Socio-demographic and educational influences on entrepreneurial intentions: evidence from business students in Croatia

Prethodno priopćenje

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Abstract

Entrepreneurship is a crucial driver of economic growth, innovation, and job creation at various levels. Using a structured questionnaire, this study examines the socio-demographic and educational factors influencing entrepreneurial intentions among students enrolled in undergraduate business programs in Croatia. The research findings reveal a statistically significant correlation between entrepreneurial intentions and gender, country of origin, parental entrepreneurial background, education on entrepreneurship, and the ability to recognize business ideas, while factors such as place of residence (i.e. urban vs. rural background), family size, type of educational institution (public vs. private), work experience, income level, and life satisfaction showed no significant impact. These results highlight the importance of supportive ecosystems and educational programs in fostering entrepreneurship, providing valuable insights for policymakers and educators aiming to enhance local entrepreneurial capacities.

Keywords: entrepreneurial intentions, socio-demographic factors, business students



Sociodemografski i obrazovni utjecaji na poduzetničke namjere: primjer studenata poslovnih studija u Hrvatskoj

Sažetak

Poduzetništvo je ključan pokretač gospodarskog rasta, inovacija i otvaranja radnih mjesta na različitim razinama. Korištenjem strukturiranog upitnika ovo istraživanje ispituje socio-demografske i obrazovne čimbenike koji utječu na poduzetničke namjere među studentima preddiplomskih poslovnih studija u Hrvatskoj. Rezultati istraživanja pokazuju statistički značajnu povezanost između poduzetničkih namjera i spola, zemlje porijekla, roditeljskog poduzetničkog podrijetla, poduzetničkog obrazovanja i sposobnosti prepoznavanja poslovne ideje, dok čimbenici poput urbane, tj. ruralne sredine, veličine obitelji, vrste obrazovne institucije (javna vs. privatna), radnog iskustva, razine prihoda i životnog zadovoljstva ne pokazuju značajan utjecaj. Rezultati ističu važnost podržavajućih ekosustava i obrazovnih programa u poticanju poduzetništva te pružaju vrijedne uvide za donositelje politika i edukatore s ciljem jačanja lokalnih poduzetničkih kapaciteta.

Ključne riječi: poduzetničke namjere, sociodemografski čimbenici, studenti poslovnih studija

1 Introduction

Entrepreneurship is a key driver of economic growth, innovation, and job creation at the country, regional, and local levels (Acs et al., 2017). Spurring entrepreneurship at the county and local levels is crucial for several reasons. Local entrepreneurship drives economic development by creating jobs, stimulating local economies, and fostering innovation. It also enhances the resilience of local communities by diversifying economic activities and reducing dependence on external markets (Fritsch and Storey, 2014). Supporting local entrepreneurs can lead to more equitable economic growth, as it allows for the inclusion of diverse groups and helps address regional economic disparities (Minniti, 2008). By focusing on local-level entrepreneurship, policymakers can tailor support programs to the specific needs and strengths of their communities, leading to more effective and sustainable entrepreneurial ecosystems (Audretsch, 2007). One important aspect is designing appropriate education and training programs for entrepreneurship. Understanding



the factors that influence entrepreneurial capacity and intentions is essential for developing effective policies and educational programs to foster entrepreneurial activities.

The Global Entrepreneurship Monitor (GEM) analyzes entrepreneurship in selected countries, including Croatia. Although Croatia's Total Early-Stage Entrepreneurial Activity (TEA) rate was higher than the EU average in 2022, this was accompanied by low established business ownership, suggesting sustainability challenges (GEM, 2023). Fear of failure is higher in Croatia, and the country faces issues with access to finance and regulatory barriers (CEPOR, 2023). The National Entrepreneurship Context Index (NECI) placed Croatia sixteenth out of 18 EU countries in 2022 (GEM, 2023). Urban regions, especially Zagreb, have higher TEA rates and better support systems than rural areas, which struggle with limited access to financial capital, markets, and entrepreneurial support services. The lagging behind is especially pronounced in regions like Northern Croatia and Slavonia and Baranja (CEPOR, 2023).

The potential of entrepreneurship in Croatia is not fully utilized at the national and local levels. The pressing question is: how can it be effectively enhanced? Fritsch and Storey (2014) identify at least four factors that influence the emergence of innovative start-ups on the regional level: the founder's personal background and personality, education at an entrepreneurial university, geographical labor market mobility and experience gained in dependent employment, and the start-up conditions in the founder's region of residence. Fritsch and Aamoucke (2013) and Bade and Nerlinger (2000) demonstrate a strong positive correlation between the number of innovative start-ups and the presence of universities and other public research institutes in a region.

This paper investigates the impact of various socio-demographic and educational factors on entrepreneurial capacity and intentions, focusing on the importance of fostering entrepreneurship at the county and local levels. Specifically, it explores the influence of gender, country of origin, urban vs. rural background, parental background, family size, former education on entrepreneurship, type of educational institution (public vs. private), work experience, income level, life satisfaction level, and the ability to recognize business ideas. The findings are based on the analysis of a questionnaire conducted among business students in Croatia. The selected factors and formulated expectations are based on an extensive literature review. Individuals from countries with supportive entrepreneurial ecosystems are expected to have higher entrepreneurial intentions (Bowen and De Clercq, 2008). Gender differences in entrepreneurship have been widely studied, with research showing that men are generally more inclined towards entrepreneurship than women (Minniti and Nardone, 2007). Urban backgrounds are expected to positively impact entrepreneurial intentions due to better access to resources and networks (Florida, 2002). Having entrepreneurial parents is expected to increase entrepreneurial intentions through mentorship and financial support (Aldrich and Cliff, 2003).



The intergenerational transmission of entrepreneurial spirit underscores the role of family influence in cultivating future business leaders (Fairlie and Robb, 2007). Higher income levels are expected to positively impact entrepreneurial intentions by providing better access to resources and reducing financial barriers (Hurst and Lusardi, 2004), as well as higher life satisfaction levels, as satisfied individuals may feel more confident and motivated to start a business (Diener et al., 2002). The type of educational institution attended, whether public or private, may also impact entrepreneurial capacity. Entrepreneurship education, in particular, has been shown to enhance entrepreneurial skills, self-efficacy, and intentions (Rae, 2007). This paper also evaluates the impact of former entrepreneurship-specific education on entrepreneurial intentions.

This paper contributes to the literature by providing a comprehensive analysis of how socio-demographic and educational factors influence entrepreneurial capacity and intentions. By examining gender, country of origin, urban vs. rural background, parental background, family size, former education in entrepreneurship, type of educational institution (public vs. private), work experience, income level, life satisfaction level, and the ability to recognize business ideas, this study offers a comprehensive understanding of the determinants of entrepreneurial potential. It fills a gap in the literature by integrating various factors, which have often been studied in isolation. The paper adds to a scarce literature that analyses the entrepreneurial potential and intentions of business students in Croatia (Dabic et al., 2012; Pfeifer, 2014; Rajh et al., 2018, Sirola, 2020). Additionally, the paper highlights the importance of local-level support systems and policies in fostering entrepreneurship, providing valuable insights for policymakers and educators to create more inclusive and effective entrepreneurial ecosystems.

The remainder of the paper is structured as follows. Following this introduction, the paper presents the literature review, which provides the foundation for the development of the hypotheses. Section 3 provides an overview of the data and methodology used in the study. Section 4 presents the key findings, while the final section summarizes the main insights and conclusions drawn from the study, discusses the implications and limitations, and suggests directions for future research.

2 Literature review and hypotheses development

There is an extensive body of literature that analyzes entrepreneurial intentions and capacity based on various internal and external factors (Lüthje and Franke, 2003; Wang and Wong, 2004; Turker et al., 2005; Veciana et al., 2005; Dabic et al., 2012). In particular, the literature points to two main theoretical models of entrepreneurial intention. The entrepreneurial event model, developed by Shapero and Sokol (1982), posits that entrepreneurial intention depends on perceived desirability, propensity to act, and perceived feasibility. The Theory of Planned Behavior



(TPB), introduced by Ajzen (1991) and applied to entrepreneurship by Krueger and Carsrud (1993), identifies attitude toward entrepreneurship, subjective norms, and perceived behavioral control as key factors.

In this paper, the primary focus is on the socio-demographic and educational factors. Accordingly, the paper will present and critically analyze the relevant streams of literature in these areas. The country of origin significantly influences entrepreneurial intentions and capacities, primarily through the varying availability of resources, cultural attitudes towards entrepreneurship, and regulatory environments. Acs et al. (2008) suggest that individuals born in countries with supportive entrepreneurial ecosystems, characterized by favorable regulatory frameworks, access to financial resources, and a strong culture of innovation, are more likely to engage in entrepreneurial activities.

The geographic origin of individuals, specifically whether they come from urban or rural areas, affects their entrepreneurial capacity. Urban environments typically offer superior access to educational resources, training programs, and funding sources, providing a significant advantage for aspiring entrepreneurs (Audretsch and Lehmann, 2005). Networking opportunities are more abundant in urban areas, allowing for connections with experienced entrepreneurs and industry professionals (Feldman, 2001). While urban areas offer larger and more diverse markets conducive to business ventures (Glaeser et al., 2010), rural students may find unique entrepreneurial opportunities in niche markets within their communities (Alsos et al., 2003).

Gender differences in entrepreneurship have been widely studied, with research consistently showing that men are generally more inclined towards entrepreneurship than women. This disparity is often attributed to differences in risk tolerance, self-efficacy, and societal norms (Wilson et al., 2007; Gupta et al., 2008). Additionally, evidence is not uniform regarding women's access to finance. While there is a stream of literature suggesting women face greater barriers, such as limited access to financing and professional networks, which can hinder their entrepreneurial endeavors (Brush et al., 2006), Harrison and Mason (2007) suggest that intergender differences are indeed small and only rarely significant regarding access to venture capital. Shinnar et al. (2012) identified significant gender disparities in university students' perceptions of entrepreneurial barriers, noting that these differences vary across cultural contexts. For instance, the study found that women in the United States and Belgium perceived the fear of failure and lack of competency as more significant barriers compared to men, while in China, the difference between men's and women's perceptions of these barriers was not statistically significant. Despite these challenges, some studies indicate that businesses owned by women can be equally successful when measured by longevity and profitability, though they may grow at a slower rate (Fairlie and Robb, 2007). Wilson et al. (2007) demonstrate that entrepreneurship education can mitigate gender differences for women aspiring to become entrepreneurs. This form of education acts as an equalizer by potentially



alleviating the negative impact of low self-efficacy, thereby enhancing the likelihood of successful business creation by women.

Parental background, including socioeconomic status and parents' entrepreneurial experience, plays a crucial role in shaping entrepreneurial capacity. Having entrepreneurial parents can significantly influence an individual's entrepreneurial intentions and success (Aldrich and Cliff, 2003). They may also receive more encouragement and support to take risks and pursue innovative ideas. Entrepreneurial parents can provide mentorship, financial support, and valuable industry insights (Carr and Sequeira, 2007, Bosma et al., 2012). Additionally, growing up in an entrepreneurial environment can instill entrepreneurial values and skills from an early age. Parents who are entrepreneurs can serve as role models, demonstrating the feasibility and benefits of entrepreneurial careers. This exposure can increase se-If-efficacy and the likelihood of pursuing entrepreneurship (Scherer et al., 1989). In general, children of entrepreneurs are more likely to pursue entrepreneurial careers themselves, benefitting from their parents' experience, resources, and networks (Fairlie and Robb, 2007). This intergenerational transmission of entrepreneurial spirit highlights the significant role of family influence in cultivating future business leaders. Laspita et al. (2012) emphasize that the impact of entrepreneurial parents and grandparents on their offspring varies across families and nations; these influences are particularly strong in cultures characterized by high levels of in-group collectivism.

The influence of family size on entrepreneurial intentions and capacity has also been examined in the literature. Aldrich and Cliff (2003) propose that larger families may dilute available resources, both financial and emotional, potentially reducing entrepreneurial intentions. Conversely, smaller families can concentrate their support, which may facilitate business ventures. However, smaller family units may face limitations in resource mobilization, particularly in terms of accessing funding and securing human resources. Many entrepreneurs depend on family members as employees, particularly during the start-up phase, as noted by Aldrich and Langton (1998).

The impact of income level and life satisfaction on entrepreneurial intentions is not straightforward, according to the literature. Higher income levels provide financial stability, enabling individuals to consider starting their own businesses. Studies show that wealthier individuals can overcome liquidity constraints and have better access to capital, fostering entrepreneurial activities (Hurst and Lusardi, 2004). Life satisfaction, reflecting overall well-being, also impacts entrepreneurial intentions. Binder and Coad (2013) report that individuals transitioning from regular employment to self-employment experience an increase in life satisfaction that can last up to two years. However, individuals moving from unemployment to self-employment do not exhibit higher satisfaction levels compared to those who move from unemployment to regular employment.



The type of educational institution, whether public or private, might influence entrepreneurial capacity. Private schools often boast superior resources, adaptable curricula, and extensive networking opportunities. Students at private institutions typically have greater exposure to successful entrepreneurs through guest lectures, workshops, and networking events, providing them with valuable inspiration and practical skills (Gibb, 2002). Conversely, public schools can benefit from government support and policy initiatives aimed at fostering entrepreneurship. The success of entrepreneurship education in public versus private institutions is influenced by cultural and contextual factors, underscoring the need for customized approaches in various environments.

Work experience, particularly in industry, has been shown to enhance entrepreneurial intentions (Davidsson and Honig, 2003) and support venture emergence (Dimov, 2010). Exposure to real-world challenges and organizational practices helps individuals develop the confidence, skills, and networks necessary for starting and managing a business. However, some evidence in the literature challenges the idea that prior work experience is a key driver of students' entrepreneurial intentions and activities (Nguyen, 2018; Kautonen et al., 2010). These mixed findings may be partly explained by the difficulties in measuring work experience effectively (Miralles et al., 2016).

Previous educational experience and having a business idea also play a crucial role in shaping entrepreneurial intentions and capacities. Entrepreneurship education, in particular, has been shown to enhance entrepreneurial skills, self-efficacy, and intentions (Rae, 2007). Educational programs that include experiential learning, mentorship, and real-world applications of entrepreneurial concepts are particularly effective in fostering entrepreneurial capacities (Pittaway and Cope, 2007). Peterman and Kennedy (2003) found that participation in entrepreneurship education programs positively influences the development of business ideas and subsequent entrepreneurial intentions. These programs provide the necessary skills and knowledge to recognize and evaluate opportunities, thereby enhancing entrepreneurial readiness. Entrepreneurial intentions and readiness are significantly influenced by the presence of a viable business idea. Opportunity recognition is a fundamental concept in entrepreneurship research. Ardichvili et al. (2003) propose that the ability to identify business opportunities is a critical component of entrepreneurial readiness. This is supported by the work of Shane and Venkataraman (2000), who argue that opportunity recognition differentiates entrepreneurs from non-entrepreneurs.

Resulting from the analysis of the existing literature, the following hypotheses are proposed:

H1: Gender significantly influences entrepreneurial intentions, with male students exhibiting higher entrepreneurial intentions compared to female students.



- H2: Individuals from countries with strong cultural support for entrepreneurship and good economic conditions exhibit higher entrepreneurial intentions compared to individuals from countries with less cultural support and weaker economic conditions.
- H3: Business students born in urban areas will show higher entrepreneurial intentions than those born in rural areas due to greater access to resources and networks.
- H4: Students with a parental entrepreneurial background are more likely to exhibit stronger entrepreneurial intentions than those without a parental entrepreneurial background.
- H5: Individuals from larger families are more likely to have a higher intention to become entrepreneurs than individuals from smaller families.
- H6: There is a positive relationship between participation in entrepreneurship education and the likelihood of students expressing entrepreneurial intentions.
- H7: Business students attending private educational institutions will show higher entrepreneurial intentions than those attending public institutions.
- H8: Business students with prior work experience show higher entrepreneurial intentions than those without it.
- H9: Income level is positively related to entrepreneurial intentions, with higher-income students showing greater willingness to start a business.
- H10: Life satisfaction has no significant impact on the entrepreneurial intentions of business students.
- H11: The ability to recognize business ideas is positively associated with the likelihood of starting the business.

3 Data and Methodology

This research was conducted in the form of a survey. Data collection involved administering a structured questionnaire to undergraduate business students from public and private business schools in Croatia. Lecturers distributed the questionnaires to students after their classes. Students were informed that the study was anonymous and that the data collected would be used exclusively for scientific research. They were assured no personal information would be gathered, preventing any identification of respondents, and there would be no financial or other compensation for participation. Students were also told they could withdraw from the study at any point without facing any consequences. Of the 200 questionnaires handed out, 186 were returned; one was incomplete and thus excluded from the analysis, leaving a sample of 185 responses and a response rate of 93%.



The questionnaire consisted of two sections: the first focused on the socio-demographic characteristics of the respondents and their basic entrepreneurial intentions. The second section explored students' attitudes and perceptions regarding sociological, psychological, and personality traits identified in the literature as relevant to entrepreneurial profiles, as outlined by Coduras et al. (2016). To identify participants' intention to start a business initiative, they were asked to select one of the following options: (1) No, never; (2) Maybe, but not in the next 5 years; (3) Yes, within the next 3 years. To determine whether statistically significant differences existed in survey responses based on factors such as gender, country of origin, place of residence, parental entrepreneurial background, income level, type of business school, entrepreneurship education, work experience, life satisfaction, and the ability to recognize business ideas, a chi-square test of independence was conducted. This test is appropriate for identifying the correlation between categorical variables. It assesses whether there is a significant relationship between two variables by testing the null hypothesis that the variables are independent - that the occurrence of one does not affect the other. The chi-square statistic is calculated by comparing observed frequencies with expected frequencies in each category. A high chi-square value coupled with a p-value below the significance threshold (usually 0.05) indicates a statistically significant correlation, suggesting the variables are not independent.

4 Research results

Our sample consists of 185 undergraduate business students from both private (62.2%) and public (37.8%) business schools in Croatia. Female students represent 61.1% of the total sample and 38.9% of the respondents are male students. The majority of the respondents are between 18 and 24 years of age (95.1%), while 4.9% of the participants were between 25 and 28 years old. 63.3% of the respondents report they have had some specific education training on entrepreneurship, while 36.7% have not had it yet. Regarding their country of origin, 75.7% of the respondents come from Croatia, 13% are from the USA, and the rest of the respondents (11.3%) are students from other countries. The collected data indicate that even 80.5% of the respondents are originally from urban places of residence and 19.5% come from rural (countryside) areas. In terms of the size of the family, 92.5% are from families with up to 6 members, while only 7.5% of respondents have large families with 7 or more members. The majority of respondents (69.2%) report medium, 21.1% report high, and 8.6% report low family income level. When it comes to the entrepreneurial background of their parents, 45.4% of the respondents report that one of their parents is or was an entrepreneur. Interestingly, 88.6% of the respondents have had some kind of work experience, mainly in the form of student internships, while 11.4% of them still have not had any work experience. It is interesting to observe that, altho-



ugh students are still undergraduates, 17.3% of them have already started a new business, either alone (5.4%) or with others (11.9%). Also, 12.4% of them report investing their money once (9.7%) or multiple times (2.7%). When observing their close environment/society/market, 27% of them have frequently detected some needs that can be translated into business ideas, while the remainder have done it sometimes (61.6%) or never (11.4%).

Regarding the respondents' entrepreneurial readiness, 30.8% indicated that they intend to start a business within the next 3 years, 58.9% indicated maybe, but not in the next 5 years, while 10.3% of the respondents indicated they have no intentions to start a business, as can be seen in Table 1.

Table 1. Entrepreneurial readiness

	Frequency	Percent
No, never	19	10.3
Maybe, but not in the next 5 years	109	58.9
Yes, within the next 3 years	57	30.8
Total	185	100.0

Source: Authors' calculations.

A detailed breakdown of entrepreneurial intentions regarding gender is presented in Table 2. While only 23.9% of female respondents were interested in starting their business within the next 3 years, 41.6% of males had such entrepreneurial intentions.

Table 2. Entrepreneurial readiness regarding gender

Never			Maybe	Yes, within 3 years	Total
Female	Count	16	70	27	113
	Expected Count	11.6	66.6	34.8	113.0
	Percent within gender	14.2%	61.9%	23.9%	100%
	Percent within start business	84.2%	64.2%	47.4%	61.1%
Male	Count	3	39	30	72
	Expected Count	7.4	42.4	22.2	72.0
	Percent within gender	4.2%	54.2%	41.6%	100%
	Percent within start business	15.8%	35.8%	52.6%	38.9%
Total	Count	19	109	57	185
	Expected Count	19.0	109.0	57.0	185.0
	Percent of total	10.3%	58.9%	30.8%	100%

Source: Authors' calculations.



Further, a chi-squared test was conducted to find out whether there were significant differences in terms of the respondents' entrepreneurial readiness according to their gender, country of origin, place of residence, parental entrepreneurial background, family size, former education on entrepreneurship, type of business school (public vs. private), work experience, income level, life satisfaction, and recognizing business ideas. The results are presented in Table 3.

Table 3. Results of chi-square test of independence

		Value	df	Asymptotic Sig. (2-sided)
	Pearson Chi-Square	9.236ª	2	.010
0 1	Likelihood Ratio	9.700	2	.008
Gender	Linear-by-Linear Association	9.148	1	.002
	N of Valid Cases	185		
Country	Pearson Chi-Square	37.247a	20	.011
	Likelihood Ratio	33.274	20	.031
	Linear-by-Linear Association	2.238	1	.135
	N of Valid Cases	185		
	Pearson Chi-Square	2.068a	2	.356
Habitat.	Likelihood Ratio	1.865	2	.394
навітат	Linear-by-Linear Association	.534	1	.465
	N of Valid Cases	185		
Parents	Pearson Chi-Square	23.492a	2	<.001
	Likelihood Ratio	26.725	2	<.001
	Linear-by-Linear Association	22.940	1	<.001
	N of Valid Cases	185		
	Pearson Chi-Square	7.531ª	2	.023
Education on	Likelihood Ratio	7.562	2	.023
entrepreneurship	Linear-by-Linear Association	7.402	1	.007
	N of Valid Cases	184		
	Pearson Chi-Square	1.677ª	2	.432
Montrormonionos	Likelihood Ratio	1.781	2	.410
Work experience	Linear-by-Linear Association	1.591	1	.207
	N of Valid Cases	185		
_ ,,,	Pearson Chi-Square	3.338ª	2	.188
Public vs. private business schools	Likelihood Ratio	3.398	2	.183
	Linear-by-Linear Association	3.209	1	.073
	N of Valid Cases	185		



	Pearson Chi-Square	10.430a	18	.917
F:	Likelihood Ratio	13.397	18	.767
Family size	Linear-by-Linear Association	.000	1	.991
	N of Valid Cases	184		
	Pearson Chi-Square	5.658ª	4	.226
т	Likelihood Ratio	4.841	4	.304
Income	Linear-by-Linear Association	2.676	1	.102
	N of Valid Cases	183		
	Pearson Chi-Square	8.577ª	6	.199
T:C+:-C+:	Likelihood Ratio	10.545	6	.103
Life satisfaction	Linear-by-Linear Association	1.219	1	.270
	N of Valid Cases	185		
	Pearson Chi-Square	52.698ª	4	<.001
D:	Likelihood Ratio	42.055	4	<.001
Business idea	Linear-by-Linear Association	29.694	1	<.001
	N of Valid Cases	185		

Source: Authors' calculations.

There is a statistically significant difference between female and male respondents regarding willingness to start a new business (χ^2 =9.236, p=0.010). This result confirms our hypothesis H1 and is consistent with previous work suggesting that women are less entrepreneurially oriented.

In addition to gender differences, the research results indicated statistically significant differences in cases of country of origin (χ^2 =37.247, p=0.011), parental entrepreneurial background (χ^2 =23.492, p<0.001), education on entrepreneurship (χ^2 =7.531, p=0.023), and ability to recognize business ideas (χ^2 =52.698, p<0.001), thereby confirming hypotheses H1, H2, H4, H6, and H11. On the contrary, place of residence (χ^2 =2.068, p=0.356), family size (χ^2 =10.430, p=0.917), type of business school (χ^2 =3.338, p=0.188), work experience (χ^2 =1.677, p=0.432), and income level (χ^2 =5.658, p=0.226) showed no statistically significant correlation with respondents' readiness to start a business, thereby leading to the rejection of hypotheses H3, H5, H7, H8, H9. Life satisfaction (χ^2 =8.577, p=0.199) also showed no statistically significant correlation with respondents' readiness to start a business, thereby confirming the hypotheses H10.

The significant impact of country of origin on entrepreneurial readiness aligns with existing literature, which suggests that national cultural, economic, and regulatory environments play crucial roles in shaping entrepreneurial intentions. Acs et al. (2008) argue that supportive entrepreneurial ecosystems, characterized by favorable regulatory frameworks and access to financial resources, enhance entre-



preneurial activities. The findings confirm this, indicating that respondents from countries with more supportive environments are more likely to exhibit entrepreneurial readiness.

The strong significance of parental entrepreneurial background underscores the importance of early exposure to entrepreneurship. This finding is consistent with studies by Aldrich and Cliff (2003) and Laspita et al. (2012), which highlight the intergenerational transmission of entrepreneurial spirit. Early exposure through entrepreneurial parents provides mentorship, and financial support, and promotes entrepreneurial values and self-efficacy from a young age, significantly influencing entrepreneurial intentions and readiness.

The results show that education on entrepreneurship significantly impacts entrepreneurial readiness, which supports the findings of Wilson et al. (2007) and Lüthje and Franke (2003). They demonstrated that entrepreneurship education enhances self-efficacy and provides essential skills, thereby mitigating gender differences and supporting business creation. This aligns with the broader literature, which emphasizes the critical role of formal education in equipping individuals with the knowledge and confidence necessary for entrepreneurial success.

The ability to recognize business ideas was also found to have a significant impact on entrepreneurial readiness. Ardichvili et al. (2003) noted the importance of opportunity recognition in entrepreneurial success, asserting that the capacity to identify viable business ideas is crucial for entrepreneurship. Our findings corroborate this, indicating that those with a keen ability to recognize business opportunities are more prepared to start a business.

On the other hand, factors such as place of residence, family size, type of business school, work experience, income level, and life satisfaction showed no statistically significant correlation with respondents' readiness to start a business. This suggests that while socio-demographic and educational factors like country of origin, parental background, and entrepreneurship education are critical, other factors may be more complex or context-dependent. The lack of significant correlation between factors such as place of residence, family size, income level, and life satisfaction with entrepreneurial readiness indicates that the influence of these variables might be indirect or mediated by other factors. The non-significant result suggests that whether respondents are from urban or rural areas does not significantly affect their entrepreneurial readiness in this study. This contrasts with some literature (Audretsch and Lehmann, 2005; Glaeser et al., 2010), which suggests urban environments provide superior networking and educational resources. The discrepancy might indicate the need for a more nuanced analysis or that other factors mitigate the urban-rural divide in this sample. Income level not being significant implies that financial stability may not be the primary driver of entrepreneurial readiness in this sample. While some studies (Hurst and Lusardi, 2004) highlight the importance of wealth in overcoming liquidity constraints, this result suggests other factors may play a more critical role in this context. Life satisfaction did not



show a significant association, suggesting it may not directly influence entrepreneurial readiness. This aligns with mixed findings in the literature (Binder and Coad, 2013), indicating that the relationship between life satisfaction and entrepreneurial intentions is complex and potentially mediated by other factors.

5 Conclusions

This study provides a comprehensive analysis of the socio-demographic and educational factors influencing entrepreneurial capacity and intentions among students enrolled in business programs in Croatia. By investigating a range of factors, including gender, country of origin, urban versus rural background, parental entrepreneurial background, family size, education in entrepreneurship, type of educational institution, previous work experience, income level, life satisfaction, and ability to recognize business ideas, this paper highlights the complex nature of entrepreneurial potential. Significant differences in entrepreneurial readiness were observed based on gender, country of origin, parental entrepreneurial background, education on entrepreneurship, and the ability to recognize business ideas. These results suggest that national entrepreneurial ecosystems, early exposure to entrepreneurship, formal education, and opportunity recognition are crucial drivers of entrepreneurial intentions. However, factors such as place of residence, family size, income level, type of business school, work experience, and life satisfaction did not show a significant association with entrepreneurial readiness, indicating the complex and context-dependent nature of these influences.

By identifying the significant and non-significant factors, this study provides valuable insights for policymakers and educators. Tailoring support programs to the specific needs and strengths of local communities, enhancing entrepreneurship education, and fostering a supportive environment can lead to more effective and sustainable entrepreneurial ecosystems on country, regional, and local levels. The findings also emphasize the need for inclusive policies that consider diverse socio-demographic backgrounds to address regional disparities and promote equitable economic growth.

Despite the valuable insights provided by this study, several limitations should be acknowledged. The limited geographic scope may restrict the generalizability of the findings to other cultural or economic contexts. Additionally, the reliance on self-reported data introduces potential biases, while the cross-sectional design limits the ability to establish causal relationships. Future research could benefit from expanding the geographic diversity of participants, incorporating longitudinal designs, and exploring additional variables to better understand the drivers of entrepreneurial intentions. In-depth qualitative studies and analyses of policy impacts and regional differences would also offer deeper insights into how these factors influence entrepreneurial activity.



References

- Acs, Z. J., Desai, S., & Hessels, J. (2008). Entrepreneurship, economic development and institutions. *Small Business Economics*, 31(3), 219-234. https://doi.org/10.1007/s11187-008-9135-9
- Acs, Z. J., Szerb, L., & Autio, E. (2017). Global Entrepreneurship Index 2017. Springer.
- 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
- Aldrich, H. E., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship:
- Toward a family embeddedness perspective. *Journal of Business Venturing, 18*(5), 573-596. https://doi.org/10.1016/S0883-9026(03)00011-9
- Aldrich, H. E., & Langton, N. (1998). Human resource management and organizational life cycles. In P. D. Reynolds, W. Bygrave, N. M. Carter, P. Davidsson, W. B. Gartner, C. M. Mason, & P. P. McDougall (Eds.), Frontiers of Entrepreneurship Research 1997 (pp. 349-357).
- Babson College, Center for Entrepreneurial Studies.
- Alsos, G. A., Ljunggren, E., & Pettersen, T. L. (2003). Farm-based entrepreneurs: What triggers the start-up of new business activities? *Journal of Small Business and Enterprise Development*, 10(4), 435-443. https://doi.org/10.1108/14626000310504747
- Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18(1), 105-123. https://doi.org/10.1016/S0883-9026(01)00068-4
- Audretsch, D. B. (2007). The entrepreneurial society. Oxford University Press.
- Audretsch, D. B., & Lehmann, E. E. (2005). Does the knowledge spillover theory of entrepreneurship hold for regions? *Research Policy*, 34(8), 1191-1202. https://doi.org/10.1016/j.respol.2005.03.012
- Bade, F. J., & Nerlinger, E. (2000). The spatial distribution of new technology-based firms: Empirical results for West Germany. *Papers in Regional Science*, 79(2), 155-176. https://doi.org/10.1111/j.1435-5597.2000.tb00766.x
- Binder, M., & Coad, A. (2013). Life satisfaction and self-employment: A matching approach. *Small Business Economics*, 40(4), 1009-1033. https://doi.org/10.1007/s11187-011-9413-9
- Bosma, N., Hessels, J., Schutjens, V., Van Praag, M., & Verheul, I. (2012). Entrepreneurship and role models. *Journal of Economic Psychology*, 33(2), 410-424. https://doi.org/10.1016/j.joep.2011.03.004
- Bowen, H. P., & De Clercq, D. (2008). Institutional context and the allocation of entrepreneurial effort. *Journal of International Business Studies*, 39(4), 747-767. https://doi.org/10.1057/palgrave.jibs.8400343
- Brush, C. G., Carter, N. M., Gatewood, E. J., Greene, P. G., & Hart, M. M. (2006). Women and entrepreneurship: Contemporary classics. Edward Elgar Publishing.
- Carr, J. C., & Sequeira, J. M. (2007). Prior family business exposure as intergenerational influence and entrepreneurial intent: A theory of planned behavior approach. *Journal of Business Research*, 60(10), 1090-1098. https://doi.org/10.1016/j.jbusres.2006.12.016
- CEPOR (2023). SME Report. Centre for Policy Excellence in Small and Medium Enterprises.
- Coduras, A., Saiz-Alvarez, J. M., & Ruiz, J. (2016). Measuring readiness for entrepreneurship: An information tool proposal. *Journal of Innovation and Knowledge*, 1(2), 99-108. https://doi.org/10.1016/j.jik.2016.02.003



- Dabic, M., Daim, T., Bayraktaroglu, E., Novak, I., & Basic, M. (2012). Exploring gender differences in attitudes of university students towards entrepreneurship: An international survey. *International Journal of Gender and Entrepreneurship*, 4(3), 316-336. https://doi.org/10.1108/17566261211264172
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331. https://doi.org/10.1016/S0883-9026(02)00097-6
- Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being: The science of happiness and life satisfaction. In C. R. Snyder & S. Lopez (Eds.), *Handbook of positive psychology* (pp. 463-473). Oxford University Press.
- Dimov, D. (2010). Nascent entrepreneurs and venture emergence: Opportunity confidence, human capital, and early planning. *Journal of Management Studies*, 47(6), 1123-1153. https://doi.org/10.1111/j.1467-6486.2009.00874.x
- Fairlie, R. W., & Robb, A. M. (2007). Families, human capital, and small business: Evidence from the Characteristics of Business Owners Survey. *Industrial and Labor Relations Review*, 60(2), 225-245. https://doi.org/10.1177/001979390706000204
- Feldman, M. P. (2001). The entrepreneurial event revisited: Firm formation in a regional context.
- Industrial and Corporate Change, 10(4), 861-891. https://doi.org/10.1093/icc/10.4.861
- Florida, R. (2002). The rise of the creative class: And how it's transforming work, leisure, community, and everyday life. Basic Books.
- Fritsch, M., & Aamoucke, R. (2013). Regional public research, higher education, and innovative start-ups: An empirical investigation. *Small Business Economics*, 41(4), 865-885. https://doi.org/10.1007/s11187-013-9510-z
- Fritsch, M., & Storey, D. J. (2014). Entrepreneurship in a regional context: Historical roots, recent developments, and future challenges. *Regional Studies*, 48(6), 939-954. https://doi.org/10.1080/00343404.2014.892574
- GEM (2023). Global Entrepreneurship Monitor 2022 Global Report. https://www.gemconsortium.org/reports/latest-global-report
- Gibb, A. (2002). In pursuit of a new entrepreneurial paradigm for learning: Creative destruction,
- new values, new ways of doing things, and new combinations of knowledge. *International Journal of Management Reviews*, 4(3), 233-269. https://doi.org/10.1111/1468-2370.00086
- Glaeser, E. L., Rosenthal, S. S., & Strange, W. C. (2010). Urban economics and entrepreneurship. Journal of Urban Economics, 67(1), 1-14. https://doi.org/10.1016/j.jue.2009.10.005
- Gupta, V. K., Turban, D. B., & Bhawe, N. M. (2008). The effect of gender stereotype activation on entrepreneurial intentions. *Journal of Applied Psychology*, 93(5), 1053-1061. https://doi.org/10.1037/0021-9010.93.5.1053
- Harrison, R. T., & Mason, C. M. (2007). Does gender matter? Women business angels and the supply of entrepreneurial finance. *Entrepreneurship Theory and Practice*, 31(3), 445-472. https://doi.org/10.1111/j.1540-6520.2007.00182.x
- Hurst, E., & Lusardi, A. (2004). Liquidity constraints, household wealth, and entrepreneurship. *Journal of Political Economy*, 112(2), 319-347. https://doi.org/10.1086/381478



- Kautonen, T., Luoto, S., & Tornikoski, E. T. (2010). Influence of work history on entrepreneurial intentions in prime age and third age: A preliminary study. *International Small Business Journal*, 28(6), 583-601. https://doi.org/10.1177/0266242610368592
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behavior. *Entrepreneurship and Regional Development*, 5(4), 315-330. https://doi.org/10.1080/08985629300000020
- Laspita, S., Breugst, N., Heblich, S., & Patzelt, H. (2012). Intergenerational transmission of entrepreneurial intentions. *Journal of Business Venturing*, 27(4), 414-435. https://doi.org/10.1016/j.jbusvent.2011.11.006
- Lüthje, C., & Franke, N. (2003). The making of an entrepreneur: Testing a model of entrepreneurial intent among engineering students at MIT. *R&D Management*, 33(2), 135-147. https://doi.org/10.1111/1467-9310.00288
- Minniti, M. (2008). The role of government policy on entrepreneurial activity: Productive, unproductive, or destructive? *Entrepreneurship Theory and Practice*, 32(5), 779-790. https://doi.org/10.1111/j.1540-6520.2008.00255.x
- Minniti, M., & Nardone, C. (2007). Being in someone else's shoes: The role of gender in nascent entrepreneurship. *Small Business Economics*, 28(2-3), 223-238. https://doi.org/10.1007/s11187-006-9017-y
- Miralles, F., Giones, F., & Riverola, C. (2016). Evaluating the impact of prior experience in entrepreneurial intention. *International Entrepreneurship and Management Journal*, 12(3), 791-813. https://doi.org/10.1007/s11365-015-0365-4
- Nguyen, C. (2018). Demographic factors, family background, and prior self-employment on entrepreneurial intention: Vietnamese business students are different: Why? *Journal of Global Entrepreneurship Research*, 8(1), 10. https://doi.org/10.1186/s40497-018-0097-3
- Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 129-144. https://doi.org/10.1046/j.1540-6520.2003.00035.x
- Pfeifer, S., Sarlija, N., & Zekic-Susac, M. (2014). Shaping the entrepreneurial mindset: Entrepreneurial intentions of business students in Croatia. *Journal of Small Business Management*, 54(1), 121-133. https://doi.org/10.1111/jsbm.12133
- Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International Small Business Journal*, 25(5), 479-510.
- https://doi.org/10.1177/0266242607080656
- Rae, D. (2007). Entrepreneurship: From opportunity to action. Palgrave Macmillan.
- Rajh, E., Jovanov Apasieva, T., Budak, J., Ateljević, J., Davčev, L., & Ognjenović, K. (2018).
- Youth and entrepreneurial intentions in four South-East European countries. *International Review of Entrepreneurship, 16*(2), 355-382.
- Scherer, R. F., Adams, J. S., Carley, S. S., & Wiebe, F. A. (1989). Role model performance effects on development of entrepreneurial career preference. *Entrepreneurship Theory and Practice*, 13(3), 53-72. https://doi.org/10.1177/104225878901300306
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. The Academy of Management Review, 25(1), 217-226. https://doi.org/10.2307/259271
- Shapero, A., & Sokol, L. (1982). Social dimensions of entrepreneurship. In C. A. Kent, D. L. Sexton, & K. H. Vesper (Eds.), *Encyclopedia of entrepreneurship* (pp. 72-90). Prentice Hall.



- Shinnar, R. S., Giacomin, O., & Janssen, F. (2012). Entrepreneurial perceptions and intentions: The role of gender and culture. *Entrepreneurship Theory and Practice*, 36(3), 465-493. https://doi.org/10.1111/j.1540-6520.2012.00509.x
- Sirola, D. (2020). Determinants of entrepreneurial intentions: Empirical evidence from Croatian perspective. *Zbornik Veleučilišta u Rijeci*, 8(1), 169-187. https://doi.org/10.31784/zvr.8.1.17
- Turker, D., Onvural, B., Kursunluoglu, E. & Pinar, C. (2005). Entrepreneurial propensity: a field study on the Turkish university students. *International Journal of Business, Economics and Management*, 1(3):15-27.
- Veciana, J.M., Aponte, M. & Urbano, D. (2005). University attitudes to entrepreneurship: a two countries comparison. *International Journal of Entrepreneurship and Management, 1*(2): 165-82. https://doi.org/10.1007/s11365-005-1127-5
- Wang, C.K. & Wong, P.K. (2004). Entrepreneurial interest of university students in Singapore. *Technovation*, 24(2): 163-172. https://doi.org/10.1016/S0166-4972(02)00016-0.
- 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.

