

MBTI-TYPE AND ENTREPRENEURSHIP: A STUDY OF PERSONALITY TYPE AND TURNING POINT IN BUSINESS

Dominik Salat¹, Jarmila Duháček Šebestová², Petra Krejčí³

¹ Silesian University in Opava, salat@opf.slu.cz, 0009-0003-0788-9308

² Silesian University in Opava, sebestova@opf.slu.cz, 0000-0002-7493-0759

³ Silesian University in Opava, krejci@opf.slu.cz, 0000-0002-2349-8919

Abstract:

A systematic analysis of entrepreneurial tasks and socioeconomic conditions is likely to reveal that neglected aspects of personality, such as cognitive abilities or values, are as important as personality dimensions. The analysis is based on a primary survey of 627 Czech entrepreneurs who passed Myers-Briggs Type Indicator Test and short interview. The study found that the entrepreneurial spirit declines over time and that the greatest innovative spirit is found only in the early stages of business. As a result, factors affecting the participation of different types of personality in business in company life have been proposed in connection with the personality type.

Key words: Entrepreneurship, influence of personality, personality typology

JEL: L26, M21

1 Introduction

Failure of an entrepreneur can be costly for society in terms of missed opportunities and lost resources and devastating for the individual entrepreneur in terms of financial and psychological impacts. Developing a better understanding of the entrepreneurial processes and variables that attract people to entrepreneurship and that facilitate success in the entrepreneurial role is therefore an important task (Zhao et al., 2010).

Motivation is the force that activates, directs, and maintains human behaviour. High performance can be achieved through well-motivated individuals who are prepared to exert considerable effort. Motivation also expresses the goals people have set for themselves and the ways in which they will achieve them. Motivation includes internal factors that encourage a certain activity and external factors that serve as incentives for a certain activity (Deppo et al., 2021). In other words, whether you flourish or “flounder” is determined in part by a combination of biogenic and sociogenic resources that impinge on you throughout your life. These are not only influences, but you need to understand how they work before exploring how your personal project allows you to intentionally determine who and where you are (Little, 2017).

Based on the research conducted by Global Entrepreneurship Monitor (GEM, 2022) in 50 countries around the world, it was found that the most common reason to start a business is ‘to make a living because jobs are scarce’. Among the countries of the European Union that participated in this study, the Slovak Republic (89.8 %) ranks first. In recent years, the business sector has also been affected by the covid-19 pandemic, which subsequently grew from a health crisis to an economic crisis. 83 % of businesses felt the negative impact of the coronavirus crisis on their business (ČTK, 2020). In 2021, 61% of new economic entities were created in the Czech Republic, 39% of them disappeared (CZSO, 2022). The consequences for the business sector are not yet clear, and therefore it is still questionable to consider the following developments. The fact that it will greatly affect the business sector is obvious and

therefore in the medium and long term, the influence of personality typology on business cannot be underestimated. Among other factors that are often investigated, relatively little attention is paid to personality typology. There are many possibilities to test personality, e.g., HEXACO Personality Inventory, Revised NEO Personality Inventory, Eysenck Personality Inventory, DISC Personality Test or Cattell's 16 Personality Factor Questionnaire or Myers-Briggs Type Indicator Test – MBTI typology (Cherry, 2022).

Analysing entrepreneurs' tasks is a necessary first step in entrepreneurial research. These tasks vary depending on circumstances such as the type of industry, region, competitors, social networks, starting a business as a matter of necessity or opportunity, financial resources, or stage of development of the business. However, techniques for systematic analyses of business tasks under different circumstances still await development. This should be an important project for future psychological research on entrepreneurship. In the future, longitudinal studies will be greatly needed to defend causal inferences from personality traits for entrepreneurial intentions. Such studies could also collect data on mental and behavioural processes that could be understood as variables that mediate the influence of personality traits on the results of entrepreneurial endeavours. Personality traits may have a stronger influence in entrepreneurs than in most other professions because the entrepreneurial role provides more freedom to choose and change the environment, as well as to act according to personal preferences and goals. There is a need to help budding entrepreneurs not only familiarise themselves with the economic opportunities, legal regulations, and financial support of start-ups, but also with the chances, limits, and risks associated with their personality structure, which they could rely on through psychological research on entrepreneurship (Brandstätter, 2011). The aim of this paper is to determine, based on primary research, whether personality types based on MBTI-types have an impact on each phase of the business and where a turning point occurs in that phase. This methodology based on psychologists' work greatly expands knowledge in the business field. Thanks to this, it is possible to derive a basic research question (RQ1), 'How is the type of personality related to entrepreneurial activity?'

2 Personality types and entrepreneurialism

Why connect personality psychology with entrepreneurship? Especially in connection with entrepreneurial mindset (Brandt & Helander, 2020, Lynch et al., 2017, Alberola et al., 2019). The basic topics of personality psychology currently include: the biological basis of personality (temperament), traits, motives, cognition (self) and the formation and development of personality (Blatný et al., 2010). Currently, research interest is mainly focused on the manager's personality with strategy preparation (Cejthamr & Dědina, 2010; Zuzák, 2011); and its development during the time (Folwarczná, 2010; Urbancová, 2021) or human resources development (Armstrong & Taylor, 2015). Other works deal with the issue of a manager's knowledge, skills and abilities in business (Templar, 2012; Jones, 2017). In attempts to define personality, psychologists agree that it is a relatively stable, complementary, and consistent system of unique characteristics, contents, and manifestations of a person (Khelerová, 2010; Lojda, 2011). Personality development is a lifelong process that includes an ascending, evolutionary, and also a descending, evolutionary path of life (Panajotis, 2012; Robbins & Coulter, 2018). The personality typology itself forms part of partial research, such as that of Cohen et al. (2013). The typology of the personality can already predict the direction a person could take within the framework of its mission (Prabhakar & Srivastava, 2017; Rychlak, 2017).

This paper is focused on Jung's approach personality types. Carl Jung significantly enriched the psychological typology of man. Jung's concept of man includes a basic inherited human blueprint that is both physical and psychological; an organic substrate embodied and directed by instinct; the psyche, which consists of unconscious and conscious processes; person (external social role); ego (autonomous self-reflective complex); and me (a potentially realisable expression of individuality) (Crellin, 2014). From this point of view, Jung distinguishes eight typological groups (two personality positions, introverted and extroverted) and four functions or ways of orientation (logical, practical, innovative, and careful), each of which can act introverted or extroverted (Sharp, 1987).

Jung's typology follows a four-dimensional path, calling these dimensions the four natural inclinations. These inclinations are inherently dichotomous and the picture they provide provides information about a person's personality type in dimensions Extraversion/Introversion, Sensing/Intuition, Thinking/Feeling, and Judging/Perceiving. The combination of all these natural tendencies creates sixteen possible personality types, when initial letters of each of the four type preferences mean one of each cognitive function. There are four general groups for which the 16 personalities can be divided into analysts, diplomats, sentinels, and explorers. The following are the general groups and the personalities that correspond to the group tested by Myers-Briggs Type Indicator Test – MBTI typology. (Jankowski, 2014, Table 1).

Tab. 1: 16 personality typologies

Analysts Group			Diplomats group		
	Indicator	Description		Indicator	Description
Architect 1 %	INTJ	logical and practical disciplined, organized	Advocate 1%	INFJ	Idealistic and sensitive focused on the future
Logician 1 %	INTP	reserved, thoughtful, flexible, and tolerant, very logical, theoretical thinking	Mediator 1%	INFP	loyalty and devotion Focusses on the "big picture" rather than details, works independently
Commander 5 %	ENTJ	leadership, communication, planning skills, communicative, planning skills	Protagonist 5%	ENFJ	Excellent at supporting and helping others, good organizer
Debater 5%	ENTP	innovative and creative dislikes the plan and routine;	Campaigner 5%	ENFP	Empathetic needs approval from others, think abstractly
Sentinels Group			Explorers group		
	Indicator	Description		Indicator	Description
Logistician 6%	ISTJ	Focusses on details and facts, realistic, observant logical and practical	Virtuoso 7 %	ISTP	Logical, self-confident and carefree, action-orientated, learn from experience, new experiences.
Defender 5 %	ISFJ	Kind and considerate, practical- minded, aware of the feelings of others, and not enjoy conflicts and arguments.	Adventurer 5%	ISFP	Strong need for personal space, likes to learn from practical examples, does not like arguments and conflicts
Executive 13%	ESTJ	practical and realistic lead people to do structured and organised, follows standards	Entrepreneur 13%	ESTP	adaptable and resourceful, abundant in interpersonal skills, observant living for the "here and now"
Consul 13%	ESFJ	Kind and compassionate to practical approval-seeking	Entertainer 13%	ESFP	seeks new experiences, spontaneous, sometimes impulsive, on the present

Source: personalities description based on Spiotta (2018) and Čakrt, (2010); own processing, where

E...Extroversion – dominant, heading away, straightforward, decisive...iNtuition – innovative, visionary, forward thinking, courageous, F...Feeling – careful, generous, sensitive, caring, J...Judging – organized, structured, decisive, persistent, P...Perceiving – unbiased, adaptable, spontaneous, impermanent, T...Thinking – logical, eternal, pragmatic, rational, S...Sensing – practical, handy, traditional, detailed, I...Introversion – independent, separate, restrained, balanced.

Although the MBTI has been used to predict entrepreneurship (Hoy & Carland, 1983; Wortman, 1986), the authors of the scale made no specific statement regarding its prediction of entrepreneurship. An instrument in the area of brain dominance was selected because of occasional mentions that entrepreneurship was a "right brain" activity (Kao, 1991, p. 160; Timmons, 1985, p. 34; Williams, 1981). Huefner et al. (1996) confirmed that the MBTI test was used in entrepreneurial research and most of them (70 + %) were 'ST' orientated (Carland et al., 1996). Following that, Reynierse (1997) summarises

previous studies, based on MBTI tests between entrepreneurs, when as dominating types were highlighted types ENTP (Debater), ESTJ (Executive), and ESTP (Entrepreneur) as the most relevant and common between entrepreneurs. The most common profiles (Zarafshani et al., 2011) among respondents in that study were ENTJ (19.64%), ISTJ (15.36%), ESFJ (12.50%) and ESTP (6.80%). To open the discussion, Mattare (2015) tried to summarise other studies, based on MBTI tests, but just confirmed a high percentage of 'N' personalities within the different samples for 15 years, when the rate was between 60 and 80% (Analyst and diplomat groups, eight types, Table 1). Sarabia et al. (2019) just confirmed that these tests are widely used to measure different entrepreneurial behaviours, especially decision-making skills. According to that, Putri (2022) connected the results of the MBTI test with entrepreneurial ability to innovate, especially the 'NF' subgroup (diplomats group, Table 1) and make changes in his own business, as mentioned in the studies of Kusano et al. (2016) or Obeidat (2016). On the other hand, the results could be used for skill development, especially in the area of risk management (King et al., 2020).

3 Methods

To obtain entrepreneurs, they were subjected to psychological tests. These are special standardized tools of psychological diagnosis, the evaluation of which should be based on statistical norms that are derived from a representative sample of the population (Pavlovský, 2009). Specifically, it was about personality tests, which are used to diagnose an individual's personality characteristics. It was a Myers-Briggs type indicator (MBTI) personality test, which is based on Jung's theory of psychological types, first introduced in his book *Psychological Types* (1921/1971). The MBTI-type rating has been available in published form since 1943 (Quenk, 2009). The MBTI test is widely used and has more than 90% of reliability, which was the reason to use that tool within the primary research (Capraro & Capraro, 2002).

3.1 Research procedure

The researchers addressed approximately 1,250 business entities randomly selected within the Czech Republic for the purposes of this case study. Data collection was carried out from May to December 2022. Data collection has two parts. Each respondent has to take the MBTI test online, to be able to answer other questions about its entrepreneurial activity and innovations.

The valid sample had 627 respondents, consisting of 41.3% of self-employed individuals and 58.7% of firms. This shows that 26.8% were without employees, 38% had up to nine employees, 17.1% ranged from 10 to 49 employees, 10.7% were made up of businesses with 50 to 249 employees, and 7.5% had more than 250 employees. Each interview lasted about 30 minutes, where

In terms of business life cycle, there was a predominance of growth (65.7%), followed by stagnating companies (27%) and start-ups (5.4%). There was only a minimum of companies in bankruptcy (1.1%) and liquidation (0.8%). If we were to characterise individual respondents, the 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%).

4 Paper results

First, we need to evaluate the representation of personalities in the study population according to the MBTI test. As can be seen in Table 2, the personality characteristics of extroverts are predominant at 62.4%.

Tab. 2: Personalities within a Data Set

Name	Abreviation	%	Name	Abreviation	%
------	-------------	---	------	-------------	---

Protagonist	ENFJ	1.6%	Advocate	INFJ	4.1%
Campaigner	ENFP	8%	Mediator	INFP	3.2%
Commander	ENTJ	13.6%	Architect	INTJ	6.2%
Debater	ENTP	4.8%	Logician	INTP	10.2%
Consul	ESFJ	2.9%	Defender	ISFJ	2.4%
Entertainer	ESFP	2.7%	Adventurer	ISFP	2.6%
Executive	ESTJ	12.4%	Logistician	ISTJ	3.8%
Entrepreneur	ESTP	16.4%	Virtuoso	ISTP	5.1%
Extrovert		62.4%	Introvert		37.6%

Source: own research data.

In Table 2, we can also note the dominant types, namely Entrepreneur (ESTP; 16.4%), Commander (ENTJ; 13.6%), Executive (ESTJ; 12.4%), and Logician (INTP; 10.2%). The least represented is protagonist (ENFJ; 1.6%). Comparing the obtained descriptive statistics with previous studies, personality types with the intuitive element "N" make up 51.7% of the sample (sum of Analysts group and Diplomats group) or a subgroup of NF (only 4 types, 16.9% of 51.7%), which is below the level of Innovative Entrepreneurs in Mattare (2015) or Putri (2022) studies.

4.1 Entrepreneur as an idea carrier

In the second stage of the analysis, we will focus on the effect of age, gender, and length of business experience. Here, it can be assumed that it will be found out which personality type will prevail. The results are summarised in the following three tables (Tables 3 to 5), where three dominant personality types are extracted.

Tab. 3: Top 3 personalities according gender

Men	% share	Women	% share
Entrepreneur (ESTP)	20.0%	Executive (ESTJ)	16.6%
Commander (ENTJ)	15.9%	Entrepreneur (ESTP)	9.8%
Executive (ESTJ)	10.6%	Commander (ENTJ)	9.3%

Source: own research data

Depending on the gender of the respondent, it can be said that the personalities are the same but their order differs. Men are more entrepreneurial than women, which is consistent with the study by GEM (2022). The other types that are more related to the management of an already established business only change order. It can be said that, from this perspective, men are dominated by "ST" types, considered as having an entrepreneurial mindset (30.6%) to "N" innovative, creative types (15.6%), which is in a ratio of 2:1. For women, this ratio is 2.93: 1 in favour of the entrepreneurial type.

If we assess only the personality (ESTP), then we can trace a decrease in the representation of this personality within age categories, especially between the ages 41 and 55, and then gaining in intensity after this age. This analysis suggests the possibility of starting businesses as a second career or as a grey business (Table 4).

Tab. 4: Top 3 personalities according to age

Age: 18-25 years	% share	Age: 26-40 years	% share	Age: 41-55 years	% share	Age: 56-65 years	% share	Age: 66+ years	% share
ESTP	17.1%	ESTP	21.3%	ESTP	15.1%	ESTP	18.2%	ESTP	26.3%
INTJ	12.2%	ESTJ	18.4%	ENTJ	14.5%	ESTJ	14.3	ENFP	15.8%
INTP	9.8%	ENTJ	18.4%	ESTJ	12.8%	ENTJ	14.3	INTP	10.5%

Source: own research data

It is rather strange that in the three age categories the representation of personalities is the same as the gender distribution, the exception being the 18-25 age group, where we find the architect (INTJ) and Logician (INTP) personality types, with the predominance of the "NT" type, i.e., pro-innovative, changing the ratio of entrepreneurial to innovative 1 to 1.29. The same situation occurs at the age of 66+, with the Campaigner (ENFP) profile, which belongs to the pure innovative "NF" types.

Almost the same situation can be seen in the analysis concerning the length of their entrepreneurial experience, where the distribution of the typology is the same throughout the entrepreneurial life, with the exception of 20+, where the type "Logician" (INTP) increases. At the same time, there is a noticeable increase in the entrepreneurial mindset that facilitates entrepreneurial persistence (ESTP), which almost doubles over time (Table 5).

Tab. 5: Top 3 personalities according to practise

Till 3 years	% share	till 10 years	% share	Till 20 years	% share	20+years	% share
ESTP	10.9%	ESTP	14.3%	ESTP	17.6%	ESTP	18.1%
ESTJ	10.9%	ESTJ	15.6%	ESTJ	12.1%	INTP	12.3%
ENTJ	9.1%	ENTJ	12.9%	ENTJ	15.2%	ENTJ	13.8%

Source: own research data

4.2 Entrepreneur as a Business Creator

Enterprise as a way to realise the entrepreneurial mindset. Since the entrepreneur uses entrepreneurship as an external way of implementing his own setup, the basic descriptive variables that affect the dominance of MBTI types were analysed, which are compared in Tables 6 to 8. In terms of legal form, the distribution is almost identical in terms of percentage, so there is no difference whether a legal entity is established or whether we do business on our own, so the important thing is the motive, to do business.

Tab. 6: Top 3 personalities according to legal form

Self-employed	%	Company	%
ESTP	16.2%	ESTP	16.6%
ESTJ	11.2%	ESTJ	13.3%
ENFP	11.2%	ENTJ	15.2%

Source: own research data

By comparison, we find an increase in the entrepreneurial mindset with increasing number of employees (ESTP), but the purely innovative profile "NF" is only found in self-employed persons, where it prevails over the purely entrepreneurial mindset (Table 7).

Tab. 7: Top 3 personalities according to size (employees, etc.)

Self-employed	%share	1-9 e.	%share	10 - 49 e.	%share	50 - 249 e.	%share	250+ e.	%share
ESTP	10.7%	ESTP	18.5%	ESTP	21.5%	ESTP	16.4%	ESTP	14.9%
ENFP	14.3%	ESTJ	13%	ESTJ	12.1%	ESTJ	19.4%	ESTJ	17%
ISTP	10.1%	ENTJ	13%	ENTJ	15%	ENTJ	23.9%	INTP	12.8%

Source: own research data

The biggest change can be found depending on the current state of the company, described by its life cycle. As can be seen in Table 8, the proactive business mindset is changing in favour of analytics in crisis management, where it represents up to 42% of the respondents' profile. Another correlating characteristic is the decline in entrepreneurial involvement, leading to stagnation of the enterprise (Table 8).

Tab. 8: Top 3 personalities according stage

Start-up	%share	Growth	%share	Stagnation	%share	Crisis	%share	Exit strategy	%share
----------	--------	--------	--------	------------	--------	--------	--------	---------------	--------

ESTP	11.8%	ESTP	18.7%	ESTP	13%	INFJ	42.9%	INTJ	20%
ESTJ	14.8%	ESTJ	12.6%	INTP	13%	ESFP	14.3%	ESFP	20 %
INTP	11.8%	ENTJ	16.3%	ENFP	11.8%	ENFJ	14.3%	ENFP	20%

Source: own research data

On the basis of this analysis, we are able to express which variables will influence entrepreneurial activity within the framework of the entrepreneur's personality. Therefore, we tested each of these nominal variables with the Cramer V test at a significance level of alpha = 0.05. The results are summarised in Table 9.

Tab. 9: Relationship between personality types and other variables

Variables	Cramer V	Sig.
Company size (CS)	0.195*	0.002
Life cycle (LC)	0.180*	0.034
Legal form (LF)	0.248*	0.001
Gender (G)	0.274*	0.000
Age (A)	0.146	0.732
Business Practice (BP)	0.157	0.406

Source: own research data, * significance level at 0.05

Four nominal variables, namely company size (CS), life cycle (LC), legal form (LF), and gender (G), were found to be statistically significant and play a role in the use of type in entrepreneurial activity (EA), whether they develop their talent for entrepreneurship and innovation.

5 Discussion

Considering the previous variables, the answer to RQ1 is which variables, depending on the personality of the entrepreneur, influence the course of entrepreneurial activity. Here, we can argue, with a sample size limit, that personality type has an effect on cycle (LC), with INFJ (Advocate) and ESFP (Entertainer) being the most persistent within the analysis. Referring to the Carland (1996) is taken into account, it becomes evident that the subgroup referred to as "ST" (comprising of 4 types - Executive, Logistician, Entrepreneur, Virtuoso) and known for entrepreneurial qualities, does not constitute the majority of the sample, in fact, it only accounts for 37.7%, which is considerably less than the reported 70%. Therefore, based on the results of the investigation, we can write a general dependency function of the structure of the elements contained in the entrepreneurial activity as follows:

$$EA = f(CS, LC, LF, G) \quad (1)$$

From this point of view, they would clearly be entrepreneurial people and not purely innovative people at all. This element extends the theoretical knowledge of previous studies (Brandt & Helander, 2020; Lynch et al., 2017; Alberola et al. 2019, Putri, 2022) that focused more on the frequency of each type of MBTI and did not cover other variables in terms of descriptive variables in the company within the Czech environment.

It is remarkable that there is a lack of research available comparing the variables recently assessed in a national context. Existing studies focus solely on the unique factors impacting entrepreneurship (e.g. Virglerová et al., 2020) and the motivational drivers behind entrepreneurial ventures (Dvouletý & Bögenhold, 2023), neglecting to explore the psychological aspects of personality and their influence on the entrepreneurial population, especially on student age (Krejčová et al. 2023).

6 Conclusions

At the moment, the business environment is literally going through a shock period. As a result, many economic subjects have disappeared and others are in significant danger. The role of entrepreneurs is demanding. More than one of them got "burnt" during this activity because of their unpreparedness. Some of them did, but more often than not, they quit their business rather than risk another failure. The failure of an entrepreneur can be costly for society in terms of wasted opportunities and lost resources, and devastating for an individual entrepreneur in terms of financial and psychological impacts. The question of examining the personality typology of entrepreneurs has been coming to the fore for a long time. The influence of personality traits can be stronger in entrepreneurs than in most other professions, as the entrepreneurial role provides greater freedom to choose and change the environment as well as to act on the basis of personal preferences and goals.

Therefore, the ambition is to investigate one of the many psychological factors, namely the connection of personality typology with providing the business. By examining this issue, which most authors do not pay due attention to, it can help people to better self-knowledge and guide their steps on the entrepreneurial path. Better self-knowledge has a significant impact on business and constant self-improvement leads to the achievement of desired goals. The expected contribution of the research can be found in the help to improve self-knowledge and decision-making of young people on the way to entrepreneurship, including through proposals and recommendations for education in the field of entrepreneurship. The limit of the study is due to the limited number of respondents and the geographic restriction of the study to one country, where social and cultural backgrounds or other biases against entrepreneurs or innovative individuals can play a role.

7 Acknowledgements

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

8 Bibliography

- Alberola, J. M. et al. (2019). Team Formation Strategies in Higher Education. In *INTED2019 Proceedings: 13th International Technology, Education and Development Conference*. Valencia, Spain, March 11–13, pp. 3732–36. ISBN 978-84-09-08619-1.
- Armstrong, M., Taylor, S. (2015). *Řízení lidských zdrojů: moderní pojetí a postupy*. 13. vydání. Praha: Grada. ISBN 978-80-247-5258-7.
- Blatný, M. (2010). *Psychologie osobnosti: hlavní témata, současné přístupy*. Praha: Grada. ISBN 978-80-247-3434-7.
- Brandstätter, H. (2011). Personality aspect of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences*, 51(3), 222-230. doi:10.1016/j.paid.2010.07.007.
- Brandt, T., Helander, N. (2020). Entrepreneurial Tendencies by Different Personalities. *Journal of Finnish Studies*, 23(2), 104-116. doi:10.5406/28315081.23.2.07.
- Carland, J. C. et al. (1996). Seeing what's not there: The enigma of entrepreneurship. *Journal of small business strategy*, 7(1), 1–20.
- Capraro R.M., Capraro M.M. (2002). Myers-Briggs type indicator score reliability across: studies a meta-analytic reliability generalization study. *Educational and Psychological Measurement*, 62(4), 590-602. doi:10.1177/0013164402062004004
- Cejthamr, V., Dědina, J. (2010). *Management a organizační chování*. 2., aktualiz. a rozš. vyd. Praha: Grada. ISBN 978-80-247-3348-7.
- Cohen, Y., Ornoy, H., Keren, B. (2013). MBTI Personality Types of Project Managers and Their Success: A Field Survey. *Project Management Journal*, 44(3), 78–87. doi:10.1002/pmj.21338.

- Crellin, C. (2014). *Jung's Theory of Personality: A modern reappraisal*. Hove: Routledge. ISBN 978-0415791670.
- CZSO. (2022) Web portal vdb.czso.cz [online]. Available from https://vdb.czso.cz/vdbvo2/faces/index.jsf?page=vystupobjekt&pvo=ORG01&z=T&f=TABULKA&skupld=3769&katalog=30831&pvo=ORG01&str=v386&v=v7__null__null__null.
- Čakrt, M. (2010). *Typologie osobnosti: volba povolání, kariéra a profesní úspěch*. Praha: Management Press. ISBN 978-80-7261-220-8.
- ČTK (2020) Web portal investicniweb.cz [online]. Available from <https://www.investicniweb.cz/ekonomika-politika/negativni-dusledky-pandemie-v-cr-pocitilo-83-firem>.
- Depoo, L. et al. (2021). *Motivace pracovního jednání*. Praha: Odborné nakladatelství Vysoké školy ekonomie a managementu. ISBN 978-80-88330-21-9.
- Dvouletý, O. & Bögenhold, D. (2023). Exploring Individual and Family-related Characteristics of Hybrid Entrepreneurs. *Entrepreneurship Research Journal*, 13(3), 693-723.
- Folwarczná, I. (2010). *Rozvoj a vzdělávání manažerů*. Praha: Grada. ISBN 978-80-247-3067-7.
- GEM (Global Entrepreneurship Monitor), 2022. *Global Entrepreneurship Monitor 2021/2022 Global Report: Opportunity Amid Disruption*. London: GEM.
- Hoy, F., Carland, J. W., Jr. (1983). Differentiating between entrepreneurs and small business owners in new venture formation. In J. A. Hornaday, J. A. Timmons, & K. H. Vesper, (Eds.), *Frontiers of Entrepreneurship Research*, pp. 157-166.
- Huefner J. C., Hunt, H. K., Robinson, P. B. (1996). A comparison of four scales predicting entrepreneurship. *Academy of Entrepreneurship Journal*, 1 (2), 56-80.
- Cherry, K. (2022). *How the Myers-Briggs Type Indicator Works* [online]. Available from <https://www.verywellmind.com/the-myers-briggs-type-indicator-2795583>
- Jankowski, J. (2014). *16 typów osobowości w pigułce*. Toruń: Logos Media.
- Jones, G. R. (2017). *Contemporary Management*. Second Edition. London: McGrawHill Education.
- Kao, J. J. (1991). *The entrepreneur*. Englewood Cliffs, NJ: Prentice Hall.
- Khelerová, V. (2010). *Komunikační a obchodní dovednosti manažera*. 3., dopl. vyd. Praha: Grada. ISBN 978-80-247-3566-5.
- King, S. P. et al. (2020). Myers-Briggs Type Indicator. In *The Wiley Encyclopedia of Personality and Individual Differences*, pp. 315–319. Doi: 10.1002/9781118970843.ch123.
- Krejčová, K., Rymešová, P., & Chýlová, H. (2023). *Self-compassion as a Newly Observed Dimension of the Student's Personality*. *Journal on Efficiency and Responsibility in Education and Science*, 16(2), 140-148.
- Kusano, S. et al. (2016). Development and assessment of self-agency, and the ability to innovate and take risks. *Center for Research on Learning and Teaching Occasional Paper*, 34, 1–12.
- Little, B. R. (2017). *Who Are You, Really? The Surprising Puzzle of Personality*. New York: TED Books.
- Lojda, J. (2011). *Manažerské dovednosti*. Praha: Grada.
- Lynch, M. et al. (2017). The Language of Successful Entrepreneurs: An Empirical Starting Point for the Entrepreneurial Mindset. In *Proceedings of 12th European Conference of Innovation and Entrepreneurship*. Novancia Business School, Paris, pp. 384-391.
- Mattare, M. (2015). Revisiting understanding entrepreneurs using the Myers-Briggs type indicator®. *Journal of Marketing Development and Competitiveness*, 9 (2), 114-119.
- Obeidat, B. Y. (2016). The Effect of Strategic Orientation on Organizational Performance: The Mediating Role of Innovation. *International Journal of Communications. Network and System Sciences*, 9(11), 478–505.
- Pavlovský, P. (2009). *Soudní psychiatrie a psychologie*. 3., rozš. a aktualiz. vyd. Praha: Grada.
- Prabhakar, B. , Srivastava, S. (2017). *Decoding a Brand Manager's Success: The Secret No One Reveals*. Chennai: Notion Press.

- Putri, N. D. (2022). The Difference Between 4 Types of Myer Briggs Type Indicator (MBTI) Personality's Function in Ability to Innovate in Family Business. *International Journal of Review Management Business and Entrepreneurship (RMBE)*, 2 (1), 24-42.
- Quenk, N. L. (2009). *Essentials of Mayers-Briggs Type Indicator Assessment*. Second Edition. New Jersey: John Wiley.
- Reynierse, J. H. (1997). An MBTI model of entrepreneurship and bureaucracy: The psychological types of business entrepreneurs compared to business managers and executives. *Journal of Psychological Type*, 40, 3-19.
- Robbins, S. P., Coulter, M. K. (2018). *Management. Fourteenth edition*. Harlow: Pearson.
- Rychlak, J. F., 2017. *Personality and Life-Style of Young Male Managers: A Logical Learning Theory Analysis*. Indiana: ACADEMIC PRESS. ISBN 978-0-12-605120-9.
- Sarabia, M., Crecente, F., Castaño, R. (2019). Why Do Sustainable Mergers Fail to Manage Entrepreneurship? *Sustainability*, 1(2) , 525. doi:10.3390/su11020525.
- Sharp, D., 1987. *Personality Types: Jung's Model of Typology*. Toronto: Inner City Books.
- 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, e1041-e1046. doi:10.1016/j.wneu.2018.09.007.
- Šnýdrová, I. (2019). *Psychologie*. Praha: Odborné nakladatelství Vysoké školy ekonomie a managementu.
- Templar, R. (2012). *107 zlatých pravidel úspěšného manažera*. 2. vyd. Praha: Grada. ISBN 978-80-247-4176-5.
- Timmons, J. A. (1985). *New venture creation: A guide to entrepreneurship*. 2nd ed. Homewood, IL: Irwin.
- Urbancová, H. (2021). *Age management*. Praha: Odborné nakladatelství Vysoké školy ekonomie a managementu. ISBN 978-80-88330-41-7.
- Virglerová, Z., Conte, F., Amoah, J., & Massaro, M. R. (2020). The perception of legal risk and its impact on the business of SMEs. *International Journal of Entrepreneurial Knowledge*, 8(2), 1-13.
- Williams, E. E. (1981). *Innovation, entrepreneurship, and brain functioning*. In K. H. Vesper, (Ed.), *Frontiers of Entrepreneurship Research*, pp. 516-536.
- Wortman, M. S., Jr. (1986). A unified framework, research typologies, and research prospectuses for the interface between entrepreneurship and small business. In D. L. Sexton, & R. W. Smilor (Eds.), *The art and science of entrepreneurship*, pp. 273-331.
- Zarafshani, K. et al. (2011). Using the Myers-Briggs Type Indicator (MBTI®) in the teaching of entrepreneurial skills at an Iranian University. *NACTA Journal*, 55(4), 14-22.
- Zhao, H., S. Seibert, Lumpkin, G. T. (2010). The Relationship of Personality to Entrepreneurial Intentions and Performance: A Meta-Analytic Review. *Journal of Management*, 36(2), 381–404. doi: 10.1177/0149206309335187.
- Zuzák, R. (2011). *Strategické řízení podniku*. Praha: Grada. ISBN 978-80-247-4008-9.