

# Examining entrepreneurial intentions through the lens of university students' attitudes

Намере о предузетништву испитиване кроз призму ставова студената

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**Abstract:** The labour markets of the transition countries of Central and Eastern Europe relied on stronger growth of the corporate sector as a mechanism for integrating the growing number of laid-off workers. The Serbian labour market has had a similar experience. Decades after the start of economic reforms, however, the role of entrepreneurship as an integrative employment mechanism has not increased in importance, which is best evidenced by statistical data. This paper focuses on students' intention to start their own business after graduation, and specifically examines the relationship between intention and personal attitudes. The experiment was conducted with two groups of students. The results indicate differences in students' attitudes towards entrepreneurship that deepen according to faculty group, gender, and year of study. From the students' responses, it can be concluded that electrical engineering students, female economics students and students in higher years of study are more inclined towards entrepreneurship. This may have implications for measures to support the development of youth entrepreneurship.

**Keywords:** attitudes towards entrepreneurship, grants, labour market, economic change, education and training, Serbia, university students.

**JEL classification:** D91, J21, M13.

**Сажетак:** Тржишта рада транзиционих земаља Централне и Источне Европе ослањала су се на снажнији раст корпоративног сектора као механизма за интеграцију све већег броја отпуштених радника. Српско тржиште рада има слично искуство. Деценијама након почетка економских реформи, међутим, улога предузетништва као интегративног механизма запошљавања није добила на значају, о чему најбоље сведоче статистички подаци. Овај рад се фокусира на намеру студената да започну сопствени бизнис након завршетка факултета, а посебно испитује однос између намере и личних ставова. Анкета је спроведена са две групе студената. Резултати указују на разлике у ставовима студената према предузетништву које се продубљују у зависности од факултета, пола и године студија. Из одговора студената може се закључити да су студенти електротехнике, студенткиње економије и студенти виших година студија склонији предузетништву. То може да има импликације на мере подршке развоју предузетништва младих.

**Кључне речи:** економске промене, образовање и обука, склоност предузетништву, Србија, студенти, субвенције за samozapošljavanje, тржиште рада.

**ЈЕЛ класификација:** D91, J21, M13.

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## **Introduction**

The labour markets of the transition countries of Central and Eastern Europe (CEE) relied on the more robust growth of the corporate sector as a mechanism for integrating the growing number of redundant workers. This was due to the inherited structure of the pre-transition economy. Large enterprises and the manufacturing industry dominated, while the business services sector was underdeveloped. The restructuring of the economy created great earning opportunities. Therefore, natural conditions were created that encouraged a part of the population to consider taking advantage of the earning opportunities. This way, space was created to develop an entrepreneurial mindset in society, where such options had been limited until recently (Kuratko, Fisher & Audretsch, 2021). This encouraged the development of the small and medium-sized private enterprises sector (McMillan & Woodruff, 2002). This enabled further absorption of the workforce to some extent and slowed the rise in unemployment so that employment rates largely stagnated. This was because private companies were founded thanks to generous state subsidies for creating new jobs. It quickly became apparent that these newly established companies achieved faster employment growth than privatised companies. The latter were motivated to buy domestic companies as they counted on the profit they would make from the share in the domestic market and customer network, so they retained some of the old management after taking over the domestic companies. This gave a number of workers hope that they would stay in the companies if they adapted to the new conditions, apart from the fact that they were familiar with the management, but the ownership structure had changed (Ognjenović, 2015).

On the Serbian labour market, it was most difficult for older workers with experience from old production plants, most of which had been shut down, to find a job. Some of the employees recruited by the new employers were sent for training in branches of these companies in other countries or trained in companies in the country (Ognjenović, 2015). However, most of them with outdated qualifications could not be re-employed, so the early retirement institute, on the other hand, put pressure on the empty pension funds. Finding a job was also difficult for young people without work experience. They came from an education system that continued to produce job profiles for industries that mostly no longer existed (Dinkić, Pešikan, Bjegović Mikanović, Blagojević Hughson, & Milutinović, 2007). The distribution of industries was largely determined by geography, and the education system followed the same concept. The local development of these areas was based on this foundation and was also destroyed by the closure of unprofitable production facilities.

Decades after the start of economic reforms in Serbia, the role of entrepreneurship as an integrative employment mechanism has not yet gained importance. The share of self-employment in total employment is declining in absolute and relative terms. Data from the Labour Force Survey (LFS) show that the number of self-employed in 2022 amounted to 479 thousand or 16.4% of total employment, and only five years earlier, the self-employed accounted for more than a fifth of the total number of employees in Serbia (Statistical Office of the Republic of Serbia, 2023).

This topic has only recently become part of the research agenda in Serbia (Ognjenović, 2023; Ognjenović, 2022) and the countries of the region (Aydin, Knezović, Bičo & Smajić,

2024; Rajh et al., 2018). The motive for this work is to identify the factors in young people that would encourage them to choose the path of an entrepreneur as a profession. This paper uses data collected from economics and electrical engineering students to examine their attitudes towards entrepreneurship and to describe the relationship between these attitudes and the intention to become an entrepreneur after graduation. In addition, current data on the support of young entrepreneurs through institutionally developed programmes will be analysed. Thus, the main research question is whether students' attitudes towards entrepreneurship match the reality of the labour market.

The structure of the paper is as follows. The next section describes the institutional context for young people entering the labour market. This is followed by an overview of the relevant literature and a description of the statistical sources used for the analysis. The part of the paper devoted to the main findings is derived from the two sub-analyses. First, the institutional support for youth entrepreneurship development implemented by the National Employment Service (NES) through the inclusion of unemployed people under 30 in two specially created programmes is analysed. The generalisation of the conclusions regarding the entrepreneurial climate from the perspective of young people is then based on the results of a survey of university students. The paper ends with conclusions and recommendations.

## 1. Institutional context

Regarding institutional support for employment and youth development, two key documents contain strategies, programs, and support mechanisms for the implementation of youth policy:

1. The National Youth Strategy of the Republic of Serbia for the period from 2023 to 2030 (Government of the Republic of Serbia, 2023);
2. The Employment Strategy of the Republic of Serbia for the period from 2021 to 2026 (Government of the Republic of Serbia, 2021).

The first document sees young people as “active and equal participants in all aspects of social life, developing their full potential with the support of society and contributing to personal and social development and well-being” (Government of the Republic of Serbia, 2023, p. 72, translation). This sentence illustrates the vision of the development of young people in Serbian society. The specific goal of the Youth Strategy is to ensure that “young people have equal opportunities and incentives to develop their potential and skills leading to social and economic independence” (Government of the Republic of Serbia, 2023, p. 73, translation). This goal is achieved through access to education, improving skills and employability in the labour market, and enhancing the entrepreneurial potential of young people.

In achieving the goals related to youth employment and self-employment, the Youth Strategy relies heavily on the Employment Strategy of the Republic of Serbia. The achievement of the strategic goals is envisaged through inter-sectoral activities and through a series of practical measures created to promote entrepreneurship, social entrepreneurship,

and employability of young people. These are the goals pursued since adopting the first Youth Strategy of the Republic of Serbia in 2008 (Kovačević & Krnjaić, 2008). This strategic framework was adopted at a time of economic and social change, accompanied by a declining population, low birth rates and delayed parenthood, high unemployment, and migration, affecting young people in particular (Dinkić et al., 2007). However, young people's prospects for employment and independence remain modest, even though the mechanisms and institutional framework for education and employment have improved significantly.

## **2. Literature review**

The development of the entrepreneurial ecosystem, with a particular focus on the young population, has been studied intensively over the last four decades (Maheshwari, Kha & Arokiasamy, 2023; Liñán & Fayolle, 2015). In Liñán & Fayolle (2015) at least two lines of research on entrepreneurship were identified. One research direction is based more on a theoretical framework linked to social psychology, specifically by focusing on the theory of planned behaviour and examining the empirical impact of key determinants on entrepreneurial intention. The second line of research relates more to studying the organizational aspects of entrepreneurship and entrepreneurial orientation.

In developing and emerging markets economies, in particular, there is a growing number of studies, as entrepreneurship is seen as one of the ways to escape poverty and solve the problems of high unemployment and a low-skilled workforce (Maheshwari et al., 2023; Sahaidak, Prokhorova & Sobolieva, 2022). Support from family members could be a significant moderating factor for the relationship between entrepreneurial alertness and, for example, Nigerian students' entrepreneurial intention. At the same time, innovativeness could also be a trigger for starting their own business (Ugwueze, Ike, & Ugwu, 2022). Institutional support, family members' involvement in entrepreneurship, peer support, and perceptions of self-efficacy and entrepreneurial skills are statistically significant determinants of entrepreneurial intentions among students in large entrepreneurial nations such as India and Pakistan (Martins, Shahzad & Xu, 2023; Jena, 2020). In European countries such as Austria, the entrepreneurial knowledge acquired through education is an important factor of the entrepreneurial intention of students of different educational profiles, economics, science, and engineering, while subjective norms can negatively influence the entrepreneurial determination of the latter two groups of students. The influence of subjective norms in the group of students of economics cannot be isolated as a significant factor of entrepreneurial intention (Maresch, Harms, Kailer & Wimmer-Wurm, 2016). Feelings such as empathy, which could also be seen as peer support, and self-efficacy were found to be important determinants of students' social entrepreneurial intentions (Simmou, Sameer, Hussainey, & Simmou, 2023). In Politis, Ketikidis, Diamantidis, & Lazuras (2016), the importance of theoretical antecedents of planned behaviour as predictors of (social and commercial) entrepreneurial intentions were determined in a sample of postgraduate students from CEE countries. However, it was found that predictors from the group of personality traits, such as the need for achievement, independence, and similar traits, cannot be regarded as statistically significant determinants of social entrepreneurial intentions.

Differences in the socio-cultural context cannot influence entrepreneurial intention with the same intensity (Moriano, Gorgievski, Laguna, Stephan & Zarafshani, 2012). Social norms as theoretical antecedents of planned behaviour are usually investigated in studies that examine the influence on entrepreneurial intentions in a multicultural environment. The results usually confirm the importance of social norms in countries where individual behaviour relies more on the expectations of family, relatives, or peers. Social norms have been shown to be a significant predictor of students' entrepreneurial intentions in selected countries in Central and Eastern Europe, the Mediterranean region, and some Asian countries, while in Western Europe, represented by the Netherlands and Germany, no significant effect of social norms on students' entrepreneurial intentions was found (Moriano et al., 2012). This can be attributed to the gender roles in these societies and the expected differences in the tradition of career choice.

Several recent studies have examined the influence of various factors on entrepreneurial intention in the countries of the Balkan region. Some of these studies have focused on the working-age population, while other studies have focused exclusively on exploring factors of the entrepreneurial ecosystem among university students as potential carriers of entrepreneurial activities after graduation.

Looking at the working-age population, the entrepreneurial intention is more pronounced among the younger population (Aydin et al., 2024). To a certain extent, this confirms the validity of similar studies published in recent years on the student population (Bağış et al., 2023; Ognjenović, 2023; Ognjenović, 2022; Rajh et al., 2018). Research on data for Bosnia and Herzegovina, conducted on a sample of the working-age population, has shown that an individual's propensity for entrepreneurship can have a significant mediating effect when the relationship between the respondent's age and their entrepreneurial, i.e., intrapreneurial, intention is observed (Aydin et al., 2024). The risk-taking factors and innovation-driven motivation have a moderate mediating effect on the investigated relationships. Data collected among economics and business students in Bosnia and Herzegovina showed that entrepreneurial orientation, behavioural control factors, and perception of the importance of others are statistically significant determinants of entrepreneurial intention (Rajh et al., 2018). This research covered the labour markets of four CEE countries (Bosnia and Herzegovina, Croatia, North Macedonia, and Serbia), and the results did not differ significantly between countries, with the desire to become an entrepreneur and the ability to control this process driving students more often than other potential predictors. Similar results were also obtained using data for Serbia, which were collected from samples of students of business, economics, and electrical engineering. These showed that the risk-taking factor does not play a significant role in forming the relationship between predictors, such as propensity to entrepreneurship, behavioural control and importance of others, and entrepreneurial intentions (Ognjenović, 2022).

Research conducted on a sample of business and engineering students from 50 countries, based on the unique 2018 *Global University Entrepreneurial Spirit Students' Survey* has shown that the education and knowledge students gain from mandatory entrepreneurship courses is critical to their choice of a long-term entrepreneurial career.

Slight differences in the impact of entrepreneurship education on the later period of an entrepreneurial career were found among business and engineering students (Sitaridis, Laspita, Kitsios & Sarri, 2023). In addition, Shirokova, Osiyevskyy & Bogatyreva (2016) analysed the discrepancy between entrepreneurial intention and the factors that led to its realization among student entrepreneurs based on the 2013/14 *Global University Entrepreneurial Spirit Students' Survey* database and concluded that the context itself, as well as the environment, transforms intention into entrepreneurial activity. Students in Serbia were excluded from this survey. From the countries in the region, Albania, Croatia, and North Macedonia, for example, took part in the survey. The results regarding the influence of motivational factors on students' entrepreneurial intentions are mixed. For example, Ognjenović (2023) found neither external nor internal motivational factors as significant determinants of students' entrepreneurial intentions.

On the other hand, Bağış et al. (2023) have shown that factors such as the need for achievement significantly influence the entrepreneurial intention and alertness of university students. Low levels of digital skills can be a significant barrier to labour market inclusion, especially for vulnerable groups such as older women and those with low skills (Bradić-Martinović & Banović, 2018). In the context of the impact of digitalization on entrepreneurship development, Youssef, Boubaker, Dedaj & Carabregu-Vokshi (2021) investigated students' entrepreneurial intentions and showed that attitudes towards entrepreneurship and perceived behavioural control are statistically significant determinants of entrepreneurial intentions. It can significantly narrow the gap between the need for the digitization of the economy and its impact on the individual (Krivokuća, Čockalo & Bakator, 2021).

### **3. Data and methods**

In addition to the LFS data from Eurostat, based on which the development of employment and self-employment is explored (Eurostat, 2023), the two most important data sources for the analysis presented in this paper are:

1. Aggregated annual NES data on institutional support for entrepreneurship development among individuals younger than 30 years;
2. Data from a survey on entrepreneurial intentions conducted among students at the University of Belgrade, the largest university centre in Serbia.

Support for youth self-employment is intended for people who were registered as unemployed at the time of applying for measures to promote entrepreneurship. This support is implemented through two active labour market policy measures: (i) entrepreneurship training and (ii) subsidy for starting a business. The training program's methodology has changed since 2021, when it was conducted over three days instead of two and included the development of a business plan (National Employment Service, 2023). Persons applying for a grant must have completed a training course that includes a business plan.

A survey based on a prepared questionnaire (Rajh et al., 2018) was conducted among economics and electrical engineering students (Ognjenović, 2022), and the number of

completed questionnaires amounted to 309 and 307 in the first and second samples, respectively. The sample consists of 348 female and 268 male students ( $n=616$ ). The data were collected in the 2016/17 academic year, and the survey was not repeated thereafter, so it is a set of cross-section data. In addition to primary demographic data, the survey included a broader set of questions about personal attitudes, behavioural control factors, social norms, and entrepreneurial intentions. All student responses were recorded on a Likert scale of 1-5.

Two complementary methodological approaches were used to determine the factors of entrepreneurial intention and to derive the differences in the students' attitudes. Since the students' responses are rated on a nominal scale, the differences in mean scores between two groups of students are tested using t-statistics. Sometimes the aggregation of responses can lead to general conclusions. Therefore, it was initially decided to adopt an approach that would allow the differences to be tested at the level of each individual question asked of the students. This approach is recommended when the questionnaire is focused on a specific group of questions and when different groups of participants are intuitively observed. Once the differences were uncovered, pairwise correlations between the variables for personal attitudes and entrepreneurial intentions were determined and tested for different subsamples.

## **4. Results and discussion**

### **4.1. Institutional support to young entrepreneurs**

Since 2018, when almost a fifth of young people under the age of 30 were unemployed, the trend of rising youth unemployment has come to a halt. In 2022, the youth unemployment rate in Serbia was 17.1% (Statistical Office of the Republic of Serbia, 2023). At the same time, a much milder decline in the youth unemployment rate was achieved in the EU-27, which amounted to 11.3% in 2022, or 1.5 percent points less than in 2018 (Eurostat, 2023). Incidentally, in a ten-year comparison, almost a fifth of young people under 30 were unemployed in the EU-27, and in Serbia, the unemployment rate was more than twice as high (Eurostat, 2023). In addition to subsidizing the employment of young people by employers, the coverage of unemployed young people through active labour market policies in Serbia has been significantly expanded in recent years, not only through subsidized employment by employers but also through incentives for entrepreneurship development. However, despite these measures, the number of self-employed young people in Serbia has not increased, as the analysis in the following text will show.

*Table 1: Beneficiaries of measures in Serbia*

Measure	Year		
	2020	2021	2022
All beneficiaries			
Training	12,468	13,698	10,266
Subsidy	3,804	4,209	4,423
Under 30 years			
Training	3,241	3,799	2,733
Subsidy	995	1,124	1,225
% of beneficiaries under 30 in total			
Training	26.0	27.7	26.6
Subsidy	26.2	26.7	27.7

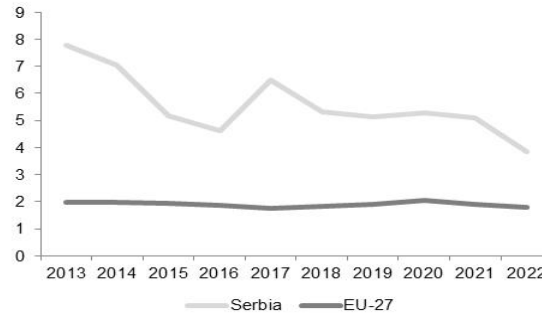
*Source: the author, based on National Employment Service (2023).*

Table 1 shows the number of participants in entrepreneurship promotion programs implemented by NES in Serbia (National Employment Service, 2023). This measure is implemented through training and direct support for self-employment by granting a subsidy. At the level of the overall program, the number of subsidy recipients is increasing. In 2022, 4,423 subsidies were granted, which is 214 and 619 more than in 2021 and 2020, respectively. The reasons for the lower number of grants awarded in the previous two years may be administrative or due to delays caused by the uncertainties challenged by the COVID-19 crisis, which was in full swing at the time. As the number of beneficiaries of the self-employment subsidy is increasing, young people are becoming more interested in entrepreneurship, but the aggregated data on the number of self-employed and their structure does not yet show this.

According to LFS data, there were 2,094.5 thousand self-employed persons aged 15-29 in the EU-27 in 2022, representing 6.0% of total employment in this age group (Eurostat, 2023). Their absolute number and relative participation had decreased in the last ten years when the number of self-employed amounted to 2,141 thousand (6.4% of total employment). In Serbia, self-employed young people account for 7.0% of total employment in 2022 (or 31.5 thousand people). However, their number has decreased significantly in the last ten years, when it amounted to 15.1% (or 46 thousand people) (Eurostat, 2023). Given the high unemployment rate, any promotion of self-employment through entrepreneurship makes sense.



Figure 1: Gender gap in youth self-employment, %



Source: the author, based on Eurostat data (Eurostat, 2023).

Women make up around a third of the self-employed in Serbia. In the age group from 15 to 29-year-olds, however, their share is significantly lower, only 22.5% in 2022. Ten years ago, the proportion of young self-employed women was higher in absolute and relative terms and amounted to 24.3%. This ratio between the number of self-employed men and women favoured the emergence of a gender gap, which is significantly higher in Serbia than in the EU-27 (Figure 1).

#### 4.2. Determinants of entrepreneurial intention

Most of the studies cited in this article dealt with the investigation of entrepreneurial intentions in the context of examining the influence of theoretical antecedents of planned behaviour on the propensity to engage in entrepreneurial activity (Bağış et al., 2023; Ognjenović, 2022; Youssef, 2021; Rajh et al., 2018; Politis et al., 2016). The personal attitudes variable stands out as it explains entrepreneurial intention the most. Previous work has found this variable to have the strongest effect on entrepreneurial intention, so this section is devoted to analysing the personal attitudes factor and its correlation with the entrepreneurial intention variable. The mediating role of gender was also confirmed when examining the effects of antecedents of planned behaviour on entrepreneurial intention (Ognjenović, 2022). Table 2 shows the empirical model linking personal attitude to intention. The  $\alpha$ -indicator values confirm a high internal reliability of the responses within each question group. The indices 1-economics and 2-electrical engineering correspond to the respondents from the samples of two faculties.

Table 2: Research model formation

Entrepreneurial intent		Attitudes toward entrepreneurship	
Variable	Description	Variable	Description
$y_{i1}$	<i>Readiness</i>	$x_{i1}$	<i>Advantages</i>
$y_{i2}$	<i>Professional goal</i>	$x_{i2}$	<i>Attractive as a career</i>

$y_{i3}$	<i>Effort</i>	$x_{i3}$	<i>Opportunities and resources</i>
$y_{i4}$	<i>Determination</i>	$x_{i4}$	<i>Satisfaction</i>
$y_{i5}$	<i>Serious thought</i>	$x_{i5}$	<i>Preferred choice</i>
$y_{i6}$	<i>Firm intention</i>		
Cronbach's $\alpha_1 = 0.95$ , $\alpha_2 = 0.96$		Cronbach's $\alpha_1 = 0.80$ , $\alpha_2 = 0.80$	

Source: research by the author.

To complete the picture of the existence of dissimilarities in students' responses and their understanding of the process of implementing an entrepreneurial idea, the differences in responses between young women and men from both faculties were examined. This is significant insofar as young women tend more frequently towards the social science faculties, including economics, and young men towards the technical and natural science faculties. In addition, regardless of age, women in Serbia are much less likely to pursue entrepreneurial careers than men, which confirms the significant gender gap in self-employment. Another important issue is whether the students' answers differ depending on the year of study. Students are grouped at individual faculty levels so that first- and second-year students form one group, and third- and fourth-year students form another group. The results are shown in Table 3 and can be summarized as follows:

1. In Ognjenović (2022), it was shown that there are significant differences only in the attitudes of male and female electrical engineering students regarding career choice, opportunities, and personal satisfaction offered by the profession of entrepreneur, as well as in all components of entrepreneurial intention, while students of economics are determined differently only in relation to the last three explanatory components of entrepreneurial intention.
2. On average, students of economics rated a positive attitude towards entrepreneurship higher than electrical engineering students (Table 3). The much more significant differences in female students' attitudes in these two faculties confirm their reticence regarding the possible choice of an entrepreneurial career. Higher mean scores among students of economics indicate that the idea of entrepreneurship is closer to them and that they have been exposed to these topics at faculty.
3. Men at both faculties agreed to a greater extent with positive attitudes towards entrepreneurship, so the mean scores are higher than those of female students. Regarding the variable of personal attitudes, the only statistically significant difference in the attitudes of male students at these two faculties concerns the satisfaction that an entrepreneurial vocation may bring, which is more attractive to students of economics.

Table 3: Differences by faculty and gender

Variable	Female students	Male students
	Economics vs Engineering	Economics vs Engineering
y <sub>i1</sub>	m <sub>1</sub> =2.8, m <sub>2</sub> =2.3, d=0.5*	m <sub>1</sub> =3.0, m <sub>2</sub> =2.7, d=-0.3*
y <sub>i2</sub>	m <sub>1</sub> =2.9, m <sub>2</sub> =2.4, d=0.5*	m <sub>1</sub> =2.9, m <sub>2</sub> =2.7, d=0.2
y <sub>i3</sub>	m <sub>1</sub> =2.8, m <sub>2</sub> =2.3, d=0.5*	m <sub>1</sub> =3.0, m <sub>2</sub> =2.6, d=0.4*
y <sub>i4</sub>	m <sub>1</sub> =2.9, m <sub>2</sub> =2.6, d=0.3*	m <sub>1</sub> =3.2, m <sub>2</sub> =3.0, d=0.2
y <sub>i5</sub>	m <sub>1</sub> =2.8, m <sub>2</sub> =2.4, d=0.4*	m <sub>1</sub> =3.1, m <sub>2</sub> =2.9, d=0.2
y <sub>i6</sub>	m <sub>1</sub> =2.9, m <sub>2</sub> =2.5, d=0.4*	m <sub>1</sub> =3.3, m <sub>2</sub> =3.0, <b>d=0.3</b>
x <sub>i1</sub>	m <sub>1</sub> =3.8, m <sub>2</sub> =3.6, d=0.2*	m <sub>1</sub> =3.7, m <sub>2</sub> =3.8, d=-0.1
x <sub>i2</sub>	m <sub>1</sub> =3.6, m <sub>2</sub> =3.1, d=0.5*	m <sub>1</sub> =3.7, m <sub>2</sub> =3.5, d=0.2
x <sub>i3</sub>	m <sub>1</sub> =3.9, m <sub>2</sub> =3.6, d=0.3*	m <sub>1</sub> =4.1, m <sub>2</sub> =4.0, d=0.1
x <sub>i4</sub>	m <sub>1</sub> =3.7, m <sub>2</sub> =3.2, d=0.5*	m <sub>1</sub> =3.8, m <sub>2</sub> =3.5, d=0.3*
x <sub>i5</sub>	m <sub>1</sub> =2.9, m <sub>2</sub> =2.8, d=0.1	m <sub>1</sub> =3.0, m <sub>2</sub> =3.0, d=0.0

Notes: m<sub>1</sub> and m<sub>2</sub> denote the average values for the corresponding group of students, whereby the indices 1 and 2 stand for the faculties of economics and electrical engineering respectively; d is the difference between m<sub>1</sub> and m<sub>2</sub>. \* Statistically significant at 5%; bold values at 10%.

Source: research by the author.

It is also possible to culturally define the differences achieved in students' entrepreneurial intentions (Gardašević, Brkanlić & Kostić, 2020). As mentioned above, this topic has been studied in depth by other authors, but in the context of different countries, in order to compare the impact of the socio-cultural dimension on the entrepreneurial behaviour of young adults (Bağış et al., 2023; Moriano et al., 2012). In this particular study, the questionnaire did not capture too many personal characteristics of the students. Questions included characteristics such as gender and age, but the data collected can be further broken down by year of study and faculty. Therefore, in this study, full attention was paid to the observed differences between faculties. In both faculties, the average age of the students involved in the experiment was 22 years. In terms of gender, however, the situation is completely different. In the sample of economics students, almost 77% were young women, while in the sample of electrical engineering students, young women made up only 36% of the total. Based on the structure of the sample, which correctly represents the population of students in these two faculties, it is logical that more attention should be paid to the observed differences by faculty and gender (as shown in table 3). Apart from these main characteristics, it is not possible to determine whether individuals with certain additional characteristics opt for a particular faculty. When colouring the results culturally, traditionally more young women tend to be enrolled in economics and more young men choose to study engineering.

Their later career in terms of commitment to entrepreneurship can largely be determined by the choice of degree programme itself.

Differences by year of study were tested on a combined sample of students from both faculties, as only 126 students from the first two years of study were included in the sample ( $n=616$ ). The results are reported in Table 4. First and second-year students reported a higher average score, but the differences are only statistically significant for entrepreneurial intentions observed by effort ( $p<0.05$ ) and career goal ( $p<0.10$ ). Significant differences in the students' attitudes can be seen in the career choice ( $p<0.05$ ) or the advantages offered by this profession ( $p<0.10$ ).

Table 4: Differences by years of study

Variable	Differences by years of study 1 <sup>st</sup> & 2 <sup>nd</sup> vs 3 <sup>rd</sup> & 4 <sup>th</sup>
y <sub>i1</sub>	$m_1=2.8, m_2=2.7, d=0.1$
y <sub>i2</sub>	$m_1=2.9, m_2=2.7, d=0.2$
y <sub>i3</sub>	$m_1=2.9, m_2=2.6, d=0.3^*$
y <sub>i4</sub>	$m_1=3.0, m_2=2.9, d=0.1$
y <sub>i5</sub>	$m_1=2.9, m_2=2.8, d=0.1$
y <sub>i6</sub>	$m_1=2.9, m_2=2.8, d=0.1$
x <sub>i1</sub>	$m_1=3.9, m_2=3.7, d=0.2$
x <sub>i2</sub>	$m_1=3.7, m_2=3.4, d=0.3^*$
x <sub>i3</sub>	$m_1=4.0, m_2=3.9, d=0.1$
x <sub>i4</sub>	$m_1=3.7, m_2=3.5, d=0.2$
x <sub>i5</sub>	$m_1=2.9, m_2=3.0, d=-0.1$

Notes:  $m_1$  and  $m_2$  denote the average values for the corresponding group of students, whereby the indices 1 and 2 stand for the faculties of economics and electrical engineering respectively;  $d$  is the difference between  $m_1$  and  $m_2$ . \* Statistically significant at 5%; bold values at 10%.

Source: research by the author.

Table 5 shows the correlations between personal attitudes and the variables on entrepreneurial intention, which were estimated separately by faculty, gender, and year of study. The results indicate a moderately high but statistically significant correlation between entrepreneurial intention and personal attitudes in all subgroups of students. Male electrical engineering students and students in higher years of study show a stronger attitude towards entrepreneurship than other groups of students.

Table 5: Correlation analysis

Subgroup (sample)	Correlation coefficient
Faculty <sub>1</sub> (n=309)	0.672*
Faculty <sub>2</sub> (n=307)	0.704*
Faculty <sub>1</sub> & Female (n=237)	0.691*
Faculty <sub>1</sub> & Male (n=72)	0.629*
Faculty <sub>2</sub> & Female (n=111)	0.667*
Faculty <sub>2</sub> & Male (n=196)	0.710*
Year of study (1 <sup>st</sup> & 2 <sup>nd</sup> ) (n=126)	0.689*
Year of study (3 <sup>rd</sup> & 4 <sup>th</sup> ) (n=490)	0.697*

Notes: \* Statistically significant at 5%.

Source: research by the author.

Table 5 shows the correlations between personal attitudes and the variables on entrepreneurial intention, which were estimated separately by faculty, gender, and year of study. The results indicate a moderately high but statistically significant correlation between entrepreneurial intention and personal attitudes in all subgroups of students. Male electrical engineering students and students in higher years of study show a stronger attitude towards entrepreneurship than other groups of students.

## Conclusion

This paper is thematically devoted to the study of entrepreneurial intentions of students from two faculties within the same university in Serbia, which are oriented towards the education of young people of different scientific and vocational directions. Assume that the conclusions are drawn based on the mean scores expressing the degree of students' agreement with a positive attitude towards entrepreneurship and revealing their intention to engage in this profession. In this case, electrical engineering students are more inclined towards entrepreneurship but lack knowledge that would help them in entrepreneurial orientation. This paper revealed several important findings that can only be generalized to the student population. The research findings show that young people understand the importance of entrepreneurship and the knowledge gap, so they could be relevant to the development of entrepreneurship programs. In addition, in countries that have recognized the role of entrepreneurship in economic development and job growth, surveys of the student population are regularly conducted to determine their entrepreneurial vigilance and develop policies to encourage active entrepreneurs. The conclusions of this study are as follows:

1. The share of self-employed in total employment in Serbia is decreasing, with a significant gender gap.

2. Female students of both faculties are less interested in a career as an entrepreneur than their fellow students. However, female economics students are more inclined towards entrepreneurship than female electrical engineering students.
3. There are no significant differences in university students' personal attitudes and entrepreneurial intentions depending on the study year. However, the correlation analysis shows that there is a higher degree of consent between personal attitudes and entrepreneurial intentions in the responses of third- and fourth-year students.

Of course, it can be assumed that the economics students have more prior knowledge about entrepreneurship than the electrical engineering students. However, the students were selected in such a way that the economics students opted for business major, while the electrical engineering students have acquired some prior knowledge of management through the courses in their final years of study. In addition, electrical engineering students find opportunities to enter entrepreneurial careers by developing projects on their own or with the support of their peers. Consequently, it is not possible to conclude based on prior theoretical knowledge of entrepreneurship alone to what extent this might influence students' attitudes. Further research on this topic would require an explicit investigation of the impact of entrepreneurship education on students' entrepreneurial intentions.

Potential weaknesses of the study may be that the generalizations used to predict entrepreneurial activity are based on the student population and cannot be applied to the working-age population. In addition, this real-time data was collected from a sample that cannot be transferred to the same sample of people. Therefore, the assessment of actual entrepreneurial activity among the selected young adults is impractical. In a country where the interest of young people in entrepreneurial careers is high and where the unemployment rate among young people is stable but high, it is recommended that a method of screening entrepreneurial intentions be conducted at regular intervals. These are the suggestions for further research on this important topic.

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## **References**

Aydin, Š., Knezović, E., Bičo, A., & Smajić, H. (2024). Age, entrepreneurial and intrapreneurial intentions: the mediating role of individual entrepreneurial orientation. *Journal of Enterprising Communities: People and Places in the Global Economy*, 18 (1), 94-113. Doi: <https://doi.org/10.1108/JEC-08-2022-0107>

Bağış, M., Kryeziu, L., Kurutkan, M. N., Krasniqi, B. A., Hernik, J., Karagüzel, E. S., Karaca, V., & Ateş, Ç. (2023). Youth entrepreneurial intentions: a cross-cultural comparison. *Journal of Enterprising Communities: People and Places in the Global Economy*, 17 (4), 769–792. Doi: <https://doi.org/10.1108/JEC-01-2022-0005>

Bradić-Martinović, A. & Banović, J. (2018). Assessment of digital skills in Serbia with focus on gender gap. *Journal of Women's Entrepreneurship and Education*, 1-2, 54–67. Doi: <https://doi.org/10.28934/jwec18.12.pp54-67>

Dinkić, M., Pešikan, A., Bjegović Mikanović, V., Blagojević Hughson, M., & Milutinović, S. (2007). *Millennium Development Goals in the Republic of Serbia: Monitoring Framework* (translated by Radović, I.). Belgrade: UNDP.

Eurostat (2023). *Labour Force Survey Series*. Available at: <https://ec.europa.eu/eurostat/data/database>

Gardašević, J., Brkanlić, S., & Kostić, J. (2020). Entrepreneurship, national culture and the Republic of Serbia. *Ekonomija: teorija i praksa*, 13 (1), 85-96. <https://doi.org/10.5937/etp2001085G>

Government of the Republic of Serbia (2023). *Youth Strategy in the Republic of Serbia for the period from 2023 to 2030*. Belgrade: Government of the Republic of Serbia, Ministry of Youth and Sport (published in Official Gazette, 9/23).

Government of the Republic of Serbia (2021). *Employment Strategy in the Republic of Serbia for the period from 2021 to 2026*. Belgrade: Government of the Republic of Serbia, Ministry of Labour, Employment, Veteran, and Social Affairs (published in Official Gazette, 18/21, 36/21-correction).

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 (6), 106275. Doi: <https://doi.org/10.1016/j.chb.2020.106275>

Kovačević, I., & Krnjaić, Z. (Eds.) (2008). *National Youth Strategy*. Belgrade: Government of the Republic of Serbia, Ministry of Youth and Sport (published by Službeni glasnik).

Krivokuća, M., Čočkalović, D., & Bakator, M. (2021). The potential of digital entrepreneurship in Serbia. *Anali Ekonomskog fakulteta u Subotici*, 57 (45), 97-115. <https://doi.org/10.5937/AnEkSub2145097K>

Kuratko, D. F., Fisher, G., & Audretsch, D. B. (2021). Unraveling the entrepreneurial mindset. *Small Business Economics*, 57 (4), 1681–1691. Doi: <https://doi.org/10.1007/s11187-020-00372-6>

Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11 (4), 907–933. Doi: <https://doi.org/10.1007/s11365-015-0356-5>

Maheshwari, G., Kha, K. L., & Arokiasamy, A. R. A. (2023). Factors affecting students' entrepreneurial intentions: a systematic review (2005–2022) for future directions in theory and practice. *Management Review Quarterly*, 73 (4), 1903–1970. Doi: <https://doi.org/10.1007/s11301-022-00289-2>

Maresch, D., Harms, R., Kailer, B., & Wimmer-Wurm, B. (2016). The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business studies university programs. *Technological Forecasting and Social Change*, 104 (3), 172–179. Doi: <https://doi.org/10.1016/j.techfore.2015.11.006>

Martins, J. M., Shahzad, M. F., & Xu, S. (2023). Factors influencing entrepreneurial intention to initiate new ventures: evidence from university students. *Journal of Innovation and Entrepreneurship*, 12, 63. Doi: <https://doi.org/10.1186/s13731-023-00333-9>

McMillan, J., & Woodruff, C. (2002). The central role of entrepreneurs in transition economies. *Journal of Economic Perspectives*, 16 (3), 153–170. Doi: <https://doi.org/10.1257/089533002760278767>

Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of Career Development*, 39 (2), 162–185. Doi: <https://doi.org/10.1177/0894845310384481>

National Employment Service (2023). Annual Report. Various Years. Available at: <https://www.nsz.gov.rs/sadrzaj/izvestaj-i-program-rada-nsz/4109>

Ognjenović, K. (2023). Did COVID-19 change the inclination toward entrepreneurship among young adults in Serbia? In M. Cristofaro *et al.* (Eds.), *Proceedings of the 2nd Conference in Business Research and Management* (pp. 87–94). Rome: Aracne Editrice.

Ognjenović, K. (2022). Planned behaviour, gender and attitudes towards entrepreneurship among business economics and electrical engineering students. *Stanovništvo*, 60 (2), 121–143. Doi: <https://doi.org/10.2298/STNV2202121O>

Ognjenović, K. (2015). On-the-job training and human resource management: how to improve competitive advantage of an organization? *Organizacija: revija za management, informatiko in kadre*, 48 (1), 57–70. Doi: <https://doi.org/10.1515/orga-2015-0005>

Politis, K., Ketikidis, P., Diamantidis, A. D., & Lazuras, L. (2016). An investigation of social entrepreneurial intentions formation among South-East European postgraduate students. *Journal of Small Business and Enterprise Development*, 23 (4), 1120–1141. Doi: <https://doi.org/10.1108/JSBED-03-2016-0047>

Rajh, E., Jovanov Apasieva, T., Budak, J., Ateljević, J., Davčev, Lj., & Ognjenović, K. (2018). Youth and entrepreneurial intentions in four South-East European countries. *International Review of Entrepreneurship*, 16 (3), 355–382.

Sahaidak, M., Prokhorova, Y., & Sobolieva, T. (2022). Entrepreneurs' strategic response to COVID-19 limitations: Ukrainian experience. *Anali Ekonomskog fakulteta u Subotici*, 58 (47), 3–13. <https://doi.org/10.5937/AnEkSub2247003S>



Shirokova, G., Osiyevskyy, O., & Bogatyreva, K. (2016). Exploring the intention–behavior link in student entrepreneurship: moderating effects of individual and environmental characteristics. *European Management Journal*, 34 (4), 386–399. Doi: <https://doi.org/10.1016/j.emj.2015.12.007>

Simmou, W., Sameer, I., Hussainey, K., & Simmou, S. (2023). Sociocultural factors and social entrepreneurial intention during the COVID-19 pandemic: Preliminary evidence from developing countries. *International Entrepreneurship and Management Journal*, 19 (3), 1177–1207. Doi: <https://doi.org/10.1007/s11365-023-00858-1>

Sitaridis, I., Laspita, S., Kitsios, F. C., & Sarri, K. (2023). Entrepreneurial program learning and career choice intentions. In: N. F. Matsatsinis, F. C. Kitsios, M. A. Madas & M. I. Kamariotou (Eds.) *Operational Research in the Era of Digital Transformation and Business Analytics. BALCOR 2020*. Cham: Springer Proceedings in Business and Economics. Doi: [https://doi.org/10.1007/978-3-031-24294-6\\_27](https://doi.org/10.1007/978-3-031-24294-6_27)

Statistical Office of the Republic of Serbia (2023). Labour Force Survey Data. Available at: <https://data.stat.gov.rs/?caller=SDDB&languageCode=sr-Latn>

Ugwueze, A. U., Ike, O. O., & Ugwu, L. (2022). Responding to social change: innovativeness, entrepreneurial alertness, and entrepreneurial intention in Nigeria: the role of family support. *Entrepreneurship Education*, 5 (4), 465–485. Doi: <https://doi.org/10.1007/s41959-022-00082-y>

Youssef, A. B., Boubaker, S., Dedaj, B., & Carabregu-Vokshi, M. (2021). Digitalization of the economy and entrepreneurship intention. *Technological Forecasting and Social Change*, 164 (3), 120043. Doi: <https://doi.org/10.1016/j.techfore.2020.120043>