

# Does Entrepreneurial Education Support Start-up Spirit of Students? Case of the School of Business Administration in Karviná

[Podporuje podnikatelské vzdělávání start-upového ducha studentů?  
Případová studie Obchodně podnikatelské fakulty v Karviné]

Dominik Salat<sup>1</sup>

<sup>1</sup> Silesian University, School of Business Administration, Univerzitní nám. 1934/3, 733 40 Karviná  
Email: salat@opf.slu.cz

**Abstract:** Entrepreneurship has a very complex culture content where people are given demanding tasks and responsibilities. For many individuals, this culture is not easy to adopt. There are various forms of support has been created for those interested. One of them is the entrepreneurship education offered to students at the School of Business Administration in Karviná. Within the process of the entrepreneurship course, students gaining professional knowledge followed by personality type through a standardized psychological test. This innovative step would help them how to use this knowledge. The aim of this paper is to introduce the typology of students in the entrepreneurship course within the comparison of the personality typology from a population of real entrepreneurs. In fact, the results show that the students' typology is very different from that of real entrepreneurs. Those results can have an impact on the decision to enter the business and subsequently on the business performance as well or to innovate business courses.

**Keywords:** education, entrepreneurship, personality, psychological test.

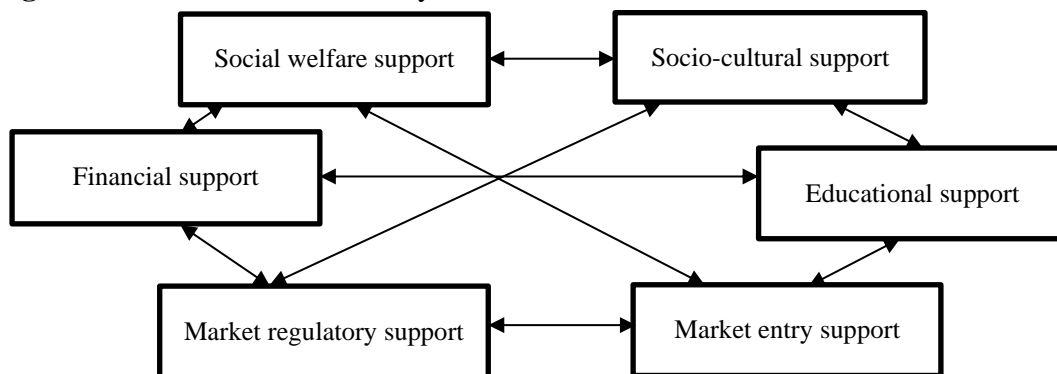
**JEL classification:** I20, L26, M21

© 2024. School of Business Administration in Karviná, Silesian University in Opava, Author(s). This is an open-access article licensed under the Creative Commons Attribution-NonCommercial-NoDerivs License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Introduction

The concept of entrepreneurial ecosystems is used to describe multiple interdependent actors and components that interact in complex ways to achieve mutually beneficial outcomes. Entrepreneurial activity exists within an ecosystem comprising political, economic, social and cultural elements that are interdependent and interconnected (see Fig. 1). Ultimately, the goal of a successful ecosystem is to generate entrepreneurial activity that contributes value to society and fosters economic prosperity (Acs et al. 2017, O'Connor et al. 2018). The entrepreneurial ecosystems approach to studying entrepreneurship aims to understand the factors driving productive entrepreneurial activity.

**Figure 1:** National institutional system



Source: Deng, Orbes and Ma, 2024

National institutional systems (Fainshmidt et al. 2018) encompass the formal and informal rules, regulations, and norms that structure a country's economic, social, and political environment. These systems include but are not limited to financial institutions, educational structures, market regulations, and cultural norms (Fainshmidt et al. 2018). The relationship between national institutional systems and entrepreneurship is complex and multifaceted.

According to Ernawati et al. (2022), interest in entrepreneurship is strongly influenced by social support. Moreover, if this social support is obtained from someone's immediate environment, such as family or friends. The form of support can be in the form of providing information on how to behave during their business activities or in the form of material where this treatment makes someone feel cared for. As stated by Baumol and Strom (2007), the factors that can encourage someone to become an entrepreneur are education and experience of entrepreneurship conducted with family, therefore, family background is an environment that can support an entrepreneur to become an entrepreneur. In addition, Cao et al. (2022) add the desire to be an entrepreneur and personality traits, where this is a major factor towards students' and graduates' entrepreneurial intentions. However, within these themes, the influence of personality traits is the cornerstone that leads to entrepreneurial intentions in young people.

Since the entrepreneurial ecosystem is complicated for budding entrepreneurs, especially at a younger age, many types of support need to be offered. One of these supports can be education acquired for a specific purpose usually related to a field of interest. The School of Business and Administration in Karviná offers one of the possibilities to improve their education since 1991. Students can expand their knowledge or acquire new skills. In the process of the entrepreneurship course, in addition to gaining professional knowledge, students are also introduced to their personality type. When personality plays the most important factor in human behaviour and entrepreneurial interest, it is necessary that the student is introduced to it during their studies.

Since child and adult personalities differ (Wright and Jackson 2022), it is already possible to predict the possibilities of success in entrepreneurship based on the personality types of entrepreneurs. However, it is very important to remember that personality alone is not the only factor of success, but there are many other factors affecting it. For the purposes of this paper, the influence of the other factors will be extracted and only this "possible" factor alone will be considered. Therefore, the research question was set, "*Do the students of the School of Business Administration in Karviná have an entrepreneurial spirit?*" The main aim of the paper is to introduce the typology of students in the entrepreneurship course and to compare the results with the personality typology from a population of real entrepreneurs."

## 1 Theoretical background

Entrepreneurship education plays a key role in domestic economic development and building a business (Walmsley and Wraae 2022, Al-Qadasi et al. 2024). In a narrow sense, entrepreneurship education is a part of quality education that aims to cultivate students' innovative spirit and entrepreneurial skills. In a broader sense, it aims to foster individuals with a pioneering mindset (Zhou et al. 2024). One of the problems of entrepreneurship education, as reported by Al-Qadasi et al. (2024), is the inability to sufficiently stimulate entrepreneurial intention and action. Several factors may contribute to this failure, such as entrepreneurial practice (Lemaire et al. 2022), a supportive environment, and the ability to acquire the right entrepreneurial skills (Sastre, Benavides-Espinosa and Ribeiro-Soriano 2022). In addition, cognitive style is crucial to understanding entrepreneurial behaviour (Marques et al. 2022).

The success of entrepreneurship education in shaping entrepreneurial intention is the most important factor in assessing the performance of entrepreneurship education.

This raises the question, which Haase and Lautenschläger (2010, p. 147) asked: "*Is entrepreneurship really teachable?*" The results point to the need to take personality traits into account for future entrepreneurship education (Luca, Cazan and Tomulescu 2013), as people who are aware of their entrepreneurial potential are more likely to engage in and benefit from entrepreneurship education. Training can, as Rae (2010) mentions, provide them with the chance to learn new entrepreneurial skills that can be useful for their future business, develop entrepreneurial skills and contribute to entrepreneurial identity and culture at individual, collective and societal levels. Entrepreneurial intention reflects a more adequate perception of reality, a realistic self-assessment of capabilities and an evaluation of opportunities, as reported by Rodrigues et al. (2012). According to this collective of authors, the opportunity to participate in education can act as a filter: those who are aware of their possibility to succeed in an entrepreneurial career are more likely to become entrepreneurs and engage in entrepreneurial education. This involvement creates the possibility of greater entrepreneurial success in the future.

In contrast, Haase and Lautenschläger (2010) believe that the critical characteristics of an entrepreneur do not lie in his or her expertise in how to start a business, but rather in his or her ability to acquire resources, develop ideas and pursue a vision. Yet, traits such as proactivity, creativity, innovation, risk-taking propensity, alertness and the need to succeed are the distinguishing characteristics and the 'essence' of what distinguishes entrepreneurs from other individuals. Consequently, the role of the entrepreneurial teacher is to act as a promoter, facilitator and manager rather than to be an educator. His task consists, for example, in organising experiences through professional training and other contacts with entrepreneurs rather than lecturing on the development of a business plan or on some of its theoretical aspects. Purposeful entrepreneurship education should thus evolve from the usual teaching through education towards the creation of experiential entrepreneurship as the only way of transmitting the necessary 'know-how'. Schmitt-Rodermunt (2004) is critical of this, suggesting that successful entrepreneurs seem to differ from other people from an early age. At least that is the story told by the biographies of many successful company founders, according to her. Although many researchers agree (Viinikainen et al. 2017; Sciaraffa, Zeanah and Zeanah 2018; Núñez et al. 2020) that there is a link between individuals' early characteristics and their later work outcomes, the evidence is scant when it comes to entrepreneurial success.

Nevertheless, education is an effective method of promoting entrepreneurship according to Rasmussen and Sørheim (2006). It is valid that it has a positive effect on promoting the entrepreneurial spirit of young people studying at university and guiding them towards entrepreneurship. The aim of entrepreneurship education is to reveal an entrepreneurial personality. It is not easy for a person to adopt the culture of entrepreneurship. This is because entrepreneurship has a complex content and imposes demanding tasks and responsibilities on a person. However, if determined study in this subject can be formed as a programme, positive results can be achieved. According to Chang, Liu and Chiang (2014), entrepreneurial characteristics relevant to entrepreneurial intention can enhance entrepreneurial behaviour. In line with this, it has been accepted that personality traits of entrepreneurs are considered as an important variable in addition to their level of education (Coulter 2001).

## 2 Methodology

The research conducted consists of two research groups. The first group focuses on a group of students. They are viewed as potential entrepreneurs. This is because of their choice of the university they choose to study at, but also because of their interest in the entrepreneurship course they are taking. This course takes place between October and December. Primary data collection by the students was also conducted during this period. In the second tutorial session of the course, students are introduced to their personality. This is where the data collection takes place. The entire process takes an average of 45 minutes. During the first 5 minutes, students are provided with the necessary information. This is followed by the personality familiarization part, which takes an average of 30 minutes. For the remaining 10 minutes, students have the opportunity to learn about the advantages or disadvantages of the personality they possess. It is up to them to decide how to use this knowledge to their advantage.

For the second research group, real entrepreneurs are approached instead of students. They are also asked to use insights about their personality for research purposes. For this purpose, the already acquired knowledge was used. Compared to the student group, data collection for this population is more complicated and requires extra care in handling the data. The data collected requires to be anonymised and protection of the data needs to be ensured to prevent leakage or misuse.

In both cases, a standardized psychological test was used to measure personality. Psychological tests are special standardized psychological diagnostic instruments whose evaluation should be based on statistical norms derived from a representative sample of the population (Pavlovsky 2009). They are personality tests that are used to diagnose the personality characteristics of an individual. According to Ritomsky (2004), these tests are not only widely used in diagnostics but also in social psychological research. The selected test is the Myers-Briggs Type Indicator (MBTI), a personality test that is grounded in Jung's theory of psychological types. Jensen and DiTiberio (1989) noted that this test became popular in 1975. Since then, it has been used in various educational efforts to study such issues as counseling style preferences for first-year students (Crockett and Crawford 1989) and educational management (Ligita 2013). Table 1 below shows these 16 MBTI personality types.

**Table 1:** 16 personality types

<b>Analysts Group</b>		<b>Diplomats group</b>	
Architect	INTJ	Advocate	INFJ
Logician	INTP	Mediator	INFP
Commander	ENTJ	Protagonist	ENFJ
Debater	ENTP	Campaigner	ENFP
<b>Sentinels Group</b>		<b>Explorers group</b>	
Logistician	ISTJ	Virtuoso	ISTP
Defender	ISFJ	Adventurer	ISFP
Executive	ESTJ	Entrepreneur	ESTP
Consul	ESFJ	Entertainer	ESFP

Source: Spiotta (2018) and Čakrt (2010)

The MBTI divides preferences (Mattare 2015) into sixteen different types, which consist of eight functions: extraversion vs. introversion (E vs. I), sensing vs. intuition (S vs. N), thinking vs. feeling (T vs. F), and judging vs. perceiving (J vs. P). These types represent dimensions that are unique areas of differentiation on a continuous scale. The following Table 2 presents a summary of these functions.

**Table 2: Summary of MBTI functions**

Functions	Description of function
Extraversion (E)	are open, action-oriented, expressive, sociable and impulsive
Introversion (I)	they do not go out in society, they represent completely closed, quiet and inconspicuous thoughts
Sensing (S)	are largely based on facts, experience, reality and proven results. They have a critical and cautious approach
Intuition (N)	imagination and theories help them predict the future. They perceive abstract things between relationships, present conditions, possibilities and connections in events
Thinking (T)	decision-making is based on a logical process. Logical reasoning and examination of results describes the actions
Feeling (F)	the conclusion is reached by personal values and subjective thinking. They have empathy, warmth and compassion for people
Judging (J)	inflexibility, working towards final goals, working only according to a schedule and plan. Prioritization of tasks is key
Perceiving (P)	embrace new opportunities and possibilities by being flexible, open, unconstrained and divergent

Source: Burriss-Melville, Burriss a Bledsoe (2024)

Čakrt (2010) then characterizes people with these personality types as follows:

Architect (INTJ) - they are detail and fact oriented, realistic, logical and practical, interested in the inner world and the present rather than the future, disciplined and organized, and observant but somewhat subjective.

Logician (INTP) - they are quiet, reserved, thoughtful, flexible and tolerant, very logical and factual, good at thinking outside the box and like theoretical thinking.

Commander (ENTJ) - excellent leadership skills and strong communication skills, they are confident, value organization and orderliness, good at making decisions, like to plan and are assertive, direct and honest.

Debater (ENTP) - are innovative, very creative, full of ideas, excellent storytellers, like to talk about different topics with people, place a high value on knowledge, dislike plans and routine, are good at leading others, don't like to be controlled and are overly logical.

Advocate (INFJ) - they are idealistic, sensitive to the needs of others, very creative and artistic, reserved, withdrawn, future-focused, have deep relationships and like to think about the meaning of life.

Mediator (INFP) - they are loyal and committed, sensitive to feelings, friendly, caring and concerned about others, have strong communication skills, value close relationships, focus on the "big picture" not the details, and prefer to work independently.

Protagonist (ENFJ) - they prefer harmony to argument, are friendly and good-hearted, have a genuine interest in the feelings of others, often have a wide circle of friends and acquaintances, are excellent at supporting and helping others, excellent organizers, and demand acceptance from other people.

Campaigner (ENFP) - they are warm and enthusiastic, empathetic and caring, highly creative, fun and spontaneous, disorganized, have strong communication skills, need approval from others, and are able to think abstractly and grasp complex concepts.

Logistician (ISTJ) - they are detail and fact oriented, realistic, observant but somewhat subjective, logical and practical, organized and organized, more interested in the present than the future, and interested in the inner world.

Defender (ISFJ) - they are reliable, stable, down to earth, kind, good-hearted and considerate, practically minded, aware of the feelings of others, enjoy order and structure, have excellent memory for details and like specific information, dislike conflict and arguments.

Executive (ESTJ) - they are practical and realistic, reliable, confident, hardworking, traditionalists, like to lead people, very structured and organised, move to standards, very much dislike inefficiency and disorganisation and look for like-minded people.

Consul (ESFJ) - they are kind and compassionate to others, fun, highly organized, practical, loyal, selfless, dependable, seek approval, and enjoy helping others.

Virtuoso (ISTP) - they are highly logical, confident and carefree, action-oriented, very realistic and practical, like to learn from experience and enjoy excitement and new experiences.

Adventurer (ISFP) - are strongly aware of their environment, reserved and quiet, prefer concrete, practical information, have a strong need for personal space, like to learn from practical examples, dislike abstract, theoretical information and dislike arguments and conflict. Entrepreneur (ESTP) - They are sociable, fun, competitive, impulsive, energetic, good at influencing others, action-oriented, adaptable and resourceful, have strong interpersonal skills, observant with a strong attention to detail, and live for the "here and now".

Entertainer (ESFP) - they are optimistic, friendly, seek new experiences, spontaneous and sometimes impulsive, sociable, like to meet people, like facts and concrete information, are focused on the present, like variety, dislike monotony and hate theories and abstract information.

Brandt and Helander (2020), based on their research conducted on 889 entrepreneurs, suggest that the most entrepreneurial personality is the ENTJ personality type. In their study, they also present ENTP, ENFP, INTJ and INTP as the most entrepreneurial personality types. On the other hand, they found that the least entrepreneurial personality types are ESTP, ESTJ, ENFJ, ESFJ, ESFP, ISTP, INFP, ISTJ, INFJ, ISFP and ISFJ. The Myers-Briggs Company (2017) study considers that Extraversion, Intuition, Thinking and Perception types tend to generally have a higher level of entrepreneurial orientation. Individuals with an Intuition or Perception preference were significantly more likely to actually become entrepreneurs than those with a Sensing or Judging preference, although the differences were small in real terms. In terms of dominant functions, ENFP and ENTP types were most likely to become entrepreneurs. The least likely were ISTJ and ISFJ.

### 3 Results

Based on the sample of students (N=173), it was found that more interest in the entrepreneurship course was shown by men (54.9 %) over women (45.1 %). The majority of this sample enrolled in the course in their first year of study at the university (59 %). This is also due to the recommendation of the syllabus by the university, which recommends the course in the first semester. However, during the course, there were also some students in their 2nd (22.5 %) or 3rd (18.5 %) year of study in the Bachelor's program. Table 3 below gives an insight into the personalities of the students. The online standardized MBTI psychological test was used to determine personalities along with the free statistical program PSPP to process the findings.

**Table 3:** The result of the personality traits among the students of the School of Business Administration in Karviná (N = 173)

Personality types	Frequency	Relative frequency (%)	Cumulative frequency (%)
ENFJ	14	8.1	8.1
ENFP	26	15.0	23.1
ENTJ	3	1.7	24.9
ENTP	4	2.3	27.2
ESFJ	16	9.2	36.4
ESFP	10	5.8	42.2
ESTJ	4	2.3	44.5
ESTP	3	1.7	46.2
INFJ	21	12.1	58.4
INFP	9	5.2	63.6
INTJ	11	6.4	69.9
INTP	10	5.8	75.7
ISFJ	24	13.9	89.6
ISFP	5	2.9	92.5
ISTJ	9	5.2	97.7
ISTP	4	2.3	100.0
<b>Total</b>	<b>173</b>	<b>100.0</b>	<b>100.0</b>

Source: own research

The most frequent personality type among the students was found to be ENFP personality type (15 %) followed by ISFJ personality type (13.9 %) and INFJ personality type (12.1 %). Table 4 (Personality functions of students) analyses in detail the individual personality traits of the students in order to elaborate on the personality profile of these potential entrepreneurs.

**Table 4:** Personality functions of students

Personality functions	E	I	S	N	T	F	J	P
Result (%)	11.56	13.44	10.84	14.16	6.94	18.06	14.74	10.26

Source: own research

Among the students, introverted function (13.44 %) prevails over extroversion (11.56 %). The most dominant function among the students is the feeling function (18.06%) compared to the thinking function (6.94 %) which is in the same dimension and is the least developed function among the students.

To compare students with real entrepreneurs, we can use the already published article by Salat, Duháček Šebestová and Krejčí (2023), where their sample consisted of 627 entrepreneurs from the Czech Republic. Their sample was dominated by men (67 %) compared to women (33 %), who were more often 41-55 years of age (48.6 %) or 26-40 years old (29.4 %), followed by 56+ (12.3 %), the rest being the 18-25 age group (9.7 %). It was also found that the ESTP personality type (16.4 %), ENTJ personality type (13.6 %) and ESTJ personality type (12.4 %) are most prevalent in the real entrepreneurs' group as shown in the following Table 5.

**Table 5:** Personality types of actual entrepreneurs (N = 627)

Personality types	Relative frequency (%)	Personality types	Relative frequency (%)
ENFJ	1.6	INFJ	4.1
ENFP	8.0	INFP	3.2
ENTJ	13.6	INTJ	6.2
ENTP	4.8	INTP	10.2
ESFJ	2.9	ISFJ	2.4
ESFP	2.7	ISFP	2.6
ESTJ	12.4	ISTJ	3.8
ESTP	16.4	ISTP	5.1
Total Extrovert Types	62.4	Total Introvert Types	37.6

Source: Salat, Duháček Šebestová and Krejčí (2023)

Subsequently, an analysis of individual personality functions was conducted on the part of real entrepreneurs. The results are illustrated in Table 6.

**Table 6:** Personality functions of actual entrepreneurs

Personality functions	E	I	S	N	T	F	J	P
Result (%)	14.86	10.14	12.15	12.85	17.52	7.48	11.55	13.45

Source: own research

The results indicate the prevalence of the extroverted (14.86 %) function in entrepreneurs over the introverted (10.14 %) function. Thinking function (17.52 %) was found to be the most significant personality function among actual entrepreneurs followed by extroverted function (14.86 %) and perceiving function (13.45 %).

## Discussion and conclusion

The personality types of actual entrepreneurs and students attending the entrepreneurship course are different. Among the students, the majority of the personality types found were ENFP, ISFJ and INFJ for the entrepreneurs it was the personality types ESTP, ENTJ and ESTJ. The results of the students of the Czech university and for example the Iranian university

(Zarafshani et al. 2011), the Korean university (Soonjoo 2022) or the Egyptian university (Hemdan, Taha and Cherif 2023) are different which proves the difference of these cultures. Furthermore, while students have a greater representation of introverted personalities among entrepreneurs, the opposite is the case and extraversion prevails. The dominance of the extroversion function in entrepreneurs is also demonstrated by Brandt and Helander (2020) in their publication. In their study, Brandt and Helander (2020) demonstrate ENFJ personality type is suitable for entrepreneurship, which is in line with the results of the students of the School of Business Administration in Karviná. This is also proved by the study of Myers-Briggs Company (2017) but in analyzing the individual functions according to this study, the results of the article are more favorable for actual entrepreneurs. However, what is the crucial link between entrepreneurs and students thus is the visible difference between the function of thinking and feeling. While in students the function of feeling is dominant so in entrepreneurs it is the function of thinking. When analysing these two groups, it is the thinking function that is the most necessary for the Czech entrepreneurial environment. A more developed feeling function may only be needed for specific types of entrepreneurship (e.g. Jirásek et al. 2021) or for customer relations or marketing tasks (Packard and Burnham 2021).

Compared to the other dimensions, a 3.3 % difference was found between extroversion and introversion, a 1.31 % difference between sensing and intuition, and a 3.19 % difference between judging and perceiving. This confirms that it is the thinking and sensing dimension that forms the most important dimension. While, according to Brandt and Helander (2020) or Myers-Briggs Company (2017), students have the potential to become entrepreneurs in the future if only personality types are now considered as the only constant, it can be concluded that students of the School of Business Administration in Karviná do not have an entrepreneurial spirit. This statement answers the research question. This is due to the findings of a study by Myers-Briggs Company (2017), which found that E, N, T and P personality types tend to generally have a higher level of entrepreneurial orientation. Czech entrepreneurs are also equipped with these higher level functions.

Limitation of the study. Both the Brandt and Helander (2020) and Myers-Briggs Company (2017) studies were conducted for different business environments. It is important to note that every business environment is different and specific. What is applicable to one may not apply in another. Nevertheless, the Myers-Briggs Company (2017) study included only 167 individuals who identified themselves as entrepreneurs. However, leaving aside this limit of only one constant (thinking function) affecting entrepreneurship, this group of students and potential entrepreneurs may also become a group of entrepreneurs in the future. The form of educational support offered by the School of Business Administration in Karviná is just one of many other forms of support available to potential entrepreneurs. For a prospective entrepreneur to become a successful entrepreneur there are a number of factors involved. Some of these, specifically selected internal factors such as Inspiration, Creativity, Motivation and Passion (Salat 2023), are also the focus of the entrepreneurship course. This aims to develop these other factors, which should be able to minimize the effect of personality type. Whether this will be successful is another ongoing research on the influence of personality typology. An application of the concept of the Business Cycle Model as suggested earlier by Salat (2023) is presented. Through the ongoing research, the presented results will be used in the issue of the study of the influence of personality on the entrepreneurial mindset, where currently in the School of Business Administration in Karviná, as part of its educational support, offers the presented personality profiles of students and thus contributes to the acquisition of the psychological factor of personality. However, at the moment the influence of this factor in the Czech environment remains an open question and will require longitudinal research. What is not a



question for the time being is only the entrepreneurial intention of the individual to enter into business. It is the motivation that can lead to the passion for the entrepreneurial intention which can make the difference.

### Acknowledgement

„This paper was supported by the Ministry of Education, Youth and Sports Czech Republic within the Institutional Support for Long-term Development of a Research Organization in 2023“[IP/05/2023]“.

### References

- [1] ACS, Z. J., E. STAM, D. B. AUDRETSCH and A. O’CONNOR, 2017. “The lineages of the entrepreneurial ecosystem approach”, *Small Business Economics*, **49**(1), 1-10. ISSN 0921-898X.
- [2] AL-QADASI, N., G. ZHANG, I. AL-JUBARI, M. A. AL-AWLAQI and A. M. AAMER, 2024. Entrepreneurship education and entrepreneurial behaviour: Do self-efficacy and attitude matter? *The International Journal of Management Education*, **22**(1), 100945. ISSN 1472-8117.
- [3] BAUMOL, W. J. and R. J. STROM, 2007. Entrepreneurship and economic growth. *Strategic Entrepreneurship Journal*, **1**(3–4), 233–237. ISSN 1932-443X.
- [4] BRANDT, T. and N. HELANDER, 2020. Entrepreneurial Tendencies by Different Personalities. *Journal of Finnish Studies*, **23**(2), 104–116. ISSN 2831-5081.
- [5] BURRIS-MELVILLE, T. S., S. T. BURRIS and K. BLEDSOE, 2024. *Empowering Teams in Higher Education: Strategies for Success*. Hershey: IGI Global. ISBN 9798369315217.
- [6] ČAKRT, M., 2010. *Typologie osobnosti: volba povolání, kariéra a profesní úspěch*. Praha: Management Press. ISBN 978-80-7261-220-8.
- [7] CAO, Y., M. M. ASAD, L. WANG, A. NAZ and N. ALMUSHARRAF, 2022. Role of personality traits for entrepreneurial intentions of young entrepreneurs: A case study of higher education institution. *Frontiers in Psychology*, **13**(2022), 1010412. ISSN 1664-1078.
- [8] CHANG, W.-L., W. G. H. LIU and S.-M CHIANG, 2014. A study of the relationship between entrepreneurship courses and opportunity identification: An empirical survey. *Asia Pacific Management Review*, **19**(1), 1–24. ISSN 1029-3132.
- [9] COULTER, M. K., 2001. *Entrepreneurship in action*. New Jersey: Prentice Hall. ISBN 978-01-394-6088-3.
- [10] CROCKETT, J. B. and R. L. CRAWFORD, 1989. The relationship between MyersBriggs Type Indicator (MBTI) Scale scores and advising style preferences of college freshmen. *Journal of College Student Development*, **30**(2), 154–161. ISSN 1543-3382.
- [11] DENG, W., I. ORBES and P. MA, 2024. Necessity- and opportunity-based female entrepreneurship across countries: The configurational impact of country-level institutions. *Journal of International Management*, **30**(4), 101160. ISSN 1075-4253.
- [12] ERNAWATI, E., E. A. SINAMBELA, C. CICI, R. J. SILVIANA, R. N. AZIZAH and S. NAUDALIA, 2022. The effect of social support and extraversion personality on entrepreneurial interest in students. *Journal of Social Science Studies*, **2**(2), 39-44. ISSN 2329-9150.

- [13] FAINSHMIDT, S., W. Q. JUDGE, R. V. AGUILERA and A. SMITH, 2018. Varieties of institutional systems: A contextual taxonomy of understudied countries. *Journal of World Business*, **53**(3), 307–322. ISSN 1090-9516.
- [14] HAASE, H. and A. LAUTENSCHLÄGER, 2011. The ‘Teachability Dilemma’ of entrepreneurship. *International Entrepreneurship and Management Journal*, **7**(2), 145–162. ISSN 1555-1938.
- [15] HEMDAN, J. T., D. S. TAHA and I. A. CHERIF, 2023. Relationship between personality types and creativity: A study on novice architecture students. *Alexandria Engineering Journal*, **65**(2), 847–857. ISSN 1110-0168.
- [16] JENSEN, G. H. and J. K. DITIBERIO, 1989c. *Personality and the teaching of composition*. New Jersey: Ablex Pub. ISBN 08-939-1504-1.
- [17] JIRÁSEK, I., T. JANOŠÍKOVÁ, F. SOCHOR and D. ČEŠKA, 2021. Some specifics of Czech recreation and leisure studies’ students: Personality types based on MBTI. *Journal of Hospitality, Leisure, Sport & Tourism Education*, **29**(3), 100315. ISSN 1473-8376.
- [18] LEMAIRE, S. L. L., C. G. BRUSH, A. CALABRÒ and A. MAÂLAOUI, 2022. Introduction to Women, Family and Family Businesses Across Entrepreneurial Contexts. In: S. L. L. Lemaire, C. Brush, A. Calabrò and A. Maâlaoui, eds. *Woman, Family and Family Business Across Entrepreneurial Contexts*, Business 2022, 1-11. ISBN 978-1-80037-516-1.
- [19] LIGITA, Z., 2013. Tourism and education management student’s characteristics from the point of view of socionics. *GISAP: Educational Sciences*, **1**(2013), 90-94. ISSN 2053-6437.
- [20] LUCA, M. R., A.-M. CAZAN and D. TOMULESCU, 2013. Entrepreneurial Personality in Higher Education. *Procedia - Social and Behavioral Sciences*, **84**(2013), 1045–1049. ISSN 1877-0428.
- [21] MARQUES, C. S., C. LOPES, V. BRAGA, V. RATTEN and G. SANTOS, 2022. Intuition and rationality in intrapreneurship and innovation outputs: The case of health professionals in primary health care. *International Entrepreneurship and Management Journal*, **18**(2), 579–602. ISSN 1554-7191.
- [22] MATTARE, M., 2015. Revisiting Understanding Entrepreneurs Using the MyersBriggs Type Indicator®. *Journal of Marketing Development and Competitiveness*, **9**(2), 114-119. ISSN 2155-2843.
- [23] NUÑEZ, M. I., S. RUBIO-VALDEHITA, M. E. APARICIO-GARCÍA and E. DÍAZ-RAMIRO, 2020. Are entrepreneurs born or made? The influence of personality. *Personality and Individual Differences*, **154**(2020), 109699. ISSN 0191-8869.
- [24] O’CONNOR, A., E. STAM, F. SUSSAN and D. B. AUDRETSCH, 2018. “Entrepreneurial ecosystems: the foundations of place-based renewal”. In: A. O’CONNOR, E. STAM, F. SUSSAN and D.B. AUDRETSCH, eds. *Entrepreneurial Ecosystems*, Springer, pp. 1-21. ISBN 978-3-319-63530-9.
- [25] PACKARD, M. D. and T. A. BURNHAM, 2021. Do we understand each other? Toward a simulated empathy theory for entrepreneurship. *Journal of Business Venturing*, **36**(1), 106076. ISSN 0883-9026.
- [26] PAVLOVSKÝ, P., 2009. *Soudní psychiatrie a psychologie*. Praha: Grada. ISBN 978-802-4726-182.

- [27] RAE, D., 2010. Universities and enterprise education: responding to the challenges of the new era. *Journal of Small Business and Enterprise Development*, **17**(4), 591–606. ISSN 1462-6004.
- [28] RASMUSSEN, E. A. and R. SØRHEIM, 2006. Action-based entrepreneurship education. *Technovation*, **26**(2), 185–194. ISSN 0166-4972.
- [29] RITOMSKÝ, A., 2004. Metodológia sociálnopsychologického výskumu. In: T. KOLLÁRIK et al., ed. *Sociálna psychológia*. Bratislava: Univerzita Komenského, 53-72. ISBN 80-223-1841-8.
- [30] RODRIGUES, R., A. DINIS, A. PAÇO, J. J. FERREIRA and M. RAPOSO, 2012. The Effect of an Entrepreneurial Training Programme on Entrepreneurial Traits and Intention of Secondary Students. In: T. BURGER-HELMCHEN, ed. *Entrepreneurship - Born, Made and Educated*. London: IntechOpen, pp. 77-92. ISBN 978-953- 51-0210-6.
- [31] SALAT, D., 2023. Seeking for a new entrepreneurial driver: A literature review. In: M. MÜLLER and P. SLAVÍČKOVÁ, ed. *KNOWCON 2023: Knowledge on Economics and Management*. Olomouc: Palacký University Olomouc, pp. 178-184. ISBN 978-80-244-6390-2.
- [32] SALAT, D., J. DUHÁČEK ŠEBESTOVÁ and P. KREJČÍ, 2023. MBTI-type and entrepreneurship: a study of personality type and turning point in business. *Economics Management Innovation*, **15**(2), 39-48. ISSN 1804-1299.
- [33] SASTRE, C. G., M. D. M. BENAVIDES-ESPINOSA and D. RIBEIRO-SORIANO, 2022. When intentions turn into action: pathways to successful firm performance. *International Entrepreneurship and Management Journal*, **18**(2), 733–751. ISSN 1554-7191.
- [34] SCHMITT-RODERMUND, E., 2004. Pathways to successful entrepreneurship: Parenting, personality, early entrepreneurial competence, and interests. *Journal of Vocational Behavior*, **65**(3), 498–518. ISSN 0001-8791.
- [35] SCIARAFFA, M. A., P. D. ZEANAH and C. H. ZEANAH, 2018. Understanding and promoting resilience in the context of adverse childhood experiences. *Early Childhood Education Journal*, **46**(3), 343–353. ISSN 1573-1707.
- [36] SOONJOO, L., 2022. STUDY ON RELATIONSHIP BETWEEN MBTI PERSONALITY TENDENCY AND HOLLAND PERSONALITY. In: M. E. PINTO da COSTA, M. Do ROSARIO ANJOS and V. ROSKA, ed. *Economic and social development: 85th International Scientific Conference on Economic and Social Development*. Varaždin: Varazdin Development and Entrepreneurship Agency, pp. 127-133. ISSN 1849-7535.
- [37] SPIOTTA, A. M., 2018. Incorporation of Personality Typing into a Neurologic Surgery Residency Program: Utility in Systems Based Practice, Professionalism, and Self-Reflection. *World Neurosurgery*, **120**(December 2018), e1041–e1046. ISSN 1878-8750.
- [38] THE MYERS-BRIGGS COMPANY, 2017. Type and entrepreneurship: A research study from The Myers-Briggs Company. *Research Study*, pp. 1-66.
- [39] VIINIKAINEN, J., G. HEINCECK, P. BÖCKERMAN, M. HINTSANEN, O. RAITAKARI and J. PEHKONEN, 2017. Born entrepreneurs? Adolescents' personality characteristics and entrepreneurship in adulthood. *Journal of Business Venturing Insights*, **8**(4), 9-12. ISSN 2352-6734.
- [40] WALMSLEY, A. and B. WRAAE, 2022. Entrepreneurship education but not as we know it: Reflections on the relationship between Critical Pedagogy and Entrepreneurship

Education. *The International Journal of Management Education*, **20**(3), 100726. ISSN 1472-8117.

- [41] WRIGHT, A. J. and J. J. JACKSON, 2022. Childhood temperament and adulthood personality differentially predict life outcomes. *Scientific Reports*, **12**(1), 10286. ISSN 2045-2322.
- [42] ZARAFSHANI, K., J. CANO, L. SHARAFI, S. RAJABI and A. SULAIMANI, 2011. Using the Myers-Briggs Type Indicator (MBTI®) in the Teaching of Entrepreneurial Skills at an Iranian University. *NACTA Journal*, **55**(4), 14–22. ISSN 0149-4910.
- [43] ZHOU, X., C. MA, X. SU, L. ZHANG and W. LIU, 2024. Knowledge is power: The impact of entrepreneurship education on the international entrepreneurship performance. *The International Journal of Management Education*, **22**(3), 101028. ISSN 1557-1211.