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## EDUCATIONAL DECISION MAKING OF REPEATEDLY UNSUCCESSFUL CZECH VOCATIONAL EDUCATION AND TRAINING EXAMINEES LEADING TO PASSING THE Matura EXAM

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### ABSTRACT

Repeatedly unsuccessful vocational education and training (VET) examinees are educational policy actors who, through their decision making, influence not only their completion of upper secondary education but also their futures. Drawing on biographical narrative interviews with 18 Czech VET examinees who failed the Matura exam at least twice, we identified how examinees make their decisions about the Matura exam and how their individual decision-making ways differ. For our participants, we can confirm that the ways they make decisions depend on which attempt to pass the Matura exam it is, as well as on in what context and on what the repeatedly unsuccessful examinees have to decide. We concluded that repeatedly unsuccessful VET examinees perceive decision making about passing the Matura to follow the principle of free choice in the first and second attempts. Due to the influence of institutionally formed beliefs about their own academic success, it is a rather limited choice. If in the third attempt they integrate their decisions about passing the Matura exam in the context of their career development, their decision making becomes a process in which we identify several individualized steps.

### KEYWORDS

Matura exam; vocational education and training; upper secondary education; decision-making process; Matura examinees

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## Introduction

Graduating from upper secondary education (ISCED-3) represents an important milestone in a person's life and it "has become increasingly important in all countries, as the skills needed in the labour market are becoming more knowledge-based and workers are progressively required to adapt to the uncertainties of a rapidly changing global economy" (OECD, 2018, p. 180). Successfully passing the Matura exam is one way to complete upper secondary education in the Czech Republic. Unfortunately, since the implementation of a unified Matura exam in 2011, the number of VET examinee failures has been growing (CERMAT, 2019; Vojtěch et al., 2020) and the failure rate is becoming an issue for the current educational policy in the Czech Republic, because unsuccessful VET examinees have no certificate of successful ISCED-3 completion (MŠMT, 2020).

For these reasons and for the purposes of this study, repeatedly unsuccessful VET examinees are viewed as educational policy actors as well as an at-risk group because after their failure they are caught in a low-education trap and without qualifications. Our aim is to determine how repeatedly unsuccessful VET examinees make decisions about the Matura exam, what circumstances enter into their decision-making process, and how the process differs for each of them. We focus on explaining the choices and decision making of students and examinees of vocational and technical tracks who completed nine years of compulsory schooling (ISCED-1 and ISCED-2), studied a selected educational program at a selected secondary technical school, a lyceum, or a secondary vocational school (Act No. 561/2004 Coll<sup>1</sup>), and first attempted to pass the Matura exam after four years of successful studies at one of these types of schools (further referred to as "VET examinees"). Even though we are aware that the making of each educational decision (including the decision to pass the Matura exam) is set into the context of the individual biographies of the examinees as young adults, many other stakeholders (e.g., the Ministry of Education, Youth and Sports, the local government, the teachers, and the school) enter this process in accordance with the Czech legislation. By monitoring the choices and decisions of the VET examinees who made three consecutive attempts to pass the Matura

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<sup>1</sup> In the Czech Republic, vocational training at the level of upper secondary education is provided in three types of upper secondary schools (further referred to as VET schools), which differ from each other in the ratio of the general and specialized components of the curriculum and the amount of practical experience. While studies at technical schools and lyceums are always concluded with the Matura exam, this does not apply in secondary vocational schools as they do not require a Matura exam.

exam, we have a unique opportunity to investigate the space for their decision-making process that is created by the Czech legislation and the impact of individual context on the decision making of VET examinees as well as on how they make their educational decisions within this space.

## 1 Matura exam

The Matura exam is not unique to the Czech educational system. This type of exam is common in other European countries<sup>2</sup> as well. In these countries, the existence of the Matura exam is being justified in part by an effort to unify the requirements for graduates from the ISCED-3 level, which strengthens the role of the nations in delimiting the content, level, and conditions of the Matura exam. However, the form of the exam differs among the individual countries (see BBWF, n.d.; CERMAT, n.d.; Eurydice, 2021; NEC, n.d.; NÚCEM, n.d.).

Research of the Matura exam has indicated some preferred research topics, such as predicting students' previous and future achievements at the Matura exam based on their previous achievement at school (Želvys et al., 2021). Sočan et al. (2016) focused on predicting student achievement at university based on their Matura exam results. Some research groups have considered the formal aspects of the Matura exam. If the exam is set up correctly to test students, a substantial part of the exam is meaningful. On the other hand, research often focuses on the success rates of Matura exams and fails to focus on the views of the students (Gashi, 2018; Gerbovits & Szabó, 2014; Schmidt, 2018; Thaçi, 2017, etc.). In the Czech Republic, research has focused only on longitudinal analyses of student success rates (CERMAT, 2019) and on the transition of graduates from school to the labor market (Kleňhová & Vojtěch, 2011). Because we are interested in the views of students and examinees, we enrich this research focus to include their decisions about the Matura exam.

### 1.1 Czech form of the Matura exam

In the Czech Republic, the form of the Matura exam and the conditions for passing it successfully are delimited in detail by law whether the student taking it completes an academic track or a vocational/technical track. The Czech legislation defines the space for identifying the decision-making processes of these students and examinees as educational policy actors and therefore we present the form of the Matura exam taken by our participants, VET

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<sup>2</sup> For example, in Austria, Kosovo, Hungary, Poland, Slovakia, and Slovenia.

examinees from 2018 and 2019, on the basis of the Czech legislation (Act No. 101/2017 Coll.; Act No. 242/2008 Coll.; Act No. 472/2011 Coll.; Act No. 561/2004 Coll.; Amendment to Act No. 82/2015 Coll.; Amendment to Act No. 370/2012 Coll.; Decree No. 177/2009 Coll.; Decree No. 232/2018 Coll.; Decree No. 371/2012 Coll.) in Figure 1.

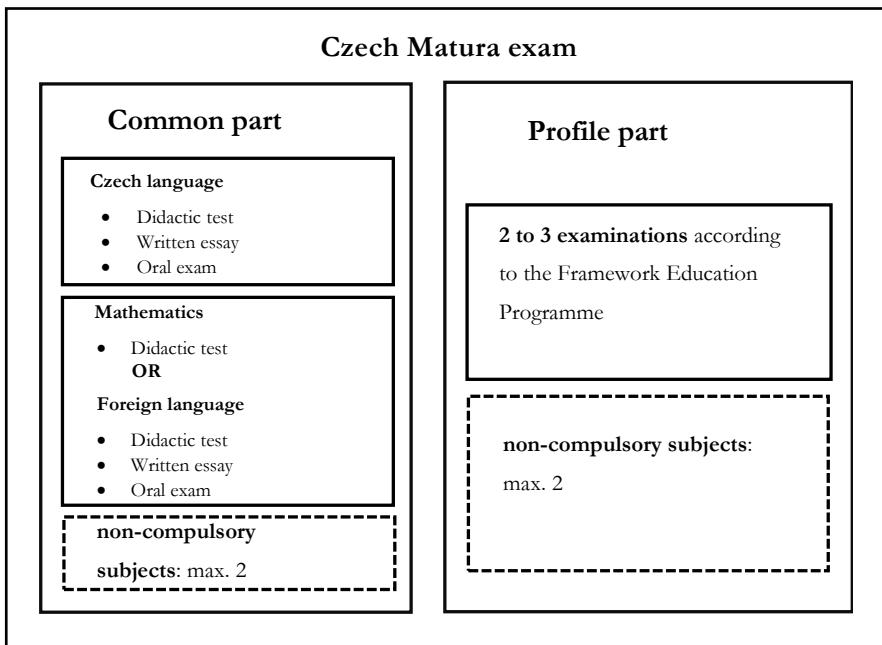


Figure 1  
*Structure of the Czech Matura exam*

The Matura exam, defined as “a school-leaving examination which shall consist of common and profile parts” (Act No. 561/2004, Section 77), is considered to be completed by those who successfully pass both parts of the exam. The Ministry of Education, Youth and Sports guarantees the common part of the Matura exam by establishing the extent of knowledge and skills that may be verified by the partial exams, guarantees the compilation of unified questions and task<sup>3</sup> evaluation criteria setting, and guarantees

<sup>3</sup> For the spring exam period, the application to the Matura exam must be submitted by December 1 of the previous year and for the autumn exam period, by June 25 of the given year (Decree No. 232/2018 Coll.).

the central evaluation of the results of the partial exams in written form, including the period of time the students have available to complete them (Decree No. 177/2009 Coll.).

The profile part of the Matura exam consists of two or three mandatory exams that cover the professional qualification of the school graduates in vocational/technical tracks. The number of exams for each field of study is set by the Framework Educational Programme (FEP). The specific offer of both mandatory and optional exams is announced by the school director in accordance with the FEP and the school educational program (Act No. 561/2004 Coll.). The exams from the profile part may take place in various forms listed in Decree No. 177/2009 Coll. The selection of forms and the set of requirements for the partial exams of the profile part are governed by the school administration. Specific dates of oral exams of the common part and all exams of the profile part are set by the school director in the period delimited by the Ministry of Education, Youth and Sports (Decree No. 232/2018 Coll.).

## **2 Matura exam as a decision-making opportunity**

The law states that the Ministry of Education, Youth and Sports is the main stakeholder creating a specific decision-making situation upon the conclusion of upper secondary education (ISCED-3) for students in the fourth year at all types of secondary schools through the provisions of the School Act concerning registering for the Matura exam (Act No. 561/2004 Coll., Section 78). Anyone who wants to pass the Matura exam must submit an application for each attempt, even if they have been studying in an educational program that concludes with the Matura exam (Act No. 561/2004 Coll.; Decree No. 177/2009 Coll.).

In accordance with Czech law, the Matura exam is taken by students with legal adult status, so this step set by the law can be interpreted either as a conclusion of the right of the “active customers” to education with the knowledge of shared responsibility for education (Act No. 561/2004 Coll.) or as an exercise of the right of the “participatory citizens” to education in compliance with the Charter of Fundamental Rights and Freedoms (Parliament of the Czech Republic, 1993). In both cases, the legislation emphasizes *individual* choice, which completes previous choices carried out within the educational market; in both cases, it implicitly includes the presumption that students and examinees, as educational policy actors, can make free choices based on individual preferences, aims, and interests (Veselý et al., 2007). There are differences between the free choices of an active customer and of a participatory citizen. The free choice of an active customer

presupposes a rational evaluation of costs and gains in the spirit of rational choice theory (e.g., Daoud & Puaca, 2011); the free choice of a participatory citizen emphasizes the (dis)continuity of the choices in the context of other social roles that citizens play. Hodkinson and Sparkes (1997) use the term “pragmatically rational decision making” to describe this kind of decision making.

Based on an analysis of the Czech legislation, it is clear that Czech examinees should apply the principle of free choice in their decision making, but their decision-making processes can vary due to the role that examinees play according to the legislation. Nevertheless, the Czech law “views” the educational decision making of students and examinees in an individualized, rational, and context-free manner.

The legislation also determines the rights and obligations of students and examinees.<sup>4</sup> The student obligations only refer to the application to the first attempt. The first student obligation is to choose the second exam of the common part of the Matura exam (see Figure 1) and to state that choice in the application.<sup>5</sup> The second obligation refers to student grades in the last year of secondary school. Only students who successfully concluded their studies in the last year are allowed to attempt the Matura exam. The law guarantees several rights to the examinees, specifically the right to repeat the failed partial parts of the Matura exam, the right to a reevaluation of exam results,<sup>6</sup> and in specific cases, the right to an adjustment of the conditions

<sup>4</sup> We understand the term “students” as a designation for individuals attending VET school. The moment they complete the first Matura exam attempt, we refer to them as “examinees.” Examinations typically include the loss of student status. If the examinees succeed on the first attempt, they “lose” their student status. If the examinees fail on the first attempt, they lose their student status on August 31, i.e. just before the second attempt.

<sup>5</sup> This condition only concerns the partial exams in the form of a didactic test and in an oral form (Amendment to the Act No. 370/2012 Coll.). For the VET examinees, this condition means that if their results are insufficient in the last year of their studies, they can only attempt to pass a part of the Matura exam at the first (regular) date, specifically only the partial exam taken in the form of a “practical exam” (see the profile part of the Matura exam).

<sup>6</sup> If a student fails some part of the Matura exam, that student can request a reevaluation of the course and the results of the exam in writing. If an unsuccessful examinee has reservations regarding the evaluation of the didactic test from the common part of the Matura exam, they file their request with the Ministry of Education, Youth and Sports. If they request a reevaluation of other parts of the Matura exam, they file their request with the appropriate regional authority (Amendment to the Act No. 370/2012 Coll.).

during the partial exams.<sup>7</sup> Should an examinee fail at the first attempt, they can exercise their right to repeat and submit an application to a repeat attempt. However, they can repeat each exam twice more at most (Amendment to the Act No. 370/2012 Coll.). If an examinee fails an optional exam, they do not have to take the repeat exam (Act No. 561/2004 Coll.).

As the description above clearly shows, with regard to the unambiguous determination of the rights and obligations of students and examinees, the Czech legislation defines the educational choices and decisions of students and examinees and creates a space for each of their decision-making processes on the conclusion of upper secondary education. It also delimits roles for other stakeholders in this space, but we are interested in how the repeatedly unsuccessful VET examinees can operate within this space, i.e. how their educational decision making can be viewed.

### **3 Decisions about the Matura exam as a case of career decision making**

Educational decision making concerns the choices and decisions that students and other stakeholders make during and/or in connection to education and training.<sup>8</sup> The choices and decisions about the Matura exam can be an example of educational decision making. On the other hand, the ways in which individuals perform their educational decision making is an important and traditional part of psychology research and sociology education research. Some authors (e.g., Germeijs & Verschueren, 2006; Kulcsárc et al., 2020) have argued that educational decision making is an integral part of the processes involved in career decision making, and therefore educational choices and decisions are within the focus of research into career decision making. All traditional career decision making theories (trait theory,

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<sup>7</sup> In compliance with the students' rights to exercise their rights on the basis of equality, the Ministry of Education, Youth and Sports sets the conditions and the manner of holding a Matura exam for students with developmental learning disorders (Amendment to the Act No. 82/2015 Coll.) and foreign students (Decree No. 371/2012 Coll.). These may request adjustments of the course of the Matura exam in accordance with the law.

<sup>8</sup> Ball et al. (2002) distinguished the concepts of choice and decision. "Where choice suggests openness in relation to a psychology of preferences, decision-making alludes to both power and constraint" (p. 51). In this text, we distinguish these concepts as follows: choice is choosing from several options (e.g., choosing the school or the subject, submitting the application form) and decision is making decisions within some horizons and contexts within which actions can be taken (e.g., decisions about education level or educational track, field of study, and participation in further education).

developmental theory, and social learning theory) assume that decision making: “(i) is fundamentally an individual process, (ii) it should and can contain large elements of technical rationality, and (iii) that the prime factors determining choice remain within the influence, if not the control, of individuals” (Hodkinson & Sparkes, 1997, p. 32). If we focus on the decision making of repeatedly unsuccessful VET examinees, then the characteristics of who is making the decisions cannot be overlooked, i.e. decision-making can be seen as a manifestation of individuality, which is a traditional focus of research into career decision making.

### *3.1 Decision making as an individual process*

Career decision making is a complex process. The research field, initially focused on individual differences in career decision making, generated countless decision-making styles that provided answers to questions such as whether an individual's decision-making style differed according to the decision-making situations (Arroba, 1977) or how individuals approach decision-making tasks (Harren, 1979). It was found that individuals apply their decision-making styles according to the decision-making situations and that the “selection” of a style is related to the perceived importance of the decision and to the degree of control the decision maker has over the given situation (Arroba, 1977).

Career decision-making research is currently dominated by the effort to learn more of the career decision-making processes and their phases (Gati & Asher, 2001; Germeijs & Verschueren, 2006). Gati et al. (2010), who based their theory on the presumption that in the course of decision making, individuals use various strategies that are influenced by both personal and situational factors, concluded that various strategies are connected to the decision-making process phases as proposed by Gati and Asher (2001). Bimrose and Mulvey (2015) argued that in adults, age- and gender-specific behavioral patterns always repeat when individuals reach transition points of their life or when they deal with crises in their work life. Using only some career decision-making styles (e.g., Haren, 1979) or profiles (e.g., Perez & Gati, 2017) can paradoxically create obstacles in the career decision-making process. Many young adults find making these types of decisions difficult as it involves uncertainty and stress and concerns numerous personal conditions (Gati & Tal, 2008).

Gati and Saka (2001) confirmed that secondary school students encounter three types of difficulties in career decision making and in various educational decision-making situations. The first group of difficulties concerns the lack of decision-making readiness, including lack of motivation, general indecisiveness, and dysfunctional beliefs. The second group of difficulties is represented by the lack of information about the self, about occupations,

about ways to obtain additional information, and about the decision-making process. The third group of difficulties is related to inconsistency of information, which includes unreliable information, internal conflicts, and external conflicts. Such difficulties may lead to postponing decision making or even chronic indecisiveness, or to transferring responsibility for decision making to others (comp. Gati et al., 1996; Gati & Tal, 2008). It is a no less important finding that in comparison to others, some career decision-making styles may be connected to smaller decision-making difficulties and that “career decision-making difficulties do not stem from lack of aptitudes and skills needed for academic success, but from other factors” (Amir & Gati, 2006, p. 498).

Sociology of education studies, which research social inequality in the educational choices of students (e.g., Ball et al., 2002), and focus on Bourdieu’s concepts of habitus and field (e.g., Hodkinson & Sparkes, 1997) or on Beck’s concept of individualization (Baker, 2019) have argued that choice has two meanings. One meaning is cognitive and relates to the matching of performance to the selectivity of institutions (schools). The second meaning is sociocultural and relates to social classifications of the self and institutions (Ball et al., 2002, pp. 52–53). These research findings refute the presumption of freedom of choice from the national legislation and international documents, and “suggest that career decision-making depended on a complex pattern of stakeholder relations and their various perceptions and reactions to the official regulations” (Hodkinson & Sparkes, 1997, p. 36).

#### 4 Methodology

We are interested in one example of the educational decision making of repeatedly unsuccessful VET examinees as a group of educational policy actors: their decision-making process for passing the Matura exam. Although the Czech legislation clearly described the rights and the obligations of students and examinees, there are few empirical findings about how young adults make choices and decisions about the Matura exam and how they themselves view their choices and decision-making processes. Psychological and sociological research tends to explain decision making as the result of individual rational choices that are influenced by personal, social, and structural determinants. On the other hand, educational policy creates space for individual free choice through legislation and other documents and its research of the decision-making process is focused on the question of how different stakeholders use this space. To determine the differences in decision-making processes among repeatedly unsuccessful VET graduates, it is necessary to identify what they decide in connection with the successful

passing of the Matura exam, in which decision-making situations they decide, and in what ways they make their choices and decisions.

With regard to the set aim, we use qualitative data collected by means of biographic narrative interviews (Burke, 2014; Hollway & Jefferson, 1997; Jovchelovitch & Bauer, 2000) with repeatedly unsuccessful VET examinees from 2018 and 2019.<sup>9</sup> In compliance with the principles of a biographic narrative interview, every interview started with the following statement:

We are interested in everything that preceded your first attempt to pass the Matura exam, how you got to secondary school, what memories you have of your studies, how you prepared for the Matura exam, how your Matura exam went, when you learned of the results, what your view was of the entire situation, and in how your life continued after. Everything you can remember is important to us, and we would appreciate it if you could tell it as a coherent story in your own words.

During the interviews, we tried to maximize the placement of the interviewees at the heart of the research study and to support them in controlling the direction, content, and pace of the interview (Anderson & Kirkpatrick, 2015; Burke, 2014; Hollway & Jefferson, 1997; Jovchelovitch & Bauer, 2000; Mueller, 2019). Nevertheless, we had to support the flow of their thoughts with open-ended questions (open clarifying questions on their perceptions of the causes of failure).

We created a research sample of 27 participants from the project and applied the following criteria: successfully concluded a fourth year of full-time studies at some type of VET school and had at least two unsuccessful attempts to pass the Matura exam, with the first unsuccessful attempt in 2018 or 2019. Eighteen participants met these criteria; we provide their characteristics in Table 1.

<sup>9</sup> The participants responded to advertisements with interest in cooperating in the research project *Životní dráhy neúspěšných maturantů a maturantek*, through Masaryk University.

**Table 1**  
*Characteristics of participants*

<b>Participants</b>	<b>Study field of qualification</b>	<b>Age</b>	<b>First attempt</b>	<b>Second attempt</b>	<b>Third Attempt</b>
		(during first attempt)	Failure at:	Failure at:	
Agáta *	Applied Photo and Media	19	CZ (dt, oe) EN (dt) PP	CZ (dt) EN (dt)	Unsuccessful
Adéla *	Lyceum of Natural Sciences	19	CZ (dt)	CZ (dt)	Unsuccessful
Alena *	Public Administration	19	EN (we) PP	PP	<b>Successful</b>
Alex	Electrical Engineering	20	PP	PP	<b>Successful</b>
Alice *	Public Administration	19	CZ (we, oe) M	CZ (oe) M	<b>Successful</b>
Amalie *	Social Services	19	CZ (dt) M	M	Unsuccessful
Aneta *	Nurse Practitioner	19	G (dt) PP	G (dt)	<b>Successful</b>
Arnold	Creative Processing of Metals and Precious Stones	20	EN (dt)	EN (dt)	<b>Successful</b>
Arnošt	Economy and Entrepreneurship	20	CZ (we) M	CZ (we) M	<b>Successful</b>
Bára *	Packaging Technology	19	M	M	Unsuccessful
Berenika *	Multimedia Design	19	CZ (dt)	CZ (dt)	<b>Successful</b>
Bětka *	Interior and Textile Design	18	PP	PP	<b>Successful</b>
Blanka *	Applied Photo and Media	19	CZ (dt)	CZ (dt)	Unsuccessful
Bořek	Economy	19	CZ (dt, we) AJ (we) PP	CZ (dt, we) AJ (we) PP	<b>Successful</b>
Božena *	Physician Assistant	18	CZ (dt)	CZ (dt)	Unsuccessful
Brenda *	Economy and Entrepreneurship	19	CZ (dt)	CZ (dt)	Unsuccessful
Brigita *	Social Services	18	M	M	Unsuccessful
Bronislava *	Pedagogical Lyceum	18	CZ (dt) M PP	M	Unsuccessful

Note: Names beginning with A: cohort 2018; Names beginning with B: cohort 2019; \* women;  
 CZ: Czech language; EN: English language; G: German language; M: mathematics; PP: profile part; dt: didactic test; we: written essay; oe: oral exam

We initiated the data analysis with inductive coding (Chandra & Shang, 2019; Gibbs, 2007) in the ATLAS.ti software. In this way, we acquired 203 codes from the entire data corpus. These codes expressed all the cases of choices and decisions of our participants. In the next step, we created the following categories based on the thematic similarity of the acquired codes: VET school choice, course of studies, Matura exam, relationships, and overcoming obstacles. Within these categories, we identified seven examples of choices or decisions: choice of the second subject in the common part of the Matura exam; an adjustment of the conditions of passing the Matura exam; appeal; application to the Matura exam; preparation for the Matura exam; choice of degree of education; and customization of conditions to ensure success. We then arranged the individual choices and decisions so that they corresponded to the Matura exam attempts.<sup>10</sup> We used axial coding to identify the context and other conditions that influenced the decision-making processes of participants who succeeded at their third attempt. Finally, in the last step of our data analysis, we focused on the differences in the identified decision-making ways of our participants according to the decision-making situations (first, second, or third attempt). We discovered that some decision-making ways differed according to the subject of the decision as well as the decision-making situation.

## 5 The path to a successful Matura diploma

Our participants encountered three decision-making situations (first, second, and third attempts) on their path to success in the Matura exam in accordance with the law (Act No. 561/2004 Coll.). These situations always occurred when they had to decide whether they would attempt to pass the exam. The participants had to make other choices or decisions in each of these decision-making situations. In the first and second attempts, the decision-making process of all our participants was very similar, but in the third attempt, the decision-making ways of our examinees were more significantly embedded in their individual biographies. In order to present the differences in decision making between individual attempts and among participants in the third attempt, we work only with data from the nine participants who succeeded on their third attempt (see Table 1) and obtained a certificate of completion of upper secondary education in the selected field.

<sup>10</sup> Students and the examinees who wish to successfully pass the Matura exam encounter decision-making situations that we identify with individual attempts to pass the Matura exam. By law, they can encounter the same decision-making situation three times at most (Act No. 561/2004 Coll.).

We introduce how our participants made their decisions in the following part of the text, and we progress chronologically according to the decision-making situations (attempts).

### *5.1 The first attempt to pass the Matura exam, or “a sure bet”*

The participants intentionally chose a study program that concluded with the Matura exam: “I did look for artistic work with metal, but I also wanted a school with a Matura exam. A school where they really have some actual demands and where I could get a proper education” (Arnold). We believe that VET examinees perceived the application form for the first attempt as a necessary formality and not as a formalized expression of their choice to complete their upper secondary education. Regarding their previous study results, our participants believed that the school had prepared them to pass the Matura exam successfully and they did not believe failure to be a possibility. They believed that they had done all that was necessary to fulfill their school duties and that their success was certain. This implies that our participants did not think about the application submission as a moment in which they had to decide about anything. If our participants were to have made a decision about their application for the first attempt, it would have been clear from their narrative that they had considered and explored at least the possibility of repeated failure at the Matura exam (or not graduating from upper secondary education) as a career alternative to success (comp. Kulcsárc et al., 2020). They approached the application for the first attempt as if it were a choice based on individual preference.

For the same reasons, the mandatory choice of the second subject in the common part of the Matura exam became a partial formal decision for them. The decision whether to submit a request for an adjustment of the conditions during the Matura exam was also a decision-making situation for some participants who had been diagnosed with specific educational needs. In both cases, their decision was limited to the choice of one from two options delimited by law. For the second subject in the common part of the Matura exam, participants chose either foreign languages or math (see Figure 1). For the request for an adjustment of the conditions during the Matura exam, participants considered whether to submit an application and perform the other related partial tasks or not to submit the application at all. In more detailed analyses in which we monitored the ways in which our participants chose one of the available options, we identified two decision-making ways, the *automatic choice* and the *path of least resistance*.

If the participants made their decisions in an *automatic choice*, it was clear that they did not even explore the second offered option. They explained their choices in various ways. For instance, for Bára, the choice of the second subject in the common part of the Matura exam was made because of

consistently good grades in one of the subjects. “Since I was really good at math in primary school, I even had straight As, I chose math.” For those who had been previously diagnosed with a specific education need, the exercise of the right to an adjustment of the conditions was an easy choice in the spirit of: “Since I have this option, I want to use it.”

Those who made decisions by taking the *path of least resistance* considered their chances of achieving success in choosing the second subject in the common part of the Matura exam. Because they did not feel sufficiently competent in any subject, they chose the one that seemed the easiest. Interestingly, the fact that the foreign language exam consists of three parts (see Figure 1) while there is only a single didactic test for mathematics was even included in some students’ considerations. For some of our participants, mathematics became “the lesser evil” on the basis of the ratio of three parts versus a single test. Some of the participants entitled to an adjustment of the conditions during their attempt to pass the Matura exam decided to take the path of least resistance, which meant not requesting and not providing the necessary certificate (thus not actively participating in the special process related to the request) and thus not using this option.

Both identified decision-making ways of our participants during the first attempt (*automatic choice* and *path of least resistance*) can be explained by the principles of rational choice theory (Daoud & Puaca, 2011): minimization of costs (energy and time for the preparation) and maximization of gains (success). Their assessment of the costs included a belief in their academic success that they had formed throughout their studies in high school.<sup>11</sup> Based on rational choice theory, these decision-making ways can be viewed as poorly considered or even rash. The participants’ belief in their own academic success entered their assessment of their level of knowledge and skills for passing the Matura exam and generated a lack of information about themselves that was an obstacle to rational decision making (Gati & Saka, 2001).

### *5.2 The second attempt to pass the Matura exam, or “no time like September”*

The dates of the second attempt are set by law for the beginning of September, immediately after the failed examinees cease to be students of the school, but before enrollment dates for university studies. This is probably the main reason our participants were not overly discouraged by their first failure. They considered it merely bad luck or a partial failure. This view of failure and the opportunity to try to pass the Matura exam on a second attempt

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<sup>11</sup> The belief in academic success is shaped by the institutional context (school), but this belief led to dysfunctional decision making for our participants.

relatively soon after the first failure did not represent a significant problem for our participants in terms of fulfilling their career goals, or specifically in terms of the beginning of university studies.

After the first failure, all our participants faced two choices, by law. They were supposed to decide if they wished to exercise their right to have the results of the first attempt re-evaluated and if they wished to submit an application for the second attempt. One more decision emerged in our data: whether to prepare for the second attempt, a decision that the participants talked about more than they had for the first attempt. Once again, they approached decision making on the same principle as for the first attempt, using *automatic choice* or the *path of least resistance*.

The right to a reevaluation of the results of the exam that the examinees failed was used only rarely by our participants. If they decided to exercise their right and appealed, they did so on the basis of the *automatic choice* principle, within the meaning of: "I am missing a single point to pass the exam, I will file an appeal." However, none of our participants' appeals were successful. All our participants also approached the submission of the application for the second attempt fully in the spirit of automatic choice.

All our participants decided to prepare for the second attempt using the *path of least resistance*. Since our participants were convinced that they were already well prepared for the first attempt, they postponed the preparation for the failed parts of the Matura exam, believing that they still had enough time to refresh their knowledge in a month. Resting or enjoying the summer holidays was the main goal of the months between the two attempts (from June to August). As Brigit said: "In the first month of the holidays, I'll admit that I just really wanted to enjoy the holidays. We flew off for a vacation with my folks and so on." Some did start preparing about mid-way through the summer, but others kept postponing the preparation, further increasing their aversion to studying and the stress about the next attempt. That did not change anyone's belief that they would pass the Matura exam on the second attempt, as exemplified by Brigit: "I thought it would work out."

For our participants, decision making in the second attempt was hasty and not well considered with regard to the possible consequences. Our participants still believed that they would succeed; the second failure was therefore much more of a surprise than the first one. This moment of surprise, in some cases even shock, evoked a change in some participants' approaches to the next decision-making situation.

### *5.3 The third attempt to pass the Matura exam, or "anything to succeed"*

After the second failure, all of our participants experienced deep disappointment, anger, frustration, and feelings of injustice. It was not easy for any of them to accept the second unexpected failure. Their negative feelings also

resulted from the situation in which the unsuccessful graduates found themselves after a second attempt. They had lost their student status just before the second attempt. The unsuccessful examinees therefore had to apply for the third attempt as regular citizens. The examinees who had failed in their second attempt also had to either find employment or pay for health insurance themselves until it was possible to make a third attempt at the Matura exam (the dates of the third attempt are set by law eight months after the second attempt, usually in May). The examinees who had planned to begin studies in tertiary education were unable to do so without the Matura certificate.

A minority of our participants decided to submit an appeal with the conviction that it would be successful and they would be able to return to their originally set career goals without the need for significant changes. Those examinees can be said to have decided on the basis of automatic choice, i.e., in the same way as they did after the first failure. Their disappointment was thus even greater when they learned that their appeal had been rejected. None of the participants who filed an appeal were successful; all of our participants then had to focus on the second important decision, connected to re-evaluating their existing career goals including the further participation in education/training. Our data show that the reassessment of their original career goals differentiates our successful participants from the unsuccessful ones (see Table 1) and also significantly entered the decision-making process of those who succeeded on the third attempt.

To emphasize the differences in the decision-making strategies of the participants who succeeded in the third attempt, we present four contrasting stories that outline the options for vocational education graduates (enter the labor market or tertiary education) and different decision-making practices between the second unsuccessful and the third successful attempt at the Matura exam. From those who succeeded on the third attempt, we selected two women (Aneta, Berenika) and two men (Arnošt, Bořek) from the examined 2018 and 2019 cohorts.

#### **The story of Berenika after the second failure**

Berenika is a typical example of those participants who wanted to spend the period between the second and third attempt meaningfully. Berenika blamed the educational system for not offering any option for repeatedly unsuccessful graduates to speed up the “waiting” for the third attempt. She suggested: “You need to have some chance to go somewhere in formal education. Because when you simply lose a year of your life without choosing to do so on your own, you just...You cannot get it back.” As a reason for her failure, she cited a lack of legal support. She had been diagnosed with several specific learning disorders, and as compensation, she was entitled to request an extension of the time to complete the test. From Berenika’s point of view, this time extension was entirely insufficient support because it did not solve the problems.

At the time of her second failure, she had already been admitted to several art colleges, none of which she could officially enter without a Matura certificate. However, the opportunity to start college was an important career goal for her. Therefore, Berenika focused all her strength, wanting to succeed in the Matura exam as soon as possible. She praised the support of her parents, who financed private tutoring for her during this period, through which she gained confidence. Thanks to her determination, apparent motivation, and the clearly defined career goal of continuing her studies at college, she finally succeeded.

#### **The story of Arnošt after the second failure**

Arnošt is an example of a participant who decided in the period between the second and the third attempt to be certain to achieve an upper secondary education, so he spent this period meaningfully. He is also an example of a participant who changed his career goal after his second failure at the Matura exam. At first, Arnošt was disappointed because the second failure meant the inability to start college, where he wanted to study. He dealt with the situation by evaluating a certificate of apprenticeship as better than only the lower secondary education, as proven by his statement: "Yes, after the second attempt, I actually studied at a vocational school to at least do something for the year, and so I'd have at least some certificate." Arnošt's fear of another failure directed his decision to exercise his right to education in accordance with the Charter of Fundamental Rights and Freedoms (Parliament of the Czech Republic, 1993) while waiting for the last attempt. He registered in a field of study that concluded with a final exam, which is a possible path to concluding ISCED-3 in the Czech Republic other than the Matura exam and is allowed by the School Act (Act No. 561/2004 Coll.). As shown by Arnošt's example, this alternative represents a safe, well considered, and pragmatic decision for students unwilling to take another risk. The knowledge that even if the third attempt to pass the Matura exam did not succeed, Arnošt would complete at least some type of upper secondary education gave him a state of mental well-being, and he approached the third attempt with less stress. In the meantime, he also worked and paid for individual private tutoring in subjects he had not passed at the previous Matura exam attempts. He changed his career goal during the year of waiting for the third attempt. He eventually rejected the opportunity to enter university and devoted all his efforts to preparing for the Matura exam. With the apprenticeship certificate and the school-leaving certificate, he feels that he has a higher value on the labor market and, in his words, that he no longer needs a university degree: "I re-evaluated going to college because I think things can be learned differently. I would rather learn by practice than in theory."

#### **The story of Aneta after the second failure**

Aneta is another example of a participant who, after being disappointed by the second failure, decided to succeed at all costs on the third attempt. However, she first filed an appeal and, for a long time, stuck to her original career goal of immediately working in her planned field in the Czech Republic or abroad without trying to deviate from the planned path in any way. Aneta's appeal did not succeed, but she still could not back down from her goal, which for her also meant becoming independent from her parents and moving in with her partner. Moreover, because she preferred work opportunities in her field of study, she was one of the few participants who hesitated to apply for the earliest Matura exam date. After much deliberation, however, she realized that by successfully passing the Matura exam, she would be able to keep

her current job and even increase her salary. Therefore, she decided to begin to re-evaluate her earlier decisions, searching for the reason for her failure. She started viewing some of her decisions as “wrong” only after the second failure. In the interview, she unequivocally stated that it had not been a “good decision” to be passive in giving feedback to her teacher, who did not teach German language well and did not reflect student needs: “I just thought it was better in German, but when it was the beginning of the last year [graduating year], and we were at the first-year level, we started to feel insecure. ... We should not have given it up; we should have risen up and start solving it, even though she was not listening to us.” At the same time, Aneta found that she was not living in an environment that was suitable for her effective preparation for the Matura exam. She realized that she needed to focus more on finding support, which she found specifically in her partner, who gave her both mental and financial support. She and her partner therefore found shared housing. Aneta was registered for several months at the Czech Labour Office, which covered her compulsory health insurance. After a few months, she started working and was able to partially support herself financially. Her boyfriend also paid for tutoring for her, thanks to which she finally succeeded in the third attempt. Aneta admits that she only found out during tutoring that she had not understood the curriculum needed for the Matura exam in her first two attempts. Aneta had not experienced support from her nuclear family. In her own words, she was able to prepare well enough for the third attempt after she decided to live with a partner who supported her and she had a quiet environment in which to concentrate on the preparation and study.

### **The story of Bořek after the second failure**

Bořek never had grand study ambitions. He did not do well in high school, and he was not admitted to some subjects in the first Matura exam attempt due to his poor performance. Like the other participants, Bořek had to decide what to do between the second and third attempts. He decided to enter a post-graduate English program, thanks to which he retained his student status. However, his insurance was not paid for him, so he also registered at the Czech Labour Office. Even Bořek, after the second unsuccessful attempt, realized that he wanted to pass the Matura exam at all costs. Bořek wanted to prove to his father and to his teacher of the vocational subject in which he had failed that he had what was needed to pass the Matura exam successfully, and that he could do it if he wanted to. Bořek began to look for the causes of his earlier failure. He found that the main problem was an unfavorable study environment. Unlike Aneta, who found support in her partner, Bořek realized that he was living in a toxic relationship, from which he had tried unsuccessfully to leave. Being in this relationship made it impossible for him to pursue his studies, and he decided definitively to leave. Decisions about relationships can be considered a key career decision that co-creates decisions about the Matura exam, not only for Bořek. He then began to study very intensively. In addition to the post-graduate study of English, he also paid for tutoring in the Czech language, which was the second subject he repeated. Although he was never particularly ambitious in school, Bořek found in the “waiting period” that he enjoyed studying, and he applied to the university where he is currently studying.

Although the ways of decision making of our participants differed in the third attempt, they were primarily determined by context. From empirical data, it was possible to identify five areas in which the participants had to decide. These areas are the contexts into which the decision making of all

those who finally succeeded in the third attempt entered, in different intensities and levels of importance. Based on our analysis, we named these areas: *deciding what to do with the extra year; finding the reason for repeated failure; identifying motivation for success; cleaning up in personal life; and taking control.*

First, the participants had to decide how to fill an *extra year* of their lives while waiting for the third attempt. Abandoning the third attempt (the last one) and concluding the studies at the ISCED-2 level was the first option. This decision would also mean that the VET examinees would have no proof of any qualification despite concluding four years of study at VET schools. Our participants considered the option of giving up only immediately after they learned the results of their second attempt, while they were emotional. Overcoming their initial disappointment, anger, or sense of injustice was a common feature of our successful participants in this moment, and it gradually allowed them to explore other legal educational or employment options. Even though not all of the participants explored all the available options, the exploration of various educational or/and work opportunities motivated them to make decisions and consider the benefits of concluding their upper secondary (VET) education with the Matura exam. Most of them started (or continued) earning some money on the side through part-time jobs or/and they registered at the Czech Labour Office. All of them attended private tutoring outside the formal education system.

Second, our participants questioned their previous decisions while trying to identify the *reason for the repeated failure*. Some questioned their choice of the second subject in the common part of the Matura exam, a choice they made with the path of least resistance or the automatic choice. Some participants went even further into their past and started to question the choice of secondary school itself. Those who decided to question their previous decisions, possibly even in the more distant past, were able to identify the “causes” of their failure. Although these causes differed, all the subsequently successful participants realized that the second failure indicated the need for a radical change in their preparation in order to address the fundamental gaps in their knowledge and skills. Our participants, who had to reconsider their original career goals as a result of the second failure, rejected the idea that they belonged among people with uncertified lower secondary education. This led them to identify their motivations for success, as well as to re-evaluate the Matura exam in relation to their career goals. Successfully passing the Matura exam ceased to be a tool for achieving their career goals and became the priority career goal, strengthening their resolve to succeed in the exam.

Third, the moment in which they identified the reasons for their failure was important in terms of their subsequent behavior. Recognizing the reasons, which came in the reappraisal of previous decisions, the Matura exam became a priority career goal for our participants, a goal they felt highly motivated

to achieve. The *motivation for success* usually more closely connected the Matura exam certificate with the planned future of our participants. Most of the participants were motivated to succeed by a “better” job in the labor market. Still, some wanted to prove to themselves and others that they had the necessary skills to pass the exam successfully.

Fourth, after answering the question of why they failed, another important question arose: how would they succeed? Our participants who were successful on the third attempt started to identify the obstacles that they believed blocked their path to success and tried to react so as to overcome these barriers. Although the obstacles were different, they were always connected with each person, so our participants had time to *clean up in their personal life* when needed. All of that was motivated by the goal of succeeding in the Matura exam, and all those decisions about overcoming barriers were intended to eliminate the probability of a third failure.

Once the participants made decisions in the given topics, a common feature in their decision making was *taking control* of their success. Before the third attempt, all of them adapted their life as much as possible to truly be well-prepared for the Matura exam. Some decreased their work hours; others terminated their employment or their registration at the Czech Labour Office and invested in tutoring. Everyone found a means of more intensive private tutoring or tutoring courses for the Matura exam outside of the educational system, which brought them the desired success. In the stories of our participants, several months of individual professional tutoring tailored to their needs led to success. Tutoring was mediated either by an organization specializing in preparation for the Matura exam or by a teacher who had experience preparing high school students for the Matura examination. For tutoring to have the right impact on our participants, it needed to be an unfamiliar person from the private sector or a teacher with whom our participants developed good but asymmetrical teacher-student relationships. Attempts to use an acquaintance or relative as a tutor did not lead to success.

The transformed perception of decision making in the attempts to pass the Matura exam was accompanied by a transformation in the approach to decision-making situations from a passive approach (the first and the second attempts) to an active one (the third attempt). While the passive approach to decision-making situations was reflected in the participants’ choice of one of several existing options without a detailed examination of the impact of each option, the active approach involved taking control of the path to meet their career goal. We consider this change in approach to decision-making situations to be the moment in which the participants escaped a cycle of educational decisions leading to repeated failure, and, at the same time, the moment in which some participants managed to change their ways of decision making.

## 6 Summary

Passing the Matura exam is an opportunity for decision making for Czech students and examinees. We found that repeatedly unsuccessful VET examinees made their choices and decisions differently. Their decision making in the first and second attempts to pass the Matura exam concerned choices given by law (choice of subject in the common part of Matura exam, request for an adjustment of the conditions for passing the Matura exam, appeal) and preparation beyond school preparation only when someone anticipated failing a subject. We identified two decision-making ways, which we called *automatic choice* and the *path of least resistance*. Our participants perceived these decision-making ways as free choices, but their choices were influenced by dysfunctional beliefs about their academic success that they had acquired during their studies. The ways in which our participants made their decisions manifested their role as active customers in the educational policy-making process.

The decision-making ways of our repeatedly unsuccessful graduates did not change significantly until after the second failure. After the second unsuccessful attempt, their decision-making processes concerned filing an appeal, applying for the third attempt, and preparing for the third attempt. We focus only on those participants who succeeded in their third attempt to pass the Matura exam. They made decisions about what to do with the extra year; finding the reason for repeated failure; identifying motivations for success; cleaning up in personal life; and taking control. Thanks to the legal situation in which twice unsuccessful examinees find themselves, decision making can also be seen as a process (cf. Gati & Asher, 2001; Germeijs & Verschueren, 2006) initiated by negative feelings after the second failure and connected with the reevaluation of career goals. The result of this reevaluation is a decision on the level of education they want to achieve in life, which can lead to applying for a third attempt. The choice to submit the application for the third attempt is connected with a reassessment of their previous decisions, including their attitudes to learning (Gati & Saka, 2001), and there is a clear connection between the choice to submit an application and the preparation for the third attempt.

Our participants who were successful on the third attempt started by considering their previous decisions; this consideration allowed them to reflect on the causes of their failure and to see the obstacles they believed were in the way of their success. It led to the decision to succeed and a change in learning conditions and preparation for a third attempt. The decision to change the conditions for learning, which we have termed *taking control*, is individual. For some participants, it meant suppressing some personal qualities (laziness) and changing their learning strategy. For others, it was a more radical change in their personal lives, which we termed *cleaning up in personal*

*life.* In general, *taking control* manifested itself in adjusting the conditions that our respondents saw as obstacles preventing them from succeeding. In order to remove the obstacles, they needed the support of people close to them. Ensuring the support of their loved ones meant more fundamental changes in the lives of some participants; for others, it meant a change in their attitudes and views of themselves. These changes were reflected in their preparation for the third attempt. Compared to previous decision-making ways (*automatic choice* and *path of least resistance*), cost maximization was a typical factor in decisions about preparing for a third attempt (securing professional tutoring, changing learning methods, and investing effort, time, and money in preparation) to ensure a minimum gain, i.e. to reach the minimum limit of success.

The decision making of those participants who succeeded on the third attempt supports research findings claiming that decision-making is a process. For our participants, this process can be divided into several steps in this order: reevaluate career goals; reassess previous decisions and attitudes; “take control”; and succeed. It is surprising that each step involves different choices and decisions. The participants changed their decision-making ways after the second failed attempt to pass the Matura exam; the decision making changed from a one-time event to a process. They left the decision-making ways typical for educational decisions made in the role of an educational policy actor for pragmatic rational career decisions (Hodkinson & Sparkes, 1997) made in the role of a citizen through interactions with significant others in their life history context.

## Conclusion

In this study, we focused on the decision-making processes of repeatedly unsuccessful VET examinees in choosing to pass the Matura exam. Passing the Matura exam (upper secondary education, ISCED-3) is undoubtedly a question of performance for every examinee in the Czech Republic, but decision making also plays an important role. The Czech laws and other educational policy documents define the conditions for passing the Matura exam and set the rules for individual decisions about the Matura exam. These documents operate on the assumption of individual freedom of choice, made based on rational assessments of abilities, knowledge, skills, and competences matching the available options and opportunities. We found that for our repeatedly unsuccessful VET examinees, belief in their own academic success (unperceived or real as the result of a lack of resources or of inability to realize the consequences of their decisions) was a factor that explained why they lacked control over their decisions and had lost the power of the educational policy actor role.

By providing descriptions of decision-making ways, we draw attention to the problem between the general and static character of the law, which assumes free choice, and the various decisions of young adults encountering social and structural determinants. This gap between the “letter of the law” and the lives of young adults can be bridged either by loosening some rules or by the addition of tools to help repeatedly unsuccessfully examinees reassess their decisions. Our findings hinted at a lack of mechanisms or services that would enable young adults to adopt the view of active citizens in their decisions regarding the Matura exam. They could be taught to make pragmatically rational decisions, including accepting responsibility for their career decisions and thus accepting shared responsibility with other stakeholders for their education (Act No. 561/2004 Coll.). We consider this problem to be the main challenge all stakeholders in education policy in the Czech Republic currently face, not only in VET education.

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### References

- Amir, T., & Gati, I. (2006). Facets of career decision-making difficulties. *British Journal of Guidance and Counselling*, 34(4), 483–503. <https://doi.org/10.1080/03069880600942608>
- Anderson, C., & Kirkpatrick, S. (2015). Narrative interviewing. *International Journal of Clinical Pharmacy*, 38(3), 631–634. <https://doi.org/10.1007/s11096-015-0222-0>
- Arroba, T. (1977). Styles of decision making and their use: An empirical study. *British Journal of Guidance and Counselling*, 5(2), 149–158. <https://doi.org/10.1080/03069887708258110>
- Baker, Z. (2019). Reflexivity, structure and agency: Using reflexivity to understand Further Education students' Higher Education decision-making and choices. *British Journal of Sociology of Education*, 40(1), 1–16. <https://doi.org/10.1080/01425692.2018.1483820>
- Ball, S. J., Davies, J., David, M., & Reay, D. (2002). “Classification” and “judgement”? Social class and the “cognitive structures” of choice of Higher Education. *British Journal of Sociology of Education*, 23(1), 51–72. <https://doi.org/10.1080/01425690120102854>
- Bimrose, J., & Mulvey, R. (2015). Exploring career decision-making styles across three European countries. *British Journal of Guidance & Counselling*, 43(3), 337–350. <https://doi.org/10.1080/03069885.2015.1017803>
- Burke, C. T. (2014). *Biographical narrative interview method: Tracing graduates' futures*. SAGE. <https://dx.doi.org/10.4135/978144627305013510257>

- Centre on Measurement in Education [CERMAT]. (n.d.). *Maturitní zkouška : Základní informace* [Matura exam: Basic information]. <https://maturita.cermat.cz/menu/vzdelavani-pegagogu/zakladni-skoleni-ciskom/zakladni-informace>
- Centre on Measurement in Education [CERMAT].(2019). *Maturitní zkouška 2013–2019: Výsledky jarního zkoušebního období a po podzimním zkoušebním období* [Matura exam 2013–2019: Results of the spring exam period and after the autumn trial period]. [https://data.cermat.cz/files/files/2019/MZ1319\\_vysledky\\_jaro\\_jap\\_final.pdf](https://data.cermat.cz/files/files/2019/MZ1319_vysledky_jaro_jap_final.pdf)
- Chandra, Y., & Shang, L. (2019). *Qualitative research using R: A systematic approach* (1<sup>st</sup> ed.). Springer. <https://doi.org/10.1007/978-981-13-3170-1>
- Daoud, A., & Puaca, G. (2011). An organic view of students' want formation: Pragmatic rationality, habitus and reflexivity. *British Journal of Sociology of Education*, 32(4), 603–622. <https://doi.org/10.1080/01425692.2011.578440>
- Eurydice. (2021, March 15). *Poland: Upper secondary and post-secondary non-tertiary education*. [https://eacea.ec.europa.eu/national-policies/eurydice/content/secondary-and-post-secondary-non-tertiary-education-37\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/secondary-and-post-secondary-non-tertiary-education-37_en)
- Federal Ministry of Education, Science and Research [BBWF]. (n.d.). *Die Zentralmatura* [The Central Matura]. <https://www.bmbwf.gv.at/Themen/schule/schulpraxis/zentralmatura.html>
- Gashi, V. (2018). *An analysis of the state Matura exam in Kosovo* [Dissertation thesis, Rochester Institute of Technology]. RIT Scholar Works. <https://scholarworks.rit.edu/theses/9812>
- Gati, I., & Asher, I. (2001). The PIC model for career decision making: Prescreening, in-depth exploration, and choice. In F. T. L. Leong, & A. Barak (Eds.), *Contemporary models in vocational psychology: A volume in honor of Samuel H. Osipow* (1<sup>st</sup> ed., pp. 7–54). Erlbaum.
- Gati, I., & Saka, N. (2001). High school students' career related decision-making difficulties. *Journal of Counseling and Development*, 79(3), 331–340. <https://doi.org/10.1002/j.1556-6676.2001.tb01978.x>
- Gati, I., & Tal, S. (2008). Decision-making models and career guidance. In J. A. Athanasou, & R. van Esbroeck (Eds.), *International handbook of career guidance* (pp. 157–185). Springer.
- Gati, I., Krausz, M., & Osipow, S. H. (1996). A taxonomy of difficulties in career decision making. *Journal of Counseling Psychology*, 43(3), 510–526. <https://doi.org/10.1037/0022-0167.43.4.510>
- Gati, I., Landman, S., Davidovitch, S., Asulin-Peretz, L., & Gadassi, R. (2010). From career decision-making styles to career decision-making profiles: A multidimensional approach. *Journal of Vocational Behavior*, 76(2), 277–291. <https://doi.org/10.1016/j.jvb.2009.11.001>
- Gerbovits, S. K., & Szabó, J. G. (2014). Az érettségi története az angol tanításának tükrében [The history of matura exam in reflection of teaching English]. *Acta Scientiarum Socialium*, 41, 73–80. <https://journal.uni-mate.hu/index.php/asc/article/view/339/1065>
- Germeijs, V., & Verschueren, K. (2006). High school students' career decision-making process: Development and validation of the study choice task inventory. *Journal of Career Assessment*, 14(4), 449–471. <https://doi.org/10.1177/1069072706286510>
- Gibbs, G. R. (2007). *Analyzing qualitative data*. SAGE. <https://dx.doi.org/10.4135/9781849208574>
- Harren, V. A. (1979). A model of career decision making for college students. *Journal of Vocational Behavior*, 14(2), 119–133. [https://doi.org/10.1016/0001-8791\(79\)90065-4](https://doi.org/10.1016/0001-8791(79)90065-4)
- Hodkinson, P., & Sparkes, A. C. (1997). Careership: A sociological theory of career decision making. *British Journal of Sociology of Education*, 18(1), 29–44. <https://doi.org/10.1080/0142569970180102>

- Hollway, W., & Jefferson, T. (1997). Eliciting narrative through the in-depth interview. *Qualitative Inquiry*, 3(1), 53–70. <https://doi.org/10.1177/107780049700300103>
- Jovchelovitch, S., & Bauer, M. W. (2000). Narrative interviewing. In M. W. Bauer, & G. Gaskell (Eds.), *Qualitative researching with text, image and sound: A practical handbook* (1<sup>st</sup> ed., pp. 57–74). SAGE.
- Kleňhová, M., & Vojtěch, J. (2011). *Přechod absolventů středních škol do terciárního vzdělávání* [Transition of high school graduates to tertiary education]. NÚOV.
- Kulcsárc, V., Dobrean, A., & Gati, I. (2020). Challenges and difficulties in career decision making: Their causes, and their effects on the process and the decision. *Journal of Vocational Behavior*, 116(Part A), 103346. <https://doi.org/10.1016/j.jvb.2019.103346>
- Mueller, R. A. (2019). Episodic narrative interview: Capturing stories of experience with a methods fusion. *International Journal of Qualitative Methods*, 18, 1–11. <https://doi.org/10.1177/1609406919866044>
- National Institute for Certified Educational Measurements [NÚCEM]. (n.d.). *O maturite: Základné informácie* [Matura: Basic information]. <https://www.nucem.sk/sk/merania/narodne-merania/maturita/o-maturite>
- National Examinations Centre [NEC]. (n.d.). *Vocational Matura: Assessment*. [https://www.ric.si/vocational\\_matura/assessment/](https://www.ric.si/vocational_matura/assessment/)
- OECD. (2018). *Education at a Glance 2018: OECD Indicators*. OECD Publishing. <https://doi.org/10.1787/eag-2018-en>
- Parliament of the Czech Republic. (1993). Charter of fundamental rights and freedoms. <https://www.psp.cz/en/docs/laws/listina.html>
- Perez, M. & Gati, I. (2017). Advancing in the career decision-making process: the role of coping strategies and career decision-making profiles. *International Journal for Educational and Vocational Guidance*, 17(3), 285–309 <https://doi.org/10.1007/s10775-016-9334-x>
- Schmidt, M. (2018). The State Matura exam in Croatia: How argumentative essay as an integral part of the Matura Higher English exam improved students' foreign language literacy. *Journal of English Language and Literature*, 9(1), 736–742.
- Sočan, G., Krebl, M., Špeh, A., & Kutin, A. (2016). Predictive validity of the Slovene Matura exam for academic achievement in humanities and social sciences. *Horizons of Psychology*, 25, 84–93 <https://doi.org/10.20419/2016.25.449>
- Thaçi, M. B. (2017). Are we ready to pilot a new test format for English language Matura exam? *European Journal of Multidisciplinary Studies*, 2(4), 88–97. <https://doi.org/10.26417/ejms.v4i4.p88-97>
- The Ministry of Education, Youth and Sports. (2004). *Zákon č. 561/2004 Sb., o předškolním, základním, středním, vyšším odborném a jiném vzdělávání (školský zákon)* [Act no. 561/2004 collection of law, on pre-school, basic, secondary, tertiary professional and other education (The Education Act)]. <https://www.msmt.cz/dokumenty-3/act-no-561-2004-collection-of-law-on-pre-school-basic>
- The Ministry of Education, Youth and Sports. (2008). *Zákon č. 242/2008 Sb., kterým se mění zákon č. 561/2004 Sb., o předškolním, základním, středním, vyšším odborném a jiném vzdělávání (školský zákon), ve znění pozdějších předpisů*. <https://www.msmt.cz/dokumenty-3/zakon-c-242-2008-sb-a-zakon-c-243-2008-sb-kterymi-se-menici>
- The Ministry of Education, Youth and Sports. (2009). *Výhláška č. 177/2009 Sb., o bližších podmínkách ukončování vzdělávání ve středních školách maturitní zkouškou* [Decree No. 177/2009 Coll., On more detailed conditions for graduating from secondary schools with the Matura exam.]. <https://www.msmt.cz/file/48686/>

- The Ministry of Education, Youth and Sports. (2011). *Zákon č. 472/2011 Sb., kterým se mění zákon č. 561/2004 Sb., o předškolním, základním, středním, vyšším odborném a jiném vzdělávání (školský zákon), ve znění pozdějších předpisů* [Act No. 472/2011 Coll., Amending Act No. 561/2004 Coll., On pre-school, primary, secondary, higher vocational and other education (The Education Act), as amended]. <https://www.msmt.cz/dokumenty-3/novela-c-472-2011>
- The Ministry of Education, Youth and Sports. (2012). *Novela zákona č. 370/2012 Sb., kterou se mění zákon č. 561/2004 Sb., o předškolním, základním, středním, vyšším odborném a jiném vzdělávání (školský zákon), ve znění pozdějších předpisů* [Amendment to Act No. 370/2012 Coll., amending Act No. 561/2004 Coll., on preschool, elementary, secondary, higher vocational and other education (Education Act), as amended]. <https://www.msmt.cz/dokumenty-3/novela-skolskeho-zakona-a-novela-vyhasky-c-177-2009-sb-2>
- The Ministry of Education, Youth and Sports. (2012). *Vyhláška č. 371/2012 Sb., kterou se mění vyhláška č. 177/2009 Sb., o blížších podmínkách ukončování vzdělávání ve středních školách maturitní zkouškou, ve znění pozdějších předpisů* [Amendment to Act No. 82/2015 Coll. on pre-school, primary, secondary, higher vocational and other education (The Education Act)]. <https://www.msmt.cz/dokumenty-3/novela-skolskeho-zakona-a-novela-vyhasky-c-177-2009-sb-2>
- The Ministry of Education, Youth and Sports. (2016). *Novela zákona č. 82/2015 Sb. o předškolním, základním, středním, vyšším odborném a jiném vzdělávání (školský zákon)* [Amendment to Act No. 82/2015 Coll. on pre-school, primary, secondary, higher vocational and other education (The Education Act)]. <https://www.msmt.cz/dokumenty-3/konsolidovany-text-skolskeho-zakona-a-doprovodny-material>
- The Ministry of Education, Youth and Sports. (2017). *Zákon č. 101/2017 Sb., zákon, kterým se mění zákon č. 561/2004 Sb., o předškolním, základním, středním, vyšším odborném a jiném vzdělávání (školský zákon), ve znění pozdějších předpisů* [Act No. 101/2017 Coll., Act amending Act No. 561/2004 Coll., On pre-school, primary, secondary, higher vocational and other education (The Education Act), as amended]. <https://www.msmt.cz/dokumenty-3/novela-skolskeho-zakona-c-472-2011-sb-vyklady-a-informace>
- The Ministry of Education, Youth and Sports. (2018). *Vyhláška č. 232/2018 Sb., kterou se mění vyhláška č. 177/2009 Sb., o blížších podmínkách ukončování vzdělávání ve středních školách maturitní zkouškou, ve znění pozdějších předpisů* [Decree No. 232/2018 Coll., Amending Decree No. 177/2009 Coll., On more detailed conditions for completing education in secondary schools by the Matura examination, as amended]. <https://www.msmt.cz/file/48688/>
- The Ministry of Education, Youth and Sports. (2020). *Strategie vzdělávací politiky České republiky do roku 2030+* [Strategy for the education policy of the Czech Republic up to 2030+]. <https://www.msmt.cz/vzdelavani/skolstvi-v-cr/strategie-2030>
- Veselý, A., Drhová, Z., & Nachtmannová, M. (2007). "Vědění o politice": Teoretické poznatky o tvorbě veřejných politik. In A. Veselý, & M. Nekola (Eds.), *Analýza a tvorba veřejných politik. Přístupy, metody a praxe* (pp. 43–66). SLON.
- Vojtěch, J., Zahradníčková, K., & Novotná, H. (2020). *Nezaměstnanost absolventů škol se středním a vyšším odborným vzděláním – 2020*. NPI ČR.
- Želvys, R., Raižienė, S., Vaitekaitis, J., Dukynaitė, R., & Jakaitienė, A. (2021). Centralised Lithuanian language and literature assessments of secondary school students: Population analysis. *Pedagogika*, 141(1), 125–145. <https://doi.org/10.15823/p.2021.141.7>