on the public administration: Aspects of financial and economic security of the country's industry. *Administratie si Management Public*, 36, 81-101. <http://dx.doi.org/10.24818/amp/2021.36-05>
  41. Si, H., Shi, J. G., Tang, D., Wen, S., Miao, W., & Duan, K. (2019). Application of the theory of planned behavior in environ-



- mental science: a comprehensive bibliometric analysis. *International Journal of Environmental Research and Public Health*, 16(15), 2788. <https://doi.org/10.3390/ijerph16152788>
42. Sniehotta, F. F., Presseau, J., & Araújo-Soares, V. (2014). Time to retire the theory of planned behaviour. *Health Psychology Review*, 8(1), 1-7. <https://doi.org/10.1080/17437199.2013.869710>
  43. Steinmetz, H., Isidor, R., & Bauer, C. (2021). Gender Differences in the Intention to Start a Business. An Updated and Extended Meta-Analysis. *Hotspots in Psychology*, 229(1). <https://doi.org/10.1027/2151-2604/a000435>
  44. Struckell, E. M. (2019). Millennials: A Generation of Un-Entrepreneurs. *Journal of Business Diversity*, 19(2), 156-168. <https://doi.org/10.33423/jbd.v19i2.2062>
  45. Suárez-Ortega, M., & Gálvez-García, R. (2017). Motivations and decisive factors in women's entrepreneurship. A gender perspective in education and professional guidance. *Procedia – Social and Behavioral Sciences*, 237, 1265-1271. <https://doi.org/10.1016/j.sbspro.2017.02.208>
  46. Tariq, H., Aroona, H., & Misbah, G. (2018). Attitude towards Entrepreneurship: An Exploration of Technology Education Students. *Bulletin of Education and Research*, 40(1), 131-139. Retrieved from <https://eric.ed.gov/?id=EJ1209794>
  47. Tornikoski, E., & Maalaouri, A. (2019). Critical reflections – The Theory of Planned Behaviour: An interview with Icek Ajzen with implications for entrepreneurship research. *International Small Business Journal*, 37(5), 536-550. <https://doi.org/10.1177/0266242619829681>
  48. Valliere, D. (2017). Multidimensional entrepreneurial intent: an internationally validated measurement approach. *International Journal of Entrepreneurial Behavior & Research*, 23(1), 59-77. <https://doi.org/10.1108/ijeb-08-2015-0182>
  49. Welter, F. (2019). Contexts and gender – looking back and thinking forward. *International Journal of Gender and Entrepreneurship*, 12(1), 27-38. <https://doi.org/10.1108/IJGE-04-2019-0082>
  50. Welter, F., Baker, T., & Wirsching, K. (2019). Three waves and counting: the rising tide of contextualization in entrepreneurship research. *Small Business Economics*, 52(2), 319-330. <https://doi.org/10.1007/s11187-018-0094-5>
  51. Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship: Theory and Practice*, 31(3), 387-406. <https://doi.org/10.1111/j.1540-6520.2007.00179.x>
  52. Związek Przedsiębiorców i Pracodawców (ZPP). (2018). *Warunki prowadzenia firm w Polsce* (Raport). Warsaw.