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Association of Centres for Interdisciplinary And Multidisciplinary Studies and Research - ACIMSI PhD in Gender Studies

# Status of women from national minorities in the Serbian higher education system - Focus on women <br> from the Hungarian national minority 

PhD thesis

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## 1 INTRODUCTION

The goal of this PhD dissertation is to analyse the status of ethnic minority women in the higher education system of Serbia with a special focus on etnic Hungarian women. The author collected a representative sample consisting of more than 2000 paper-based questionnaires filled in by high school teachers in their last school year before graduation, 43 semi-structured interviews with students and professors studying or working at the University of Novi Sad or the University of Belgrade, as well as publicly available statistical data. This data was used to analyse three important aspects of the status of ethnic minority women in the Serbian higher education system.

First, we analysed language as a performative metaphor for (in)equality. We intended to find out how Serbian language skills can become an element of inequality between the majority and the (ethnic) minority population. Its performativity lays in the fact, that it could be used as a 'strategy' for explaining the disadvantages faced by the members of the minority population.

The second aspect analysed in this research deals with national minority women's status in academia and their possibility for reaching decision-making positions. We intended to find out the attitudes of women in general, but especially ethnic minority women, towards climbing the hierarchical ladder in higher education institutions and reaching high positions (e.g. head of department, dean, rector). We will show through the narratives of women that they usually see themselves as educators and are not willing to get involved in politics (i.e. to campaign for support from a political party). These two are the most often obstacles barring women from entering decision-making positions.

The third and last aspect is the sentiment analysis of ethnic minority women in Serbia towards science, technology, engineering and mathematics (STEM) fields. Although women's underrepresentation in STEM is a challenge analysed in relevant literature (Blickenstaff, 2005; Schiebinger, 2011; Case \& Richley, 2013), those studies do not analyse the issue from an intersectional perspective by specifically analysing the attitudes of ethnic minority women towards the STEM fields of studies. We will analyse the attitudes of high school students towards the notion of women in STEM fields compared to pedagogical and other more 'feminine' fields, as well as towards potential advantages if there would be more women in the STEM fields. Based on the narrative analysis of the interviews, we will identify
the most prominent strategies, which the respondents use to explain or justify their career decisions.

### 1.1 LANGUAGE AS A PERFORMATIVE METAPHOR FOR (IN)EQUALITY

The educational migration of ethnic minority students is a long-standing issue. The two main reasons behind this type of brain-drain are (1) the inadequate knowledge of the state majority language (e.g. Hungarian students’ inadequate Serbian language skills) (Takács, 2013a: 115) and (2) the ethnical, language-based and cultural similarity and connection to their nationstate (Takács, 2013a: 35). We will analyse an additional reason for this type of educational migration, namely that the students are opting for the country where the main body of their nation lives mainly because all (i.e. Hungary, Romania, Slovakia) are member states of the European Union. That means that after finishing the University students obtain a degree recognized in the EU. This is especially true for social sciences or humanities domains in which a Serbian diploma is not transferrable to EU member states. The knowledge of the majority language is often a stumbling block for national minority students, who live in ethnic blocks along the Tisza river, when entering the higher education system in Serbia, in a language (Serbian) which is different from their mother tongue.

Hungarians living in Serbia have legal rights which grant them the use of their mother tongue in both education and administration ${ }^{1}$. Education in their mother tongue is feasible from preschool education to high school. As far as the higher education is concerned there is not much choice for them to study in their mother tongue, only the (1) Department for Hungarian language and literature at the Faculty of Philosophy, University of Novi Sad, (2) the Teacher Training Faculty in Hungarian language in Subotica, University of Novi Sad, and the (3) Department for Hungarian language and literature as foreign language, University of Belgrade. Some faculties of the University of Novi Sad offer a number of courses and exams in Hungarian, e.g. (1) the Faculty of Civil Engineering in Subotica, and (2) the Faculty of Economics in Subotica. Earlier this was a possibility at the Faculty of Law of the University of Novi Sad as well.

[^0]Bilingualism among members of national minorities in Vojvodina is often a topic of discussion. A Romaninan researcher in Vojvodina, Puja - Badescu highlights that bilingualism has its advantages, but also disadvantages as well, of course that the real wealth is the knowledge and learning of two languages at the same time, but it can happen when adopted at a certain age in both languages, stagnation occurs, or that new words are adopted more slowly and that no further enrichment of the vocabulary is achieved (Puja - Badescu, 2009:146). In recent years parents, who are members of the Romanian minority in Vojvodina, enroll their children in Serbian language schools, under the pretext that it will be easier for their children to continue their education (high school and later university). Another prominent trend noticeable in the Romanian community in Serbia is that during the last few years more and more Romanian children enrolled in schools in Romania, where they are usually studying natural sciences (Puja- Badescu, 2009: 147). Members of minority communities often feel, that despite their (legal) equality with the majority, despite the possibility to use their (literary) language in schools, the press, public life, they still feel a dose of inferiority, which is based on the idea of belonging to another nation (Maran, 2013: 232). Teaching all classes in primary and secondary school in a minority language, with only a couple of hours a week of Serbian as the majority's language, has brought about several generations of imbalanced bilingual speakers characterized by very low levels of competence in Serbian. In consequence, they are incapable of continuing their education at the university level in Serbia, and/or finding satisfying jobs which by default require knowledge of Serbian (Filipović et al., 2007:9). Consequently, when Hungarian students enter the higher education system of Serbia, they first have to overcome the language difficulty, i.e. learn Serbian, which is a significant disadvantage and requires time, effort and sacrifice (Lendák-Kabók, 2014:143). All these have a negative impact on the results achieved, as most Hungarian students learn Serbian instead of studying the subjects taught (Lendák-Kabók, 2015:49). Afther this introductory part about language within ethnic minority communities living in the northern part of Serbia, we define the following research questions, which will be discussed further on in this dissertation:

1. Are there language and culture-realted disadvantages, which are affecting women from national minorities during studies and in their academic careers?
2. Would it be easier for female members of ethnic minorities to overcome the potential language difficulty in science, technology, engineering and mathematics (STEM) fields, compared to social sciences and humanities (SSH)?

### 1.2 WOMEN IN ACADEMIA - WOMEN FROM NATIONAL MINORITY COMMUNITIES

In the XIX and early XX century Vojvodina was part of Austro-Hungarian monarchy which had its advanced legislation which allowed the emancipation of women, first through quality education for women and the right of inheritance (Stojaković, 2006:241). Women's associations' organization and their activities in Vojvodina were very visible and gathered women of all nationalities in Vojvodina. After World War II and the establishment of the Anti-Fascist Front of Women (Antifašistički front žena - AFŽ) women become equal in the right to work. AFŽ in their newspapers addressed the entire range of women from different ethnic groups, but the difference in a given political regime was not in the least stressed (Stojaković, 2011:28). In the last decade of the twentieth century (i.e. 1990s) women became nearly 'invisible', especially women from minority communities in Vojvodina (LendákKabók, 2016a:54). At the beginning of the XXI century women from minority communities are slowly becoming noticed and recognized through the work of the non-government sector (Lendák-Kabók, 2016a:54).

Savić conducted a research with Serbian women about their attitudes towards minority women in Vojvodina. The results show that although Serbian women have stereotypical view of women from other ethnic communities, they do not associate them with the political situations created by men in Europe or in the region during the 90 's (e.g. German women or Croatian women), i.e. they are not holding them responsible for the war in the 90 's. Therefore, Savić thinks that through majority women there is a chance for dismantling stereotypes about women in Vojvodina and creating a peaceful multiculturalism in the region (Savić \& Mitro, 2006: 253).

When it comes to women in academia, Blagojević is one of the most prominent researchers in the region, and she argues that most of the female scientists in Eastern and Southeastern Europe are still not aware of the latest efforts in the gender equality domain (i.e. "gender sensitized") and could therefore have inadequate, even distorted perceptions of the real situation (Blagojević, 2009: 110). It is often much easier for women in this region to speak about general bad conditions in which scientific institutions find themselves during the transition, than to have a gender sensitive understanding of their own marginalization and exclusion. There are important psychological barriers and discourse taboos in the articulation of these problems (Blagojević, 2009:110). Blagojević argues, that due to existing horizontal segregation, expressed in the feminization of some sciences and much smaller representation
of women in other sciences (e.g. computer science), it might be assumed that different scientific fields are "open" to women to different extents (Blagojević, 2009:111).

The status of both ethnic minority women (Hungarian, Slovak and Romanian) and majority (Serbian) women will be discussed and their motivation for reaching decision-making positions through the conducted interviews. The analysis of the narratives will show that most of the respondents' narratives reveal their demotivation to reach decision-making positions. In the analysis, the author introduced and explained the strategies the respondents were using to talk about their motivation/lack of motivation and their possibilities to build a career in academia. These strategies are important for them to explain the reasons behind their actions and lack of motivation. It might be that their lack of motivation is a strategy for not wanting to take a stand against the system, which is rigid towards women, especially if they are from an ethnic minority group. When it comes to the majority women, the analysis will show how they are narrating about minority women's chance to build a career in the academia and to reach decision-making positions within it. Men in their narratives will reveal how women have a disfavorable position within academia, but also how they are blaming the society and gender stereotypes for women's position, not questioning or actively doing something against it. The analysis of the narratives will focus on work-life balance as well, confirming previous research done within this topic, how women (and men as well) in academia have great difficulties balancing between career and family obligations. The analysis of the interviews will show that the strategies differ between genders and that there is an ethnicity-based difference as well. In the end, the analysis will show whether there is any difference between the narratives of women who work in SSH and women who work in STEM fields when it comes to building career in academia or reaching decision-making positions. Based on the above discussion we formulate the following research questions:

1. Is the level of motivation to reach decision-making positions within the hierarchy of the acadmemia lower for women? If so, what are the reasons behind it?
2. How are men and women, from different national communities coping with work-life balance within academia?

### 1.3 Women in STEM

Research on why women are under-represented in the STEM fields of studies, mainly points out that women are discouraged from majoring in STEM fields, because of gender stereotypes in family and school, eventually resulting in segregation in higher education (Gender

Differences in Educational Outcomes: Study on the Measures Taken and the Current Situation in Europe, 2010). According to Brandell and Staberg in Sweden students of younger age adopt the Swedish equity discourse, namely they are firmly convinced that there are no difference concerning mathematics when it comes to boys and girls. This was the point of view both the younger and the older students as well. They claimed that there are only individual differences (Brandell \& Staberg, 2008:507). Blickenstaff has made several suggestions what should be done in the classroom to steer women towards STEM. He suggests the following: ensuring students have equal access to the teacher and classroom resources, creating examples and assignments that emphasize the ways that science can improve the quality of life of living things, using cooperative groups in class, or at least avoiding dividing students by sex for class competitions or in seating arrangements, eliminating sexist language and imagery in printed materials, not tolerating sexist language or behavior in the classroom, increase depth and reduce breadth in introductory courses and open acknowledgment of the political nature of scientific inquiry is needed (Blickenstaff, $2005: 384$ ). Blickenstaff further suggests that by implementing the above-mentioned changes to current classroom practice, school teachers would provide an environment where female students will be more likely to succeed in subjects that have traditionally been dominated by males (Blickenstaff, 2005:384).

According to the Report of the EU Commisions Expert Group on Structural Change, research performance is limited by the perpetuation of direct and indirect discrimination based on gender. This might be regarded as a serious drawback of Europe, given the key roles of research and innovation. Smart, sustainable and inclusive growth can be achieved in Europe if the EU will make full use of its human capital - involving both men and women (Structural change in research institutions: Enhancing excellence, gender equality and efficiency in research and innovation, 2012:6).

Women from national minority communities in Vojvodina are mainly from smaller municipalities where gender stereotypes are still very present. In this dissertation results of the questionnaire with minority high-school graduates will show how are gender stereotypes affecting women and men in minority communities, and why are women less likely to choose STEM but more likely to enrol in study program which are enabling them to preserve their ethnic and cultural values. One of the aims of this research is to inform and educate women from national minority communities in Vojvodina about the benefits of studying and working in STEM fields, e.g. about improve prospects of being employed and earning more than in
other areas. The research aims to point out the need for dismantling gender stereotypes. For this part of the research we define the following research question:

1. Why are women choosing less STEM fields of studies, when copleting STEM studies would make easier to find a job and often it would offer more financial power?

### 1.4 DOCUMENT STRUCTURE

The dissertation will analyse different intersections of gender, ethnicity, class and language affecting women from ethnic minority communities when they are making their career choices and in highly demanding academic careers.

The dissertation starts with the literature review and the overview of the legal framework, shaping the legal and social setting of ethnic minority women. The legal overview covers EU policies and international legal documents which regulate the status of women and ethnic minorities. Both international and Serbian legislation on gender equality and minority rights will be presented. It is followed by a section containing an overview of educational possibilities of ethnic minorities and their supporting institutions. Goals, hypothesis and methodology are covered in the next sections. The description of the empirical material consists of the introduction of the secondary data, questionnaire data and the interviews which constitue the qualitative element.

The findings are presented in three sections, each presenting part of the answers to the research questions presented in the the literature review. First, the topic of the language will be presented through the questionnaire analysis and interviews as well. The topic of ethnic minority women in academia including the topic of balancing between academic career and family life is presented together with our analysis related to ethnic minority women in academic leadership positions. The third main topic in the findings part of this dissertation deals with ethnic minority women in STEM sciences also based on the quantitative and qualitative data gained through the research. These topics will be discussed through the narratives of different generations and with the presentation of the results from the quantitative research part. The more experienced generations recalled a different political regime, namely the communist Yugoslavia where the national minorities and women therefore national minority women as well, had a different position in higher education. The younger generations spoke about the present, and the time they grew up, during the ' 90 's in the Yugoslavia, a country ravaged by war, where nationality became more important. In such a setting the different nationalities linving in Vojvodina grew distant in only a few years,
dismantling the tradition of harmonious cohabitation built through the past couple of centuries.

The dissertation is concluded with a set of policy recommendations for empowering women from national minority communities, helping them with the language difficulty, motivate them to strive towards decision-making positions in academia and steer them towards the STEM fields, thereby granting them more financial and social power.

The research results published in this PhD dissertation bridge the gap between the research about women's position in higher education and studies done on ethnic minorities in this region. The dissertation is a unique, intersectional contribution to ethnicity studies and gender studies as well, focusing on ethnic minority women, especially Hungarian minority women.

## 2 LITERATURE REVIEW

The literature review presented in this dissertation will be divided in three parts: (1) ethnicity language - gender, (2) gender in academia, and (3) women in science, technology, engineering and mathematics (STEM). Each topic is divided into sub-topics which in the end create the state-of-the-art and position this research. Each of the three sections of this literature review are closed by an overview of the author's activities and contribution in the respective areas.

### 2.1 ETHNICITY - LANGUAGE - GENDER

The status of ethnic minorities will be discussed in Serbia, through the language component and with the help of the postcolonial theories, which can to some extent be used in order to understand the identity of the national minorities in Vojvodina. In this part of the literature review, a short historical overview of women's position during the communist era will be given, together with its effect on higher education and research.

### 2.1.1 Vojvodinian - Hungarian national identity

We define Vojvodinian, or Southern Hungarian identity, as its members significantly differ from Hungarians in Hungary, or Serbians in Serbia in many aspects. Namely, both the positive and negative characteristics from the groups' self-evaluation, and the assessment of the opinion of other ethnic groups about them, as well as the evaluation of honorable historical personalities - are markedly different. As stated by Mirnics and Nacsa (2011) Hungarians differ in their "basic nature" established in the last century, and they can be easily distinguished from the majority. Čudić (2017:33) adds that Vojvodinian - Hungarian identity is historically, socially and politically determined and it changes relatively fast. When it comes to the Vojvodinian - southern Hungarian national identity, it is essential to clarify the fact how are Vojvodinian - southern Hungarians related to the wider (or maybe original?) Hungarian nation, whether by identifying with the Vojvodinian - southern Hungarian national identity, one belongs to a separate nation, or is he/she still part of the wider Hungarian nation (Bálint, 2012:454). Lendák-Kabók and Bakoš analyse the role of etnic minority women as guardians of their communities and the ethnic minority identity (Lendák-Kabók \& Bakoš, 2018:46).

### 2.1.2 Language as an ethnicity component

This section defines language, mother tongue and policies affecting the use of language, with a special focus on minority languages.

### 3.1.2.1. Mother tongue and bilingualism

Definitions of the notion of mother tongue differ in literature. According to Love and Ansaldo (2010: 589), if a person was born and brought up from birth to speak a given language, for preference in a family where the parents or other adults had the same experience with the same language, then he/she is a native speaker of that language, which is his/her mother tongue. Skutnab-Kangas, a well-known Finnish specialist in minority education and linguistic human rights, created several definitions of mother tongue. This author writes that mother tongue has often been thought of as the language which the mother speaks, the language a child learns first, the language a person knows best, the language a person uses most, or the language one identifies with. Skutnabb-Kangas also writes that our mother tongue may change, even several times during a lifetime (Skutnabb-Kangas, 1981). It is worth mentioning as well that, when it comes to education in mother tongue, Seid argues that mother-tongue instruction improves educational outcomes in primary school (Seid, 2016:21).

It is possible to have two mother tongues and achieve complete bilingualism (SkutnabbKangas, 1981). A person who is able to communicate in two (or more) languages on a native level in a multilingual community, in accordance with the socio-cultural requirements imposed on the communicative and cognitive competence of the community, and the individual who can identify with both (and all) linguistic groups (and cultures), and with parts of these groups is bilingual (Gönz according to Skutnabb -Kangas, 2004: 30-31).

Bilingualism is a complex phenomenon, with both advantages and disadvantages. Some claim that a person's ability to learn a language is limited, so when learning multiple languages, this ability is divided, therefore a multi-lingual learner cannot reach the level of a monolingual learner (Bene, 2000:12). Other critics write of interference (mixing of the structures of languages), which is naturally reflected in language use, but its degree can be significantly reduced by a good language learning and teaching strategy. Others claim that bilingualism is beneficial since brain plasticity in early childhood can be used to learn more languages, even simultaneously and consecutively, which further promotes cognitive development and creativity (Bene, 2000:12).

### 3.1.2.2. Multilingual communities and their creation

Gönz (2004:15) defines multilingual communities as being linguistically, ethnically, culturally, and religiously heterogeneous communities, that face multilingualism and multiculturalism, and most frequent forms of bilingualism and biculturalism (e.g. alternating use of languages and cultures are often different values and norms of adaptation problems) on a daily basis. Serbia is a country characterized by ethno-linguistic diversity, and according to Filipović (2011:2), it should have stable and systematic capabilities that can empower and encourage minority members to be successful, not in spite of the system, but because of the system.

Today, Hungarian students growing up in Vojvodina often do not possess a minimum Serbian language competence, which makes them incapable of continuing their studies in the Serbian higher education system or finding a satisfactory job. Because of that and a combination of other reasons (e.g. having Hungarian citizenship (beside the Serbian) allows them to work anywhere in the EU), they decide to leave the country in scores. This brain drain was not as prominent in the past. Nađ suggests that young people in the North Bačka geographic region between the Danube and Tisza rivers, where most of the Hungarian minority lives, since the time of crisis (meaning the 90 's) and until today do not want to learn the state language (Nađ, 2006: 448). Lendák-Kabók and Lendák (2017: 291) argue that ethnic Hungarian university professors who "grew up in a different social setting of the communist Yugoslavia, which (among other outcomes) resulted in lower national segregation and better knowledge of the Serbian language, compared to the students who were finishing their education in the 1990s and 2000s". Filipović et al. (2007: 1) conclude "that the concept of plurilingual in education and communication remains an idealistic construct in Serbia, if issues related to the political and socio-economic power of languages are not recognized and seriously considered".

### 3.1.2.3. Language and identity

Language may be important to a group at a symbolic level (Jaspal, 2009:18) and is strongly connected to one's ethnic identity. Moreover, as stated by Dołowy-Rybińska (2015:260), if language is separated from the cultural context it would not remain a community language and only functioning as such can its existence be assured.

According to Gábrity (2013:128), the linguistic identity is a self-expression - very often unconscious - in the social world using languages/language variants. Additionally, according
to Noels (2014:90), identity exploration might be associated with code-switching and mixing between languages.

Language is an important component of maintaining a separate ethnic identity, and no doubt it is true that language constitutes the distinctive designation of a separate ethnic identity (De Vos, 1995:23). Attempting to establish a cohesive national identity may be detrimental for minority groups' identity, since an important self-aspect, namely language, is often at stake. Research shows that affirmative policies towards minority groups should recognize that maintaining ethnic contact in various aspects of their lives can be positive and not to be discouraged.

De Vos (1995: 23) observed that there are many ways in which language fluency or lack of fluency in a second language is related to identity maintenance. Russo et al. (2017: 515), propose „that non-native accents can have a series of effects on non-native-accent speakers' work (job performance, job performance evaluation, task assignment) and career outcomes (career advancement, career satisfaction)".

### 3.1.2.4. Attitudes towards minorities and minority policies

De Vos defines an ethnic group as a "self-perceived group of people who hold in a common set of traditions not shared by the others with whom they are in contact" (De Vos, 1975:9).

Speaking of the attitudes towards minorities and minority policies, autochthonous Slovenian ethnic minority, which is a remnant of former Slavic groups that populated the entire south and east of today's Austria, may serve as an example. Namely, this community now lives in the southern Austrian provinces of Carinthia and Styria. Although this minority had its rights guaranteed by two international treaties - the Saint Germain Peace Treaty of 1919 and the Austrian State Treaty of 1955 - and European conventions, Austria has failed to fully implement them (Smejkalova, 2007).

Another example would be minorities in Serbia, i.e. former Yugoslavia. The constitution of Serbia from 1990 and the 1992 Yugoslav constitution curbed their rights. The language of the state was Serbian, and its use was obligatory under the pretext that the Serbian language became inferior and less used than the minority languages (Mirnics, 2001). As observed by Gábrity-Molnár (2011), after this shift towards the obligatory use of the majority language, it became risky to use the minority languages in the street or while travelling on public transport, because a significant portion of Serbians became latently or openly intolerant towards the national minorities.

### 3.1.2.5. Minority women

Advanced legislation in the XIX and early XX century Vojvodina allowed the emancipation of women, first through quality education and the right of inheritance (Stojaković, 2006). Women's associations and their activities in Vojvodina were very visible and gathered women of all nationalities. After World War II, with the establishment of the Women's Antifascist Front (Antifašistički Front Žena - AFŽ), women gained the equal right to work. AFŽ in their newspapers addressed the entire range of women from different ethnic groups, but the difference in a given political regime was not in the least stressed (Stojaković, 2006).

Unfortunately, the last decade of the twentieth century was not very beneficial for women's movements, women became 'invisible', especially those from minority communities in Vojvodina. This invisibility was the most pronounced during the 1990s in Yugoslavia, when the political climate revived the patriarchal 'regime'. At the beginning of the XXI Century women from minority communities were slowly becoming more 'visible' and recognized through the work of the civil sphere (Lendák-Kabók, 2016b). Although the data were scarce about ethnic minority women in higher education and research in Vojvodina, professor emeritus Svenka Savić worked on publications raising awareness about their status and the issues they faced (Savić, 2015). Savić conducted research with Serbian women about their attitudes towards minority women in Vojvodina. The results show that, although Serbian women have stereotypical view of women from other ethnic communities, they do not associate them with the political situations created by men in Europe or in the region during the 90 's e.g. German women or Croatian women). Savić (2002) theroized that through majority women there is a chance for dismantling stereotypes about women in Vojvodina and creating peaceful multiculturalism in the region. In her essay about Hungarian identity in Vojvodina, when mentioning women's identity, Bakos (2017:17) writes: "but if you are simply just a woman, as in approximately every other inhabitant in Vojvodina, speaking in Hungarian (as well), often there are other or for a matter of fact different rules that apply to you".

### 3.1.2.6. Women's role in maintaining ethnic communities

Concernig women's role in maintaining ethnic communities, Yuval-Davis (1996:17) argues that women reproduce symbolically their ethnic and national collectives as well as the workforce, their families, or the citizenry of their states. It is a fundamental dimension important both theoretically -- in analysing gender relations -- and politically, when considering women's reproductive rights. Yuval-Davis (1997: 196) adds that, apart from
having the task to symbolyze their nation collectively, women are expected to reproduce it culturally.

Korać asserts that male and female roles are defined on the basis of a patriarchal gender hierarchy, concluding that the important role that women have is biological reproduction of the members of collectives (Korać, 1996: 136). Kandiyoti argues that „women bear the burden of being 'mothers of the nation', as well as being those who reproduce the boundaries of ethnic/national groups, who transmit the culture and who are the privileged signifiers of national difference" (Kandiyoti, 1994: 377). Kandiyoti (1988) introduces the "patriarchal bargain", a situation in which women intentionally choose to accommodate and uphold patriarchal norms and gender roles (instead of trying to dismantle them!), while at the same time they work laboriously to succeed in the 'men's world'.

### 2.1.3 Hungarians in the Higher education system of Serbia

The problem of mother-tongue education among Hungarians in Vojvodina was studied for several decades, from the period of time when the scientific and political community realized that this is an issue which needs to be addressed in a scientific way. Empirical research and statistical analyses are mostly carried out by professionals in the framework of national or international projects (Gábrity - Molnár, 2012:1).

Most ethnic Hungarians live in the Autonomous Province of Vojvodina (APV). They are an indigenous ethnic minority, which lived in this geographic region even before the most recent migrations which happened during and after the Yugoslav crisis in the 1990s. This multiethnic and multi-cultural region was part of the Austro-Hungarian Monarchy before World War I. The latest demographic trends show a decrease in the number of Hungarians compared to the total population of the APV - in the 1950s roughly 500,000 Hungarians lived on the territory of the APV, while the latest census puts their numbers at around 250,000 (Statistical Office of the Republic of Serbia 2012).

Higher education in Hungarian is available in certain departments of the UNS. One such example is the Teacher Training Faculty in Hungarian Language in Subotica which opened in 2006. Partial Hungarian-language higher education is available at four faculties/departments:

- Faculty of Civil Engineering, Subotica;
- Faculty of Economics, Subotica;
- Department of Hungarian Language and Literature, at the Faculty of Humanities, Novi Sad; and
- One acting group at the Academy of Arts.

Hungarian-language study groups are organized at the Subotica Tech - College of Applied Sciences and the Preschool Teaching College, which are not members of the UNS. The joint higher education programs supported by Hungarian institutions in Subotica and Senta were not accredited in Serbia, therefore they were not an integratal element of the Serbian higher education system (Gábrity-Molnár, 2017: 32).

The faculty choices of the members of the Hungarian national community living on the territory of APV are widely discussed in the available literature (Gábrity-Molnár, 2009; Mirnics, 2001; Takács, 2013b; Szalma, 2009). Based on the research conducted by GábrityMolnár (2009) at the UNS, students from the Hungarian national community mostly opt for social sciences and humanities, followed by the natural sciences and mathematics, arts and medicine, while in the technical and technological areas they are under-represented. Apart from the lack of trainings available at UNS and the lack of ability to study in their mother tongue, additional factors affecting faculty choices of Hungarian students are professional interests and faculty proximity (Gábrity-Molnár, 2005).

The number of Hungarian students decreases in comparison to the total number of students at University of Novi Sad (UNS) (Gábrity-Molnár, 2009). Hungarian students constitute 6.7\% of the total student population at the UNS (Lendák-Kabók, 2014:140), which is not surprising, as 30\% of them are continuing their higher education in Hungary, where they can study in their mother tongue (Takács, 2013a:109) and obtain a degree recognized in the European Union. This multiple decade-long trend of ethnic minority students deciding to study in their nation states (i.e. their motherland) in ever rising numbers continues. Ethnic minority students who decide to continue their studies in Serbia, usually think, that a Serbian university/college degree will allow them to more easily build careers in Serbia. Their decision is influenced by the bonds tying them to family and friends as well (Lendák-Kabók, 2016c:55).

The language difficulty is surely one of the main reasons for such a trend. Filipović et al. (2007: 9) point out that teaching all classes in primary and secondary school in a minority language, with only a couple of hours a week of Serbian as the majority's language, has brought about a number of generations of imbalanced bilingual speakers characterized by very low levels of competence in Serbian, who are incapable of continuing their education at
the university level in Serbia, and/or finding satisfying jobs. Moreover, when Hungarian students enter the higher education system of Serbia without having a proper level of Serbian language proficiency, they first have to overcome the language difficulty, which requires a lot of time, effort and sacrifice (Lendák-Kabók, 2014:143). Consequently, they study the language, not the subject, which makes them less successful, having lower self-confidence and negatively affecting their motivation to excel (Lendák-Kabók, 2015:49). This lower selfesteem is partly caused by inter-ethnic conflicts they experienced in their childhood and partly because of their limited knowledge of the majority's language (i.e. Serbian) (Lendák-Kabók, 2014b:30). The language related difficulty is not as significant for students studying in science, technology, engineering and mathematics (STEM) fields, where students and professors interact through formulae and written exams (Lendák-Kabók, 2017:93). Additionally, having a degree in a STEM field allows graduates to find jobs more easily, and those job usually do not require perfect majority (Serbian) language skills (Lendák-Kabók, 2017:93).

### 2.1.4 Multiculturalism and gender in the past: the position of women in Yugoslavia

This section will present the status of women in Yugoslavia, a country which was made of seven different countries, with a wide range of different nationalities. In Yugoslavia, the communist era was determinative, so there is a need to present the past, in order to understand the present situation of the women who were born, grew up and entered academia during the communist era.

### 3.1.2.7. Women, work and class in Yugoslavia

As pointed out by Bracewell (1996:25), after World War II, what symbolized Yugoslav modernity and socialism were strong, emancipated women, whose equal rights were stipulated in the laws - namely, they had equal voting rights, as well as the right to political office, education and employment. However, despite all those rights expressed in legislation, women's position did not improve significantly, since they still primarily remained at home, and when they worked, their salaries were lower than men's. In socialist Yugoslavia, the family, work and political activity embodied women's contribution to the building of the ideology. Moreover, Sklevicky (1996:91) asserts that, in the 1950s women did not have common interests that were not mediated by the class, since some (civil feminists) had to fight to achieve the equal rights to work and enter the profession, whereas others found paid work outside their homes an unpleasant everyday necessity. Activities and campaigns aimed at integrating women into the workforce were numerous at the time. Among other reasons, this
was a necessity in a country devastated by the war and in need of reconstruction. Not highly developed technology, together with the ideological glorification of the "physical" thus unqualified work of low productivity, made women work in industries with the most important social priorities. As reported by Božinović (1996:189), at the Conference for the Social Activity of Women (1961), it was stated that the number of women in leadership or any other responsible positions was symbolic. This was due to, among other things, a low financial standard of a working family, traditional distribution of work according to gender within the family, the fact that personnel policies were directed by the party committees, prejudices, resistance towards changes, etc. Božinović adds that, despite the fact young women nowadays start from more convenient social positions, lower social engagement is noticed with them as well, and concludes that all prominent issues can be solved with the active participation of women themselves. Zaharijević, when arguing about women's position in the socialist Yugoslavia, points out how the socialist, self-managing, Yugoslav road to emancipation saw itself in manyways superior - in terms of being closer to full humanity - to its Western capitalist counterpart, as Yugoslavia had a more market oriented and 'open' form of socialism (Zaharijević, 2017:151).

### 3.1.2.8. Elite and Nationality in the Communist Era

Academia and work in academia has always been considered an elite occupation, therefore it is important to present how the elite was "made" or selected in the communist era. Intellectuals also had a greater chance to be selected for some decision-making positions.

Political activity was irrefutably an important factor when it came to the selection of candidates for elite, high-ranking positions. As reported by Miladinović (2003a:364), the membership in the Alliance of Communists, most commonly required and often presupposed, was a universal condition for the social promotion of the new members throughout the entire existence of the Socialist Federal Republic of Yugoslavia, together with political activity before the elections for the elite position, as well as the activities outside the working organizations (in various socio-political organizations).

Miladinovic further states that membership in the Alliance of Communists was the default criteria for entering the elite as well. Therefore, political activity was viewed as a homogenous activity. It was important to maintain excellent relations with those people who chose potential candidates for entering the elite. This was most easily done through direct engagement in the work of socio-political organizations which acted both on the principle of territory and of work. It can be generally concluded that the members of the elite found their
own ways in the broader choice of possible forms of socio-political activities, through which they constantly kept close contacts with those who were at hierarchically higher positions (Miladinović, 2003a: 368).

Nationalism was a very sensitive issue in the Yugoslav era. The Communist Party understood that in order to successfully run a country with such a diverse population, it was extremely important to respect the so-called "national key criterion". The choice of state officials, military officers and judges had to correspond to the national structure of the population (Miladinović, 2003b: 39). This "key" was applied for ethnic minorities as well, not just the most populous nations of the country, i.e. Serbs, Croatians, Slovenes, Bosnians, Macedonians and Montenegrans.

### 3.1.2.9. Status of women in Yugoslavia and after the breakup of the country

Pejanović clams that female emancipation, presupposes a prevalence of patriarchal civilization (Pejanović, 1984:11). The status of women in the former Socialist Federal Republic of Yugoslavia (SFRY) during the 50s was considerably different than the situation in the West. As reported by Vasiljević (2009:124), the country was at the peak of its socialist phase, whereas women were encouraged to study and be financially independent. At the same time, their traditional gender role of having to do the domestic chores and to care for their husbands and children remained.

Blagojević (2010: 187) argues that Yugoslavia with its developed welfare state, the high level of guarantees and protection of minority rights, the 'social ownership' project, industrial 'selfmanagement', balanced federal set up, strong involvement and leadership in the nonalignment movement, openness to the East and West, North and South, strong promotion of peace and security on the international level, and strong support of women's rights, locally and internationally, was in many ways 'more modern' than the restrictive position of the country at the semi-periphery could allow it to be.

Women were active in professions in which were necessary for the development of certain regions of Yugoslavia. Women entering those professions did not threaten, but confirmed the domination of the patriarchal system, since they entered the positions that men had left, or were concentrated on the lower (hierarchical) levels, which meant that the domination of men was not threatened (Blagojević Hjuson, 2015:217).

As stated by Korać (1996) after the breakup of Yugoslavia, women had to accept the maternal role as their primary role, while also having to serve the country in "difficult times". The last
years of SFRY saw the transformation of the socialist citizenship regime into one based around nation-building (Zaharijević, 2015: 96). In the meanwhile, the number of unemployed women was rising, because of an economic crisis and restructuring. Even before the (1990s) wars in former Yugoslavia, the number of women having a job was not higher than $40 \%$ throughout the country. Pajvančić - Cizelj and Hjuson (2018: 279) reflect on the position of women in socialism and state that in terms of post-socialist European countries, patriarchal ideology and power function at the deeper structural level have not been significantly altered in the period of socialism.

### 3.1.2.10. Women's movements in Yugoslavia

Sauer, Langzinger and Frysak (2006:15) argue that Yugoslavia implemented a "more specific" and open communism, more approacheable to and by the West. After the communist era in Yugoslavia was over, the negative effects of the transition affected women more than men, while unemployment and poverty among women increased and their participation in the political process dropped significantly. At the same time, women groups and NGOs were "solely preventing and remedying human rights violations and continuously worked for a culture of cooperation, solidarity, dialogue, and tolerance" (Cicarkic, 2006:234).

Blagojević listed a series of social movements' activities: establishment of political/anti-war groups, activities aimed at ending violence against women,various groups aimed at helping marginalized women (lesbians, refugees or the disabled), as well aseducational groups and women's studies centres at different Serbian universities (Blagojević, 1998).

### 3.1.2.11. Post-colonialism and Yugoslavia: a possible link?

To understand the link between post-colonialism and Yugoslavia, one must first introduce the theory of post-colonialism. Childs and Williams (1997: 21) explain that "post-colonialism as a historical period is best understood as a phase of imperialism, in turn best understood as the globalizing of capitalism, but that is not simply or everywhere reducible to these categories, therefore post-colonialism has an inescapable global dimension, but it does not mean that post-colonial theories are inevitably totalizing in an overweening effort to master and explain everything".

Kovačević argues that „certain Eastern European states are only begrudgingly discussed as postcolonial even in terms of its Soviet, Austro-Hungarian or Ottoman imperial legacies (or the legacy of German rule in Poland). Recently publication regard Eastern Europe as a colonial terrain of the Western tradition (Kovačević, 2008:2). Kovačević analyses the issue of
inequality between the East and the West, by stating that Western Europe has always been seen as enlightened, developed, and civilized in comparison to Eastern Europe and, as a result, it was always attempted "to intellectually master Eastern Europe through description and classification, fixing it into stereotypes of lamentable cultural, political, and economic backwardness" (Kovačević, 2008:2).

Furthermore, when talking about the relation of post-colonialism to feminism, Childs and Williams are highlighting that post-colonialism introduces racial and cultural dimensions into the analysis of feminism (Childs \& Williams, 1997:22). What is more, Spivak in her famous essay Can the Subaltern Speak? criticizes the postcolonial theory and expresses her concern toward the position of a 'third-world-woman'. She writes that "between patriarchy and imperialism subject - constitution and object - formation, the figure of the woman disappears, not into a violent shuttling which is the displaced figuration of the third-world - woman caught between tradition and modernization" (Spivak, 1988:102).

### 3.1.2.12. Hybridization vs. Acculturation in Vojvodina

Homi K. Bhabha, who is one of the most important figures in post-colonial studies, argues that "only when we understand that all cultural statements and systems are constructed in this contradictory and ambivalent space of enunciation, can we begin to understand why hierarchical claims to the inherent originality or "purity" of cultures are untenable, even before we resort to empirical historical instances that demonstrate their hybridity" (Bhabha, 2006:155).

Kraidy asserts that hybridity is an association of ideas, concepts and themes that at once reinforce and contradict each other. He suggests that it is an imperative to situate every analysis of hybridity in specific context where the conditions that shape hybridities are addressed (Kraidy, 2005: iv).

Ashcroft, Griffiths and Tiffin argue that "hybridity has frequently been used in post-colonial discourse to mean simply cross-cultural 'exchange'. This use of the term was widely criticized, since it usually implies negating and neglecting the imbalance and inequality of the power relations it references" (Ashcroft, Griffiths \&Tiffin, 2000:109).

Papastergiadis states that, in social context, where the political structures for mobilizing and integrating emancipatory projects were also fragmenting, hybridity was a form of succor to remind ourselves of our ‘multiple subjectivities’ (Papastergiadis, 1997: 257).

Mirča Maran, a Romanian researcher from Vojvodina states that the first step of assimilation is acculturation. He offers an example of the minority communities in this region, the members of which are gradually coming closer to a different social group's cultural, also being unconsciously acculturated physically, which refers to the download mode of thought, mentality, customs, habits and traditions of the majority people (Maran, 2013). Socio-ethnic assimilation is characteristic of multi-ethnic communities, and it is manifested through mixed marriages, education in a language different from one's mother tongue and others (Maran according to Spariosu, 1993).

Maran (2013) further argues that members of minority communities often feel that despite their (legal) equality with the majority, despite the possibility to use their (literary) language in schools, having the available press in their mother tongue and using it in public life, still feel a dose of inferiority, which is based on the idea of belonging to another nation. This inferiority can lead to eroded national identity and assimilation.

Šimonji-Černjak (2009) claims that the interference between the Slovak and Serbian language is in inverse proportion to the identification of the Slovak language and culture and with the knowledge of the Slovak language. Parents who are members of the Romanian minority in Vojvodina, enroll their children in Serbian language schools, under the pretext that it will be easier for their children to continue their education (high school and later university). PujaBadescu (2009) further explains that another prominent trend noticeable in the Romanian community in Serbia is that during the last few years more and more Romanian children enrolled in schools in Romania, where they are usually studying natural sciences.

To round off this discussion, Šarčević (2012) suggests that the regional identity in Vojvodina has its potential to bridge the differences of ethnic and national communities in Vojvodina, however very often it is not so appealing to Vojvodinians as their national or ethnic identity.

### 3.1.2.13. Othering and agency

The theory of otherness can be attributed to Gayatri Spivak, who uses the concept in a review of Derrida (Spivak, 1980) and from 1985 she starts using it systematically in her essay "The Rani of Sirmur" (Spivak, 1985). In the latter, Spivak analyses three dimensions of othering present in archive material of the British colonial power in India. The first dimension is societal power, making the subordinate aware of who holds the power, and hence about the powerful producing the other as subordinate. The second dimension is about constructing the other as pathological and morally inferior. The third dimension implies that knowledge and
technology is the property of the powerful empirical self, not the colonial other (Jensen, 2011: $65)$.

Jensen (2011: 65) shares Spivak's opinion, stating that the theory of identity formation inherent in the concept of othering assumes that subordinate people are assigned subject positions as others in discourse, whereby it is the centre that has the power to describe, and the other is constructed as inferior. Brons deepends the discussion, claiming that „different kinds of othering can be distinguished, and that the differences between them concern their logical structure and the construction of otherness", thereby making a distinction between „crude and sophisticated othering, which differ in form, but not in their conclusions "(Brons, 2015: 70).

Jensen points out that „othering is not a straightforward process of individuals or groups being interpellated to occupy specific subordinate subject positions, but on the contrary, agency is at play, and actors far from always accept becoming the other self. Othering can be capitalized upon or disidentified from" (Jensen, 2011:73). This attempt to carve out a third space which transcends majority and minority problematizes the binary thinking inherent in the concept of othering. That, however, does not mean that the concept of othering should be discarded. On the contrary, the concept seems well suited for grasping a specific type of space for agency. Its merits furthermore lie in its potential for understanding contemporary discourses in the light of history, its openness towards intersectionality, and its understanding of identity formation as a process (Jensen, 2011:74).

To understand Jensen's viewpoint, one should in the first place understand and explain agency, a concept defined by the author in question as „capacity to act within as well as up against social structures "(Jensen, 2011: 66).

Agency has a specified meaning in feminist theory as well. McNay (2002: 2) argues that ,,agency in feminist theory is often formulated as explanations of how gender identity is a durable, but not immutable phenomenon". McNay points out that the feminist work on gender identity is dominated by the thought of Foucault and Lacan, which exemplifies some of the major features of the negative paradigm of subjectification, concluding that, unfortunately, there have been few attempts to locate alternative theoretical sources beyond these two paradigms (McNay, 2000: 6).

### 2.1.5 Author's contribution

The status of minority communities is widely discussed in relevant literature. Migration is very common in the modern world, all over Europe there are newcomers who need to adjust. There are also indigenous minorities whose status is changing with the change of borders and political regimes, as well with migrations. In order to speak about ethnic communities in the Northen part of Serbia, we need to analyse the historical background and the use of certain theories (postcolonialism) in order to grasp the current situation of ethnic minorities with a special focus on ethnic minority women. The Hungarian minority in Vojvodina has its historical roots in this geographic region, i.e. it is not a community formed from people who arrived during recent migrations, therefore their experiences and problems are unique. In any minority - majority relation there might be a gender bias as well, which can be more easily identified if an intersectional analysis is applied.

Although there were several studies about different effects of ethnic minority and majority language skills, they did not specifically focus on how those skills affect career choices, nor did they investigate the interplay of gender, ethnicity-language and career choices/prospects. This research investigates this topic in detail, thereby raising both researchers' and policy makers' awareness. The analysis will be followed up by policy recommendations, which if successfully applied, would allow ethnic minorities to avoid discrimination in the Serbian higher education system. Consequently, those measures might slow down the brain drain faced by the ethnic minority communities in Vojvodina.

We will also assess the interplay between gender, language skills and career choices in the STEM and SSH fields, arguing that ethnic minority members can more easily succeed in STEM even without perfect knowledge of the majority language. The same level of success is questionable in SSH for individuals without true bilingualism. We will analyse the connection(s) between the career choices of ethnic minority women in Vojvodina and their role as guardians of their (minority) communities. We will present situations in which ethnicity- and language-based 'otherness' can be turned into an advantage.

### 2.2 GENDER IN ACADEMIA

This section will discuss how the notion of gender is intertwined with the relevant aspects of academia. We 'paint' a broader picture of the position of women at institutions of higher education in Europe and in the region of interest for this research. We will continue with a review of discrimination and gender bias, as well as the effects of affirmative actions for
minority students and women in leadership positons. The second part of this section will discuss the potential tensions and advantages in academia shape academic performance and excellence. These topics are: neoliberalism, luck as an influential factor and work-life balance in academia.

### 3.2.1. The position of women in the region and in the EU

Blagojević argues that most female scientists in this geographic area of Eastern and Southeastern Europe are still not aware of the latest efforts in the gender equality domain (i.e "gender sensitized") and could therefore have inadequate, even distorted perceptions of the real situation. It is often much easier for them to speak about general bad conditions in which scientific institutions find themselves during the transition, than to have a gender sensitive understanding of their own marginalization and exclusion. There are important psychological barriers and discourse taboos in the articulation of these problems (Blagojević, 2009:110).

Blagojević claims that due to horizontal segregation, which is expressed in the feminization of some sciences and much smaller representation of women in other sciences (such as, for example, computer science), it could be assumed that different sciences are "open" to women to different extents, therefore if women build careers in those sciences which are "more open", they generally face fewer obstacles than in the opposite case (Blagojević, 2009:111), Pető $(2006: 1014)$ adds that, excellence, which is a key aspect of current EU science policy cannot mean only "male" excellence. She further states that effectiveness is another fundamental principle of EU science policy and concludes that no economy can afford the luxury of not maximizing the efficient use all its resources, women included. She concludes that as long as science policy-makers, most of whom are men, look at women as threats, we cannot count on big changes.

### 3.2.2. ENWISE report

The European Commision initiated the Enlarge Women in Science to East (ENWISE) report in order to asses the conditions and status of women scientists in the Central and Eastern European countries and the Baltic States (ENWISEEN Report, 2004:6). The report contains key recommendations for improving the status of women scientists in the ENWISE countries. The Enwise Expert Group consisted of senior women scientists from different disciplines, representing academies of sciences, universities, research institutes and administration, as well as business (ENWISE Report, 2004:6). The report argues that during pre-communist era, the position of women in these countries progressed in a similar manner as the position of
women in Western countries, but the process was faster due to certain political events, which led to the establishment of women's suffrage rights, their representation in public administration and the co-education of children prior to that in Western Europe (ENWISE Report, 2004:6). The report acknowledges the legacy of the communist gender policy, which emphasised the importance equal access to education and led to the emergence of a considerable proportion of highly-qualified women active in all public spheres and notably in science as well (ENWISE Report, 2004:6). Even though, women constituted the majority of teaching staff (54\%), they were concentrated in lower academic positions and men were three times likely to reach senior academic positions, than women (ENWISE Report, 2004:7).

Hughson argues that in the ENWISE report, it is clearly shown that the position of women in Eastern Europe in any case is not "behind" the position of women in Western Europe, but that it is quite the opposite - in many ways they even led the way, e.g. when we consider the voting rights or the entry of women into science. Also, the "opening" of hard sciences for women in the East preceded the process in the West (Hughson, 2015). "The Report acknowledges the legacy of the communist gender policy", and also emphasizes the importance of education, which made possible for a considerable number of highly-qualified women to take an active role in all public spheres, including science (ENWISE Report, 2004: 6). Moreover, the Report speaks of the transition period, which fundamentally changed the research system in the ENWISE countries, and which was characterized by decreasing the funding allocated to science, etc. which all had a more negative effect on female than male scientists (ENWISE, 2004: 7).

### 3.2.3. Discrimination in academia

Discrimination is one of the reasons why women have fewer publications and are underrepresented in positions of full professors (Mercer, 2013:126). Cotterill and Letherby (2005: 112) provide possible explanations for this situation, by writing that women at such positions need to be both professional and feminine and that they carry the double burden - of work at home and at work, which causes and reproduces gender privilege and subordinate status. Shahtalebi et al. (2011: 3645) are of the same opinion, claiming that the number of female researchers in high positions is limited, as women who intend to reach those positions must efficiently manage several key factors: balance, family support and friendship with colleagues, co-operation and management.

Because of the abovementined reasons, Mercer (2013:132) concludes that women are aware of and prepared for the high level of rejection in the academic community in the social
sciences. The statistics show that although more and more women and men qualify for professorships, considerably more women compared to men "disappear" while "climbing" the career ladder, which eventually results in men being over-represented in top positions (Niegel, 2014:54).

Speaking of women in science, Gordić Petković asserts that female heritage, as well as the female experience and female influence, harder becomes part of history, faces a greater difficulty when trying to find a place in it. Still, the flow of the female line in science, art and thinking is more characterized by replacement, neglect or absence, thus it cannot be said that women's experience is truly contextualized and integrated, neither into knowledge and research, nor in other insights and contents that make science and opinions (Gordić Petković, 2017:9).

### 3.2.4. Gender bias in the academic society

Gender equality in higher education was broadly understood in two contrasting streams. The first is 'sameness' in gaining access to the same levels of education or professional qualifications or earnings as men. The second is 'difference' in equally valueing perspectives or forms of practice associated with women, for example the establishment of women's studies as a field of enquiry, or the development of feminist approaches to teaching that highlight the social situatedness between learners and teachers (Unterhalter, 2006: 621).

Blagojević Hjuson claims that the number of women working in institutions of higher education is rising (Blagojević Hjuson, 2015:214). However, the higher the level was, the lower was the number of women, i.e. there were more teaching assistants, for example, than professors. Also, the more developed the region was, the higher was the number of women, and vice versa (Blagojevć Hjuson, 2015: 215). The predominant causes of this situation could be the degradation of the earlier prestigious status of holding a position in a higher education or research institution

Women usually pursue a PhD degree as a continuation of their education and self-education. Men look at a PhD as a necessary step in any successful academic career. Women are more sensitive to nepotism while building their academic careers compard to Eastern European men (Lendák-Kabók \& Mignot-Gérard, 2018:20).

### 3.2.5. Affirmative action for minority students

Dickson analysed how ending affirmative action in public colleges in Texas affected the percent of minority high school graduates applying to college. It was found that the end of
affirmative action significantly lowered the percent of Hispanic students (by 1.6 percentage points) and significantly lowered the percent of black students applying for college (by 2.1 percentage points). The end of affirmative action in public colleges in Texas did not significantly affect the percent of white students. The Texas State Legislature passed a percent plan that guarantees students who graduate in the top ten percent of their high school class admission to any public college in Texas. The percent of minority students applying to college increased significantly when the percent plan was accompanied by changes in financial aid (Dickson, 2006). Taken together, the evidence suggests that race, socioeconomic status and gender continue to pose substantial barriers to college attendance and achievement, and that race - or ethnicity-based quotas help promote equity to some extent. It may be necessary to develop programs to improve the quality of public primary and secondary schooling, so that a wider range of individuals across racial groups and socioeconomic strata are well-positioned for success in college and in the labor market (Francis \& Tanuuri-Pianto, 2012).

### 3.2.6. Women in leadership positions in academia

Women are under-represented in top scientific and academic positions: only $18 \%$ of full professors in Europe are women; 13\% of heads of higher education institutions and $22 \%$ of board members in research decision-making (Structural change in research institutions: Enhancing excellence, gender equality and efficiency in research and innovation, 2012). The same report claims that low numbers of women in decision-making positions throughout the science and technology system is a waste of talent that European economies cannot afford Benschop and Brouns argue that the continuous poor representation of women in the highest ranks and the numerical dominance of men in the academic professions stand out as warnings that something is the matter with gender and academia (Benschop \& Brouns, 2003:195). There is a constant debate about whether women would like to reach decision-making positions, and what does it take to posess power. There is no question about if someone who is a leader, must be invariably someone who possesses power. If one wants to preserve such a status, one needs to keep complying with the followers' expectations. In order to increase one's power, one should empower his/her colleagues, thereby helping them to develop professionally, which results in them being more loyal to the leader. The strategies that could be employed for such a purpose are, for example, fostering self-awareness, self-belief, awarding the colleagues with positive feedback, making them visible in a group, nurturing a collegial environment, etc. In the end, one can conclude that the extent of power depends both on the leaders themselves and their followers (Middlehurst, 1997).

Some women do not see themselves as leaders because they cannot recognize in themselves the values that are necessary for such a position. Others strive to reach leadership positions and for that purpose start adopting a leaders' behavior patterns (Madden, 2002). A good leader is someone who knows how to listen, to motivate others, to encourage them to take initiative. These traits are characteristic of men, i.e. female leaders resemble men in terms of their behavior, strategies that they employ, motives, etc. They usually do not have visible peers of the same gender and think of themselves as outsiders in the upper levels of the organization (Morrison, et al., 1987). The six behavior strategies that are typical of women are that they are role models, teachers, they stimulate questions, encourage openness, empower and restructure (Aburdene \& Naisbitt, 1992). They are caring, sensitive, sympathetic, which could be advantageous for some aspects of leadership, however, women still seem to lag behind their male counterparts when it comes to leadership positions in higher education (Porat, 1991). When it comes to women from ethnic minority groups, Lendák-Kabók argues that by adopting an intersectional analysis ethnic minority woman are distancing themselves from the political side of the decision-making positions, using this as a strategy to explain why for ethnic minority women there is no place in decision-making positions within academia (Lendák-Kabók, 2018a:344).

In the process of reaching a leadership position, the roles of support groups, as well as of individual mentors are of great importance for women. Their task is to encourage and support women who want to get an upper-level administrative position, which is beneficial in both directions - for the women who need encouragement, but also for those who provide it, since making others succeed is their own success too. The situations they have experienced, decisions they have made and pieces of advice for professional growth that the female administrators share are helpful and serve as guidance for the younger or less experienced ones (Cox, 2008: 7).

### 3.2.7. Neoliberalism in academia

Neoliberal market ideology creeped into academia, pressuring academics and reducing academic freedom and authonomy. Žarkov writes about how students became clients and consumers, teachers and researchers are now 'academic/educational workers' or 'service providers'. The results of the teaching, research and engagements - the students committed to the field of study as much as to the fairer world; the solidarities with networks and communities within which we are active; and the diverse publications and communications by which we present our research results to peers and the public - become 'verifiable outputs'
and 'deliverables', valuable in as much as they are quantifiable and economically profitable (Žarkov, 2015:270). When writing about neoliberalism in academia, Cannizzio suggests that the 'schism' between academic and managerial values results in the subjective experience of depoliticised evaluations of academic conduct, as academic work comes to be defined by managerial expertise and its utility to organisational objectives through performance management (Cannizzio, 2018: 89).

### 3.2.8. Luck as an influential factor in academia?

Luck can be brought into conection with academia as one of the factors which contributes to academic success. André $(2006: 1461)$ suggests in her study that there are four principal components: luck, good fortune, bad fortune and opportunity. According to her results, these four confirmed previous studies concerning relations between self-esteem, anxiety and achievement motivation and irritations beliefs in chance. Thompson and Prendergast suggest that no matter whether people are believers or disbelivers, when it comes to luck they both make the same everyday semantic differentiation between luck (a) as a deterministic phenomenon and (b) a synonym of fortunateness (Thompson \& Prendergast, 2013: 506). Gromet et al. (2015:45) for the first time empirically proved ,that the perceived relationship between luck and success is a function of people's political ideologies". These authors first concluded that conservatives endorsed the association between luck and success to a lesser extent than liberals did, adding that luck's polarizing effect is due to its emphasis on uncontrollability and instablity. External attributions for success that do not emphasize chance, such as help from others, do not produce the same level of polarization.

### 3.2.9. Work - life balance in academia

Finding optimal work-life balance is an open issue which is yet to be solved in academia. Dubois - Shaik and Fusulier (2017:100) argue that the university "vehicles a 'gendered order' in its structures, its principle of organization, its customs and ways of doing things; in short in the practice of scientific work". They explain how the old structure of the university rested on the masculine figure, who is completely immersed in his work, not having to do anything in the household, because "an invisible person" does all the domestic duties for him. These authors add that women need to build this masculine figure, and this is connected to the fact that women tend to have fewer children (Dubois - Shaik \& Fusulier, 2017:100). Benschop and Brouns (2003: 199) argue that "output is all that matters in academia, however the input needed to get that output is not considered, at the expense of part-timers and people with more (care) responsibilities in life", implying that time, and not quality, accounts for a large part of
the appreciation. When it comes to childcare, Perista and Perista claim that during the first years, when children are fully dependent on adult care, it is the woman who usually gives up science to raise the children, adding that even if she keeps in touch with academia throughout that time, her commitment to work cannot be significant (Perista \& Perista, 2014:7). The same authors reflect on the carework women and men do and conclude that men still have the choice to care or not to care, to 'help' or not to 'help' women in their care work, which is undoubtedly unpaid, while their main responsibility is their paid work (Perista \& Perista, 2014:15).

Leonard and Malina (1994:30) argue how "being a mother in academic life is a predominantly silent experience", since the struggles that a mother needs to overcome, compromises she has to make and solutions she needs to find are not recognized by society. These authors add that it is expected from men to display their fertility and sexual competence at the workplace, while women are faced with taboos, e.g. a pregnant woman upsets the sexual status quo in the organization. Mostly flexible working-hours in higher education and research are considered an advantage favoring women, as they can care for their children more easily (Jašarević, 2012 :183).

### 3.2.10. Author's contribution

There are still substantial differences when it comes to the equal representation of men and women in higher education and research. Although the latest studies show that the majority of academic workers are women, they are under-represented in the highest, leadership positions. The status of ethnic minority women in academia was the subject of numerous studies worldwide, but it was not specifically studied in the Vojvodinian context, for the most numerous Hungarian, Slovak and Romanian ethnic minorities. This research will fill that gap and discuss the status of Hungarian, Slovak and Romanian women in the Serbian higher education system. We will identify and analyse the invisible, unconcienscios and conciencious biases towards ethnic minority women in the Serbian higher education system.

Additionally, we will perform a comparative analysis of women building their careers during the communist era in Yugoslavia and the present-day Serbia. We will analyse how does the intersection of gender, ethnicity and Serbian language skills impact the life paths of our respondents?

### 2.3 Women in Science Technology Engineering and Mathematics (STEM)

This section the relevant literature on gender in science and gender in knowledge production. We will specifically focus on the related works about women in the science, technology, engineering ahd mathematics (STEM) fields.

### 3.2.11. Gendered knowledge production

According to Cavarghan, the term gender knowledge, in the broadest sense, refers to how gender relations are understood, and what the criteria for such understanding are. If a gender knowledge analysis is applied to policy and governance, researchers can better understand the barriers to successful equality policies, as well as the ways in which gender inequality is maintained (Cavaghan, 2010:19). If the aforementioned gender, or any other inequality, is cultivated in an institution, it might change the nature of the knowledge produced as it can cause over-representation of major demographic groups, as is the case in academia. Whoever produces and owns the knowledge has the most to say about which topics are researched, how they are researched and whom the research impacts. For that reason, ensuring that researchers are diverse, and minorities are adequately represented is a strong pathway to ensuring research benefits society in its entirety (Tsui, 2015).

Blagojević argues that in the Semiperiphery (i.e. the region we are living in) the knowledge project should constitute itself as an interactive knowledge matrix instead of focusing on 'Theory' production. According to Blagojević, gender knowledge production should become a grid which would allow endless communication of ideas, concepts, paradigms, facts and figures, heavily relying on and reaffirming the value of contextual knowledges which enables better understanding of the global interconnectedness and interdependence between the core and the semiperiphery. It could encourage the empowerment of the weaker, transnationalities on equal terms, and consequently, social inclusion on a global scale (Blagojević, 2010: 195).

### 3.2.12. Research performance and gender-based discrimination

According to the Report of the EU Commisions Expert Group on Structural Change, research performance is limited by the perpetuation of direct and indirect discrimination based on gender. This might be regarded as a serious drawback of Europe, given the key roles of research and innovation. Smart, sustainable and inclusive growth can be achieved in Europe if the EU will make full use of its human capital - involving both men and women (Structural
change in research institutions: Enhancing excellence, gender equality and efficiency in research and innovation, 2012:6).

In recent years there is a notable progress towards integration of gender into science. Various project stimulated the involvement of women in science and technology. One such project was the Gender Science, Technology and Environment (genderSTE) Cooperation in Science and Technology (COST) action, with an aim to gather and stimulate female scientists in the abovementioned research areas. Additionally, the project team intended to develop incentives and clear trajectories for integration of gender in science, in order to stimulate the creation of gender-responsible science and technology, and by doing it, to enhance the lives of both men and women around the globe (genderSTE, 2013). To help develop the gender dimension in EU research, the European Commission assembled an "Innovation through Gender" expert group, with the dual goals: to provide scientists and engineers with practical methods for sex and gender analysis, and to develop case studies as concrete illustrations of how sex and gender analysis lead to new ideas and excellence in research (Gendered Innovation, 2013:37).

### 3.2.13. Gender and science

It is necessary for the women to be included at all stages of the research and innovation process, if research institutions and industry want to create valuable and sustainable research results and technologies for people (the market) (genderSTE, 2013). In brief, the three most important benefits of gendered innovations are that they:
(1) add value to research and engineering by ensuring excellence and quality in outcomes and enhancing sustainability;
(2) add value to society by making research more responsive to social needs, and, finally,
(3) add value to business by developing new ideas, patents, and technology (Gendered Innovations, 2013:8).

In order to successfully integrate the gender dimension into science there is a need of steering women towards the science, technology, engineering and mathematics (STEM) fields of studies. The urgency of incorporating the female perspective in these fields is without question one of the most important tasks for further development. When studying students with identical abilities, women are still between $50 \%$ and $70 \%$ less likely than men to complete a degree in the STEM subjects (Breda \& Ly, 2012:22). Research on the reasons for women's underrepresentation in the STEM fields of studies mainly indicates that women are discouraged from majoring in the STEM fields, because of gender stereotypes in the family
and school, eventually resulting in segregation in higher education (Gender Differences in Educational Outcomes: Study on the Measures Taken and the Current Situation in Europe, 2010). Apart from the above-mentioned reasons, gender inequalities are also caused by the failure to recognize women knowledge and knowhow. There is a long tradition of women's knowledge and technical expertise as agriculturalists, gardeners, animal-breeders, forest users, managers of their community water need and resources and technological innovators and agents of change (Gender and Science, n.d). The key role given to research and innovation in striving towards a smart, sustainable and inclusive growth in Europe means that the EU should make full use of its human capital (Structural change in research institutions: Enhancing excellence, gender equality and efficiency in research and innovation, 2012).

Lendák-Kabók and Pető argue that gender diversity in research teams can lead to unforeseen breakthroughs as having both female and male experts can provide different approaches and ideas. More significant women involvement in all research domains could help in prioritizing different research issues and in solving existing research questions in novel ways. Innovative technologies are equally used by men and women and they need to be responsive to the needs of individuals of both genders (Lendák-Kabók \& Pető, 2017).

A recent study by Lendák-Kabók and Popov showed that male high school graduates think that teaching as a profession is reserved for women. When asked about the possible benefits of having more women in the STEM fields, male respondents answered that there would be no benefit. Grils responded that such a change might lead to scientific and professional innovations, as well as give women better chances on the job market (Lendák-Kabók \& Popov, 2019).

### 3.2.14. Women's under-representation

In 2010, in Europe, female PhD graduates equalled or outnumbered men in all broad fields of study, except for science, mathematics and computing (women's share was $40 \%$ ), as well as engineering, manufacturing and construction (26\%), the two fields with the highest overall number of PhD graduates (She Figures Gender in Research and Innovation, 2013). In Switzerland, a country which is not an EU member, but stands for one of the economically strongest countries in Europe " $36.9 \%$ of doctorates are awarded to women" (Fassa, 2015:42). Women's underrepresentation can be due to the "masculinist career patterns and management practices, resisting those discourses of performativity merely creates another form of ordering in the gendered organization, in ways that strengthen the dominant masculinist discourses" (Thomas \& Davis, 2002:392). Pető argues that there are fewer women in professions with
great social prestige and that STEM fields are bringing more social prestige, than the predominantly female educational sciences are (Pető, 2018:552).

Dubois - Shaik and Fusulier explore the issue of women under-representation in STEM deeper and argue that the "gender regime that distributes socially useful activities unequally between men and women". They explain that women were always portrayed as the heads of the family (pater familias), sentimental beings oriented towards serving others and towards unpaid work, whereas men have been primarily seen in the light of the productive sphere and paid work. "These forms of stereotypes which associate rationality to the masculine and emotivity to the feminine have contributed in construing 'science' as a masculine activity" (Dubois - Shaik \& Fusulier, 2017:100).

The EU Commission proposes measures to overcome the identified gender stereotypes and gender biases in academia. Gender-aware management of universities and research organizations would be an efficient solution of the above identified issues, as it would have a positive impact on policies and practices in the recruitment, promotion and retention of both women and men, thus ultimately benefiting the very quality of research (Structural change in research institutions: Enhancing excellence, gender equality and efficiency in research and innovation, 2012). Fassa argues in her more recent study on Swiss examples, that the translation of several demands of the feminist second-wave into policies set up to promote equality between sexes revealed and proved that academia is still a gendered realm (Fassa, 2015:48).

### 3.2.15. Women in STEM

The 'leaky piplenine' is a metaphor often used when talking about women in STEM. Blickenstaff introduced and explained the metaphor, defining it as "frequently used to describe the fact that women are under-represented in science, technology, engineering and mathematics (STEM) careers" (Blickenstaff, 2005: 369). As he furthermore argues, the 'leaky pipeline' leaks students in various stages of their education - students often change their minds when enrolling universities, others change their minds in later stages, some leave the pipeline after graduating in a STEM field. It is important to note, that according to Blickenstaff, women do leak out more than men (Blickenstaff, 2005).

Schiebinger argues that since STEM are predominantly male fields, in which not only are most students male, but also workplaces and research conducted in these fields are influenced by gender (Schiebinger, 2011). According to Case \& Richley (2013: 344), the leaky pipeline
is based upon a linear male version of scientific success, where climbing the career ladder can be done only one way or not done at all, with no opportunity for exiting and reentry. Blagojević Hughson argues that, given the existing horizontal segregation, expressed in the feminization of some sciences and much smaller representation of women in other sciences, it could be assumed that different sciences are open to women to different extents. Moreover, if women build careers in those sciences which are more open, they generally face fewer obstacles than in the opposite case (Blagojević Hughson 2009: 111). When trying to solve the problem of women under-representation in STEM studies, Alper argues that it is not biology, but society which steers men and women towards different choices, because "almost from birth, society sends girls and boys different messages about their abilities and expectations" (Alper, 1993: 410). Lehr argues that although many attempts address the 'women in science problem', there are no detailed recommendations for reducing ongoing inequalities (Lehr, 2001:504).

Gender stereotypes learnt through education lead to gender segregation in the job market, more specifically technical and computer sciences become reserved for males through education (Lendák-Kabók, 2015b:165). Lendák-Kabók adds that most ethnic minority girls in Vojvodina do not opt for technical fields of study after high school graduation. So-called 'blockers' are behind this trend, which (usually) stem from their family and the very traditional society they belong to, and which in turn steer most girls towards pedagogy and boys towards technical fields of study (Lendák-Kabók, 2015c). A possible solution for clearing the obstacles faced by Hungarian women in the Serbian higher education system would be "the introduction of university quotas for women enrolling at the University of Novi Sad, especially at faculties in the STEM fields. Such quotas would be beneficial as they would steer women towards STEM where they are under-represented, and which provide more job opportunities after graduation" (Lendák-Kabók, 2014b:30).

### 3.2.16. Author's contribution

Policy makers are aware of the still open issue of women under-representation in STEM. EU policies were changed with the ultimate goal of steering (more) women towards STEM. In that context, this study is novel in its focus on attitudes towards STEM in the ethnic minorities living in Vojvodina, Serbia. We will identify the different gender stereotypes which are common among ethnic minority high school graduates and which steer them towards genderstereotypical career paths. We will also assess the intersection of gender and ethnicity in the context of STEM. More specifically we will analyse whether, while studying in the Serbian
higher education system, ethnic minority students face difficulties and discrimination in STEM or social sciences and humanities (SSH) fields.

We will conclude our analysis with a set of policy recommendations which could allow ethnic minority high school graduates to make more informed decisions when choosing the field in which they continue their studies.

## 3 LEGAL FRAMEWORK

The goal of this chapter is to present an overview of the most important elements of European and Serbian legal and strategic frameworks governing the rights of women, gender equality, ethnic minorities and education in general. We will present both the government and alternative reports about the position of women and ethnic minorities where available. These reports allow the assessment of the differences between the planned situation governed by the legal framework and strategies, and the actual status of women and ethnic minorities. This review will show that Serbia has an advantageus legal framework when it comes to the abovementioned social categories. However, certain inequalities remain.

One must keep in mind that the legal and strategic framework is the product of the human justice and righteousness. Righteousness is based on the respect of each person in achieving a dignified life for all, respecting the freedoms and rights of people, the equal treatment of all, preventing any form of discrimination and privilege, eliminating any form of exploitation of a person by another person (Jašarević, 2010: 57).

### 3.1 Women rights

The introduction and analysis of the following documents are needed to describe the overall position of women in the geopolitical region of Vojvodina, the multi-ethnic Northern province of Serbia.

### 3.1.1 Gender equality in the EU and in Serbia

The primary objective of this sectionis to overview the EU policies on gender equality. The secondary objective is to define and discuss the three models of gender equality in the EU: (1) equal treatment, (2) positive action/discrimination and (3) gender mainstreaming. The latter, third concept is a gender equality norm and an EU transformative strategy.

### 3.1.1.1 The EU Treaties

The European Union was set up with the aim of ending the frequent wars among the neighbouring countries and as a platform to build a strong alliance, both economic and political, between France and Germany after the WWII. Since then, it aspires to ensure the freedom, justice and security for its citizens, as well as to promote social and economic progress. There are five major norms which have been developed by the means of numerous declarations, treaties, policies, criteria and conditions, and those are: peace, liberty,
democracy, rule of law and respect of human rights (Manners, 2002). There are four minor norms as well: social solidarity, anti-discrimination, sustainable development and good governance (Manners, 2002; van Eerdewijk \& Roggeband, 2014).

In the light of the above-mentioned core ideals, equality between men and women comes forth as one of the EU's basic values (Vida, 2017). The EU regards itself as the main exporter of gender equality norms through legislation and practice (Woodward \& van der Vleuten, 2014). The EU identifies its norms through treaties, which export both hard and soft norms. Hard norms include treaties, regulations, etc. which represent formal standards in Europe and globally, whereas soft norms are not legally binding.

Many scholars question the human rights-based motives behind gender equality, by pointing out its economic importance and consequences. As brought up by Elomäki, "the gender equality policy of the EU has always been embedded in the logic of the market" (Elomäki, 2015: 290).

The Treaty of Rome comes forth as a treaty in which gender equality is framed as a foundational norm, with the principle of equal work between men and women (Manners, 2008). Since its main objectives were market-oriented, it can be concluded that the main targets of this treaty were economic. While the Treaty of Amsterdam "enhances the systematic values and norms in the system" (Laffan, 2001: 724), the Treaty of Lisbon further strengthens the equality rights, since the Charter of Fundamental Rights of the EU became legally binding at this point. What proceeds from the analysis of the major documents is the conclusion that the gender equality policy is oriented more towards the economic goals of the EU rather than towards the goals based on the human rights, since most rights were closely connected to employment priorities, bringing to the forefront women's employment rates (Elomäki, 2015). As pointed out by Vida, the interpretation of gender equality has been challenged, since women are individuals able to contribute to the labour market and economic prosperity (Vida, 2017).

Vida questions how the EU documents are implemented by the Council of Europe and European Commission, stating that apart from different treaties, there are also many more declarations and statements created within the EU institutions, such as EC's annual reports, various action plans, roadmaps, etc. which also refer to the gender equality, but which are in close connection with the economic interests of the EU, as well (Vida, 2017). She mentions the 1997 Annual Report of the EC on equal opportunities between men and women, where gender is defined as crucial for "economic growth, social development and respect for human
rights" (True, 2009: 126), as well as the 2006 Roadmap for gender equality in which gender is defined as a human right which contributes to reducing poverty (EC, 2006). "Gender equality is considered and accepted only in those cases when it contributes to economic growth" (Vida, 2017: 16).

In conclusion, the detailed analysis of the above-mentioned documents sheds light on how gender equality becomes replaced by political goals of the EU, i.e. how gender equality is not seen as a human right that is important for itself but is rather seen as such when it represents a tool for improving the economy and prosperity of the EU. Since the EU pushes its economic interests, rather than implements human rights, one of them being gender equality, the discussion could be rounded off by stating that the EU and EC fail to fulfil their normative power (Vida, 2017).

### 3.1.1.2 Equal treatment, positive action and gender mainstreaming

Continuing the discussion on gender equality in the EU, there are three different approaches to equal opportunities: equal treatment, positive action and politics of difference that will be further analysed.

Namely, equal treatment is ensured by the Treaty of Rome, but it alone is considered passive, since it focuses more on ensuring equal rights between genders rather than on the aftermath of having those rights (Rees, 1998). Due to the shortcomings of the law on equal treatment, there were various positive action measures, with the aim of achieving a better understanding of the term equality, but they had limited success. 'Equality' is still referred to the difference based on the biological difference (Pető \& Manners, 2006). These positive action/discrimination measures did move the focus to the outcomes, making women better represented and more visible, but they did not consider "institutional organisation and decision-making power relations" (Rees, 1998: 39-40).

Finally, gender mainstreaming is devised as a new way of achieving gender equality. What makes it different from the previous two approaches is the fact that it is based on politics of difference (Rees, 1998). There is no precise definition of this concept, but it is generally seen as a transformative tool, able to infiltrate all layers of an institution, its culture, policies, projects, with the aim of ensuring equal opportunities for both genders. This is achieved by broadening the fields in which gender difference is relevant, not just by speaking about the deprived situation in which women find themselves and practising gender equality in all areas (Walby, 2005). Having these transformative powers of gender mainstreaming in mind, it can
be concluded that this approach represents a policy tool for social change that can be used with any kind of inequality, in any organisation (Vida, 2017).

### 3.1.1.3 Instrumentalising gender mainstreaming in the EU

Gender mainstreaming was developed in 1995 at the Fourth United Nations World Conference on Women in Beijing. It was only after Beijing that gender mainstreaming became a formal EU strategy (Woodward \& van der Vleuten, 2014). This leads to the conclusion that the EU was not the first to export the strategy, but the UN, making it a global norm, which resulted in conflicting patterns of gender mainstreaming norm production, which will be further analysed (Vida, 2017).

Since the Beijing Conference, gender mainstreaming became the foundation of the EU's gender policy. In 1996 the EC adopted a communication on gender mainstreaming, defining it as a mechanism "mobilising all general policies and measures specifically for the purpose of achieving equality and openly taking into account at the planning stage their possible effects on the respective situations of men and women" (EC, 2000: 5). The strategy became more extensive since 1997, when the Treaty of Amsterdam was signed. In this Treaty gender mainstreaming was planned to become a 'hard incentive'. However, Member States which did not implement this policy were never financially punished (Woodward \& van der Vleuten, 2014).

It is evident that the EU failed to export gender mainstreaming through its normative power. The EC also did not fulfil its goal, since its strivings to implement this strategy pertained to the economy and not to social justice and gender equality, as they were supposed to (Pollack \& Hafner-Burton, 2000). Bacchi and Eveline state that both within the EC and western democracies, dominant forms of gender mainstreaming were created to be in accordance with neoliberal agendas, the reasons for which stem from the participation changes in the process of gender mainstreaming implementation (Bacchi \& Eveline, 2010). In the beginning, feminist movements took part in devising the norms, but as the strategy started to spread around the world, international institutions started to oversee the process, taking the place of the movements (Elomäki, 2015). As a result, ambiguous agendas on gender mainstreaming in the EU were introduced, which paved the way for other interests to be catered for (such as economic ones), rather than the equality ones.

According to the Council of Europe, gender mainstreaming was defined more concretely and precisely, making it "incorporated in all policies, at all levels and all stages" (CoE, 1998: 15).

The Women's Charter (2010) aimed at including gender equality in Europe's 2020 Strategy. The Strategy for equality between women and men 2010-1015 is important since it strives to establish a coordinated action plan in all EU policy fields. It is still bending towards economic growth, whereas in the Europe 2020 Strategy, there was only the shallow mentioning of the concept of gender mainstreaming (Smith \& Villa, 2010).

The EU adopted the simplified and narrowed frame of gender equality norms, because of misusing gender equality to fulfil some of its economic goals. Gender mainstreaming was framed as a tool for reaching certain goals, rather than as a goal itself. The EU consequently took an integrationist approach - gender concerns are integrated into certain policies rather than reassessing the role of the EU from a gender perspective (Polack \& Hafner-Burton, 2000).

### 3.1.1.4 Gender Equality Laws in Serbia

Apart from the explicit prohibition of discrimination, the Constitution of the Republic of Serbia contains specific guarantees for the equality of men and women and stipulates that it is obligatory for the country to practice the policy of equal opportunities. Constitutional prohibition of discrimination is elaborated in the Law on the Prohibition of Discrimination ${ }^{2}$. It stipulates that the term discrimination is used to designate any unwarranted discrimination or unequal treatment omission (exclusion, limitation or preferential treatment) in relation to individuals or groups, as well as members of their families or persons close to them. This discrimination can be overt or covert, based on race, skin color, ancestors, citizenship, national affiliation or ethnic origin, language, religious or political beliefs, gender, gender identity, sexual orientation, financial position, birth, genetic characteristics, health, disability, marital and family status, previous convictions, age, appearance, membership in political, trade union and other organizations and other real or presumed personal characteristics. This law stipulates the prohibition in the sphere of education and professional training by stating that everyone shall have the right to pre-school, primary school, secondary school and higher education and professional training under equal circumstances. Discrimination based on gender which occurs in the case of conduct contrary to the principle of the equality of the genders; the principle of observing the equal rights and freedoms of women and men in the

[^1]political, economic, cultural and other aspects of public, professional, private and family life is also prohibited by this law ${ }^{3}$.

Apart from the prohibition based on gender and sex which is stipulated by the Law on Gender Equality ${ }^{4}$, it is also stipulated that educational and scientific institutions as well as vocational training institutions must not make gender-based discrimination, especially related to conditions for admission and rejection of admission to a particular institution, conditions and opportunities of access to permanent education, including all programs for education of adults and programs of acquisition of functional literacy, conditions for exclusion from educational process and professional training, method of service rendering and awarding of concessions and information, appraisal of knowledge and assessment of achieved results, conditions to get scholarships and other forms of support for education and studies, career building, conditions of professional training and acquisition of diplomas, conditions of promotion, additional qualifications or new qualifications. The Law on Gender Eqaulity underlines that it is important that teaching plans and programs include elements aimed at: overcoming stereotypes based on gender; the overcoming of limiting social roles based on sex (gender discrimination) and liberation from gender-based prejudice. Inclusion of these contents into curricula at different levels of education is aimed at raising awareness and change of consciousness and the insights about the equal status of women and men in society (Pajvančić et al., 2010:77). The above-mentioned law stipulates that it is possible to undertake special measures, by stipulating that the public authorities in charge of education shall undertake special measures for the inclusion into the process of education and professional training of the pupils or groups of pupils, who, because of their culture, tradition and socio-economic conditions leave school prematurely. It is also stipulated that it is possible to undertake measures of special support to pupils or groups of pupils for their transfer from lower to higher educational levels, i.e. the continuation of their education. The public authorities in charge of education shall establish special teaching curricula for the return of pupils to schools and other educational institutions. They may also undertake other special measures, especially the measures to encourage education of the under-represented gender in the field of information technology, engineering and technology.

[^2]In the Law on Serbian Armed Forces adopted in 2007, Article $11^{5}$ stipulates that the provisions of the Law shall equally refer to both women and men. The Statute of the University of Defense adopted in 2012, did not specifically regulae gender equality, neither did the Statute of the Academy of Criminalistic and Police Studies adopted in 2006. Women can be employed as civil employees in the security sector without limitations. It is not the case for operational personnel in the police and army, whose availability is severely limited for women. This limitation is defined by quotas as affirmative actions, which refer to the upper limits, i.e. determine the maximum number of workplaces for women (Bjeloš, 2012).

### 3.1.1.5 Gender equality strategies in Serbia

The National Strategy for Improving the Position of Women and Promoting Gender Equality ${ }^{6}$ was adopted in 2009. One of its objectives is achieving gender equality in education. In the description of the current state of education, it states that equal rights to education, as well as the equal availability of education, are the basis for achieving equal opportunities in their professional careers and realizing the potentials of both women and men. It states that these two rights are guaranteed at all levels of education, that there are no discriminatory regulations in the law, but there is no special gender sensitivity either. It points out that there are certain issues which cause more girls leaving the education system. Educational profiles are still segregated, i.e. the occupations are divided into "male" and "female".

Achieving gender equality and mainstreaming of a gender perspective in education are stated as a separate objective of this strategy. It is to be achieved by working in several directions:
(1) achieving the full coverage of female children in an educational system, especially of female children marginalized on multiple grounds;
(2) building adequate elements into educational programs and introducing new educational content related to this field;
(3) eliminating stereotypes and prejudices from educational programs, textbooks, etc.

The three separate objectives are: 1) equal access to education, balancing gender representation at all levels and profiles of education; 2) building the capacities of the

[^3]educational system by mainstreaming the gender perspective into education; 3) eradicating gender inequalities in education of groups discriminated on multiple grounds.

### 3.1.2 CEDAW reports

The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) is a UN document adopted in 1979 by the UN General Assembly and is often described as an international bill of rights for women ${ }^{7}$. Its goal is to eliminate all forms of discrimination towards women and to promote gender equality. Today, there are 189 -member states of the agreement.

The Convention provides the basis for realizing equality between women and men through ensuring women's equal access to, and equal opportunities in, political and public life, including the right to vote and to stand for election, as well as education, health and employment. States parties agree to take all appropriate measures, including legislation and temporary special measures, so that women could be assured of all their human rights and fundamental freedoms.

The Convention is the only human rights treaty which affirms the reproductive rights of women and targets culture and tradition as influential forces shaping gender roles and family relations. It affirms women's rights to acquire, change or retain their nationality and the nationality of their children. States parties also agree to take appropriate measures against all forms of traffic in women and exploitation of women.

Countries which ratified or acceded to the Convention are legally bound to put its provisions into practice. They are also committed to submit national reports, at least every four years, on measures they have taken to comply with their treaty obligations.

The Federal Republic of Yugoslavia (FRY) (after changing the political regime) acceded to CEDAW in 2001 (CEDAW shadow report Serbia, 2007). The last state report to CEDAW was submitted in 1998 but it was not considered by the Committee. The FRY report was submitted in 1993 (and discussed in February 1994), but the report did not meet the requirements of the Committee. The Committee was concerned that the events in former Yugoslavia (wars, economic crises, etc.) influenced women's rights. It also expressed regrets regarding the position of women in former Yugoslavia and the acts of violence they were exposed to (CEDAW shadow report Serbia, 2007).

[^4]Serbia is one of the member states of the convention. It renewed its membership after the political regime changed in the country (after year 2001).

Beside the government CEDAW reports we will also analyse the shadow reports, which are written by women's organizations. The alternative reports are more critical and focus on the implementation of the relevant elements of the legal and strategic frameworks. Our analysis of the mentioned Convention reports will be limited to their parts about higher education, which is regulated by Article 10 of the Convention, which mandates that all women should be guaranteed equal rights with men when it comes to education. All of them, no matter whether they come from rural or urban areas, should have equal possibilities to develop their careers and to acquire diplomas in all educational fields. Educational standard should be the same for all. To eradicate stereotypes, other types of education, e.g. coeducation, as well as curriculum and textbook revision, would be of great effect. Everybody should have equal access to funding and scholarships, as well as programs for continuing education, especially the ones that have a goal to minimize the educational gap between men and women. Equal opportunities should be granted in terms of active participation in sports and physical education, as well as in terms of healthcare and family planning. The drop-out rate of female students should be reduced and school programs for those who left school prematurely should be organized. (Article 10, 1979)

Our analysis will cover the following reports:

- CEDAW Serbia Government report 1 (1992-2006), 2006.
- CEDAW Serbia Alternative report 1 (1990-2006), 2007.
- CEDAW Serbia Government report 2-3, (2007-2009), 2011.
- CEDAW Serbia Alternative report 2-3 (2007-2012), 2013.


### 3.1.2.1 CEDAW Serbia Government report 1 (1992-2006)

The first Government report mentions that the University of Novi Sad has completed preparations for the establishment of the Centre for Gender Studies within the framework of the Association for Interdisciplinary and Multidisciplinary Studies and Research (ACIMSI), starting from the 2003/04 academic year. As it is stated in the Report, the Centre will organize courses in the field of gender studies at the postgraduate (two-year) and specialist (one-year) levels. The Report elaborates that women's studies specialized courses were introduced in Belgrade and Novi Sad, and that they were part of the programme at the University of

Belgrade. The Report stated that within the subject of civil education in secondary schools in Serbia, gender sensitive subjects are studied as well. In ten secondary schools, a pilot project "Gender Equality in Schools" was realized in cooperation with the Ministry of Education and Sports of the RS and NGOs. Domestic and international non-governmental organizations ran a series of courses entitled "Women Can Do It 1 and 2" aimed at furthering the status of women in the domain of economic and political rights.

The government report mentions the number of female students and teaching staff in Serbia and the segregations when it comes to the fields of study. According to available data, in 1991 women accounted for $70.80 \%$ of graduate students in schools of medicine; $33.60 \%$ on average in engineering; $44.40 \%$ in agriculture; $73.10 \%$ in natural sciences; and $60.10 \%$ in law school graduates. According to the 2002 census, the percentage of women who had completed post-secondary (including two-year colleges) higher education stood at $9.87 \%$, for men it was $12.27 \%$. The trend of a higher number of female vis-à-vis male students was present in the evidence in Serbia in the reporting period. At the university level, the ratio was 55.59 \% female to 44.41 \% male students. According to the 2001 Statistical Yearbook, out of the total number of 1,133 students who graduated from Schools of Medicine in 2000, 63.37 \% were women. In the preceding three years, that percentage stood at 57.47 in 1997; 59.56 in 1998; and at 61.86 in 1999. The percentage of women who graduated from Schools of Dental Medicine in 2000 stood at 53.56\%.

The data on several typical Engineering Schools (2000), out of the total number of 877 students, 174 women graduated from Schools of Mechanical Engineering or 19.84 \%. In 1997, that percentage stood at $19.05 \%$, in 1998 at $24.05 \%$ and in 1999 at $20.90 \%$. Consequently, the oscillations in the percentage of female graduates from Schools of Mechanical Engineering were small. Likewise, the percentage of women graduates in schools of civil engineering in 2000 was $42.74 \%$, in electrical engineering $21.05 \%$, in agriculture 49.64 and in mining $40.89 \%$. To obtain the true picture of the participation of women, comparison will be made with the share of women in the overall student population. In the 1999/2000 academic year, the percentage of female students in the overall student population stood at $52.95 \%$ and the percentage of women among all graduate students in 2000 was $58.05 \%$. Women were continually under-represented in engineering profiles compared to the corresponding percentage of women in the overall student population.

The report also lists the student numbers in social sciences. Out of the total number of 1,423 students who graduated from schools of philosophy and philology in 2000, women accounted
for 1,226 or $86.16 \%$. These data were similar as for the preceding years. In the period from 1997 to 2000, the percentage was evenly balanced: $82.96 \%$ in 1997; $85.44 \%$ in 1998 and $85.77 \%$ in 1999. According to the data on graduate students, it is possible to conclude that division of educational profiles according to gender was maintained in institutions of higher education. This applied to the medical profession as well: a greater participation of women in this area was the result of the trend of feminization of medicine-related professions.

According to the data for the 1993/94 academic year, out of the total number of 30 deans of all Schools of the University of Belgrade, two were women. According to the data of the Rector's Office of the University of Belgrade, two women were among the deans of this University in the 1999/2000 academic year, while in 2002/03, five of them were women. It is perhaps important to point out that the Rector of the University was also a woman. Since the establishment of the University in Belgrade in 1905, there were 33 male and 1 female rector. On the university level, 29.40 \% of the teaching staff were female in 2002.

Segregation is evident at the University of Belgrade, where men make up the clear majority in the field of science and technology (up to $80 \%$ ), while women are more present in philology, chemistry, pharmacy and biology. Just over $40 \%$ of independent researchers, and a little over $50 \%$ assistants/technicians were women in scientific institutions in the 2000-2002 period.

### 3.1.2.2 Serbia Alternative Report 1 (1990-2006)

The first Alternative Report was written by the following women NGO-s:

1. Glas razlike - grupa za promociju ženskih političkih prava (Voice of difference + group for promotion of women's political rights)
2. Autonomni ženski centar (Autonomous women's center)
3. ASTRA (Anti trafficking action)
4. Incest trauma centar (Incest trauma center)
5. Žene u crnom (Women in black)

These women NGO-s had a 10 to 14 years of experience in the field of women's rights activism (CEDAW Alternative Report, 2006).

The Alternative Report is dealing with the number of women in academic institutions. It states that the number of women slightly increased during the previous 15 years. This is however, a result of women starting to take the "empty space" which emerged because of brain drain and other reasons. Jobs at universities and in scientific institutions were no longer prestigious and
well-paid as they were during socialism. Consequently, a gradual increase in the presence of women in lower positions in the scientific and academic institutions was related to the fact that these institutions lost economic and/or social prestige and that women took the those positions which their male counterparts did not consider desirable any more. Women were still under-represented in leadership positions at universities and in other decision-making positions in the educational system and in scientific institutions.

When it comes to gender studies the NGOs actively participated in the implementation of research on gender in university programs. In the 1990s women NGOs initiated and implemented various alternative education programs in universities. Programs for Women's Studies and Gender Studies were among them at the Centre for Women's Studies in Belgrade. At the University of Novi Sad, the Centre for Gender Studies also became a university program. Gender was introduced as an optional subject in regular study programs of some universities in Serbia, such as the Faculty of Arts Belgrade (1993), Faculty of Political Sciences in Belgrade (1997) and the Faculty of Law in Nis (2003). However, it is important to emphasise, that these programs faced constant resistance and cynical comments.

### 3.1.2.3 CEDAW Serbia Government report 2-3 (2007-2009)

The CEDAW government report 2-3, states that all key laws adopted in the previous period govern and promote the improvement of the status of women in the field of education. To achieve the Millennium Development Goals in Serbia, it was necessary to introduce Gender Studies into the educational system and increase computer literacy of women. Gender Studies were introduced at the Faculty of Political Sciences in Belgrade and at the Faculty of Philosophy in Novi Sad ${ }^{8}$. The Faculties of Law in Belgrade and Niš started the so-called legal clinics, wherein law students rendered consultations to women free of charge, thus being educated and becoming sensitized for this type of legal aid. According to EUROSTAT, the Republic of Serbia is in the fourth place, with over $40 \%$ of women as researchers, although funds in this area were insufficient, as only $0.3 \%$ of gross domestic product was spent on research.

The government report states that the representation of women in science is good. The Ministry of Science and Technological Development planned to introduce additional ways to improve the status of women and promote gender equality through the National Action Plan

[^5]for the period between 2009 and 2015, which prescribed a series of activities in the forthcoming period, which shall support and ensure gender equality in the field of education.

### 3.1.2.4 CEDAW Serbia Alternative report 2-3 (2007-2012)

The section on higher education in Alternative report 2-3 claims that the rise of women among graduates, holders of MA and Ph.D. degrees (44\%) is a laudable trend. It is not a consequence of affirmative actions in state education, but it happens because science and education continued to lose their prestige in the society, and women entered "the empty space left behind by the men, who are turning to more profitable professions (business and private practice). In higher education, women make up most graduates in the field of education (up to $91 \%$ ), health and social care ( $77 \%$ ), arts and humanities ( $65 \%$ ) and social sciences ( $62 \%$ ). Men are predominantly present in the field of natural science, mathematics and computer science ( $61 \%$ ) and engineering construction ( $56 \%$ ), agriculture and veterinary medicine. A gender analysis of higher education textbooks (the area of social sciences and humanities discipline) shows that in most of the analyzed textbooks gender perspective is not present: they do not use gender-sensitive language, they do not approach the materials in a gendersensitive way, nor do they exhibit any principles that can be called gender-sensitive. The Serbian Academy of Sciences and Arts had less than $6 \%$ of women members on average. Since its founding, there were no women as heads of the Academy.

### 3.2 RIGHTS OF ETHNIC MINORITIES

In this section we introduce the international and national laws on the rights of ethnic minorities.

### 3.2.1 European Charter for Regional or Minority Languages

The brief introduction of the Charter for Regional and Minority Languages and the Government and Alternative Report is important for the readers of this dissertation to picture the situation regarding the language rights of minorities and their implementations. The Government and Alternative Report will make it easier to understand the students' narratives and their social background.

The protection and promotion of the wealth and diversity of Europe's cultural heritage are among the fundamental aims of the Council of Europe today. Regional or minority languages are very much part of this heritage. The Council of Europe's Member States confirmed their commitment to the protection of this heritage by ratifying the European Charter for Regional
or Minority Languages (ECRML) in 1992. The ECMRL was put together based on a text put forward by the Standing Conference of Local and Regional Authorities of Europe. It was adopted as a convention on June $25^{\text {th }}, 1992$ by the Committee of Ministers of the Council of Europe. It entered into force on 1 March 1998. At present, the Charter has been ratified by twenty-five states (Armenia, Austria, Bosnia and Herzegovina, Croatia, Cyprus, Czech Republic, Denmark, Finland, Germany, Hungary, Liechtenstein, Luxembourg, Montenegro, Netherlands, Norway, Poland, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine and the United Kingdom). Another eight states have signed it, some of which are expected to ratify it soon. The Charter is a convention designed to protect and promote regional and minority languages as a threatened aspect of Europe's cultural heritage. Its goal is enable speakers of a regional or minority language to use it in private and public life. It covers regional and minority languages, non-territorial languages and less widely used official languages. First and foremost, the ECRML sets out the main objectives and principles that states undertake to apply to all regional or minority languages existing within their territories. Secondly, the ECRML contains a series of concrete measures designed to facilitate and encourage the use of specific regional or minority languages in public life. Within its scope are languages traditionally used within a state's territory. It does not cover languages connected with recent migratory movements or dialects of official languages. It is intended to ensure, as far as is reasonably possible, that regional or minority languages are used in education and in the media, to permit and encourage their use in legal and administrative contexts, in economic and social life, for cultural activities and in trans frontier exchanges (Council of Europe, 2016).

The ECRML is based on an approach that fully respects national sovereignty and territorial integrity. It does not conceive the relationship between official languages and regional or minority languages in terms of competition or antagonism. Development of the latter must not obstruct knowledge and promotion of the former. A deliberate decision was taken to adopt an intercultural and multilingual approach in ECRML. In each state the cultural and social reality must be considered (Council of Europe, 2016).

Part III - Measures promotes the use of regional or minority languages in public life in accordance with Article 2, paragraph 2, Article 8 - Education (ECRML ${ }^{9}$, 1992) will be discussed through the government and alternative reports from Serbia.

[^6]ECRML (Article 8) states that in all territories where minority languages are in use, all children should have an opportunity to attend preschool education (or the families that request such an opportunity, if their number is sufficient), as well as primary, secondary, technical and vocational education (or a minority language should become a part of the curriculum), or at least their substantial parts in that particular language. The same policies apply for higher education - students should have an opportunity to study in minority languages, or at least have the facilities necessary for studying in these languages. Finally, as far as adult and continuing education is concerned, it should be arranged that people can study in their (minority) language - if that is not possible, then that language should be a course subject, or at least its history and culture should be taught as a course subject. All teachers should be appropriately trained for carrying out education in minority languages. In the end, in the territories other than those where minority languages are traditionally used, if the number of people who use a particular minority language is sufficient, teaching of or in that language should be encouraged.

We will discuss the following government reports on the European Charter for Regional or Minority Languages in this dissertation will be (only considering article 8):

1. Initial periodical report presented to the Secretary General of the Council of Europe in accordance with Article 15 of the Charter (2007)
2. Second periodical report presented to the Secretary General of the Council of Europe in accordance with Article 15 of the Charter (2010)
3. Third periodical report presented to the Secretary General of the Council of Europe in accordance with Article 15 of the Charter (2015)

### 3.2.1.1 Government Reports on the ECRML $(2007,2010,2015)$

The Government Reports on the European Charter for Regional or Minority Languages (2007, $2010,2015)$ reports the exact numbers of national minority children in the educational system of Serbia. The numbers are precisely given by municipalities in Vojvodina from pre-school to university education. The numbers were not included in this dissertation due to page constraints and their availability in the above report. The reports highlight that children from mixed marriages are mostly enrolled by their parents to schools in Serbian language and that in this way national minorities are rapidly dwindling in numbers.

It is important to point out that the Government Report from 2010 mentions higher education in the Hungarian language. The Government Reports state that in the Republic of Serbia,
university education in Hungarian language is provided in Vojvodina at 5 faculties (Faculties of Philosophy, Economics, Natural Sciences, Civil Engineering and Teaching) in Novi Sad and Subotica as well as, the Academy of Arts in Novi Sad ${ }^{10}$, and at three colleges of vocational studies (the College of Vocational Studies for Education of Pre-School Teachers in Novi Sad, the College for Vocational Studies for Education of Pre-School Teachers in Subotica and SuboticaTech - College of Applied Sciences in Subotica). From the listed faculties three (Economics, Natural Sciences and Civil Engineering) are not officially providing education in Hungarian, there are some initiatives of professors of Hungarian origin who form Hungarian groups and teach in Hungarian. The author of this dissertation can add from her own experience, that at the Faculty of Law, there was also a possibility to study some subjects or to have consultations in Hungarian. This activity which was slowly disappearing, as the professors were no longer paid for the (extra) classes they taught in the ethnic minority languages, and both the numbers of students and professors decreased ${ }^{11}$. It is also important to mention that there was no aftergrowth of young Hungarian scholars at the faculties, therefore Hungarian students had less and less possibilities to study or to learn the terminology in their mother tongue.

### 3.2.1.2 Alternative ECRML Report

The Vojvodina Human Rights Centre (VHRC) ${ }^{12}$ and the CHRIS Network of the Committees for Human Rights in Serbia submitted the Alternative report based on the Article 15 of the European Charter for Regional and Minority Languages ${ }^{13}$ in the second monitoring cycle in June 2010. Its preparation was supported by the Open Society Foundation Serbia. The Report does not mention the higher education system in Serbia and the possibilities for minority students to attend classes in their mother tongue. Rather, it mentions the situation in elementary and secondary schools regarding textbooks and teaching staff, as well as the subject of mother tongue with the elements of national culture.

The VHRC states that the inadequate teaching materials and textbooks combined with the lack of teaching personnel for subjects still influence the quality of education conducted in

[^7]minority languages in Serbia. There is no coherent state strategy for training of teachers in minority languages. The national councils generally take care of the training of the teaching personnel. The initiative for creating a possibility for the teachers to be trained as two-subject teachers, which would help overcoming the problem of insufficient recruitment of teachers in minority languages was still not adopted. There was still no practice of recruiting school supervisors for education in minority languages.

The Report contains information provided by the National Councils as well. It is stated that the National Council of the Hungarian National Minority considered that the outdated educational policy of the faculties for the education of teachers, where the students are traditionally educated to become one-subject teachers, contributes to the lack of the professional staff. The national councils of the three minorities in question report about not having textbooks in minority languages on time, i.e. at the start of the school year. The prescribed number of teaching hours cannot be reached by recruitment in small educational institutions, hence the initiation of education of two-subject teachers at faculties would enhance the representation of professional teaching in minority languages. The National Council of the Hungarian National Minority points out that the translations of textbooks in minority languages, meaning also in Hungarian language, are up to a month late, in comparison to the textbooks in Serbian language.

The National Council of the Slovak National Minority states in the Report that the Slovak national community is solving the problem of professional personnel shortage by giving scholarships for shortage occupations in the field of education, informing and use of language and the writing system. The Serbian Ministry of Education approved the programs for professional training of elementary school teachers and preschool teachers in the Slovak language. Those who have undergone professional training through accredited programs were awarded with certificates.

The VHRC stated in the Report that, due to inexplicable reasons, the Republic of Serbia does not satisfy the national minorities' requirements for the past several years. The national minorities requested, that Mother tongue with the elements of national culture is classified together with the compulsory subjects in elementary schools and secondary schools. By satisfying this requirement, the minority pupils would be more stimulated to foster their mother tongue, since the final grade in this subject would be part of the overall final grade. They would not be in a dilemma about choosing this subject or IT or some other foreign language, which are all far more favorable to the requirements of the modern market.

Satisfying this condition would have a positive effect on the pupils of those minority communities in which these courses are the only form of education in their mother tongue.

### 3.2.2 European Framework Convention on the Protection of National Minorities

The European Framework Convention for the Protection of National Minorities ${ }^{14}$ (The Convention) is the most comprehensive multilateral treaty devoted to minority rights. Adopted under the auspices of the Council of Europe, it sets forth several principles according to which member States are obliged to develop specific policies to protect the rights of minorities (Council of Europe, 2017). The Convention was adopted by the Committee of Ministers of the Council of Europe in 1994 and entered into force in 1998. It is the first legally binding multilateral instrument devoted to the protection of minorities and is regarded as the most comprehensive international standard in the field of minority rights so far. To a large extent, it transforms the political commitments of the 1990 Copenhagen Document of the Organization for Security and Cooperation in Europe (OSCE) into legal obligations. The Framework Convention may be ratified by member states of the Council of Europe, and nonmember states may join at the invitation of the Committee of Ministers. Accession to the Convention is obligatory for States which apply for membership in the Council of Europe. As of May 2001, the Convention was ratified by 33 countries: Albania, Armenia, Austria, Azerbaijan, Bosnia and Herzegovina (non-member state), Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Ireland, Italy, Liechtenstein, Lithuania, Malta, Moldova, Norway, Poland, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Ukraine, and the United Kingdom (Council of Europe, 2017).

The Convention does not define "national minority", so some countries determine on their own to whom the Convention applies. Several parties, including Austria, Denmark, Estonia, Germany, Poland, Slovenia, Sweden, Switzerland, and The Former Yugoslav Republic of Macedonia, set out their own definition of "national minority" when they ratified the Convention. Many of these declarations exclude non-citizens and migrants from protection under the Convention, and some identify the specific groups to whom the Convention will apply. Liechtenstein, Luxembourg, and Malta are parties to the Convention, but each declared that there are no national minorities within their respective territories. Although States can exercise some discretion in deciding to whom the Convention applies, it is expected that this

[^8]issue will also be assessed through the international monitoring process created for the Convention. But a first step for any NGO that wishes to participate in the monitoring process should be to determine whether the State concerned made a declaration concerning the groups to which it will apply the Convention (Council of Europe, 2017). Regardless of the term's definition, the Convention applies it only to "national" minorities. This contradicts the 1992 UN Declaration on the Rights of Persons Belonging to Minorities, which applies both to "national" and "ethnic, religious and linguistic" minorities as well. It is not yet clear how much difference this distinction will make, but it appears that the Convention's scope is deliberately narrower than that of the UN Declaration (Council of Europe, 2017).

### 3.2.2.1 The substantive provisions of the Convention

The Convention proclaims the fundamental principles of non-discrimination and equality ${ }^{15}$ and it makes clear that a State's obligations may also require affirmative action on the part of the government and not merely abstention from discrimination ${ }^{16}$. States are to adopt, "where necessary", measures to promote "full and effective equality between persons belonging to a national minority and those belonging to the majority" taking "due account of the specific conditions" of national minorities. Article 4.2 is a key provision, since it provides the basis for the succeeding provisions that spell out in greater detail the measures that States should take in specific areas ${ }^{17}$. Article 4.3 clarifies that any measures taken to promote effective equality are not to be considered as discrimination themselves ${ }^{18}$. The remaining substantive provisions of the Convention cover a wide range of issues, many of which may require that States adopt special measures. Ratifying States agree to improve the conditions for cultural and personal development of minorities ${ }^{19}$. Tolerance and different freedoms should be encouraged ${ }^{20}$ and minorities should have the right to use their own language in private and public life and in the media ${ }^{21}$. Furthermore, their names and surnames should be officially recognized (Article 11, 1994). Apart from bilingual topographical indications, adequate opportunities of education in the minority language should exist in the areas which are widely populated by the minorities. Minorities should also be allowed to use their language in administration and education

[^9](Articles 10, 11, 13, 14, 1994). In Article 12, it is stipulated that both majority and minority culture, history, language and religion should be cherished ${ }^{22}$, while Article 15 proposes that members of national minorities should have all the necessary conditions for taking part in all aspects of life that affect them ${ }^{23}$. Finally, ratifying states should not try to change the proportion of people who live in areas populated by the minorities, nor prevent them from maintaining contacts outside the country or from being part of national and international NGOs ${ }^{24}$ (United Nations Human Rights, 2012).

Article 12, 13 and 14 are regulating the field of education, therefore we will present them in more detail before the government and the alternative report regarding the mentioned articles. In Article 12 of the Framework Convention for the Protection of National Minorities stipulates that the culture, language and religion of both majority and minority people should be cultivated. Furthermore, teachers, as well as students from minority communities, should have an appropriate training and the access to the necessary facilities, but also to education at all levels ${ }^{25}$.

In Article 13 stipulates that the rights of the members of national communities to establish and manage their own private educational and training establishments, as well as not to require any financial compensation should be recognized ${ }^{26}$.

Article 14 defines (1) the right of the members of national minorities to learn in their mother tongue, (2) that, if the number is sufficient, all members of national minorities should be able to receive tuition in their mother tongue and to receive instruction in that language, and (3) that "Paragraph 2 of this Article shall be implemented without prejudice to the learning of the official language or the teaching in this language ${ }^{27}$.".

[^10]Government reports are the ones describing the position of the state about the compliance with the above-mentioned Convention.

1. The first report by the Federal Republic of Yugoslavia on the implementation of the framework convention for the protection of national minorities (2002)
2. The second report submitted by Serbia pursuant to article 25 , paragraph 2 of the framework convention for the protection of national minorities (2008)
3. The third report submitted by Serbia pursuant to article 25, paragraph 2 of the framework convention for the protection of national minorities (2013)
Articles 13 and 14 as most relevant to the topic of this dissertation. Higher education will be in focus, as previously mentioned, it is the main topic of this research. The Serbian were followed up by one alternative report, which will be discussed after the government reports.

### 3.2.2.2 The First FRY Report on the Convention (2002)

The first report on the implementation of the Convention was submitted by the Federal Republic of Yugoslavia in 2002. Article 14, paragraph, 1-2 stated that the Yugoslav legal system guarantees not only the right of persons belonging to national minorities to study their mother tongue, but also the right, under certain conditions set by the law, to receive education in the public education system in two languages or in their mother tongue. Provisions related to this are contained in the highest acts of the state, i.e. of the member republics. The Constitution of the FR Yugoslavia in Article 46, paragraph 1, stipulates that persons belonging to national minorities have the right for education in their own language, and this right was also guaranteed by Article 34, paragraph 4 of the Serbian Constitution. The abovementioned right and its implementation were regulated in greater detail by relevant laws.

The report described in detail that the Serbian Law on the Protection of the Rights and Freedoms of National Minorities (the Law), which stipulates that persons belonging to national minorities have the right to instruction and education in their own language in preschool, elementary and secondary schools. The mentioned law specifies that the state is obliged to create conditions for education in the language of a national minority, if at the time of the adoption of this law, there was no education in the language of a national minority within the system of public education, or to ensure teaching in two languages or the studying of the language of a national minority with elements of national history and culture. The presented provision of the Law made it possible for teaching in a mother tongue for those national minorities which did not have such option earlier.

When it comes to higher education on the territory of AP Vojvodina, studying in Hungarian was possible at the two-year post-secondary technical college in Subotica and teachers training colleges in Novi Sad and Subotica. Classes in Hungarian were held at the Department for the Hungarian language and literature at the Faculty of Philosophy in Novi Sad and Belgrade, and at the Arts Academy in Novi Sad (the Department of Acting in the Hungarian language), the Subotica department of the Sombor-based Teachers' Faculty and at the Faculties of Economic and Civil Engineering in Subotica ${ }^{28}$.

Romanian language higher education was available in the Vršac Department of the Belgradebased Teachers' Faculty and at the Departments of Romanian language and literature in Novi Sad and Belgrade.

Higher education programs in Slovak were available at the Teachers' Faculty in Sombor (the department in Bački Petrovac) and at the Departments of Slovak language and literature in Belgrade and Novi Sad.

The provision of Article 13, paragraph 4 of the Law explicitly stipulates that education in the language of the national minority does not rule out the mandatory study of the Serbian language as a means of mutual communication among different ethnic communities

### 3.2.2.3 Second minority convention report by Serbia (2008)

The second government report was submitted by Serbia pursuant to article 25, paragraph 2 of the Framework Convention for the Protection of National Minorities in 2008. The report contains information about the laws which guarantee the rights of national minorities in Serbia regarding the organization of higher education in their mother tongue (Article 13). The Report is again describing the Serbian Law on the Protection of the Rights and Freedoms of National Minorities (the Law). It defines the of members of national minorities to establish and manage their own private educational and training institutions (Article 15). This Article of the Law stipulates, that members of national minorities, where education will be organized in the languages of national minorities or bilingually, have the right to establish and maintain private educational institutions, schools or a university, where education will be organized in the languages of national minorities or in two languages, in line with the law.

In paragraph 2 Article 13 of the Second government report, there is an explanation that the rights of persons belonging to national minorities to establish and run their own private

[^11]institutions for education and training does not entail any financial obligations for the state. The Law stipulates that both domestic and foreign organizations, as well as foundations and private persons can participate in the financing of education in national minoritu languages, in accordance with the law. In the event of a financial or other type of donation, the state will provide certain benefits or tax deductions. In article 14 of the Second government report the Law on Higher Education ${ }^{29}$ is quoted as a favorable and progressive law towards national minority higher education, as according to article 80 , paragraph 2 of the above-mentioned law, higher education institutions may organize and conduct studies and/or specific segments of studies, and organize preparation and defense of PhD dissertation, both in a national minority language and in a foreign language. Although this right is important for minority communities, it is seldom exercised in any higher education institution in Serbia, except the ones which already have study programs or education in minority language.

### 3.2.2.4 Third minority convention report by Serbia (2013)

The third Convention report was submitted by Serbia in 2013 (the Third report). It consists of an overview of the present legal system regarding the education of national minorities, with a special focus on the higher education system. We will limit our analysis to Convention Article 14.

The Third report identifies the Law on Higher Education as the key piece of legislation dealing with national minority rights in higher education. It governs the higher education system, conditions and manner of carrying out higher education activities, financing and other matters of importance for the performance of these activities. Article 8 stipulates that the right to higher education shall have all persons who have completed their secondary education irrespective of the race, color, gender, sexual orientation, ethnicity, national origin or social background, language, religion, political or any other opinion, birth, existence of a sense or movement handicap or property. This regulation is important, as ethnicity and national origin is respected and cannot be considered as discriminative causes. Under provisions of Article 80, paragraph 2, it is stipulated that a higher education institution may organize and implement studies and/or certain parts of studies, as well as the preparation and defense of a doctoral dissertations in the language of a national minorities or in a foreign language, in accordance with its Statute. In accordance with paragraph 3 of the same Article, a higher education institution may carry out a study programme in the language of a national minority

[^12]or in a foreign language if such a programme has been approved and/or accredited. Certain faculties and academies of vocational education started study groups in national minorities languages.

The Third report contains valuable information about where national minority students can (especially Hungarians) study in their mother tongue. This information was updated and included in each government report. Higher education in Hungarian language is in general delivered in Vojvodina at four faculties:

- Faculty of Philosophy in Novi Sad (Department of Hungarology, Section of Hungarian language and literature),
- Teacher's Training Faculty in Hungarian Language in Subotica,
- Faculty of Civil Engineering in Subotica and
- Academy of Arts in Novi Sad.

Hungarian study groups were available at 3 academies of vocational studies:

- Academy of professional career studies for preschool teacher education in Novi Sad,
- Academy of professional career studies for preschool teacher education in Subotica and
- SuboticaTech - College of Applied Sciences in Subotica.

At the Faculty of Economics in Subotica and Faculty of Sciences in Novi Sad, it was possible to attend (some) classes in Hungarian language. For all subjects for which there were sufficient numbers of interested students, and if the professors knew Hungarian, instruction was organized in this language ${ }^{30}$. Hungarian study programs were earlier available at the Faculty of Education in Sombor, but they were not opened in the five years preceding the report, due to the low number of interested students and lack of teaching staff. Hungarian language and literature were studied in the Republic of Serbia at the University of Belgrade, Faculty of Philology, Department of Hungarology, Study programme for Hungarian language and literature, module Hungarian language, literature and culture.

The Report covers the higher education options for Romanian, Slovak and other national minorities as well. Romanian language studies were available at the Faculty of Philosophy in

[^13]Novi Sad, Department of Romanian Studies, Study programme for Romanian language and literature, and at two academies in Vršac: Faculty of Teacher Education (Belgrade) Department of Romanian language (as mother tongue) and Academy of Vocational Studies for Preschool Teacher Education. Romanian language and literature were studied at the University of Belgrade, Faculty of Philology, Department for Romanian Studies, Study programme for Romanian language and literature, module Romanian language, literature and culture ${ }^{31}$.

Higher education in the Slovak language was available at the University of Novi Sad, Faculty of Philosophy, Department of Slovak Studies, Study programme for Slovak language and literature, and at the Faculty of Teacher Education in Sombor and Academy of Vocational Studies for Preschool Teachers' education in Novi Sad ${ }^{32}$. Slovak language and literature were studied at the University of Belgrade, Faculty of Philology, Department for Slavic Studies, Study programme for Slovak language and literature, module Slovak language, literature and culture ${ }^{33}$.

### 3.2.2.5 Alternative minority convention report (2007)

There only alternative report was submitted by the Vojvodina Human Rights Center (VHCR) and the national councils in Vojvodina in 2007. When it comes to the secondary and higher education, the parts of the report which were compiled based on separate evaluations of national councils of the three minority communities (Hungarian, Slovak and Romanian) will be represented in more detail, since this dissertation deals with the communities.

Article 12 of the Alternative report states that the Law on the Foundations of the Education System ${ }^{34}$ stipulates developing the awareness and sense of belonging to the country and the nation, as well as fostering the tradition and culture of national minorities. These are important objectives and tasks in education and pedagogy ${ }^{35}$.

[^14]The Alternative report criticizes the implementation of the above principles, claiming that despite officials taking decisive actions in order to solve these issues, some of them still exist. For example, publishing of registers, workbooks for entrance exams, final grade certificates and student booklets in minority languages is permanently delayed, because the registers in minority languages are more expensive than the registers in Serbian language. If there are translations of tasks in minority languages aimed for school competitions, they are usually of low quality and sometimes there are no translations at all.

The Autonomous Province of Vojvodina had a more coherent national minority education policy in comparison to the central, south and east parts of Serbia. The collection and updating the data relevant for the education of the members of national minorities, which is a precondition for implementing an active minority education policy, was consistently carried out in Vojvodina (although there is also space for improvement here), whereas the statistics on the minority education in Central Serbia is much scarcer, which to a great extent influences the quality of the education of the national minorities in those territories.

The report states that the Law on the Protection of Rights and Freedoms of National Minorities ${ }^{36}$ (Article 14, paragraph 1) stipulates that the country is obliged to provide departments on universities, where preschool teachers, teachers and language professors for the minority languages will receive education in the languages of national minorities ${ }^{37}$. By the provision of paragraph 2 of the same Article ${ }^{38}$, universities shall organize language departments in the languages of national minorities, where the students can also learn the technical terminology needed for giving instruction in the language of a national minority. According to the same Article, the State shall support vocational training and terminological specialization of teachers for the needs of education in the languages of national minorities. The members of national minorities are, by the Law on the Foundations of the Education System ${ }^{39}$, granted the opportunity to use the textbooks from their nation states based on the approval of the minister of education, in accordance with the standards determined by the National Education Council.

[^15]The Law on Textbooks and Other Teaching Materials ${ }^{40}$ explicitly stipulates that the textbooks shall be printed in Serbian language - using Cyrillic alphabet. By implementing this regulation, the earlier existing right of national minority pupils to use secondary schools textbooks in Serbian, but printed in the Latin alphabet, was abolished ${ }^{41}$.

When reviewing the Opinion of the Consultative Committee about teaching personnel, the VHCR analyzes the situation in the country: since the time of the first report, the State did not undertake any important steps in terms of education of the minority teaching personnel, whereas the shortage of teachers who teach in minority languages is a constant problem. The professional personnel shortage caused by the unavailability of appropriate study groups for education in minority languages, by which the education of teachers comes down to personnel trained for teaching mother tongue and literature, as well as the abolition of language departments which prevents the acquisition of technical terminology in minority languages on some universities, degrade the instruction given in minority languages. Because of that, a greater number of parents chose to enroll their children in classes where the instruction is given in Serbian. The suggestions made by some members of national minorities that, for forming the necessary teaching personnel, a two-subject education should be organized at universities, or that the attendance of visiting professors from abroad should be provided, were not approved by the authorities. In the territory of the AP Vojvodina, one can receive the following education: for preschool teachers in Hungarian and Romanian language, for teachers teaching in the first cycle of education in Hungarian, Slovak and Romanian language and for teachers teaching the Hungarian, Slovak, Romanian and Ruthenian languages.

When reviewing the Opinion of the Consultative Committee on textbooks, there was criticism in the reports. Although the national minority councils took upon themselves the major activities related to the creation of the content of textbooks in minority languages, there was space for improvement in this field, in terms of both increasing the number of teaching units related to the history and culture of national minorities and eradicating negative stereotypes towards some minority groups. Since the first reporting period, apart from the Institute for Textbook Publishing and Teaching Aids, other publishers started printing textbooks in minority languages. In the Serbian language textbooks, there was a low percentage of cultural and historical topics related to the members of national minorities in this region. The members of national minorities are usually represented in fragments, through history of their nation

[^16]states or in the scope of some greater historical events, e.g. World War II. This was sometimes done in a negative tone, which influenced the emergence of negative stereotypes towards these minorities ${ }^{42}$.

The right of the members of national minorities to use the textbooks from their nation states (e.g. Hungary, Slovakia, Romania) was realized slowly. The delay was mainly caused by the slow administration in the Ministry for Education and Sports of the Republic of Serbia. Due to the small print-runs, the changes in teaching programs often do not follow the changed content in the textbooks in minority languages. Since Serbs and the members of national minorities belong to different religions, the claim made by the State that the textbooks for religious education are translated into minority languages is not supported.

The Alternative Report recommends that in the territory where the members of national minorities constitute most of the population, equal use of the Latin and Cyrillic alphabets for the Serbian language should be introduced again.

Paragraph 3 of Article 12 stipulates that the Parties undertake the promotion of equal opportunities for access to education at all levels members of to national minorities. In the The Alternative Report explains that by the provision of the new Constitution ${ }^{43}$ which delegates power to the AP Vojvodina to grant additional rights to national minorities ${ }^{44}$, for the realization of which it shall provide resources from direct revenues ${ }^{45}$. There is a possibility for the members of national minorities who traditionally live in the territory of AP Vojvodina to regain the rights which they enjoyed until 1992. The Law on the Foundations of the Education System ${ }^{46}$ stipulated that for the members of national minorities, education and pedagogy work should be delivered in their mother tongue, and only in extreme cases it can be organized in Serbian. Until 1992, when the Law on Elementary Education, Law on Secondary Education and Law on the Social Care of Children came into force, education and pedagogy work was delivered in Hungarian, Slovak, Romanian, Ruthenian and Serbo-Croatian language under completely equal circumstances in terms of the number of students. From 1992 on, teaching can be delivered in the minority languages, without separating the languages that are traditionally in use in the AP Vojvodina, only if at least $15 \%$ of the minority students choose

[^17]this kind of teaching when enrolling in the first grade of elementary school and in secondary schools in the already formed classes. For the formation of a class in Serbian language, the minimum number of students is not prescribed, hence the regulation of Article 13, paragraph 3 of the Law on the Protection of Rights and Freedoms of National Minorities is stricter towards national minorities compared to the majority. This regulation guarantees that the national minorities may receive education in their mother tongue, even if the number of students is lower than the determined general number that is required for organizing classes and education in Serbian language. In the Law on Higher Education it is stipulated that the activities of higher education shall be based, among other things, also on the respect for human rights and civil liberties, including prohibition of all forms of discrimination ${ }^{47}$. Equality rights and prohibition of discrimination in education are guaranteed by the Law on the Foundations of the Education System. The Law stipulates that all citizens of Serbia shall have equal rights to exercising their rights to education and pedagogy, regardless of their nationality and language ${ }^{48}$. This Law also prohibits all activities aimed at threatening, belittling or discriminating groups or individuals based on their national, linguistic and religious background in the institutions in the field of preschool, elementary and secondary education, as well as the instigation of such activities ${ }^{49}$. This Law provides the definition of discrimination of a child and a pupil, which implies each direct or indirect differentiation or giving precedence, exclusion or limitation, the aim of which is the prevention of exercising rights or reduction of rights or termination of the equal treatment of a child and a pupil ${ }^{50}$. A fine shall be imposed on those threatening, belittling or discriminating groups or individuals based on their national, linguistic or religious background ${ }^{51}$. Expressing national or religious bigotry is defined as a form of violation of work responsibilities ${ }^{52}$, for which, if done by a teacher, preschool teacher or a psychologist/pedagogue, one is suspended until a disciplinary procedure is finished ${ }^{53}$.

The possibilities of receiving education in minority languages were quite uneven: they were more significant in geographic areas in which the members of national minorities constitute the majority population (for example, Slovaks in Bački Petrovac, Stara Pazova and Kovačica),

[^18]and less significant in the geographic areas in which their numbers were small (for example, Hungarians in Srem or South Banat). For example, for the members of the Hungarian, Romanian, Ruthenian and Slovak minorities, two possibilities are available: to receive education in Serbian, or to choose to go to more distant places, that is to travel to the nearest school or to relocate to settlements where they would have the opportunity to receive education in their mother tongue. The members of national minorities in the AP Vojvodina can be educated within the unique education system from preschool level to the level of higher education. If there are conditions necessary for that, they can be educated: a) in their mother tongue, b) bilingually, and c) in case they receive education in Serbian, they can study their mother tongue with the elements of their national culture. Although there is a greater number of national minorities in AP Vojvodina, education was delivered in six languages: Serbian, Hungarian, Slovak, Romanian, Ruthenian and Croatian language. For the members of the Ukrainian and Roma national minority, studying their mother tongue with the elements of their national culture was the only choice.

The Law on the Foundations of the Education System stipulates that the education and pedagogy work for the members of national minorities is realized in their mother tongue, and only in extreme cases, it can be organized in Serbian language ${ }^{54}$. For these exceptions to the guaranteed rule, the Republic of Serbia should prescribe individual laws by which preschool, elementary and secondary education and pedagogy would be regulated, since the provisions of these laws remained non-compliant with this new provision for the rights of national minorities.

The first state report on the implementation of the Framework Convention for the Protection of National Minorities uses the term "bilingual instruction", although there is no definition for this kind of instruction. For 14 years of the Law on Elementary Education being in force, the minister of education has not prescribed the way of implementing the bilingual syllabus.

The new Law on Higher Education allows higher education institutions to organize and implement study programmes or their parts, as well as to organize the preparation and defense of a doctoral dissertation in national minority languages, in accordance with the institution's Statute. The precondition for implementation of a study program in the language of a national minority is that the program is approved and/or accredited ${ }^{55}$. Instead of being prescribed by the Law on Higher Education, this Law gives the Statute of a University the

[^19]right to prescribe the conditions for organizing the studies in a minority language, although the new Constitution guarantees that the attained level of minority rights may not be lowered. Neither the Law on University ${ }^{56}$ nor the Law on Faculties have worked out the way in which the members of national minorities would exercise their right to receive education in their mother tongue, despite the straightforward provision of the Constitution which stipulates that the Law governs exercising the rights of national minorities to education in their mother tongue. Delegating to a college or a university to decide, cannot be considered a solution in accordance with the Constitution. The right of the members of national minorities must not depend on the change of government and political organizations in power, nor on the change of the bodies at colleges and universities which are also changed depending on the change of government (VHCR, 2007).

The Alternative Report states, that education was conducted in minority languages in 40 secondary schools in the AP Vojvodina: 12 grammar schools (Serbian "gimnazija") (9 in Hungarian, 2 in Slovak and 1 in Ruthenian), 25 vocational schools (24 in Hungarian and 1 in Romanian), 2 joint schools (grammar schools + vocational school) (1 in Hungarian and 1 in Romanian), 1 arts school in Hungarian language (VHCR, 2007).

One of the main reasons for the decrease in the number of students of all nationalities in secondary schools in AP Vojvodina is demographic in nature. Another reason is the current net of secondary schools which does not offer sufficient choice of education profiles for the students of Slovak, Romanian and Ruthenian minority: the instruction is given in Slovak and Ruthenian language only in grammar schools, and in Romanian only in the grammar schools and in High School of Economics and Commerce. In comparison to these three national minorities, the Hungarians can receive education in grammar schools and in a number of vocational schools. The third reason for the decrease in the number of students, is the lack of the qualified teaching personnel in the current grammar schools where the instruction is given in Slovak, Romanian and Ruthenian.

The National Council of the Hungarian National Minority stated in the Alternative report, that in 2003, two grammar schools for gifted pupils instruction given in Hungarian were established in Subotica and Senta. Their existence and work are very important for the Hungarian community. Those are "Deže Kostolanji" Language Grammar School in Subotica (linguistic department) and "Boljai" Grammar School for Gifted Pupils with a Pupil

[^20]Residence" in Senta (science department). The founder of these schools was the Government of AP Vojvodina.

The National Council of the Hungarian National Minority has submitted its proposals to the Ministry of Education and Sports, concerning the establishment of new elementary and secondary schools and reorganization of the existing ones. School administration from Sombor currently has the field office in Subotica. Local self-governments of Bačka Topola, Mali Iđoš and Subotica, together with the National Council of the Hungarian National Minority asked the Ministry of Education and Sports for the independence of the School Administration in Subotica, above all because of the specific characteristics of North Bačka District, i.e. because of the significant number of students who receive their education in Hungarian. In the school administration of Banat District there were no supervisors speaking Hungarian.

The National Council of the Slovak National Minority stated that it is evident that the number of Slovak students was decreasing year by year due to the smaller number of births, as well as due to the enrolment of pupils in preschool, elementary and secondary schools in which the instruction is given in Serbian. Parents explained this by claiming that this would later make it easier for the children to continue their education (in Serbian). In the 2006/2007 school year, 3347 pupils were enrolled in Slovak classes in elementary schools and 468 in secondary schools, which is $14.17 \%$ of the total number of pupils who receive education in minority languages in AP Vojvodina.

It should be noted that since the publication of the Alternative Report there were changes in the number of institutions in which studying in minority language (partially or entirely) was possible and within the institutions as well, as there were fewer staff members able to teach in minority languages.

The Report states that in the 2003/2004 school year there were nine colleges in Novi Sad, Subotica, Zrenjanin, Sremska Mitrovica, Kikinda and Vršac. Three were technical colleges, 1 business college and 5 nursery teacher training colleges. Bilingual Serbian and Hungarian education was available at SuboticaTech College of Applied Sciences in Subotica, Preschool Teacher Training College in Novi Sad and the Preschool Teacher Training College in Subotica. Bilingual Serbian and Romanian training was available at the Preschool Teacher Training College in Vršac.

At the time of writing the Altnernative Report, the University of Novi Sad considted of $13^{57}$ faculties. Courses or study programs in one or more minority languages was available at the following faculties of the University of Novi Sad:

- Academy of Arts in Hungarian language,
- Faculty of Economics in Subotica in Hungarian language,
- Faculty of Civil Engineering in Subotica in Hungarian language,
- Faculty of Philosophy in Novi Sad in Hungarian, Slovak, Romanian and Ruthenian language,
- Teachers' Training Faculty in Sombor in Hungarian and Slovak language (in the field offices in Subotica and Bački Petrovac).

The instruction at colleges in AP Vojvodina was not entirely given in minority languages for all subjects: at SuboticaTech - College of Applied Sciences in Subotica and at Colleges for Nursery Teachers in Novi Sad and Subotica. The situation was similar at the group of Hungarian language and literature at the Faculty of Philosophy in Novi Sad and at the acting department at the Academy in Novi Sad. At the Faculty of Pedagogy in Sombor, the instruction is given in Slovak for around $2 / 3$ of the subjects. At the Teachers' Training Faculty in Belgrade and in the field office in Vršac, the instruction is given in Romanian for a bit more than half of the subjects

The National Council of the Hungarian National Minority stated in the Alternative Report, that although the number of students of Hungarian nationality at certain faculties of the University of Novi Sad was slightly increasing over the course of the previous few years, the relation between the Hungarians in higher education institutions was, in comparison with their share in the entire population in AP Vojvodina, low: Hungarians constituted $14 \%$ of the population of the AP Vojvodina, and in higher education institutions in 2006 only $6 \%$, as among 38000 students there were only 2300 Hungarians. The decrease in the number of students is the consequence of the negative demographic migrations and emigrations, since part of Hungarian youth continue their education in Hungary. There is a small number of Hungarians among the teachers and co-workers at certain faculties, for example at the Faculty

[^21]of Medicine in Novi Sad (from among 92 full professors, only 3 are of Hungarian nationality (3.3\%)). The very fact that the Law on Higher Education stipulates that the instruction shall be given in Serbian, the members of national minorities are, in comparison to the majority population, discouraged and not in an equal position, since they do not have the opportunity to study the technical terminology in their mother tongue. At the Faculty of Law, University of Novi Sad, the lectorat in Hungarian language was available up until the 1990s, but it was not re-established after the change of the political regime in 2000. Although it is stipulated by the new provisions in this field, the language department for Hungarian was not established again, as well as for the other minority languages. During the 1970s and 1980s, language departments existed, for example, at the Faculty of Law in Novi Sad. It is important to mention that the Provincial Secretariat for Regulations, Administration and National Minorities in cooperation with the National Council of the Hungarian National Minority organized in the four previous years professional and thematic seminars for legal practitioners, for the purpose of enabling the employees in administrative bodies, younger judges and prosecutors, who did not have the opportunity to attend certain subjects or some practice classes in their mother tongue at the Faculty of Law in Novi Sad, to use the Hungarian language in the municipalities in which its official use is prescribed by the statute of the municipality. Although these three-day seminars are very useful, they cannot substitute for the lack of training in a mother tongue during education.

The establishment of the Teachers' Training Faculty in Hungarian language in Subotica was a result of a long-lasting and difficult process which lasted for two years. In 2004, the Minister of Education informed the Provincial Secretary for Education and Culture that they do not approve of establishing the faculty, nor of opening of a bank account of this institution, and they addressed the provincial decision to the Constitutional Court of the Republic of Serbia, for the conformity assessment with the constitution and the law. The Constitutional Court did not consider the Ministry's proposal, because it declined its jurisdiction. The framework agreement on the establishment of this faculty was signed by the Intergovernmental Mixed Commission of the republic of Hungary and the Republic of Serbia, and the authorities gave the permission for establishing the only higher education institution in Hungarian language under both foreign and domestic pressure, acting on a proposal from the Prime Minister of the Republic of Serbia. Although establishing the Teachers' Training Faculty in Subotica was accepted as the foundation of the 14th faculty within the University of Novi Sad, the existing Teachers' Training Faculty in Sombor and the Faculty of Philosophy in Novi Sad still prevent
the operation of this institution in Hungarian in a sense that they refuse the appointment of professors and every form of professional cooperation and only the basic (bachelor) study program, without the possibility of organizing specialist, master or doctoral courses, is accorded with the Memorandum of Association of the Faculty, by which adding people to the existing and building the new staff structure is not possible. The Teachers' Training Faculty in Hungarian language does not have the status of a legal entity within the University. Although with a delay, the instruction began during the autumn of 2006. It started working on 13th of August, 2004, when the Assembly of AP Vojvodina adopted the Decision on the Organizational Structure of the University of Novi Sad ${ }^{58}$ ("Official Gazette of AP Vojvodina, No. 14/2004), according to which the Teachers' Training Faculty in Subotica was included in the list of faculties within the University of Novi Sad, until the 16th of October, 2006, when the Teachers' Training Faculty in Subotica was officially opened.

In the Alternative Report, the part which was written by the National Council of the Romanian National Minority, it is written, that although the provincial assembly decision of AP Vojvodina stipulates the establishment of the Teachers’ Training Faculty in Vršac, with the instruction given in Serbian and Romanian Language, the aforementioned institution did not gain momentum, since the enrolment in the first school year was, without explanation, stopped in 2002, by the Ministry of Education. It still functions as a field office of the Teachers’ Training Faculty in Belgrade. Nursery Teacher Training College is in the process of accreditation, as the Four-year Pedagogical College, in which the nursery teachers would receive education in Serbian and Romanian until the master's degree (academic studies).

The presentation of the Council of Europe's Framework Convention on the Protection of National Minorities was needed to get a legal overview of the situation regarding secondary education and higher education for Hungarian, Slovak and Romanian national minorities in Vojvodina. Understanding the situation from a legal perspective enables the readers of this dissertation to grasp the results from the questionnaire data and especially the narratives of students and professors studying and teaching at the University of Novi Sad and at the University of Belgrade. Although the legal provisions are mostly in favor of national minorities, when it comes to establishing higher education institutions in their mother tongue, there are insurmountable barriers. The situation regarding the lectorate at the Faculty of Law hasn't changed, there is still no possibility for Hungarian students to study the terminology in their mother tongue. The establishment of the Teachers' Trainings Faculty in Hungarian

[^22]Language was very difficult, and the faculty still has not gained its independence. There is less and less opportunity for the students to study in their mother tongue at the University of Novi Sad. This is mostly because of the eroding numbers of teaching staff speaking national minority languages.

### 3.2.3 Ethnic Minority Rights in Serbia

The Law on the Protection of Rights and Freedoms of National Minorities ${ }^{59}$ (the Law) stipulates that the members of national minority groups have the right to education and pedagogy conducted in their native language in preschool, primary and secondary educational institutions ${ }^{60}$. If at the moment of adopting this law, there was no option for the ethnic minorities to receive tuition in their mother tongues within the system of public education for the members of national minority groups, the country is obliged to provide all the conditions necessary for delivering education in their native language, and by the time it happens, it is obliged to deliver the education bilingually, or to make it possible to study the language of the national minority with the elements of their national history and culture for the members of that national minority. The mentioned law explicitly states that the education delivered in the language of the national minority does not necessarily exclude studying the Serbian language. National minority councils necessarily take part in the preparation of the syllabus for the purposes of teaching the subjects which express special characteristics of the national minorities in their languages, bilingual education and studying the mother tongues of national minorities with the elements of their culture. The syllabus in educational institutions and schools in which the instruction is given in Serbian, with the purpose of promoting tolerance towards national minorities should contain the material which covers history, culture and the position of national minorities and other topics which promote mutual tolerance and coexistence. In the territories where the minority language is official, the syllabus in elementary school institutions and schools in which the instruction is given in Serbian should provide the pupils with opportunity to study the minority language. When it comes to higher education, the law stipulates that for the purposes of education conducted in the minority language in the scope of tertiary education there shall be departments and faculties where the instructors, teachers and professors of minority languages shall be educated in the minority language or bilingually. Apart from the tertiary education from the previous paragraph of this Article, the faculty shall organize a minority language instructorship where the students who

[^23]belong to national minority groups could master the technical terms also in the national minority language. The state shall foster the professional training and terminology specialization of the professors for the purposes of education and international cooperation, to make it possible for the members of national minorities to study abroad in their mother tongue, graduate and that their diplomes acquired in that way to be recognized in Serbia in accordance with the law. The members of national minorities are guaranteed the right to establish and maintain private educational institutions, schools, or universities, where education shall be conducted in the minority language or bilingually, in accordance with the law. Domestic or foreign organizations, foundations, or a natural person may take part in financing education in the minority language, in accordance with the law. In the case of financial or some other kind of donation from the previous paragraph, the country shall provide the institutions with financial benefits or relieve them of financial duties.

According to The Law on Higher Education ("Official Gazette of the Republic of Serbia", No. 76/2005, 100/2007 - authentic interpretation, 97/2008, 44/2010, 93/2012, 89/2013, 99/2014, 45/2015 - authentic interpretation and 68/2015), a higher education institution shall organize and implement studies in the Serbian language. A higher education institution may organize and implement studies and/or certain parts of studies and organize the preparation and defense of a bachler thesis, master's thesis, specialist thesis and doctoral dissertation in the language of a national minority or in a foreign language, in accordance with the institution's Statute. A higher education institution may carry out a study programme in the language of a national minority or in a foreign language if such a programme was approved and/or accredited.

### 3.3 Higher education in Serbia

Education is of great importance for every society. Gender equality and the rights of ethnic minorities are essential rights as well. These areas are regulated by laws, by applying different legislative models. In the study "Gender Differences in Educational Outcomes" (EURYDICE, 2010) it was pointed out that studies conducted in the sphere of social sciences draw attention to the effect reproduction of gender stereotypes through education. Gender patterns in educational attainment still exist, whereas traditional gender roles and stereotypes are still relatively persistent throughout all levels of education. Because of this, it is important to develop gender policies through three models, based on the organization and purpose of such frameworks in education: the general framework which guarantees equal treatment and equal
opportunities, equal treatment and equal opportunities in education, and gender equality in education ${ }^{61}$ (EURYDICE, 2010). It is necessary to mention that the study showed that in most countries the primary objectivea were to promote equal treatment, equal rights and equal opportunities. Only in a small number of countries, was gender equality incorporated as the outcome of education (equal rights, above all, during and after education). The situation was unfortunately similar in Serbia.

The Constitution of the Republic of Serbia guarantees equal access to higher education to everyone. The Constitution guarantees the equality of all people before the constitution and the law, as well as the right to have equal legal protection. All direct or indirect discrimination based on any grounds, particularly on race, sex, national origin, social origin, birth, religion, political or other opinion, property status, culture, language, age, mental or physical disability is prohibited. The educational system of Serbia is divided into compulsory and free preschool and primary education, and non-compulsory high schools and higher education. The Law on the Foundations of the Education System stipulates that all children, students and adults are equal when exercising their rights for education and pedagogy, without discrimination and segregation based on gender, race, national, religious or language affiliation, social and cultural background, financial status, age, physical and mental condition, developmental impairments and disabilities, political beliefs or on any other personal characteristic. By explicitly prohibiting discrimination, the level of availability of education increases and the educational system is directed towards the needs of the students. It is stipulated that secondary education and pedagogy lasts for three or four years and is conducted in high schools which are divided into three types: grammar schools ("gimnazija" in Serbian), which offer general education, professional and vocational schools. After finishing elementary school, an eighthgrade student sits a final exam which they need to pass before they enroll into secondary education. Certain individuals and groups can enroll into secondary education under the more favorable conditions for achieving full equality in educational attainment. After completing the fourth grade of the secondary school, the students sit a general, vocational or arts matriculation exam, which they are required to pass to continue to the next level of education.

The Law on Higher Education stipulates that the right to higher education shall have all persons who have completed their secondary education irrespective of race, color, gender, sexual orientation, ethnicity, national origin or social background, language, religion, political

[^24]or any other opinion, birth, existence of a sense or movement handicap or property. Higher education is carried out through academic courses, which are shaped according to academic study programs equipping students to develop and apply scientific, professional and artistic achievements, as well as through professional career courses streamlined according to professional career study programs equipping students to apply the knowledge and skills necessary in their future workplaces. There are first level studies (basic academic courses and basic professional career courses), second level studies (diploma academic courses for a master's degree, specialist professional career courses and specialist academic studies) and third level courses (doctoral academic courses).

### 3.3.1 Educational strategies in Serbia

### 3.3.1.1 Strategy for Education Development in Serbia 2020

The Strategy for Education Development in Serbia $2020^{62}$ was adopted in 2012. It does not mention gender equality in education, i.e. achieving full and effective equality of women and men in education as an objective of education. Its central objective is quality, more specifically that the quality and the outcomes of education should be at the highest possible level. The coverage of Serbian population should be increased at all levels of education. The relevance of education should be reached and maintained, especially that financed from public resources. This is to be achieved by adjusting the education system structure with different needs of individuals and systems, such as economic, social, cultural, research, education, public, administrative and other. Finally, educational resources are to be used in an efficient manner, i.e. education is to be completed on time, with minimal extension and reduced dropout.

### 3.3.1.2 Hungarian National Council's Strategy for education development between 2016-

 2020Hungarian National Council's (HNC) Strategy for education development between 2016$2020^{63}$ refers to the Vojvodinian Hungarian students' career orientation in its section 3.1.4. It says that the aim of professional orientation is to help students' career choices by aligning desires and opportunities. The HNC considers it important to assist students in each and every

[^25]station in the career process, in particular to draw the attention of parents and students to the less-known, modern disciplines or to the professions in which there are shortages. To make a good decision, students need information about themselves, high schools and professions alike. The most important is to provide students with a fuller picture of themselves, their skills, their interest in raising awareness of their value system and their expectations towards their future professions.

The strategy is however not considering career orientation in a gender sensitive way, nor does it have an intersectional perspective. This is unfortunate, as the HNC possesses the resources to successfully work towards dismantling gender biases and stereotypes throughout the complete educational paths of ethnic Hungarian students. Such good use of resources could ensure that female and male students are not segregated in their professions, also as this is one of the goals of the dissertation. More specifically, it would be useful if the abovementioned strategy would steer ethnic minority women in Vojvodina towards the STEM fields, thereby allowing them to face fewer language-related issues when continuing their education in Serbian after finishing elementary and secondary education in their mother tongue.

## 4 EDUCATIONAL POSSIBILITIES IN MINORITY LANGUAGES

In order to start an analysis of the status of minority women in the higher education system of Serbia, there is a need to introduce the educational possibilities for ethnic minority students in Serbia. Firstly, the universities will be listed, where minority students can study (partially or entirely) in their mother tongue. We will also list the high schools, where minority students (in this case Hungarian, Slovak and Romanian) can study in their mother tongue. After the introduction of the universities and schools, the National Councils (Hungarian, Slovak and Romanian) will be introduced and the possibilities which they offer in the field of education. Non-government organizations (NGOs) with activities related to minority higher education will be introduced as well. The above listed institutions constitute the framework in which ethnic minority female students and female teaching staff obtain the necessary tuition or teach in their mother tongues and become reasonably competitive in a society they are living in. Although this dissertation focuses on women members of the aforementioned three ethnic communities, the educational possibilities and the support regarding ethnic minority education will be presented for both female and male students.

### 4.1 Hungarian-language higher education in Serbia

In Serbia two state Universities ${ }^{64}$ offer higher education in the relevant minority languages. The University of Novi Sad, which is the second largest university in Serbia, and the University of Belgrade (which is the largest university in Serbia).

The University of Novi Sad traces back its origins to around 1740, and it was officially founded in 1960. It has now more than 50,000 students and 5,000 employees, making it one of the largest educational and research centers in Central Europe. It belongs to the group of comprehensive universities, which are characterized by providing nearly all fields of science and higher education (University of Novi Sad - Basic Information, 2017). The University of Novi Sad consists of fourteen faculties (University of Novi Sad - Basic Information, 2017):

1. Faculty of Philosophy,
2. Faculty of Agriculture,
3. Faculty of Sciences,

[^26]4. Faculty of Law,
5. Faculty of Technical Sciences,
6. Faculty of Technology,
7. Faculty of Sport and Physical Education,
8. Faculty of Medicine,
9. Academy of Arts, and
10. Faculty of Economics (with headquarters in Subotica),
11. Faculty of Civil Engineering,
12. Teachers' Training Faculty in the Hungarian Language ${ }^{65}$ (also situated in Subotica).
13. Faculty of Education headquartered in Sombor, and
14. Technical Faculty "Mihajlo Pupin" in Zrenjanin.

There was an initiative that a bilingual or trilingual University (Hungarian - Serbian- English) should be founded in Subotica, but this initiative lost its political support. Although the Hungarian government founded Hungarian-language universities in Hungary's neigbour countries where a significant Hungarian ethnic minority population lives (Romania, Slovakia and Ukraine), this is not the case in Vojvodina (Serbia). On November 19th, 2017 the Hungarian Training - Reseach - Cultural Center in Vojvodina was opened (Vajdasági Magyar Képző - Kutató - Kulturális Központ - VM4K) in Subotica. It has various activities, mostly of cultural nature. It also offers Hungarian-language master study programmes in technical sciences and pedagogy together with various universities from Hungary. These programmes are not yet accredited in Serbia and therefore their degrees are not recognized.

The Faculty of Philosophy has departments where students can study minority languages as mother tongues, namely there is a Department of Hungarian Studies, Department for Slovak Studies and Department for Romanian studies as well. We should note here that most of the students at these departments for minority languages are female, with only a few exceptions. This is also true for the teaching staff, who are mostly female as well. It seems that the minority language departments are educating minority women, who maintain/nurture national

[^27]culture and language as a very important component. Additional institutions with Hungarian only tuitition are the Hungarian-language (acting) groups at the Academy of Arts in Novi Sad and the Teachers Training Faculty in Hungarian in Subotica. Partial Hungarian education is available at the Faculty of Civil Engineering in Subotica and at the Faculty of Economics in Subotica. A 2005 report assessed education in Hungarian at the faculties at the University of Novi Sad, namely at the Faculty of Law, at the Faculty of Natural Sciences and Mathematicas and at the Faculty of Technology (Szalma, 2005). The author experessed his concern about the Faculty of Medicine where there were more than twenty Hungarian professors, there were nor classes, nor consultations in Hungarian (Szalma, 2005). We should note that as the years pass, not only is the number of Hungarian students falling, but the number of Hungarian teaching staff at the UNS is shrinking as well. In this sense, the traditional possibilities for Hungarian students to study in their mother tongue are disappearing.

The University of Belgrade, whose origins date back to 1808 and which was founded in 1905, is the largest university in the country. The Department for Hungarian Language, Literature and Culture at the Faculty of Philology, offers students to study Hungarian as a foreign language. Their number of students is continuously decreasing. Most of the students have no Hungarian ethnic roots, instead they are somehow connected to or interested in the Hungarian language. At the same faculty in Belgrade, there is a Departments of Slavonic Languages, Literature and Culture, where students can study Slovak language, literature and culture and there is a Department for Romance Languages, Literature and Culture, where students can study Romanian language. We should note that all the departments have only a few professors who are teaching and the number of students is small, usually less than twenty.

### 4.2 HUNGARIAN-LANGUAGE HIGH SCHOOLS IN SERBIA

Twelve municipalities in Vojvodina offer a variety of high schools to Hungarian students in their mother tongue: Ada, Bečej, Kanjiža, Čoka, Senta, Zrenjanin, Bačka Topola, Subotica, Sombor, Novi Keževac, Novi Sad, Temerin. Slovak students have the possibility to study in two municipalities in their mother tongue (Kovačica and Bački Petrovac). Romanian students also have the possibility to study in two municipalities in their mother tongue (Vršac and Alibunar). The high schools are listed in Table 1 (Appendix 4). In the high schools, national minority students are usually gender-segregated. In more "feminine" vocational schools like the Hemijsko-prehrambena srednja škola Čoka (engl. translation: Chemical-food high school Čoka) female high school students are overrepresented, while in technical schools like the

Tehnička Škola Ada (eng. translation: Technical School Ada) male students are overrepresented. Female students are overrepresented in most grammar schools (Serbian: gimnazija) as well. One such example is the Kosztolányi Dezső Grammar School in Subotica, which is a language-oriented school.

### 4.3 NATIONAL COUNCILS

The Hungarian, Slovak and Romanian national councils have the legal authority and (limited) financial means to implement measures necessary to improve the current status of minority education.

The Law on the protection of the rights and freedoms of national minorities ${ }^{66}$ (The Law) was passed in 2002. It stipulates that the state may delegate certain rights to the national councils for the effective protection of the rights and freedoms of national minorities. Obviously, the extent of these powers is tightly coupled with the financial capabilities of the councils. Before making decisions in the areas of language, education, information and culture in the state, provincial and local government agencies are required to seek the opinion of the national councils (Article 19 of the above Law)

In 2009 the Law on National Councils ${ }^{67}$ entered into force, which was the state intention since 2002. The law regulated in detail the foundation of national councils, the terms for the election of their members, the way of financing and their place in the political system of the country.

According to the Law on National Councils they have competences in the field of education which are determined by Articles 11-15 of the Law. They may as establish institutions of upbringing, education, standards for elementary and highschool students and students in higher education and exercise the rights and obligations of the founder. The National Council shall establish the institutions on its own or with the Republic, with the Autonomous Province of Vojvodina (APV), a local self-government unit or other legal entity in accordance with the law (Article 11). The Republic, autonomous province and local self-government units as founders of institutions may transfer in whole or in part the founding rights to the national council (Article 11). It is important to mention that national councils are financed from the budget of the Republic of Serbia, from the budget of the APV and they may receive donations

[^28]from their mother countries, Hungary, Slovakia and Romania respectively. Until the last changes of the Law on National Councils, there was a right of the national councils, to give opinion in the process of dismissal of the principals in instutions in which minority languages are used and members of the body management in the abovementioned institutions and gave prior consent to select the director of the institution (Paragaph, 4 and 5, Artcile 12). These paragraphs were erased with the last changes of the Law. ${ }^{68}$

### 4.3.1 Hungarian National Council

The Hungarian National Council offers scholarships to students who finished their elementary and/or high school education in Hungarian language. In some cases, a special board can rescind a student from this requirement, usually Hungarians living in very small communities and with no option to attend elementary nor high school education in their mother tongue.

Hungarian students can apply for the Európa Kollégim ${ }^{69}$ student dormitory, where students who (1) fulfill the above-mentioned requirement, (2) study at an accredited higher education institution, (3) commit themselves to working at least three years in Serbia after graduation, (4) do not have an address in Novi Sad and (5) previously did not violate any institution policy. Senior students are obliged to attending the additional training courses organized in the dormitory (Magyar Nemzeti Tanács hivatalos honlapja, 2017).

Students have the possibility to apply for three types of scholarships. The Várady ${ }^{70}$ excellence scholarship for PhD students (Várady kiválósági ösztöndíj doktoranduszok részére) for first and second-year PhD students. The goal of this scholarship is to provide financial aid to Hungarian PhD students living and studying in Serbia. Applicants previously had to had finished their studies in the Hungarian language (elementary and/or high school) and they have to enrolled in PhD studies in one of the accredited higher education institutions (Magyar Nemzeti Tanács hivatalos honlapja, 2017). The Várady excellence scholarship for MSc students (Várady kiválósági ösztöndíj mester hallgatók részére) is the next option with similar conditions as for the PhD students. Undergraduate students might apply for the scholarship awarded by the Hungarian National Council with the financial support of the Bethlen Gábor

[^29]Fund ${ }^{71}$ (Bethlen Gábor Alap Zrt) from Hungary. There is also a Demonstrator's scholarship (Demonstrátori ösztöndíj) for senior undergraduate students (second year and above) who should have an $8,00^{72}$ average grade in the previous year (and to fulfill the above-mentioned other requirements as well). The students receiving this scholarship are obliged to help the freshmen (i.e. first-year students) to get familiar with the higher education system. The Demonstrator's scholarship has an enhancing role for students to get the highest grades as possible during their studies, therefore they could get the monthly financial aid, in return of mentoring a younger student. The Hungarian National Councel offers a fast-learning Serbian course for students (Szerb nyelvi felzárkóztató képzés elsőéves egyetemisták részére) which is designed for students who need to improve their knowledge of the Serbian language, thereby allowing them to face fewer challenges in connection with the language difficulty during their studies. With these possibilities students who speak Hungarian language in Serbia are encouraged to study in Serbia to succeed later, on the labor market. The above-listed scholarships are financed either by the Hungarian government or by privately held funds (the Várady scholarship programs).

### 4.3.2 Slovak National Council

The National Council of the Slovak National Minority in Serbia also offers a scholarship program for students who study in one of the accredited higher education institutions of Serbia and meet the following criteria: knowledge of the Slovak language (completed a Slovak-language secondary school or a Serbian-language school and attended Slovak with elements of national culture classes). Students who apply should be oriented towards working in elementary or secondary school in Slovak language in Serbia, in the Slovak media or other Slovak institutions (this should be proven with a declaration of honor), the applicants should have completed successfully at least the first year of their studies at the preferred departments: mathematics, physics, German language, law, journalism, economics or in the field of Slovak language and literature. The candidates should also attach a document which proves what sort of other financial aids are they receiving.

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### 4.3.3 Romanian National Council

The National Council of the Romanian National Minority does not offer scholarships in a few years back. Earlier they had scholarships which were granted to bachelor students and master students as well ${ }^{73}$.

### 4.4 NGOS IN EDUCATION

A variety of non-government organizations (NGOs) exist only in the Hungarian, Slovak and Romanian national minority communities in Vojvodina. Some specifically support or deal with higher education and/or research. They are mainly trying to fill the gaps of not having a comprehensive higher education in ethnic minority languages.

### 4.4.1 Hungarian NGOs

We shortly discuss four Hungarian civil societies ${ }^{74}$ which deal with higher education, research, publications, and/or organizing conferences.

The Magyarságkutató Tudományos Társaság (Hungarian Scientific Research Society) was founded in 1991 with an aim to conduct research in Vojvodina - sociological, psychological, demographic, ethnographic, law, historic as well as other researches of social nature with a possibility for professional forums and publications as well (Gábrity - Molnár, Csányi \& Takács, 2011).

The Vajdasági Magyar Tudományos Társaság (Hungarian Scientific Society in Vojvodina) was founded in 1999 with the aim to address a variety of scientific challenges of the Hungarian society in Vojvodina. It organizes a conference once a year (Gábrity - Molnár, Csányi \& Takács, 2011).

The Vajdasági Magyar Felsőoktatási Kollégium (Hungarian College for Higher Education in Vojvodina) was founded in 2001. It successfully supports young Hungarian students who study in the higher education system of Serbia with a special tutoring program. It organizes the annual Vajdasági Magyar Tudományos Diákköri Konferencia (Hungarian Scientific Conference of Vojvodinian Students) (Gábrity - Molnár, Csányi \& Takács, 2011). The College introduced the Kristálygömb (Crystal Globe) annual reward. The award has been awarded since 2006 to a young Hungarian talent from Vojvodina for outstanding scientific -

[^31]artistic results presented at the College's conference and elsewhere. It is awarded to only one person per year, consists of a certificate, engraved crystal ball and a financial prize. It is presented each year in November at the certificate giving celebration at the Hungarian Scientific Conference of Vojvodinian Students (Vajdasági Magyar Felsőoktatási Kollégium, 2017). Since 2006 the Crystal Globe was awarded to 9 men and 3 women ${ }^{75}$.

The Vajdasági Magyar Akadémiai Tanács (Hungarian Academic Council of Vojvodina) was founded in 2008 and its goal is to coordinate the activities scientific community, to develop strategic research plans, to set priorities and create a network of Hungarian researchers and professors of Hungarian origin (Gábrity - Molnár, Csányi \& Takács, 2011). The Hungarian Academic Council of Vojvodina has its own annual conference as well. In 2017 it introduced the Aranybagoly (Golden Owl) award, which is awarded to Hungarian researchers in Vojvodina who already obtained their PhD and have excellent academic achievements. It is awarded to two scholars per year, one in STEM and one in SSH studies (Vajdasági Magyar Akadémiai Tanács hivatalos honlapja, 2017).

The amendments in 2009 on the XL Act on Hungarian Academy of Sciences from 1994 stated that the Hungarian Ministry of Science and Technology introduced the issue of cross-border Hungarian science in the following way: the Hungarian Academy of Sciences "liaises with the experts of Hungarian scientific and linguistic research abroad and supports cross-border Hungarian science". The public function of the Hungarian Academy of Sciences (MTA), is the communication and support related to Hungarian science beyond the borders. The top-set, principal and conceptualizing body of this dual task system provided by law is the Chairmanship Committee of the Hungarian Science Foundation Abroad, established by the Academy in 1996, and in 1999 assigned the Administrative Secretariat of the Hungarians Across the Border (Magyar Tudományos Akadémia hivatalos honlapja, 2017). The Hungarian Academy of Sciences donates funds to the above-mentioned civil societies in annually. The funds are covering the basic operations of the above-mentioned civil societies. There are possibilities for them to apply for government funded projects ${ }^{76}$ as well.

### 4.4.2 Slovak NGOs

In the Slovak national minority two societies should be mentioned, which has scientific activities. The Ústav kultúry Vojvodiny Slovákov (Slovak Cultural Insitute in Vojvodina) has

[^32]publishing, research, educational and organizational activities (Zavod za kulturu vojvođanskih Slovaka, 2017). The Slovakistická vojvodinská spoločnost' (Slovakian society in Vojvodina) was publishing the publications of the Department of Slovak Studies at the Faculty of Philosophy, University of Novi Sad. Recently the society had very limited funds for financing those types of activities ${ }^{77}$.

### 4.4.3 Romanian NGOs

The Romanian national minority in Vojvodina is supported by the Institutul de Culturã al Românilor din Voivodina (Romanian Cultural Institue in Vojvodina) which organizes the annual scientific conference „Banat - istorija i multikulturalnost". It awards book prizes to elementary school pupils who won prizes in Romanian language competitions. The Societatea pentru limba română din Voivodina (Romanian language society in Vojvodina) publishes Logos, a journal of philology. The mentioned society organizes the international symposium named „In memoriam Radu Flora" and other cultural activities (e.g. literary meetings, festivals) ${ }^{78}$.

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## 5 GOALS AND HYPOTHESES

### 5.1 Goals of the dissertation

The dissertation has a threefold goal, the first goal is to analyse the narratives of Hungarian female students and teaching staff about the difficulties they are facing in the Serbian higher education system while studying and building a career in the academic community. How are does difficulties presented in their narratives and how are they reflecting on them. Their answers will be compared to the answers of the female and male respondents from the majority community.

The secondary objective is to analyses the unconscious and conscious gender biases towards ethnic minority women (especially Hungarian women), when building their careers in the academia and aiming for a decision-making position. The findings will also present their difficulties when balancing between career and family obligations and the narratives regarding the work-life balance of ethnic minority women will be compared to the narratives of the majority women. Moreover, a total gender-based comparison will be made regarding work-life balance.

The tertiary objective of the study is that, through the example of a woman from the Hungarian national community in Serbia, raise awareness about how the lack of workforce in the labor market in the field of STEM significant and that women should be, in increasing numbers, are oriented towards the mentioned sciences.

### 5.2 Hypotheses

Based on the previously presented literature review, theoretical framework, EU policies on gender, legal framework, methodology of the proposed research, the author of this dissertation proposes the following hypothesis:

H1.There are difficulties (language- based, ethnicity-based, gender-based and others) for women members of national minorities during their studies and building up their careers. These difficulties female students get beyond easier in STEM fields of studies, than in SSH. One factor in this phenomenon is that the perfect knowledge of the majority language (i.e. Serbian) is less important in both teaching and research in STEM fields.

H2.Regardless that the completion of studies in some STEM fields makes it easier to find a job and often offers more financial power, small number of women choose STEM fields of study.

H3.The level of motivation to reach high positions/decision-making positions in the hierarchies of higher education and/or research institutions is lower for women.

## 6 Methodology

There are many ways to understand the social world, as no social science research method can capture all the complexities, messiness and elusiveness of our social reality (Law, 2004). In line with the above quote, the author used a combination of different methods to analyse the rich datasets collected during her research. Before continuing with the description of the methodology applied, we provide a short overview of the datasets used:
(1) Census data of the Republic of Serbia, more specifically data about the Hungarian (minority) population in the total population of the Autonomous Province of Vojvodina (APV) and the proportion of Hungarian students in the total number of students at the University of Novi Sad (UNS). The quantitative part of the study will refer to four school years between 2009/10 and 2012/13. The data used will be the statistical information collected by the UNS and the data from the national Statistical Office.
(2) Questionnaire data collected from Hungarian, Slovakian and Romanian high school students, who were finishing secondary education in their mother tongue. The data was collected in school years 2013/14 and 2014/15 in Vojvodina.
(3) Interviews with Hungarian, Slovak, Romanian and Serbian female and male students and teaching staff studying or working at in two higher education institutions in Serbia, namely the University of Novi Sad and University of Belgrade.

The above listed diverse datasets were analysed with a diverse range of scientific methods. The datasets themselves were listed to thereby better position the methods described in the following sections. We will conclude the methodology section with a short section on ethics in handling the data received and collected during this research.

### 6.1 INTERSECTIONALITY AS A THEORETICAL FRAMEWORK

This section outlines various definitions of intersectionality found in relevant literature and discusses research results in various related fields. First, the definitions of gender, ethnicity and class will be presented and their intersections. These definitions are important to understand the analythical cathegories by which the qualitative and the quantitative data was examined and discussed.

### 6.1.1 Gender

Defining gender should begin with the very famous sentence written by Simone de Beauvoir. „One is not born, but rather becomes, woman. No biological, psychic, or economic destiny defines the figure that the human female takes on in society; it is civilization that elaborates this intermediary product between the male and the eunuch that is called feminine" (Beauvoir, Borde and Malovany-Chevallier, 2010:330). Butler argues that gender is culturally constructed and it "originally intended to dispute the biology-is-destiny formulation" (Butler, 1990:6). Kadri reflects on gender as a category which is "not historical or fixed, but rather flexible and open to contestation, as the social, cultural and material context in which meanings to gender are produced is continuously changing" (Kadri, 2015 :20). Zaharijević begins her definition of gender with an explanation who is a woman, therefore she argues that a „woman" is (like a „man", after all) a set of attributed, socially imposed, acquired characteristics, a „gender framework" which each individual fit, successfully (Zaharijević, 2008). McNay is defining gender slightly differently, when arguing how the conception of gender is a "lived set of embodied potentialities, rather than an externally imposed set of constraining norms" (McNay, 2000:25). Zaharijević defines gender as a category used to describe the effect of patriarchate on every woman (Zaharijević, 2008).

When analysing 'women' as a 'category' of analysis, Mohanty argues that in „western feminist discourse on women in the third world to construct 'third world women' as a homogeneous 'powerless' group often located as implicit victims of particular cultural socioeconomic system" (Mohanty, 1994: 200). Mohanty furthermore argues that women are characterized as a singular group based on the shared oppression and what binds women together is a sociological notion of the 'sameness' of their oppression (Mohanty, 1994).

### 6.1.2 Ethnicity

Fenton defines ethnicity as a communal and individual identity expressed as an idea of 'our people our origins' (Fenton, 2003:114), and argues that in the last decade or two there is a remarkable rise of research interest in questions of 'national identity', it is now difficult to think of sociology of ethnicity without a key focus on nation, nationalism, and national identity (Fenton, 2011:12). Ethnicity is a complex and fluid phenomenon, which involves the self-identification processes of individuals, collective internal discourses of ethnic groups and external discourses on ethnicity in the mainstream population (FRA, 2011: 15). Ethnicity is the social system that gives meaning to ethnic differences between people - to those differences that can be made based on people's origin, appearance, history, culture, language
and religion (Franken et al, 2009:74). Verloo argues that "ethnicity" is associated with culture and geographical roots and inequality based on ethnicity is seen to derive from the way we organize citizenship (who belongs to 'us'? who is the outsider?) (Verloo, 2006: 2018).

Just like gender, race and ethnicity structure our personal experiences and give rise to inequalities in society. These dimensions structure meanings for people at the personal and symbolical levels; one only must think of the differential consequences of applying for a position when one's last name is 'Jansen' or 'Al Husseini' (Franken et al, 2009:74). According to Yuval - Davis, ethnicity relates to the politics of collectivity, boundaries, dividing the world into 'us' and 'them' around, myths of common origin and/or common destiny, and engaging in constant process of struggle and negotiation (Yuval - Davis, 1997:194).

### 6.1.3 Class

Cote defines social class as a dimension of the self that is rooted in objective material resources (via income, education, and occupational prestige) and corresponding subjective perceptions of rank (Coté, 2011:43). Verloo connects class to how labour is organized (Verloo, 2006:218). Common understanding of social class for Blagojević Hjuson, is bound to the participation and in the distribution of material wealth, power and prestige. But such a definition is of limited applicability when it comes to women (Blagojević Hjuson, 2015).

Anthias and Yuval-Davis argue that classes are not homogeneous ethnically, culturally or in terms of gender in most cases, but class fractious may constitute homogeneity (Anthias \& Yuval-Davis, 1983: 65-66). Blagojević Hjuson states that the dimensions of the social status themselves (involvement in the distribution of the material wealth, power and reputation) reflect the values of the patriarchal society. i.e. the existing disbalance of power. She states that the dominant knowledge in a patriarchal society is "necessarily androgynous" (Blagojevic Hjuson, 2015).

### 6.1.4 Intersectionality

Intersectionality is a theoretical and methodological mechanism which allows us to study and analyze the interaction and intersection between gender, ethnicity, race, class, sexuality, age/generation, disability, nationality, mother tongue, etc (Lykke, 2008). The interaction of these concepts can produce social inequality and unjust social ties. Intersectionality can be considered as a theoretical and methodological tool to analyze how historically specific kinds of power differentials such as gender, ethnicity, race, class, sexuality, age/generation,
dis/ability, nationality, mother tongue and so on, interact, and in so doing produce different kinds of societal inequalities and unjust social relations (Lykke, 2010:67). Davis suggests, that intersectionality was, "among other things, developed in order to complicate gender as the theoretical mainstay of feminist research" (Davis, 2014: 23). Brah and Phoenix (Brah and Phoenix, 2004:76) regard intersectionality as signifying the complex, irreducible, varied, and variable effects which ensue when multiple axis of differentiation - economic, political, cultural, psychic, subjective and experiential - intersect in historically specific contexts. It emphasizes that different dimensions of social life cannot be separated out into discrete and pure strands. The idea of 'multiple disadvantage' has advanced from the crude idea of 'adding up' disadvantages to a more sophisticated level, in which disadvantages are not just cumulative but interactional, i.e. they amplify each other as their number rises (Franken et al, 2009:50). Intersectionality provides simultaneity - instead of simply adding up various types of oppression, it captures how they are experienced at the same time (Carastathis, 2014). Intersectionality recognizes race/ethnicity, gender, and class as interacting categories, i.e. it does not treat these categories as if they were isolated from each other (Kózce, 2009).

Intersectionality focuses primarily on rendering the invisible visible, i.e. enlightening the world about the lives of people who politically, socially, and/or legally exist at the intersection of race, class, and gender (Hancock, 2011:39). People often pretend that race, gender, class, and sexual orientation do not exist when individuals, groups, and institutions interact with each other. Intersectionality emphasizes that not only do such categories have material effects, but the categories themselves interact with each other, teaching us how to spotlight invisible norms which lead to complex disadvantages (Hancock, 2011:35). Although intersectionality has always provoked fierce disputes among feminist researchers from America to Europe, today it is almost inconceivable that any women's study program, project, study, research focus exclusively on women, ignoring the emphasis on differences and diversity among women. Studies that do not pay due attention to differences are unwise, purposeless, politically irrelevant, or simply absurd (Sebestyén, 2016). Intersectionality encourages feminist theorists to apply reflexive and critical feminist examination, (Davis, 2008). It also addresses one of the most central theoretical and normative concern within feminist scholarship: the acknowledgement of differences among women (Davis, 2008:70).

### 6.1.5 Intersectional research

Although the theory of intersectionality was introduced by Crenshaw towards the end of the $20^{\text {th }}$ century, it promises an almost universal applicability, useful for understanding and
analyzing any social practice, any individual or group experience, any structural arrangement, and any cultural configuration (Davis, 2008). Crenshaw introduces intersectionality through the experiences of black women, whose experiences cannot be reduced to neither those of "black people" nor those of "women". Black women observe that the discrimination they experience does not fit neatly into either „racism" or „sexism" but is rather a combination of the two. The critique of racism that was inherent to the feminist movement which essentialized „women" without acknowledging their different positionalities (Crenshaw, 1994). The aim of intersectional analysis is precisely to identify the meanings given to and interrelations between these categories in the social context they are studied, not to assume that this content or relationship between them is identical everywhere (Kadri, 2015). Feminist research journals need to engage in more detailed reflections on unequal relations between nations, regions, mother tongues and so on (Lykke, 2004), and to analyze the ways in which they generate often invisible disadvantages to certain social groups (Lykke, 2010:72).

Carastathis differentiates the following distinctive characteristics of intersectionality:
(1) complexity: it moves away from the monistic "genderism" (the fixation on the sexgender dichotomy in feminist theorizing and analysis), capturing the complexity of;
(2) inclusiveness: intersectional approach includes the experiences and needs of different groups which are often left out by conventional approaches; and
(3) irreducibility: it does not reduce different axes of oppression to one foundational explanatory category (e.g. class in Marxism) (Carastathis, 2014).

To achieve its full potential, intersectionality needs a definition and a methodology which would eliminate any confusion among researchers concerning how, where, and when it should be applied (Davis, 2008:78). The success of intersectionality is, at least in part, attributable to the implicit reassurance it provides that the focus on difference will not make feminist theory obsolete or superfluous. On the contrary, intersectionality suggests that there is still important work to be done. In other words, intersectionality promises feminist scholars of all identities, theoretical perspectives, and political persuasions, that they can 'have their cake and eat it, too' (Davis, 2008).

While intersectionality was understood and employed in different ways, McCall managed to group these various applications into three types: anti-categorical, inter-categorical and intracategorical, the last one being the middle-ground between the two former ones. The first, anticategorical approach, was born out of (feminist) postmodernist and post-structuralist critiques
addressing the use of analytical categories (McCall, 2005:1773). The anti-categorical approach suggests that social categories are simplifying social fictions that produce inequalities in the process of producing differences and therefore aims to deconstruct them (McCall, 2005:1773). The second approach is the inter-categorical approach, which requires temporarily adopting existing analytical categories to document relationships of inequality along multiple and conflicting dimensions (McCall, 2005:1773). The third is the intracategorical approach which acknowledges the stable and even durable relationships that social categories represent at any given point in time, although it also maintains a critical stance toward categories (McCall, 2005:1773). McCall suggests that it can be used for dealing with social groups at neglected points of intersection so that it could reveal the complexity of lived experience within such groups (McCall, 2005:1773).

Academics being inspired by poststructuralism mostly fall into the first category, statistical research on different types of inequality most often uses the second, and researchers focusing on marginalized groups (e.g. Roma women) usually employ the third approach (McCall, 2005:1774). One must keep in mind that as McCall suggests, not all research dealing with intersectionality can be classified into one of these approaches. Davis argues that "methodologies are not written-in-stone guidelines for doing feminist inquiry, a kind of one-size-fits-all recipe for feminist research, rather methodologies should also stimulate the researcher's curiosity and creativity" (Davis, 2014: 21). Davis also suggests introducing some strategies, when using intersectionality as a critical methodology, namely that a researcher needs to position his/herself to begin with intersectional research (Davis, 2014). This way feminist knowledge production will be enabled and the knowledge itself will be "accountable, reflexive and admittedly partial" (Davis, 2014: 22). Davis suggests that "an intersectional analysis would not entail a list of identity categories, but rather involve developing a narrative about how your specific location shapes or influences you (your thinking, theoretical preferences, intellectual biography) in specific ways - ways which will be relevant with respect to the research you are doing" Davis, 2014: 22). When it comes to a Vojvodinian context of intersectionality, Lendák-Kabók argues that if we add ethnic minority experience to gender differences, we are getting a new "matrix" of inequality, which cannot be observed separately (Lendák-Kabók, 2016).

### 6.2 SECONDARY DATA ANALYSIS

Secondary data about ethnic minorities in Vojvodina was analyzed from the Statistical Yearbooks (2009-2013) of the Republic of Serbia and the data about the ethnic minority students number refer to four school years between 2009/10 and 2012/13 and was received from the University of Novi Sad (UNS). Statistical methods of general conclusion, generalizations and interpretations of results were used.

### 6.3 QUESTIONNAIRE

Questionnaires are research instruments consisting of a series of questions and other prompts for gathering information from respondents. Questionnaires usually consist of several questions which the respondents answer in a set format. There are open-ended and closedended questions. An open-ended question asks the respondent to formulate his/her own answer and a closed-ended question has the respondent pick an answer from a given number of options. The response options for a closed-ended question are exhaustive and mutually exclusive. Four types of response scales for closed-ended questions are distinguished:

- Two- point (dichotomous) questions, where the respondent has two options;
- Multiple choice questions (Nominal-polytomous, where the respondent has more than two unordered options and Ordinal-polytomous, where the respondent has more than two ordered options);
- Continuous, where the respondent is presented with a continuous scale.

There are several advantages of close-ended questions: time-efficiency, responses are easy to code and interpret and they are optimized for quantitative research. Disadvantages are that respondents are required to choose a response that does not exactly reflect their answer and the researcher cannot further explore the meaning of the responses.

Open-ended questions have categories or predefined options and the participants write their own opinion about the question. A respondent's answer to an open-ended question is coded into a response scale afterwards. The advantages of the open-ended questions are that participants can respond to the questions in their own way, with their own words and the researcher can investigate the meaning of the response. The disadvantages are that the responses are difficult to code and interpret. An example of an open-ended question is a question where the respondent must complete a sentence.

The questionnaire used in this research was designed specifically for this research and it was a paper-based questionnaire. It consisted of both closed-ended and open-ended questions. The closed-ended questions were dichotomous or two-point questions (Yes or No) and multiplechoice questions ( $\mathrm{a}, \mathrm{b}, \mathrm{c}$ or d ). We used completely unstructured questions as well, in which the respondents were asked about their opinion, i.e. to write opinions in their own words.

The quantitative part of the paper will present a questionnaire conducted with high school students from the Hungarian national community, Slovakian national community and Romanian national community, were finishing their secondary education in their mother tongue in Vojvodina in the 2013/14 school year and 2014/15 school year.

As survey research can put a problem on the map by showing it is more widespread than previously thought (Reinharz \& Davidman, 1992). In that sense, the author used the questionnaire to identify gender stereotypes by asking ethnic minority high school graduates to express their opinions about women in educational and technical sciences. Questionnaire data will be used as valuable inputs when discussing the language difficulty faced by ethnic minority students when entering the Serbian higher education system, as well as in the discussion of gender stereotypes keeping women away from the science, technology, engineering and mathematics (STEM) fields.

### 6.4 QUANTITATIVE DATA ANALYSIS

Quantitative analysis focuses on counting and measuring data. It measures the number of situations and phenomena. Quantitative analysis is a formal, objective, systematic process in which numerical data are used to obtain information and regularities in a certain group.

Basic data analyses were performed with the Statistical Package for Social Scientists (SPSS) for Windows version 16.0, while Excel for Windows 2013 was used for data visualization. SPSS is able to handle large amounts of data, it can perform data entry and analysis, and creates tables and graphs. SPSS is commonly used in social sciences. It is a powerful statistical package, excellent for cross-sectional analysis, but it can also be used for time series analysis as well.

After the filled-in questionnaires were collected, the data was coded in SPSS and an SPSS database was created. The following descriptive statistics analysis were performed: frequencies for categorical data and measures of central tendency for interval level data. Cross-tabulation and the chi-square statistic and t-test were used to examine associations
between variables, and the concept of statistical significance. Correlation: examining relationships between interval data (Greasley, 2008).

Given the fact that majority of variables were defined as categorical data, mostly nominal, a Pearson's Chi-Square test was utilized to address hypotheses associated with the research questions. In case of continuous variables (e.g. assessment of knowledge and use of language), one-way ANOVA was used.

### 6.5 INTERVIEW

An interview is a conversation between two or more people where questions are asked by the interviewer to elicit facts or statements from the interviewee(s), so that in the end together they could try to create a meaning about a topic. Interviews are a standard part of qualitative research. "Interviewing produces knowledge and sound interviewing involves a conceptual grasp of the subject matter of interviewing as well as of the kind of knowledge produced by interviews" (Brinkmann and Kvale, 2009:298). Reinharz and Davidmann suggest that interviewing allows interviewers to envision the person's experience and hear the multiple voices in a person's speech (Reinharz \& Davidmann, 1999). "Interviews vary according to the amount of control exerted by the researcher during the interview and to the degree of structure" (Esterberg, 2001: 85). There are several types of interviews, namely: structured, semi structured and unstructured (ibid.). The most formal and rigid types of interviews are structured interviews, which are more likely to be used in survey research, in telephone interviews, and in market research and political polling (Esterbeg, 2001). Semi-structured interviews (sometimes called in-depth interviews) are less rigid than structured interviews. Their goal is to explore a topic more openly and to allow respondents to express their opinions and ideas in their own words (Esterberg, 2001). Unstructured interviews are often conducted in a field setting, in conjunction with an observational study (Esterberg, 2001).

Several feminist scholars argued that semi-structured interviews are a particularly good way to study women and other marginalized groups (Esterberg, 2001). As women were historically silenced, they did not have the opportunity to tell their own stories. In-depth interviews allow them to do so (Esterberg, 2001).

The interviews collected for this research were conducted with men and women from ethnic minority communities and from the majority population. The interviewees were either still studying, or they were university teaching or research staff in the higher education system of Serbia. The students were selected with snowball sampling. Snowball sampling is a technique,
where you begin with an initial interviewee, then you ask that person to refer you to friends or acquaintances or colleagues who might be appropriate to interview (Esterberg, 2001). The teaching and research staff were pre-selected via personal contacts (i.e. the author did not know them from before) and contacted via email.

The author tried to be neutral during the interviews, occasionally revealing some personal details about herself, which motivated the respondents to open-up and talk more freely. Although the interviews were a one-time encounter basis, the author kept in contact with most the interviewees. The interviews were conducted on the premises of the University of Novi Sad, Novi Sad, at the author's home (as it was more convenient for the student participants), one interview at the respondent's home and one interview in Subotica, also on the premises of the University of Novi Sad.

The interviews were voice recorded and transcribed, after which they were sent back to the respondents for authorization. I used codes instead of names for my respondents in order not to reveal their identities.

### 6.6 NARRATIVE ANALYSIS

When discussing what narrative is, Esterberg suggests that we can refer to it as a "story" told by someone (Esterberg, 2001:182). Most narrative scholars agree that it can be conceptualized as storytelling, where speakers narrate events and episodes of their lives in sequence, and in doing so give meaning to what they tell, always with audiences in mind (Riessman, 2008). We should also keep in mind that not all kind of talk can be considered a story. This is particularly true for a typical semi structured interview, in which the researcher moves back and forth between relatively brief questions and answers, asking interviewees how they felt or what they think (Esterberg, 2001:182). People can discuss their feelings or describe something without necessarily telling a story (Esterberg, 2001:182). Labov and Waltetzky introduced the most influential approach for identifying narratives and they argue that a narrative consists of the following specific elements: abstract, orientation, complication, evaluation, results and coda (Labov \& Waltetzky, 1967). Labov defines narrative as "one method of recapitulating past experience by matching verbal sequence of events which (it is inferred) actually occurred" (Labov, 1999: 225). Most of the stories told in interviews do not correspond to the mentioned model (Aavik, 2015). Critics claim that it does not consider the role of the researcher and collaborative storytelling, nor culturally specific storytelling (Bold, 2012).

Narrative inquiry constitutes a way of doing qualitative research. While sharing the general underlying assumptions and similar research practices with other qualitative methods, it stands out as unique in its focus on stories which people construct and present about (episodes of) their lives (Aavik, 2015). Narrative research is concerned with ways in which individuals and groups interpret the social world and their place within it (Law, 2004). Hence, the meanings people attribute to the events they narrate are at the center of analysis (Aavik, 2015). Pető argues, that "through women's life stories we get to know the women's narrated experience, the ways in which the specific narrativity constructed their social identities" (Pető, 2006:322). McNay argues that the "narrative is the privileged medium of this process of self - formation. The process of active appropriation immanent in the construction of narrative identity suggests a more autonomous model of agency than is offered in the negative paradigm" (McNay, 2000: 27).

The author considered and analysed as narratives the biographical parts and the sequences of events that the respondents told the researcher about their experiences, thoughts and feelings during their studies/and as teaching/research staff at the universities (in the interviews).

### 6.7 Discourse analysis

According to certain researchers, discourse analysis is only a higher level of linguistic analysis of a sentence, for others it is a distinctive approach to language that was built by representatives of different disciplines, including linguists (Savić, 1993). Most agree that discourse analysis is analyzing units larger than a sentence, in a specific use, in the context of the situation to explain better the human communication and behavior (Savić, 1993). van Dijk explains discourse analysis as cognitive, social and political analysis in the same time, but which focuses rather on the role discourses play, both locally and globally, in society and its structures (van Dijk, 2014). The relevant relationship says van Dijk runs both ways: societal structures such as groups and institutions, as well as overall relations such as power or global societal acts such as legislation and education, provide the overall constraints on local action and discourse (van Dijk, 2014).

Discourse analysis is used in many disciplines. Using it in linguistics aims to show how linguistic units are used and help understand a discourse, while in other disciplines the goal of discourse analysis is to learn more about natural, non-linguistic aspects of human communication, and language is an instrument in that, hence simplifying the instrument equally simplifies reality itself (Savić, 1993). Baxter argues that discourse analysis is a
'textualizing' practice in that no form of knowledge can be separated from the structures, conversations and conceptuality of language as inscribed within discourses and texts (Baxter, 2003:6). In addition to Baxter's definition of discourse analysis, Hekman argues that Foucault's theory of discourse brought elements of innovation, namely that knowledge and power are inextricably linked to discourse (Hekman, 1990:18). Aavik argues that discourse does not have to be presented in a temporal sequence, as narratives. Rather, what matters is how particular versions of reality are produced in talk and the power interests implicated in this. Whole stories told or parts of them might constitute a discourse, as an important function of telling a story is to produce and legitimate a certain version of reality (Aavik, 2015).

In this research discourse analysis was applied to understand the opinions within the academic society about ethnic minority students and academic staff and the self-reflections of minorities with an emphasis on women. To understand the narratives and to position them it was necessary to take both the current political situation and the political situation in the 1990s Serbia into account. The latter was important because the civil war changed the political discourse and therefore society at large. Discourse analysis was also important to understand ethnic minority women, whose schooling and career had a different path during the egalitarian communist Yugoslav era.

### 6.7.1 Gender in discourse analysis

Baxter in her book entitled Positioning Gender in Discourse: A Feminist Methodology introduces a newly emerging field of feminist post-structuralist discourse analysis (FPDA), and defines it as a feminist approach to analyzing the ways in which speakers negotiate their identities, relationships and positions in their world (Baxter, 2003:1). Braxter explains how FPDA can explain why certain speakers are judged more powerful, influential and effective then others in larger group contexts (Braxter, 2003:181) Braxtler elaborates how FPDA can enrich the discourse analysis, by "making sense of the differences within and between girls/women (in terms of their verbal and non - verbal behavior) including their experiences of the complexities and ambiguities of power" (Braxter, 2003: 181,182). Sunderland and Litosseliti suggest that discourse analysis of particular spoken and written texts can shed light on the range of ways in which gender identities are represented and constructed, performed and indexed, interpreted and contested (Sunderland \& Litosseliti, 2002: 31). They suggest that by adopting a discourse approach to gender makes it difficult to make global statements about women's and men's language, however they see this 'difficulty' as productive (Sunderland \& Litosseliti, 2002: 31). In Gender and Discourse Wodak explains how the two best-known
theories about the gender-induced use of language is those of 'difference' and 'dominance' (Wodak, 1997:11). Wodak elaborates further the above-mentioned theories explaining that whereas investigations following the 'dominance model' have interpreted the use of such indicators as manifestations of 'powerless language of women', research in the paradigm of the 'difference model' views the linguistic behavior of men and women as originating in opposed models of socialization and equal in their meaning and impact (Wodak, 1997: 11). DeFrancisco argues that the 'difference' theory suggests that "communications problems between women and men are parallel to many other cross-cultural misunderstandings: the problems are a result of innocent socialization in different sociolinguistic cultures (DeFrancisco, 1997: 40). In the 'dominance' model men's speech becomes an implicit tool of patriarchal power through conscious and less conscious gender-role training where they may learn to dominate a conversation through interruptions, talk time, etc. (DeFrancisco, 1997:40). This is how Kotthoff and Wodak argues that "male dominance has become naturalized in the institutions of power" (Kotthoff \& Wodak, 1997:x). This thought is also written by Hekman, who says that "through their control of language, men have dominated not only women but every aspect of the world in which we live" (Hekman, 1990: 31).

### 6.8 Qualitative data analysis

Qualitative analysis is used when researchers need to understand what participants thought, felt, did in some situations at some point in time. Qualitative analysis wants to get an answer on the "why" question, to understand the full richness of social experiences. The focus is on the "text" whereas in quantitative analysis "numbers" are the most important indicators. The "text" represents in most cases interview transcripts or notes taken during observations.

### 6.8.1 Coding

Saldana defines a code in qualitative research as a word or a short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data (Saldana, 2013:3). According to Saldana, coding consists of two cycles. The First Cycle of coding processes a range of magnitude from a single word to a full paragraph to an entire page of text can be coded. In the Second Cycle of coding codes are recoded or re-organized (Saldana, 2013). Saldana suggests that the primary goal during the Second Cycle coding is to develop a sense of categorical, thematic, conceptual, and/or theoretical organization from the array of First Cycle codes (Saldana, 2013:207). Esterberg has a similar way of coding, and she suggests that interviews might be analyzed with an open
coding method, which helps identify themes and categories in the data. After identifying several key recurring themes, the analysis continues with focused coding, just focusing on the key themes identified during open coding (Esterberg, 2001:158). Content analysis and interpretative analysis might be used when looking for patterns in the data, similarities and differences, as well as for building typologies (Esterberg, 2001:158). Content analysis, at its simplest level, aims to find relatively straightforward content - words that appear in the text directly (manifest content). When conducting an interpretative analysis, the focus is more on the underlying meanings in the text (latent content) (Esterberg, 2001). Saldana introduces magnitude coding which is supplemental shorthand to add texture to codes, sub-codes, and categories (Saldana, 2013:73). Magnitude Codes can consist of words or abbreviations, which suggest intensity, frequency, "direction" of a process, phenomenon, or concept, direction through symbols representing conceptual ideas or opinions, indications of the presence or absence of something within a category and numbers that suggest evaluative content (Saldana, 2013:73).

When analyzing the qualitative data, the author used the coding methods suggested by both Saldana (Saldana, 2013) and Esterberg (Esterberg, 2001). The open coding method was used to identify themes connected to language (e.g. majority (Serbian) language related experiences in childhood, language difficulty, etc). In the First Cycle the author used an open coding method and identified themes and categories. Focused coding followed in which the emphasis was put on the themes identified earlier. Magnitude codes were developed as well. During the Second Cycle content analysis and interpretative analysis were applied.

The computer-assisted data analysis and coding was performed in the Atlas.ti Computer Assisted/Aided Qualitative Data Analysis Software (CAQDAS) solution. Using CAQDAS is beneficial as it, unlike the human mind, can maintain and permit the researcher to organize evolving and potentially complex coding systems into such formats as hierarchies and networks for "at a glance" user reference (Saldana, 2013). Although computer-assisted data analysis might seem considerably more complex compared to paper-based, manual coding, it was selected for this research as a method which allowed the author to more efficiently code the interviews and identify codes across all interview transcripts.

When analysing language skills, the themes identified in the coding phase were graded with magnitude codes. Magnitude codes in this research consisted of the following words: strongly, moderately and no opinion and high, medium, low. In hypothesis coding the
following codes were introduced: interested, not interested and $\mathrm{N} / \mathrm{R}^{79}$ when analyzing the interviews. For this type of coding, a predetermined list of codes was generated. Bottom-up coding was applied in work-life balance analysis with the following codes: number of children, shortened the maternity leave, supportive husband/partner, career effect on family.

### 6.8.2 Narrative strategies

The author introduced the 'strategy' concept in order to analyze the respondents' narratives on how they were making sense of their choices regarding their personal life and career path. These strategies were re-occuring in their explanations of the (career) choices they made. We distinguished two types of strategies the respondents were using: rhetorical and life strategies.

With rhetorical strategies the respondents were trying to persuade both the interviewer (i.e. the author) and (sometimes) themselves about the validity of their choices. They narrated about important, past decisions they made and their feelings about them, often trying to justify those choices. As most interviewees were not trained in rhetorical persuasion, the application of such strategies seemed unconscious. Furthermore, the interviewees were sometimes unaware that the very same issues they were narrating about were previously discussed in detail by sociologists and gender scholars, e.g. class privileges or gender-based differences.

Life strategies are decision processes which people apply at important turning points of their lives. Life strategies are often forced by some kind of necessity, e.g. lack of financial resources, health-related problems, etc. The life strategies identified in this research were mostly used by the respondents to solve their work-life balance and make important decisions (eg. strategy of one child). Similarly to the rhetorical strategies, the respondents were sometimes unaware that others might be facing similar challenges during their lives and making similar decisions, i.e. applying the same life strategies.

Strategies will be identified when analysing women attitudes towards decision-making positions in acadamia, balancing between career and family and attitudes about women in STEM. We will do a gender-sensitive analysis and analyse whether the strategies applied differ between genders and ethnic minorities.

### 6.9 ETHICS

This section covers the ethical issues concerning the quantitative and qualitative research.

[^34]We cover the ethical issues related to both the questionnaire-based data collection, and the interview-based qualitative research. We cover respondent anonymity, authorization to conduct questionnaire-based data collection and data management. We will describe how were the potential interviewees approached, how were the interviews conducted and what did the interviewees do with the texts of the interviews.

In the last part of this section the issue of a researcher being an "in-group" will be explained.

### 6.9.1 Quantitative research

In this section we cover the ethical elements of the questionnaire-based data collection and analysis. We cover the location of data collection in high schools, what were the steps and how was it all successfully completed in two school years, namely in 2013/2014 and 2014/2015.

The principal of each school was sent a written request. It was only after the written approval, that the researcher visited the schools and conducted the paper-based survey. The principals of each shool requested that a psychologist and/or a pedagogue examine the questionnaires beforehand. Each school's psychologist and/or pedagogue were informed about the research process. In some cases, one of them was present when the questionnaires were administered. The researcher was present in most of the classes where the questionnaire-based research was conducted, or the research was conducted by the psychologist or pedagogue of each school, where the presence of the researcher was not feasible.

Considering the questionnaire itself, it was distributed in paper form. They were anonymous the students entered only the high school they were attending, the educational profile, the school year (e.g. $3^{\text {rd }}$ or $4^{\text {th }}$ grade) and their year of birth. The surveys were usually conducted during the class teacher's classes, or in rare occasions during other classes. At the time of conducting the research, all the students were of age, i.e. eighteen years or older. All the students present that day filled in the questionnaire, there was no single case of refusal. There were some students who did not take the questionnaire seriously, so they completed only certain parts of it or added inappropriate comments.

The questionnaires completed partially or inappropriately were not taken into consideration. The majority displayed a great deal of interest - they would sometimes ask something about the questions in the questionnaire. Many students responded to open-ended questions, not only to the closed-ended ones. Filling in the questionnaire took around 10 minutes of their time.

### 6.9.2 Qualitative research

The interview ${ }^{80}$ respondents were initially contacted via personal contacts, and subsequently through snowball sampling - the respondents who were the researcher's acquaintances suggested further potential respondents. They were usually contacted via email. The topic of the research was explained to them, as well as the interview duration ( $30-60$ minutes). The respondents were glad to take part in the interviews. Some stated that they felt honored to be chosen for the interview, which speaks in favor of the fact that the topic was a matter of great concern to them, as well as that they saw the importance of the topic being an inherent part of academic discourse. Respondents who were members of Hungarian, but also Slovak and Romanian minority groups were more willing to take part in the interviews than their Serbian colleagues. The researcher sent numerous emails to potential respondents, but only a few answered. Those who eventually agreed to take part did so with the help of the researcher's personal contacts. The respondents from the majority group tended to distance themselves from the topic - they immediately stated that they do not belong to a minority group and that the researcher might have mistakenly invited them. The researcher explained to them that their opinion was also of great importance and that they represented the control group.

Each interview was conducted successfully. None of the respondents were sent the interview grid beforehand; they were only given the topics the questions were to cover. The respondents were generally satisfied with the author's research in general, as well as with the interview process. They found it pleasant to recall their childhood, education, start of their careers, starting their families, as well as their careers afterwards. The students were also interested in the topic. They were willing to take part in the interviews. At the beginning of the interview, they felt uncomfortable, since the researcher seemed as someone much more experienced, but the questions were posed one after another, allowing them to talk. When deemed necessary, the researcher emboldened them with additional questions. She was always encouraging and strived to seem calm, often nodding in approval. This kind of body language was also necessary during the interviews with the professors, although the situation here was the other way around - the professors were the more experienced parties.

All interviews were voice-recorded. They were transcribed and edited. After editing, the texts of the interviews were sent back to the respondents for authorization. Some of the respondents added something they found important, but for some reason they did not speak about during

[^35]the interview, but a very small number of them made more serious changes in the text. The changes mostly concerned leaving out some of the names. The respondents were told that the texts of the interviews, even after authorization, would not be used in their entirety, but that only certain parts would be used in the doctoral thesis or in other publications in the form of citations. All respondents agreed with this. The researcher also explained that their identity would remain anonymous (their names would be replaced by codes), and that the whole text of the interviews was to be coded.

### 6.9.3 Being an in-group

Davis proposes that, when developing strategies about how to do a successful intersectional analysis, "the social location of the researcher will inevitably shape the ways how the researcher is looking at the world, the kinds of questions will she/he ask (as well of the questions the researcher haven't thought of asking), the kinds of people and events that evoke sympathy and understanding (as well as those that make the researcher feel uncomfortable or evoke avoidance)" (Davis, 2014:23).

The researcher was a female, ethnic Hungarian PhD student studying at the Center for Gender Studies, ACIMSI, University of Novi Sad. She was born in 1986 in Novi Sad and raised in the same city. She finished elementary and high school in Hungarian. She earned her BSc and MSc degree in law at the Faculty of Law, University of Novi Sad. She studied in Serbian. She is a mother of three children. These characteristics meant that the researcher belonged to the in-group, as Davis suggests. This was methodologically problematic.

The problems concerning the power relations between the researcher and the respondents were hierarchic and gender-related. Namely, when it comes to the relation between the young female Hungarian researcher and Hungarian students, the female students were more trusting than the male ones. They narrated more openly and freely, whereas male students were somewhat hesitant. However, they expressed their opinions about women very openly, although the researcher herself was a woman. Speaking of the relation between the young female Hungarian researcher, who is also a mother, and the female professors, female Slovak and Romanian professors were more open. Serbian women identified with the researcher only through the role of a mother (and only those who were mothers at the time of the interviews). When it comes to the minority identity, they seemed to be slightly wary and seemed as if they tried to distance themselves. All male professors, both ethnic minority and Serbian, slightly distanced themselves from the young female, Hungarian researcher. Most Serbian professors defended and/or justified the actions of their nation and measures of the state in their
narratives. It seemed that they felt it was their duty to do so, mainly because the researcher was an ethnic minority woman asking them questions about other ethnic minority women.

## 7 EMPIRICAL MATERIAL

### 7.1 Statistical Data

Primary data of the University of Novi Sad (UNS) was needed to be in position to analyse the number of minority students who remained in Serbia and decided to study in Serbian. The data was made available by the rectorate of the UNS. The data was given in paper format and before processing, it was necessary to methodologically equate and process the data.

Demographic statistics were used in this research, as a special branch of applied statistics which studies population data, demographic characteristics and classification, as well as the issue of processing and displaying population data. Dynamic analysis was used to analyse the trends in the number of male and female students during the analysed period. Structural data analysis was applied when studying the relative share of female students in the total number of students.

### 7.2 Questionnaires

### 7.2.1 Sample and procedure

The total questionnaire sample consisted of 2192 high school students, 1.119 female (51\%) and 1.073 male ( $49 \%$ ), and the total sample is also listed below in the Table number 2. The entire population of ethnic minority Hungarian, Slovak and Romanian high school graduates in 2013/14 and 2014/15 school year numbered $3311^{81}$ students in total, therefore the sample covered $66,20 \%$ of the total number of students, who attended the final grades in 2013/14 and 2014/15 school years in Vojvodina.

Table 2 Total sample

| Total sample |  |
| :---: | :---: |
| Female | $1.119(51 \%)$ |
| Male | $1.073(49 \%)$ |
| Total | 2192 out of $3311(66,20 \%)$ |

[^36]The ethnicities of the students filling in the questionnaire were Hungarian 1.951 (89\%), 175 Slovak (8\%) and 66 Romanian (3\%). These students attended their final years in their high schools. It was a critical period for them, when they had to make career choices about further education. Their average age was 18 years. The ethnic membership is listed below in Table 3 below.

Table 3 Respondents' ethnicity

| Ethnic membership |  |
| :---: | :---: |
| Hungarian | $1.951(89 \%)$ |
| Slovakian | $175(8 \%)$ |
| Romanian | $66(3 \%)$ |

The sample was collected in 16 municipalities of the AP Vojvodina: Ada, Bečej, Kanjiža, Čoka, Senta, Zrenjanin, Bačka Topola, Subotica, Sombor, Novi Sad, Temerin, Kovačica, Bački Petrovac, Alibunar and Vršac. The students attended 26 different high schools, which are listed below in a Table 4.

Table 4 High schools surveyed

| High schools |  |
| :---: | :---: |
| Tehnička Škola Ada | Technical School Ada |
| Poljoprivredno-tehnički srednjoškolski centar <br> „Besedeš Jožef" Kanjiža | "Besedeš Jožef" Agricultural - technical high <br> school center Kanjiža |
| Gimnazija Novi Kneževac | Novi Kneževac Gymnasium |
| Senćanska gimnazija | Senta Gymnasium |
| Gimnazija sa domom učenika za talentovane <br> učenike „Boljai", Senta | "Boljai" Gymnasium with a dorm for gifted <br> students Senta |
| Ekonomsko - trgovinska srednja škola Senta | High school for economics and trade Senta |
| Srednja medicinska škola Senta | Medical high school Senta |
| Hemijsko-prehrambena srednja škola Čoka | Chemistry and food industry high school Čoka |
| Zrenjaninska gimnazija | Zrenjanin Gymnasium <br> Ekonomska - trgovinska škola „Jovan <br> Trajkovič" Zrenjanin |
| Medicinska škola Zrenjanin | Medical school Zrenjanin <br> ZJajković" Economics - trade school <br> Zlenjanin |
| Elektrotehnička i građevinska škola „Nikola <br> Tesla" Zrenjanin | "Nesla" Electrotechnical and <br> constructions school Zrenjanin |


| Gimnazija i ekonomska škola „Dositej <br> Obradović" Bačka Topola | "Dositej Obradović" Gymnasium and <br> economics school Bačka Topola |
| :---: | :---: |
| Tehnička škola „Šinković Jožef" | "Šinković Jožef"Technical school Bačka |
| Topola |  |

The questionnaires were sent to school and the students filled them in during classes. Although participation was optional, cases of refusal were not registered. The research was conducted in May 2014 and May 2015.

### 7.2.2 Instruments

For this study the researcher constructed a questionnaire which consists of 20 mainly closed questions. The students were asked to answer questions grouped around the following topics:
(1) mother tongue (i.e. Hungarian, Slovakian or Romanian),
(2) Serbian (majority) language skills,
(3) plans about their higher education,
(4) location where they planned to continue their education, i.e. Hungary, Slovakia, Romania or Serbia
(5) thoughts about the career choices women have in pedagogy or in technical fields.

### 7.3 INTERVIEWS ${ }^{82}$

### 7.3.1 Sample

The total number of conducted interviews was fourty-five (45). From the mentioned number, twenty-five interviews were conducted with Hungarian female professors and students. Three interviews were conducted with Slovak and Romanian female professors, eight with Serbian female professors and one student. Five interviews were conducted with Hungarian, Slovak, Romanian and Serbian male professors and four with Hungarian male students. The relatively small sample of Slovak and Romanian female and male professors was caused by the limited size of their communities in Vojvodina compared to the Hungarian community. It should be also noted, that the exact number of Hungarian, Slovak and Romanian professors in the higher education system of Serbia is not known, because revealing their national/ethnic identity is not obligatory according to Article 47 of the Constitution of Serbia. The municipalities in which interviewees from minority communities were born and raised is shown in Table 5 below and the percentage of the minority population living in those municipalities is based on the 2011 Census of Population, Households and Dwellings in the Republic of Serbia.

## Table 5 Municipalities and percentage of minority populations

| Hungarian | Novi Sad | $3.88 \%$ |
| :--- | :--- | :--- |

[^37]|  | Subotica | $35.65 \%)$ |
| :---: | :---: | :---: |
|  | Kula | $7.92 \%$ |
|  | Senta | $79.09 \%$ |
|  | Bezdan | $50.77 \%$ |
|  | Zrenjanin | $10.01 \%$ |
|  | Temerin | $26.37 \%$ |
|  | Bačka Topola | $57.94 \%$ |
|  | Ada | $75.04 \%$ |
|  | Srbobran | $20.76 \%$ |
| Sačko Petrovo Selo | $61.51 \%$ |  |
| Slovak | Bečej | $46.34 \%$ |
| Romanian | Petrovac | $65.37 \%$ |
| Seleuš | $49.10 \%$ |  |
|  | Zrenjanin | $1.75 \%$ |

The interviewees from the majority community were born and raised in municipalities where most of the population is Serbian or where most of the population is speaking the Bosnian/Croatian/Serbian language. Namely in municipalities: Novi Sad, Sombor, Šajkaš, Zagreb (today Croatia), Sarajevo (today Bosnia and Herzegovina) and Zrenjanin.

### 7.3.2 Basic information about Hungarian female professors

Thirteen semi-structured interviews were conducted with Hungarian female teaching staff who will be referred to in the text via code names HFP1-HFP13 (HFP = Hungarian female professor). The interviewees were selected by the snowball sampling method. The interviews were recorded during late 2014 and early 2015, in an interval of approximately six months. They were transcribed and sent back to the interviewees for authorization. Six interviewees worked in STEM and seven in SSH fields. The interviewees were born between 1952 and

1983 and raised in different parts of Vojvodina, namely Novi Sad, Subotica, Kula, Senta, Bezdan and Zrenjanin.

### 7.3.3 Basic information about Hungarian female students

Twelve semi-structured interviews were conducted with Hungarian female students. The interviewees were selected through personal contacts and with the snowball sampling method. The interviews were conducted in Hungarian. The interviews were tape-recorded in late 2014 and early 2015, transcribed and sent back to the interviewees for authorization. The interviewees were codenamed HFS1-HFS12 (HFS = Hungarian Female Student). Seven students studied in STEM fields and five in SSH. The students were born between 1986 and 1995, and raised in different parts of Vojvodina, namely: Novi Sad, Subotica, Bačka Topola, Ada, Srbobran, Pančevo and Temerin.

### 7.3.4 Basic information about Slovak and Romanian female professors:

Three semi-structured interviews were conducted with Slovak and Romanian female professors. The interviewees were selected through personal contacts and with the snowball sampling method. The interviews were conducted in Serbian. The respondents were asked in the beginning of the interview, whether they felt comfortable to talk in Serbian, knowing that it was not their mother togune. Conducting the interview in Serbian was the most efficient way, as it was the common language for the interviewer and the interviewees. The interviews were tape-recorded in late 2014 and early 2015, transcribed and sent back to the interviewees for authorization. All of the interviewees worked in SSH studies. The interviewees were codenamed SLFP1-SLFP2 (SLFP = Slovak Female Professor) and RFP1 (Romanian Female Professor). The professors were born between 1972 and 1984 and raised in different parts of Vojvodina, namely: Pivnice, Bački Petrovac and Seleuš.

### 7.3.5 Basic information about Serbian female professors and student(s)

Seven semi-structured interviews were conducted with Serbian female professors and one with a Serbian female student. The interviewees were selected through personal contacts and with the snowball sampling method. The interviews were conducted in Serbian. The interviews were tape-recorded in late 2014 and early 2015, transcribed and sent back to the interviewees for authorization. Five of the respondents were in STEM studies and three in SSH. The interviewees were codenamed SFP1-SF7 (SFP = Serbian Female Professor) and SFS1 (SFS = Serbian Female Student). The professors were born between 1954 and 1985 and
raised in different parts of Vojvodina and Former SFRY, namely: Novi Sad, Sombor, Šajkaš, Zagreb and Sarajevo. The student was born in 1993 and raised in Zrenjanin.

### 7.3.6 Basic information about male respondents

Five semi-structured interviews were conducted with Hungarian, Slovak, Romanian and Serbian male professors and four interviews with Hungarian male students. The interviewees were selected through personal connections and with the snowball sampling method. The interviews were tape-recorded in late 2014 and early 2015, transcribed and sent back to the interviewees for authorization. The interviewees were codenamed HMP1-HMP2 (HFS = Hungarian Male Professor), SLMP1 (SLMP = Slovak Male Professor), RMP1 (RMP = Romanian Male Professor), SMP1 (SMP = Serbian Male Professor), HMS1-HMS4 (HMS = Hungarian Male Student). The professors were born between 1950 and 1984 and raised in different parts of Vojvodina, namely: Novi Sad, Zrenjanin, Pivnice. The students were born between 1986 and 1992 and raised in different part of Vojvodina, namely: Bačko Petrovo Selo, Bečej, Zrenjanin and Temerin.

## 8 SECONDARY DATA ANALYSIS

This section contains the analysis of the number of ethnic minority students (Hungarians, Slovaks and Romanians) studying at the University of Novi Sad between 2009-2014. The author received the data from the University of Novi Sad (UNS). All students starting their studies at the UNS filled in a questionnaire, in which they specified their personal details and their ethnicity. It was not obligatory to reveal their ethnicity according to the Constitution of Serbia (Article 47, 2006), therefore the exact number of minority students was not possible to determine precisely.

The author decided to include the analysis of this data, because the numbers of ethnic minority students studying at the UNS was necessary for both the analysis of language-related difficulties and their presence in STEM and SSH.

### 8.1 Hungarians

Table 11 in Appendix \% contains two important indicators: the total number of students of Hungarian nationality at the faculties of the UNS, as well as the number of female students and their relative share in the total number of Hungarian students.

The majority of both male and female students of Hungarian nationality attend the biggest faculties of the UNS (in terms of the number of the students): the Faculty of Economics, the Faculty of Sciences and the Faculty of Technical Sciences. These faculties are followed by the Hungarian Language Teacher Training Faculty and the Faculty of Philosophy. A small number of ethnic Hungarian students studied at the rest of the faculties of the UNS.

In regard to the relative share of female students in the total number of Hungarian students, we concluded that the highest structural share of female students is in the traditionally "female occupations", namely the Teacher Training Faculty and the departments on faculties which train teachers with a share higher than $80 \%$. As explained earlier, at the Hungarian Language Teacher Training Faculty in Subotica the students could continue their higher education in their mother tongue, which was a positive fact for female students from the Hungarian ethnic minority community, who traditionally opt for educational occupations. In the same manner, it is concluded that there is a high share of female students, with a structural share higher than $70 \%$ at the Faculty of Philosophy and the Faculty of Sciences, where social sciences and future teachers are trained (e.g. maths, physics, chemistry and biology teachers).

There was a high share of female students in the field of medicine and technological sciences with a structural share higher than $70 \%$, as well as in the field of economics where the relative share of female students in the total number of students of Hungarian nationality is up to $70 \%$. We concluded based on the statistical data that Hungarian female students were not particularly interested in traditional "male occupations" - in technical and computer sciences, as well as in agriculture, while there is the least interest in the field of physical education (the Faculty of Sport and Physical Education), where the relative share of female students in the total number of students is around $25 \%$. As it will be shown later in this section, the situation was similar when it comes to female student belonging to the other ethnic minorities living and studying in the AP Vojvodina, as very few of them chose technical and computer sciences, which means that the abovementioned problem was universal.

The relatively small number and low share of female students of Hungarian origin at the faculties of technical and computer sciences, as well as agriculture may be a result of a twofold discrimination. The first issue lies in traditional gender roles which are taught throughout education and which make technical and computer sciences 'reserved' for the male population. The second, but not less important, issue is the fact that they first must overcome the language difficulty by studying at the faculties of the UNS.

### 8.2 Romanians

In the following section data about Romanian students will be analysed. Table 12 (Appendix 5) contains the number, gender structure and their faculty choices. Based on that data, we analysed two indicators: the total number of the students of Romanian nationality at the faculties of the UNS, as well as the number of female students and their relative share in the total number of Romanian students. Based on the number of male and female students at different faculties, we concluded that a very small number of male and Romanian female students enrolls in the study programs of the faculties of the UNS, which makes the structural analysis in this field more complicated. The results of this analysis do display similar tendencies to the Hungarian and Slovak. Romanian students studied at the following faculties of the UNS: the Faculty of Philosophy and the Faculty of Sciences, where the social sciences and specialized (e.g. math, physics, biology) teachers are trained.. It is important to point out that the Department of Romanian language and literature is part of the Faculty of Philosophy, which explains the significant Romanian presence at that faculty. A significant number of both male and female Romanian students studied at the Faculty of Law and Faculty of

Economics, because the students usually associate the occupations (lawyer, economist) they might choose after graduation from those faculties with higher wages. At the rest of the faculties, there was a significantly lower number of Romanian students. Romanians were present in very limited numbers (one or two students!) at the following faculties of the UNS: the Faculty of Education, the Faculty of Sport and Physical Education, and the Faculty of Civil Engineering.

The highest relative share of female students in the total number of Romanian students were studying at the Faculty of Philosophy and the Faculty of Sciences. There was a relatively high $70 \%$ share of female students at these faculties. This also supported the claim that ethnic minority female students incline towards social sciences and teaching professions. This was especially true for studies offered in their mother tongue (e.g. a the Faculty of Philosophy).

By observing the structural share of female students in the fields of law and economics, we concluded that they constitute most of the total number of the students of Romanian nationality, but these tendencies are similar also in the case of students of Hungarian and Slovak nationality. In comparison to technical and computer sciences, as well as to agriculture, the low share of female students in the total number of students who opted for these sciences was noticed. Since the total number of Romanian students was quite small, it was difficult to carry out definitive analysis.

The relatively small number and a low share of female students of Romanian nationality at the faculties belonging to the fields of technical and computer sciences, as well as agriculture, may be due to the traditional gender roles that are present in our society, which contribute to the belief that technical and computer sciences are reserved only for the male population.

### 8.3 SLOVAKS

Table 13 (Appendix 5) contains the number, gender structure and the faculty choices of Slovak students starting their studies at the UNS. The two key indicators in Table 13 are the total number of Slovak students and the number of female students and their relative share in the total number of Slovak students. We analysed the statistical data and concluded that the highest number of male and female students of Slovak nationality is at the biggest faculties (in terms of the number of the students) of the UNS: the Faculty of Technical Sciences, the Faculty of Science and the Faculty of Agriculture, the Faculty of Philosophy, the Faculty of Medicine, the Faculty of Economics and the Faculty of Law. It should be emphasized that the Faculty of Education has a Slovak language department in Bački Petrovac, where a significant
number of Slovak students studied. The share of Slovak female students studying there was the highest at $80 \%$. There was a higher than $70 \%$ share of female students at the Faculty of Philosophy, which hosts the Department for Slovak language and literature. There was a high share of female students in the field of medicine, with a structural share higher than $70 \%$, as well as in the fields of technology, science, mathematics and economics, where the relative share of female students in the total number of the students of Slovak nationality was up to $70 \%$. Similarly to other ethnic minority female students, only a smaller number of Slovak female students showed interest for technical and computer sciences, agriculture and physical education. Their share at the respective faculties was lower than $30 \%$ in some years. What is surprising is that both male and female students of Slovak nationality showed low interest for studying at the Faculty of Civil Engineering, where, during the last three years analysed, there were no Slovak female students.

A relatively small number and a low share of female Slovak students at the faculties belonging to the fields of technical and computer sciences, but also of agriculture and physical education, could be due to the traditional gender roles that are present in our society and which contribute to the belief that technical and computer sciences are reserved only for the male population.

### 8.4 The number of students of all nationalities

The available statistical data (Table 14 in Appendix 5) on the gender structure of Serbian, Hungarian, Slovak and Romanian students studying at the UNS was compared for school years 2009/2010 and 2012/2013. We applied dynamic analysis by expressing the level index and structural analysis to express the relative share of female students in the total number of students. We concluded that the trends are similar when it comes to the number of female students of Serbian, Hungarian and Romanian nationality during the four-year period. After an increase in the number of Serbian female students in the 2010/2011 academic year in comparison to the base 2009/2010, there was a decrease in that number. The number of Hungarian students showed a similar trend, but with a more pronounced decline compared to the Serbian. The same trend was identified for the Romanians as well.

This tendency was somewhat different for the Slovaks. Namely, after the base year, the number of students declined in 2010/2011 and 2011/2012, but was higher in 2012/2013. This fact can be explained by demographic migrations, but also by the increase in the number of people interested in studying at the faculties of the UNS in the given year, especially at the

Faculty of Science and the Faculty of Technical Sciences. These two faculties introduced popular study programs, which were not always connected only to computer sciences (see Table 14).

The level index can be seen in columns 3, 7, 11 and 15 in Table 14. Based on it we concluded that the number of ethnic minority, female students who decided to continue their studies at the faculties of the UNS declined.

The tendencies were similar when it comes to the relative share of female students of Serbian, Hungarian, Slovak and Romanian nationality in the total number of students of those nationalities. In the relative share of female students of Serbian nationality, there was an increase in the share in the 2010/2011 academic year in comparison to the base 2009/2010 year, which was followed by a decrease in the last two years of the analysed period. When it comes to female students of Hungarian nationality, the relative share has a decreasing tendency throughout the whole analyzed period. In the 2009/2010 academic year, the share was $60.21 \%$, and in 2012/2013 it was only $56.26 \%$, which is $3.95 \%$ lower than in 2009/2010. After comparing these two indicators in column 10 of Table 14, we concluded that the share of female students of Hungarian nationality in the total number of Hungarian students was higher than the share of female students of Serbian nationality in the total number of Serbian students at the UNS during the observed four-year period. There might be different reasons for this, but one of the most important is, certainly, the fact that Hungarian students leave the country or do not continue their studies at the institutions of higher education in the country. Similar tendencies are noticed in the structural analysis of the number of female students of Slovak and Romanian nationality. In comparison to the base school year of 2009/2010, there was a slight increase in number of the students of these nationalities in the 2010/2011 and 2011/2012 academic years, and, after that, there was a decrease in their number during the last analyzed academic year. Although the reasons behind this trend were not clearly identified, they were most probably caused by demographic factors and/or the attractiveness of some new study programs at faculties of the UNS, which were introduced and marketed as excellent choices for a successful entry into the labor market after graduation.

One should not neglect the fact that the total number of male and female students observed was relatively small. Because of that, the quantitative analyses were not always reliable.

## 9 LANGUAGE AS A PERFORMATIVE METAPHOR FOR (IN)EQUALITY

In this section we will analyse analyze how language is symbolizing the pillarization of society, first how is it dividing the ethnic minority high school graduates and leading them to different life and career paths, than how it is affecting ethnic minority and majority students in the Serbian higher education and in the end what is the symbolic meaning of the language among young man and women finishing high school, students, professors and researchers who are about the enter, study in or work in the Serbian higher education system. The author will analyse the ways in which language becomes affects the life and rhetoric strategies of ethnic minority women and men and majority women and men as well. The author will analyse whether and how can the above-mentioned language-related strategies evolve from being a disadvantage to an advantage during the career paths of ethnic minority women. The title of this chapter is "Language as a performative metaphor for (in)equality", with the intention to widen the meaning of language and to show how language can symbolize the inequality between majority and (ethnic) minority population, turning language into a crucial category in being an equal member of (the academic) society. Its performativity lays in the fact, that it could be used as a strategy for explaining the challenges ethnic minorities face, but also a recourse of the reality and a collective term for all types of discrimination against ethnic minority students and staff members.

The analysis will follow a chronologic sequence. We will start with the presentation of the results of the quantitative research done with Hungarian, Slovak and Romanian high school graduates with respect to the gender variable. The analysis will focus on their answers about their mother tongue and knowledge of the majority language and the countries which they chose to continue their higher education and which factors influenced their decisions. Afterwards the analysis will continue with the qualitative analysis of the interviews which cover the same topic, enquiring how language is affecting career choice and career progress of Hungarian, Slovak and Romanian female students and professors and how is language a strategic tool for the majority population as well. The narratives of Serbian female professors and student(s) will be analysed as well. The answers of female respondents will be compared to the answers of their male counterparts. In the end, the author will analyse what do members of the Serbian, majority population (female and male) narrate about the language-related
challenges faced by ethnic minority students and staff members, i.e. how is language becoming a metaphor for a performative (in)equality in the higher education system of Serbia.

### 9.1 QUANTITATIVE DATA ON LANGUAGE

The author investigated how the ways in which language is, as an ethnic component, shaping the career paths of high school graduates and becoming a determinative factor of their future education.

As Filipović et al. suggest, ethnic minority studying in their mother tongue only have a couple of hours per week in Serbian and there they do not make significant progress in perfecting their majority language skills. If they are living in municipalities in which ethnic minorities are in fact majorities ${ }^{83}$, students in those municipalities have a very low level of competence in Serbian, which leads them to being unable to function outside their linguistic/ethnic community. They become incapable of continuing their education at the university level in Serbia (Filipović et al., 2007:9). Our goal was to further explore this phenomenon based on our questionnaire data.

### 9.1.1 Ethnic minority high school graduates on language

The inquiry started with a question about which language do they list as their mother tongue. The results showed that $97 \%$ of the respondents indicated an ethnic minority language as their mother tongue. A relatively small number of students noted that they had two mother tongues, mostly the ethnic minority's language and Serbian. Most of these exceptions were raised in families of mixed origin (e.g. Serbian father, Hungarian mother).

A key question in the first part of the questionnaire was their self-estimated knowledge of Serbian language in a seven-point Likert scale (between "not at all" (1) and "very good" (7)), ( $\mathrm{M}=4,60 ; \mathrm{SD}=1,52$ ). The results of the questionnaire showed that $7.9 \%$ of female highs school graduates spoke only a few words of Serbian, while $27,5 \%$ female high school graduates self-estimated their knowledge of the majority language as "not so good". This meant that $\sim 35 \%$ of the total respondents would have certainly face language-related difficulties if they chose to continue their studies in the higher education system of Serbia. Table 15 contains a summary of the answers of female high school graduates from the three ethnic minority communities.

[^38]Table 15 Female high school graduates' self-estimated knowledge of Serbian

|  | Mother tongue <br> (Hungarian, Slovakian or <br> Romanian) | Serbian |
| :--- | :---: | :---: |
| No answer | $0.4 \%$ | $0.4 \%$ |
| Not at all | $0.4 \%$ | $2.2 \%$ |
| Does not speak, but understands | $0 \%$ | $5.1 \%$ |
| Only a few words | $0.2 \%$ | $7.9 \%$ |
| Not so good | $0 \%$ | $27.5 \%$ |
| Good | $1.6 \%$ | $27.8 \%$ |
| Very good | $2.9 \%$ | $18.1 \%$ |
| As a mother tongue | $94.5 \%$ | $11.0 \%$ |

When it comes to male respondents, the situation was slightly different, more of the high school graduates' boys answered that they are speaking only a few words of Serbian, i.e. $9,4 \%$, whereas $26,1 \%$ of the boys answered that their Serbian language skill is "not so good". Statistically it is not a significant gender -based difference, however, it should be noted that almost equal number of boys and girls spoke the state language "not so good". Table 16 contains the summary of answers given by ethnic minority, male high school graduates.

Table 16 Male high school graduates' self-estimated knowledge of Serbian

|  | Mother tongue <br> (Hungarian, Slovakian or <br> Romanian) | Serbian |
| :--- | :---: | :---: |
| No answer | $0.8 \%$ | $1.2 \%$ |
| Not at all | $0.5 \%$ | $4.7 \%$ |
| Does not speak, but understands | $0.1 \%$ | $5.8 \%$ |
| Only a few words | $0.5 \%$ | $9.4 \%$ |
| Not so good | $0.6 \%$ | $26.1 \%$ |
| Good | $3.2 \%$ | $26.3 \%$ |


| Very good | $3.1 \%$ | $15.4 \%$ |
| :--- | :---: | :---: |
| As a mother tongue | $91.3 \%$ | $11.2 \%$ |

The next language-related question was the frequency of use of Serbian language in a fivepoint Likert scale (between "less than once a week" and "several times a day") ( $\mathrm{M}=3,20$; $\mathrm{SD}=1,51$ ). In the questionnaire the students needed to declare how often they spoke Serbian. The results showed that some students manage to get by without almost ever using the majority's language and having minimal Serbian language skills (see rows 2 and 3 in Table 17). There was no significant gender difference in the frequency of majority language use. A relatively high proportion of high school students manage to get by with very limited Serbian language proficiency, especially in municipalities where they are in majority. By being monolingual they limit their career options and put themselves in a vulnerable situation, in which they live in a state whose language they do not speak almost at all.

Table 17 Level of Serbian language use in everyday communication

|  | Female |  | Male |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Frequency | $[\%]$ | Frequency | $[\%]$ |
| No answer | 5 | 0.4 | 7 | 0.7 |
| Less than once a week | 205 | 18.3 | 217 | 20.2 |
| Once a week | 161 | 14.4 | 115 | 10.7 |
| Several times a week | 337 | 30.1 | 283 | 26.4 |
| Once a day | 59 | 5.3 | 66 | 6.2 |
| Several times a day | 352 | 31.5 | 385 | 35.8 |
| Total | 1119 | 100 | 1073 | 100 |

A one-way ANOVA with Bonferroni post-hoc test was performed to show whether the level of Serbian language proficiency had an influence on where the respondents were planning to continue their education. In this test the dependant variable was the frequency of use of the Serbian language (see the Y axis in Figure 1), and the grouping variable was the location of chosen higher education institution (Serbia, ethnicity's nation state, etc.).


Figure 1 Frequency of Serbian use and country of future education
The analysis showed that there was a significant correlation between the frequency of Serbian language use and the country of further education $(F(4,2190)=8,94 ; \mathrm{p}<0,01)$, as participants who use the Serbian language less frequently, mostly chose to leave and study outside Serbia. Students who often use the Serbian language in their communication, mostly choose to continue their education in Serbia. Students who use Serbian language least in their communication choose to continue their education in their nation states. Between them there was a significant difference. Students who use the Serbian language medium frequently chose the option of taking the entrance exam in both places, but preferred to continue their education in their nation states.

The next question in the questionnaire was inquiring where and why were minority high school graduates opting for the continuance of their higher education in Serbia or in their nation states. These answers are also shown by gender in Table 18.

Table 18 Countries in which ethnic minority female students planned to continue their education

| Answer | Frequency | Percent |
| :--- | :---: | :---: |
| No answer | 192 | $17.2 \%$ |
| Serbia | 375 | $33.5 \%$ |
| Hungary, Slovakia or Romania (depends on nationality) | 369 | $33.0 \%$ |
| I will try to apply both in Serbia and in country of national origin, |  |  |
| but I prefer country of national origin if I pass entrance |  |  |
| examination |  |  |


| Do not know yet | 113 | $10.1 \%$ |
| :--- | :---: | :---: |
| Total | 1119 | $100.0 \%$ |

Our data analysis showed that an almost equal number of female high school graduates wanted to continue their education in Serbia as in their nation states. This confirmed a more than two decades-long trend of Hungarian $\sim 30 \%$ ethnic minority high school graduates continuing their education in their nation states (Takács, 2013a:109).

When it comes to minority male high school graduates, the situation was quite similar. There was only a slight difference in the percentage of male students who want to continue their education in Serbia, which was $28,6 \%$. A total of $26,6 \%$ of graduates planned to continue their education in their nation states. The complete results are presented in Table 19 below.

Table 19 Countries in which male students planned to continue their education

|  | Frequency | Percent |
| :--- | :--- | :--- |
| No answer | 275 | $25.6 \%$ |
| Serbia | 307 | $28.6 \%$ |
| Hungary, Slovakia or Romania (depends on nationality) | 285 | $26.6 \%$ |
| I will try to apply both in Serbia and in nation state, but I prefer country <br> of national origin if I pass entrance examination | 76 | $7.1 \%$ |
| Do not know yet | 130 | $12.1 \%$ |
| Total | 1073 | $100.0 \%$ |

The next question was the inquiry of female and male minority students about the reasons of choosing Serbia or the country of their national origin. Their answers to this question revealed the performative characteristics of language, as most of the students in the questionnaire answered (regardless of their gender) that they will leave Serbia because the EU diploma will ensure better possibilities in the future. This performativity could be explained by the fact, that by being Others (Spivak, 1985) in the country they were born in and by feeling this through their childhood, they can by having the chance to choose their career path and getting an EU diploma reverse the concept of Otherness (Jensen, 2011), as it is easier for them to get an EU diploma, although they are members of a potentially discriminated ethnic minority.

### 9.2 QUALITATIVE DATA ON LANGUAGE

This section presents the qualitative analysis about the ways in which is language skill shape the career paths of ethnic minority women. The analysis of the qualitative data will follow a chronologic sequence, starting with Hungarian female students as they are the ones who need to adjust to the new environment after high school graduation and entry into the Serbian higher education system. The analysis will follow with Hungarian female professors, who succeeded to build international careers in higher education and/or research by relying on a different strategic dimension of language, namely by using bilingualism as an advantage. The analysis of the Serbian female professors and student's narrative will follow, showing how are they using language as a strategic tool in the metaphor of performative (in)equality. In the end, the narratives of minority (Hungarian, Slovak and Romanian) and Serbian male professors will be analysed, reflecting on their language-related experiences.

### 9.2.1 Hungarian female students

The Hungarian female student interviewees were born between 1986 and 1995, and raised in different parts of Vojvodina, namely: Novi Sad, Temerin, Subotica, Bačka Topola, Ada, Srbobran, Pančevo. All but one finished their elementary and high schools in their mother tongue, i.e. Hungarian.

Seven students studied in STEM fields and five in SSH. Table 20 shows the summarized and quantified results of the interviewees' language proficiency. The first, left-hand half of the table contains information about their childhoods, which affected the Serbian language skills acquired during childhood. If they were growing up in a mostly Serbian environment, they had a higher level of Serbian language proficiency, whilst if they grew up in a Hungarian environment, the situation was the opposite ${ }^{84}$. Only one interviewee finished high school in Serbian, and she also grew up in a mostly Serbian environment as well. The second part of the table shows the type of studies the students chose (STEM or SSH), the language of the study program (Hungarian or Serbian), as well as the level of Serbian proficiency and the selfestimated magnitude of the language difficulty faced at the start of their studies (in the columns with shaded background). Serbian language skills were coded in three levels: L- low, M - medium, H - high. The magnitude of language difficulty was also coded in three levels: $\mathrm{L}-$ low, M - medium, S - strong.

[^39]Table 20 Language difficulty possible causes (students)

| $\begin{array}{c}\text { Student } \\ \text { code }\end{array}$ | {$\begin{array}{c}\text { Childhood } \\$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{c}\text { Mixed } \\ \text { marriage }\end{array}$ | $\begin{array}{c}\text { Serbian } \\ \text { environ. }\end{array}$ | $\begin{array}{c}\text { Hungarian } \\ \text { environ. }\end{array}$ | Field | \(\left.\begin{array}{c}Language <br>

of studies\end{array} $$
\begin{array}{c}\text { Serbian } \\
\text { proficiency }\end{array}
$$ $$
\begin{array}{c}\text { Language } \\
\text { difficulty }\end{array}
$$\right]\)

As it was stated above, the majority of interviewees told that the ethnic composition of the settlement where they had been raised had a significant impact on their knowledge of the majority language. Those who grew up in a Serbian-speaking environment knew Serbian very well. HFS5 was an exception to this rule as she relocated to a Hungarian environment. The majority of those who came from Hungarian speaking environments had low or medium Serbian language proficiency. None of the students came from mixed marriages and only one of them completed her schooling in Serbian. Only one student was studying in her mother tongue (i.e. Hungarian), while the other ten chose studies which were available only in Serbian at the UNS.

The students who had week Serbian (HFS4, HFS7, HFS9, HFS11, HFS12) were raised in Subotica, Bačka Topola, Ada, Temerin and Srbobran. This was not surprising, as Subotica, Bačka Topola and Ada are home to sizeable Hungarian communities. Nađ suggested that young people in North Bačka, where most of the Hungarian minority lives, since the time of 1990s crisis and until today do not want to learn the state language (Nađ, 2006: 448). HFS12 grew up in Srbobran in a street where everybody spoke Hungarian, therefore, even though she grew up in a town where Hungarians constitute a minority, she had only contact with the Hungarian speakers.

Five female students explicitly identify in their narratives the language difficulty as the most important obstacle they had to overcome when entering the Serbian higher education system.

We attributed this to the fact that four of them had low Serbian language proficiency at the time of university enrollment. During their interviews they stated that they still felt discomfort during examinations or when speaking in public. The language difficulty became a constant fear for some women, turning it into a metaphor for (in)equality. They performed worse in exams compared to their Serbian-speaking counterparts, which undermines their selfconfidence and affect their grades and future career prospects. To outsiders who were not familiar with their background, they might have seemd as if they did not study for the exam. This is supported by the following extracts of HFS7's and HFS12's interviews.

> During the oral exam I constantly feel like I am at a disadvantage because of the language...Simply, I feel confused, I have little courage to speak, as I am not sure whether I speak correctly or not. It is also a problem that I speak in short sentences, so I make fewer mistakes... During oral examinations students should be more eloquent, I cannot say the same thing in five different ways (HFS7).
> I do not like to approach professors, I prefer not to talk. I usually don't ask questions either. For example, I wanted to ask the teaching assistant whether there were negative points, but I stuttered and felt very bad. The teaching assistant helped, he explained but made a strange face when he saw me struggling with Serbian (HFSl2).

Not only the female students, with poor language skills had difficulties, but those who knew Serbian in a medium level as well. This was the case with HFS10 who knew the majority language in medium level in childhood but, SSH studies required a higher level of language competence to follow the curriculum and to succeed in exams.

Even though HFS11 studied in Hungarian, she recalls that on her foreign language class at the faculty, she had to translate to Serbian, which was difficulty for her. When, contrary to the instructions she translated the text she was given, to Hungarian instead of Serbian she got scolded by the professor and did not get any points for her homework. This is supported by the following quote.

I did the translation to Hungarian, because the task was to understand the text we got for homework. I got a minus because I did not translate it to Serbian. The goal was for us to understand. To understand the text in a foreign language I had to translate it to my mother tongue. I did not understand why had I to translate it to Serbian, so that others could understand? The task for them was the same, to understand the text. I did not understand why did I get a minus for my task? (HFS11)

The ones who faced a moderate language difficulty, had to „switch their brains" to studying and passing exams in Serbian. Although HFS6 and HFS8 grew up in a Novi Sad, in a Serbianspeaking environment, they state that at the start of their studies they were unable to study and to reproduce the curricula in Serbian. This was a barrier for just a short time for them, after a few months they have managed to adjust and efficiently study, think and learn in Serbian.

HFS2 and HFS3 narrated that they did not face a noticeable language difficulty at all. HFS2 even said that her parents would had not minded even if she had to repeat a year at the university, as after all she was not studying in her mother tongue. This could be attributed to the fact, that even though the interviewees narrated that they had no difficulties at all, switching from a Hungarian high school to studying in Serbian at the university is a difficulty per se.

Four respondents, all from STEM fields, had positive language-related experiences (HFS1, HFS3, HFS6, HFS11), e.g. supportive professors, colleagues who understood if they did not know something in Serbian or pronounced something incorrectly. Some of their colleagues even wanted to learn some Hungarian words from them.

HFS4 and HFS11 from STEM studies narrated about them having negative experiences, e.g. HFS4 said that the professor asked her whether she went to school in Hungarian, when she answered positively, she got a lower grade (than expected). HFS11 had significant language difficulties and considered to write a request for being examined in a written form.

HFS7, HFS8 and HFS10 from SSH (3 out of 4) narrated that they had very distinct negative experiences, e.g. being publicly criticized by professors because of limited Serbian language skills or feelings of being in a less favorable position compared to fellow colleagues. HFS7 was criticized because of her imperfect language skills during an exam and told that she should learn Serbian by reading Dostoevsky:
... then he (Author's remark: referring to the professor) said, that this is the second year and I should learn the state's language. Then he asked me, whether my parents learnt Serbian, when they came here? ... Then I went to the professor's consultation, asked him for advice, how I should learn the language? He told me to read Dostoevsky in Serbian. This was his solution (HFS7).

The above-mentioned quote supports our hypothesis that in studying in an SSH field is more difficult for students with limited Serbian language skills. On the other hand, although three STEM students also had bad experiences, they were mostly satisfied with the atmosphere at
their faculties. This might be attributed to the fact that STEM studies do not require perfect language skills, i.e. the formulas and numbers are universal and language-independent. In SSH fields of study the students study subjects connected to the state, nation and society, in which the state's language and its knowledge is essential. The example of advice about reading Dostoevsky to master Serbian could be attributed to the historical roots and political connections of Serbia and of course it reflects the attitudes of professors working in SSH studies.

### 9.2.2 Hungarian female professors

The author made extra effort to equally represent both the STEM and SSH fields by finding six interviewees who worked in STEM and seven in SSH fields. The interviewees were born between 1952 and 1983 and raised in different parts of Vojvodina, namely Novi Sad, Subotica, Kula, Senta, Bezdan and Zrenjanin. Their geographic background affected their Serbian language skills, as it was the case with Hungarian female students. Most of the professors finished their pre-university education in Hungarian and then enrolled at the university in Serbian language. It is important to note that four professors studied in their mother tongue, as three studied Hungarian language and literature in Serbia (an SSH field) and one professor obtained her bachelor's degree in a STEM field in Hungary.

Table 21 contains the summarized findings based on the analyses of the coded interview transcripts and serves as an introduction and background information to the qualitative part of the research, where parts of the interviews will be analysed. The table is structured in three main parts: the professor code is in the first column; the second part contains relevant information about their childhood affecting their Serbian language proficiency, and the third part summarizes their language related experiences at the start of their studies. The three levels of Serbian language proficiency used were: $\mathrm{H}=$ high, $\mathrm{M}=$ medium and $\mathrm{L}=$ low. The three levels of language difficulty used were: $\mathrm{S}=$ strong, $\mathrm{M}=$ moderate and a dash was used for the professors who did not face a noticeable language difficulty. Their Serbian language proficiency at the start of their studies and the intensity of the language-related difficulties faced when starting their studies were magnitude coded as it was at the female students' answers. The possible causes for such language-related challenges was the same as it was in Hungarian female students, i.e. prior education in Hungarian and childhoods spent in Hungarian-only environments. These two aspects intersected and led to low Serbian language skills. Ethnic minority professors had better Serbian language skill if they were educated in their mother tongue, but lived in a municipality where most of the population were Serbian.

Table 21 Langueage difficulty possible causes (professors)

| Code | Childhood |  |  |  | Early studies |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Educated in Serbian | Mixed marriage | Serbian env. | Hungarian env. | Field | Language of studies | Serbian proficiency | Language difficulty |
| HFP1 | x |  |  | x | STEM | Serbian | H | - |
| HFP2 |  |  |  | x | SSH | Hungarian | H | - |
| HFP3 |  |  | x |  | SSH | Serbian | H | - |
| HFP4 |  |  |  | x | SSH | Serbian | M | M |
| HFP5 | x | x | x |  | SSH | Hungarian | H | M |
| HFP6 | x |  | X |  | STEM | Serbian | M | - |
| HFP7 |  |  |  | x | SSH | Hungarian | L | - |
| HFP8 |  |  |  | x | STEM | Serbian | L | S |
| HFP9 |  |  | x |  | STEM | Serbian | H | - |
| HFP10 | x |  |  | $x$ | STEM | Hungarian | H | M |
| HFP11 |  |  |  | x | STEM | Serbian | L | S |
| HFP12 |  |  | x |  | SSH | Serbian | H | - |
| HFP13 |  | x | x |  | SSH | Serbian | H | - |

Based on the childhood data in Table 21, we observed that professors who knew the majority language very well (1) were educated in Serbian, (2) grew up in an environment with a Serbian majority or (3) were raised by mixed-marriage parents.

Professors who came from municipalities or city blocks with a Hungarian majority usually had medium (HFP4, HFP6) or low (HFP7, HFP8, HFP11) Serbian language proficiency. The only outlier was HFP2, who although came from a Hungarian environment, knew Serbian very well as she learnt it at home. HPF4 and HPF6 knew Serbian in a medium level. HFP1, HFP2, HFP3, HFP5, HFP9, HFP10 and HFP12 knew the language in a high level, four of them were educated in Serbian (HFP1, HFP5, HFP6 and HFP10), four of them grew up in a Serbian environment (HFP3, HFP5, HFP9 and HFP12) and one (HFP5) was raised in a mixed marriage.

Two interviewees faced a strong language difficulty at the beginning of their studies (HFP8, HFP11), which is clearly related to their low Serbian language proficiency, which is further linked to their childhood background, as they grew up in environments where they almost exclusively used the Hungarian language. HFP7's low Serbian proficiency level did not cause her any issues, as she studied in Hungarian.

The stories of the interviewees who faced a moderate language difficulty at the start of their studies differ significantly. HFP4 started her studies in Serbian with a medium Serbian
language proficiency, therefore having (only) moderate language difficulties. HFP5 and HFP10 faced an 'inverse' problem as they completed their childhood education in Serbian and then started their studies in Hungarian. HFP5 studied Hungarian language and literature in Serbia and was anxious at the beginning of her studies, i.e. she was not sure whether her Hungarian language skills were sufficient. HFP10 went to Hungary to study in a STEM field and had to adjust back from Serbian to her mother tongue, which was a moderate challenge, as she was slower in solving exercises in mathematics or physics, as she had lost the automatism which worked for her when solving those kinds of exercises in Serbian. Later, she went on to obtain a PhD and a teaching position at the University of Belgrade, where she had to adjust again, i.e. switch back to Serbian.

HFP6 told that after switching to a Serbian class in high school, she had difficulties reading from the blackboard. This is supported by the following quote from her interview .

The beginning was really "hard", after ten years spent in an all Hungarian environment and attending school in Hungarian, I could not read out loud simple things in Serbian at the blackboard, e.g. three plus two, four minus three in Serbian (HFP6).

It is interesting to point out, how their level of language competency changed during the years. This is important, as it was never easy to maintain high level language competency in both languages, especially if only one of the languages (mostly Serbian) was used in communication, teaching and publishing papers. Nine professors obtained and maintained high levels of Hungarian language competency. HFP1, HFP6 and HFP8 had medium-level professional language skills in their mother tongue (i.e. moderately able to communicate in Hungarian with other Hungarian-speaking colleagues). HFP9 had low competency in Hungarian, which was a sure signal that her mother tongue 'changed' to Serbian during her career.

The Hungarian female professors and researchers unanimously stated that being bilingual was a significant advantage for them, as they can read, write and publish in both Serbian and Hungarian. Almost all maintain good relationships with colleagues in Hungary. Some of them did research or wrote their dissertations in Hungary. A few of them participated in joint projects or other forms of established collaborations with various higher education institutions in Hungary. HFP8 narrated about this in the following interview excerpt.

I defended my thesis in Serbia, after doing my research in Budapest (Hungary). I
wrote (my thesis) in Serbian. This was the advantage of the Hungarian language, I
could do a very special experiment in Hungary and discuss the problem with my Hungarian colleagues. I could publish the findings of my research conducted in Hungary in significant scientific journals (HFP8).

We concluded that there was an advantage from this ethnicity perspective and that the struggle in the beginning of their careers was compensated later by professional bilinguality and having significant connections with colleagues in Hungary. This phenomenon could be attributed to the Othering from postcolonial theory, as they are making an advantage for themselves by being Others. This is what Jensen (Jensen, 2011) suggests in his study as well. Hungarian female professors narrated more about language as a source of advantage, while this was not the case with Hungarian female students. This could also be attributed to the fact, that their lived experiences connected to language happened chronologically earlier in their career, while the same challenge was a relatively fresh memory for Hungarian female students.

### 9.2.3 Hungarian male professors and students

The professors were born between 1978 and 1984. The students were born between 1986 and 1992. They were raised in different parts of Vojvodina, namely: Novi Sad, Bačko Petrovo Selo, Bečej, Zrenjanin and Temerin. All of them finished their elementary and secondary education in their mother tongue, i.e. Hungarian.

Table 22 contains the summarized findings based on the analyses of the coded interview transcripts and serves as an introduction and background information to the qualitative part of the research, where parts of the interviews will be analysed. The same aspects were analyzed as for the Hungarian female professors and students, i.e. Serbian language proficiency and its relation to the language difficulty faced by the students at the start of their studies.

Table 22 Language difficulty possible causes (Hungarian male professors and students)

| Code | Childhood |  |  |  | Early studies |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Educated <br> in Serbian | Mixed <br> marriage | Serbian <br> environ. | Hungarian <br> environ. | Field | Language <br> of studies | Serbian <br> proficiency | Language <br> difficulty |
| HMP1 |  | x | x |  | STEM | Serbian | H | - |
| HMP2 |  |  | x |  | STEM | Serbian | H | - |
| HMS1 |  |  |  | x | STEM | Serbian | M | M |
| HMS2 |  |  |  | x | STEM | Serbian | M | S |
| HMS3 |  |  | x |  | STEM | Serbian | H | - |
| HMS4 |  |  |  | x | SSH | Serbian | M | S |

Our findings based on the male interviewees' responses were similar to the female interviewees. All of them completed their education in Hungarian and all started their studies in Serbian. The ethnic composition of the settlement where they had been raised made a significant impact on their knowledge of the majority's language. The interviewees who grew up in a Serbian-speaking environment (HMP1, HMP2 and HMS3) had high Serbian language proficiencyThose who came from Hungarian speaking environments (HMS1, HMS2 and HMS4) knew Serbian in a medium or low level. One of the professors came from a mixed marriage (HMP1) additionally to the fact that he was raised in a Serbian speaking environment as well.

Based on the quote below by a professor who was raised by parents in a mixed marriage (Hungarian father, Serbian-Croatian mother) we concluded that he had high level competence in Serbian.

## I had no language related difficulty at all. As early as the elementary school I knew

 Serbian better than most Serbians. Often, I did the homework for them, the level of my Serbian language proficiency was high from elementary school. (HMP1).The above stated narrative extract is a performative action of the interviewee, which could be seen as agency suggested by Jensen, where (as it is in this case), the actor did not accept becoming the Other self, instead choosing to disidentify with the Other self (Jensen, 2011: 73).

HMP2 narrated that he had no difficulty regarding language, but as he finished his elementary and high school education in Hungarian, some terminology in mathematics he knew only in Hungarian. He emphasized that although he finished higher education and was employed as a professor at his faculty, he still had to revise the terminology in Serbian before going to lectures. He referred to this as if the basic terminology was somehow "engraved" in Hungarian in his brain.

When it comes to Hungarian male student interviewees, all of them studied in Serbian. The only student who knew Serbian a in very high level at the beginning of his studies was born and raised in Zrenjanin (HMS3), where the majority population is Serbian, therefore he could learn and practice the language. The students who knew the language in a medium level (HMS1, HMS2, HMS4) were raised in Bačko Petrovo Selo, Bečej and Temerin, i.e in municipalities with a sizeable Hungarian community. One student (HMS1) facing a medium language difficulty stated that even though his Serbian was not perfect, he could cope with the curriculum and slowly built up his knowledge of Serbian. For this he is mostly thankful to his
colleagues, who constantly corrected him, when he made grammar mistakes. In his narrative, language was not seen as a source of discrimination, he emphasized a different perspective of language performativity. For him it was an advantage to study in Serbian and a designed road to career success, as in this way he knew he could be skilled and competent in both languages. Language was not seen by him as a source of discrimination rather as a possibility.

HMS2 knew Serbian in a medium level, did not know the terminology at all in Serbian. He could not cope with the curriculum in an acceptable level. Partly because of that he did not pass the necessary number of exams in the first year of his studies, carried over some exams to the second year and later had to repeat that year. This is supported by the interview extract below.

I do not know in which level I knew Serbian but I know I was able to communicate.
The terminology in Serbian I knew nothing of, it was totally unknown to me. I set there in the first mathematics class and my reaction to it was: "wow, this is great, but it would be better if I could understand something". Then through the second year the language barrier spiked, and I had to repeat the second year. I started coping with the curriculum it wasn't so bad. I think that the language barrier cannot be the main obstacle to your success at the university. If someone really wants to graduate, he/she will do it. (HMS2)

From the narrative of HMS2 we can recognize a masculine narrative, in which he explains how the language difficulty is performative, he is not attributing his lack of success purely to language. He explained how language cannot be an obstacle to university success, if someone really wants to finish university, he/she will do it regardless of any language-related challenges.

The only male interviewee (HMS4), who studied in an SSH field, stated that he had put in a lot of effort to learn Serbian. He regularly read the newspapers and followed all the latest news and spelling and grammar regulations of modern Serbian language. Although as he recalls, the professors were supportive at the beginning and tried to encourage him to learn the majority's language on the highest level, he had one experience where he felt discriminated because of his ethnicity and the language difficulty. This was supported by the following quote.

I felt only once that I was in a less favorable position. It was when I studied for an elective course. It was one of my favorite subjects, which I knew well as it was based on knowledge which could be partially gained from the media and self-study. The professor was a nationalist politician and even though his attitudes and statements
were like those nationalist statements we were used to during the nineties, I accepted to do a one-hour seminar. At the exam, I knew the answers to all three questions and he did not consider the seminar I held. I got the lowest grade and I knew I deserved better (HMS4).

HMS4's statement is interesting to analyze, as he had this pre-established bias towards the professor, who was active in the nineties, when the political climate was not favoring ethnic minorities and he experienced no change regarding the statements the professor made at the lectures. It seems that HMS4 wanted to prove his worth and took the subject without fear. He did not succeed in the end, and he felt discriminated and inferior. He attributed his 'failure' in that subject to the professor's political affiliation. HMS4 emphasized that most professors were practicing politicians, supporting the conservative parties and the nation state, and consequently showing less understanding towards ethnic minority students.

HMS4 narrated about a gender-based opinion about language difficulty and its effect on women. The following quote is an extract from his narrative.

> I am confident that the lack of confidence is stronger in women. Some mentally collapse and give up after a single language-related failure. For example, on the freshmen year I had a female colleague who burst into tears after failing the sociology exam, and eventually she dropped out. The loss of self-confidence is more prominent in women. It is less common in men (HMS4).

The above claim might be partially attributed to gender stereotypes, i.e. maybe HMS4 in his narrative attributed a sort of mental weakness to women which resulted in not being able to cope with the language difficulty and with situations that challenge brought. Women emphasized in their narratives that the language difficulty was the most important obstacle they had to overcome before gaining momentum in their studies. Almost all female interviewees used in their narratives language as a metaphor for inequality, whereas males emphasized their masculine side, making sense of language as more like a possibility to become even more diverse, rather than a disadvantage.

However, it should be noted, when talking about STEM and SSH differences, that female students studying in STEM fields would not have to focus only on the language difficulty in a same level, as female students had in SSH fields, but they could focus on studying and excelling from the onset. This supports the proposed hypothesis in this dissertation, that although STEM studies can (also) be difficult without the required level of Serbian language proficiency, the pressure to speak perfect Serbian was lower and colleagues and professors were more tolerant. In the SSH fields the pressure to speak perfect Serbian is constant and
stipulates fear in the ethnic minority students. Some are challenged by this disadvantage and put in additional effort, but most lose the momentum and get even more insecure.

### 9.2.4 Slovak and Romanian female and male professors

Five semi-structured interviews were conducted with Slovak and Romanian female and male professors. In this sub-section we analyse their narratives about language. The professors were born between 1950 and 1984 and raised in different parts of Vojvodina, namely: Pivnice, Petrovac, Seleuš and Zrenjanin.

We analysd Serbian language proficiency and its relation to the language difficulty faced by the professors at the start of their studies. Although members of Slovak and Romanian national minority could also have some difficulties regarding the language, most of the interviewees mentioned their experiences with Hungarian students or fellow colleagues as well, as they regarded them as having the most difficulties in the Serbian higher education system.

In table 23 we can observe that four of the interviewees finished their primary education in their mother tongue (Slovakian or Romanian) and the women finished their secondary education in their mother tongue as well (SLFP1, SLFP2, RFP1), only one of them, namely RMP1, finished elementary and high school in Serbian. SLMP1 finished secondary education in Serbian. We should emphasize, that both elementary and secondary education are gendersegregated, which could be attributed again to the preservation of the nation as Yuval - Davis suggested (Yuval - Davis, 1996:17). RMP1 was brought up in a Serbian environment and the other four were raised in Slovak or Romanian environments. SLFP1, SLMP1 and RMP1 studied in Serbian, while SLFP2 and RFP1 studied in their mother tongue at the departments of Slovak and Romanian language and literature. When it comes to Serbian language proficiency, four of the interviewees stated (SLFP1, SLFP2, SLMP1 and RMP1) that they had very high Serbian language proficiency and only one interviewee stated (RFP1) that she had a medium language proficiency but a strong language difficulty at her workplace.

Table 23 Language difficulty possible causes

| Code | Childhood |  |  | Early studies |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Educated <br> in <br> Serbian | Mixed <br> marriage | Serbian <br> env. | Slovakian/Romanian. | Field | Language <br> of studies | Serbian <br> proficiency | Language <br> difficulty |
|  |  |  |  | x | SSH | Serbian | H | - |
| SLFP2 |  |  |  | x | SSH | Slovakian | H | - |
| RFP1 |  |  |  | x | SSH | Romanian | M | S |


| SLMP1 | x |  |  | x | STEM | Serbian | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RMP1 | x |  | x |  | STEM | Serbian | H |

RFP1 enrolled mathematics in Romania, but as she was a student during the Yugoslav crisis in the 1990s, she had financial difficulties and could not go to study in her nation state. SLFP2 first wanted to study biology, but later she changed her mind, and enrolled Slovak language and literature because she was not sure she would be able to secure a state-funded position at the Biology Department. These female interviewees chose the "safe option" instead of STEM. This could lead us to the theory of how studying minority languages will be an easier option for women, having state funded education and "less pressure" compared to having chosen a less feminine field of studies (e.g. engineering). These two examples also partial "clues" to solving the issue of ethnic minority women's underrepresentation in STEM studies.

Four out of five interviewees stated that they had no problems with the majority's language. One of the interviewees went to elementary and high school in Serbian, partly to avoid the complications of traveling to school and partly to avoid the bad experience his mother had with the language difficulty, when studying law in Novi Sad. Only one interviewee (RFP1) stated that she still had problems with the language difficulty, when teaching to Serbian students who do not speak Romanian (she is teaching at the Department for Romanian language and literature). She narrated about this experience in the following quote.

> I think that the language difficulty is very important ... as I am really suffering when lecturing in Serbian to my students who do not understand Romanian, because I must teach in Serbian (RFP1).

The Slovak interviewees stated that because of the similarity of the two languages (Slovak and Serbian), they had less problems compared to Hungarians. They explained that they also spoke Serbian with a noticeable accent. The following quotes support it:

I think I did not have any problems with the language, in fact, I know I did not have any problems only the accent, which remains a problem. Even now I sometimes make a mistake with the accent, especially when I am tired. Then I even start to mix the two languages, which is a sure signal to me that I had enough lectures (SLFP1).

SLMP1 a senior professor evoked his memories regarding his superior in his youth, who was of Hungarian origin.

My superior professor was Hungarian. He was from Kanjiža. When I came to work for him, I knew only by his name that he was of Hungarian origin, i.e. he spoke
perfect Serbian. Afterwards when he got older, his Hungarian accent surfaced. They say that the situation is the same with me. It must be genetics or biology (SLMP1).

It is interesting to mention, that RMP1 narrated about his experience with Hungarian students and the language difficulty they are sometimes struggelig with. He said that he had a lot of Hungarian male students and no females at all in his STEM department. He can easily notice the Hungarian students, as they always stick to themselves and form small groups, a converse with each other only. RMP1 stated that the language difficulty they have is sometimes so strong that they cannot express themselves at all in exams.

One of the professors who knew Hungarian, because he lived in a mixed environment (namely Subotica), where he learnt some Hungarian, tried to help them by speaking Hungarian. RMP1 states that it is very difficult to be fair in these situations, as teaching staff has to treat equally all students, while he would have liked to help, as he saw that those students needed help. He also pointed out that language is important even in STEM studies, as for example in software development exercises people must work together in a team, and conversation is very important there. He had rich experience with Hungarian students (mostly males) and that they might not have the best grades, but that they were finishing their studies. This is supported by RMP1's following narrative.

> They might not have the best grades, especially when it comes to the written part of the exam, there they cannot compete with the students from the majority population. But when it comes to practical, laboratory assignments they are equally good, they can easily get the highest grades. They face problems when they cannot express themselves well in a written exam, because the professor might not assume that their performance is related to their limited language skills. There might be an option for them to come to consultations and explain orally the task they wrote, but it depends whether the professor is willing to make this possible or not. It is very important that everybody gets equal treatment. This is very inconvenient. Wasn't there a story for a while that Hungarians will have a University in their mother tongue? (RMP1)

The findings show that members of the Romanian and Slovak ethnic minorities faced fewer issues with the language difficulty compared to the Hungarians. This could be attributed to two things: first the Slovak minority's language is very similar to Serbian, therefore they face a lower language difficutly per se. Second, because the size of the Romanian community is continuously shrinking, a significant portion of the community studies in Serbian schools or goes to Romania to study. This is the case with the Slovak minority as well. All the correspondents stated that young people, members of their communities go to study in their
nation states, because of the EU diploma and the scholarships they the from the state governments.

### 9.2.5 Serbian female and male students and professors

Nine semi-structured interviews were conducted with Serbian female and male professors and students. The professors were born between 1954 and 1985 and the only student interviewee was born in 1993. They were raised in different parts of Vojvodina and former Yugoslavia, namely: Novi Sad, Sombor, Šajkaš, Zrenjanin, Zagreb, Sarajevo. All of them finished their elementary and high school education in their mother tongue, i.e. Serbian.

Statements of Serbian female and male students and professors about Hungarian students with a language difficutly were analyzed. Table 24 contains an overview of the qualitative part of the research, i.e. the interview analysis.

Table 24 Attitudes towards Hungarian students or colleagues

|  | Teaching Hungarian students with a language difficulty |  |  |  | Helpful towards the Hungarian students with a language difficulty |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Field | Yes | No | No answer | Yes | No | No answer |
| SFP1 | STEM | x |  |  | x |  |  |
| SFP2 | STEM | x |  |  |  | x |  |
| SFP3 | SSH | x |  |  | $x$ |  |  |
| SFP4 | SSH | x |  |  | x |  |  |
| SFP5 | STEM |  | x |  |  | x |  |
| SFP6 | STEM | x |  |  |  |  | x |
| SFP7 | STEM | x |  |  | x |  |  |
| SFS1 | SSH | X |  |  |  |  | X |
| SMP1 | STEM | X |  |  | X |  |  |

The first part of the Table 24 contains opinion of professors who taught Hungarian students with a language difficulty. All but one interviewee stated that they had Hungarian students or fellow colleagues. The professor who did not encounter any Hungarian students (SFP5) was working at the University of Belgrade, where it was not common for Hungarian students to study. She stated that, although there were no students from the Hungarian national minority, there were students from other minorities in Serbia, mostly of Albanian origin. The right half of Table 24 contains information about the interviewees' attitudes towards Hungarian students
with a language difficulty. Two respondents did not give an explicit answer, whereas five of them (SFP1, SFP3, SFP4, SFP7, SMP1) said they tried to help when they could. On the other hand, two of them stated that they were not amiable towards these students (SFP5 and SFP2).

All ethnic majority interviewees stated when speaking about Hungarian students that they tend to have a language difficulty. SFP3 narrated the following about it:
... as a teaching assistant I notice the problem of the Hungarian students who do not understand and do not speak Serbian on an adequate level. That is not a problem for me, because we can find a solution for them to fulfill the pre-exam requirements in their mother tongue, which is their right. On the other hand, I see this as a problem for them, because they are not equal with their colleagues during their studies, because the others can do their tasks more quickly and better, as they do not have to face the language barrier. We have experienced that some students begin to speak Serbian only during their studies at the faculty, because the system allows them to do so. As I said, that is their right, but on the other hand the system allows them to not speak the majority's language up until the moment when they enroll faculty, which is disadvantageous setup. The current Serbian language textbooks are not properly designed to be used by young people who are learning Serbian as a foreign language and this creates a barrier and lack of motivation. I think that the state system is not handling this properly, but as I said it is an advantage when someone speaks more than one language (SFP3).

She narrated that she understood the students' language difficulties. Those difficulties put the ethnic minority students in an inferior position. SFP3 in her narrative suggest that it is the system's fault (meaning the state), which is not progressive and that the education system 'creates' this language difficulty for minority students. This is what Jelena Filipović is suggesting in her research as well (Filipović et al, 2007:9).

SFP2 narrated about her own experience regarding one of her Hungarian associates, who is a very good researcher who had difficulties to express himself in Serbian, although he had great (scientific) achievements. As they worked in a STEM field, this was acceptable, but SFP2 thought that this was not a good situation for her associate, as he still struggled, when speaking in Serbian. SFP2 had a different approach to this language-related challenge. She narrated that if she was an ethnic minority mother, she might enrol her children in ethnic minority primary and secondary education and thereby avoid such language difficulties when they grew up and had to choose a career. This is supported by the following quote.

I think that they have difficulties. I can speak from the experience of one of my associates, who works with me and with his great work and results (because he sits

> quietly and brings fantastic results) and he is fighting for his position. But I think that it was harder for him. It is hard for him even today, when he must prepare a presentation and exercises, but then I am not sure to which extent is that a language problem and to which extent a personal issue caused by his character. This experience I have heard from others as well, whose children went to Hungarian elementary and high school, because for these children it is harder at faculty, they can only pass Sociology in their mother tongue and everything else is in Serbian. If I would be a Hungarian mother. I am not sure whether I would opt for primary and secondary education in Hungarian, because of the difficulties my children would face when starting their studies (SFP2).

In SSH studies students sometimes struggle to the very end of their studies. This can be frustrating to both students and professors. At the Faculty of Philosophy (UNS) students can pass some subjects in their mother tongue in cooperation with professors from other departments, who speak Hungarian. On one hand this system is favorable to the Hungarian students, as they can study in their mother tongue. On the other hand, they are not improving their knowledge of the Serbian language, which comes back as a problem when they have to take the rest of their exams in Serbian, when the language difficulty emarges. As they seem to know less while they struggle to find the right words, they often get lower grades than they should, based on the accumulated knowledge. The following quote is supporting the statement that Hungarian students are not fluent in Serbian until the very end of their studies:

> Hungarian students have a difficulty because of the inadequate knowledge of the majority's language. We sometimes have situations that students reach the end of their master studies and that we are struggling because we have to seriously and fundamentally lector their master theses. Earlier they could take certain exams in Hungarian at a Hungarian professor, who retired and who was partially succeeded by his daughter. Still, most exams they have to pass in Serbian. At the exam, they warn us that their work might contain erroneous formulations, grammatically incorrect sentences, we ignore that aspect and we are assessing based only on the content. The only difficulty I see is the insufficiently mastered language, which stays as with them until the very end of their studies. I have recently received an email from a fourth year, Hungarian female student, which seemed to have been translated by google translate. It is not the case with all bilingual students, but quite a few of them struggle to learn a second language while studying (SFP4).

RMP1 narrated about how mostly male Hungarian students at STEM have some difficulties regarding the language, they are overcoming those difficulties, while getting lower grades, but in the end, they are finishing their studies. This narrative is repeating in SFP1 as well, she is talking about how her Hungarian students at STEM studies are really trying and they are
hardworking, when they overcome the language difficulty (during their studies), their grades are getting better. The following quote supports this.

> There are a few Hungarian students, there are quite sweet and very often they do not speak Serbian. Then as they learn Serbian, their average grades are rising, they are very hard-working. Almost every Hungarian student is a good student. They are very honest, hard-working, work with great enthusiasm, I have a very good experience with them. They need some time to master the language. One young colleague recently passed my exam, he got the lowest grade, but when I first saw him, it was clear to me that he did not speak Serbian. As he learnt Serbian, he passed the exam as well. They lack knowledge of the majority language. I often write letters of recommendation for their scholarship applications (SFPI).

When it comes to being helpful to Hungarian students, almost all professors narrated how they were trying to help them. Whether the help is in a form of verbal communication, overlooking the grammatical mistakes they make, lectoring their written assignments or writing letters of recommendation for scholarships. SMP1 applied his modest Hungarian language knowledge to help Hungarian students to be more open during exercises, so that they would ask him to help them, when they encountered a problem.

RMP1, SMP1 and SFP2 stated that Hungarian students tend to stick together and that they are reclusive by nature. This could be attributed to the fact, that they do not speak the majority language perfectly and therefore avoid socializing with their Serbian colleagues. This is a problem per se as their lack of self-esteem often results in poorer performance during their studies.

### 9.3 DISCUSSION: LANGUAGE AS A PERFORMATIVE METAPHOR FOR (IN)EQUALITY

When discussing the chapter about Language as a metaphor for performative (in)equality, we will first analyse the quantitative data. The minority high school graduates were asked about their language proficiency and their plans for their future education. It was really interesting to point out, that a relatively high proportion of high school students manage to get by with very limited Serbian language proficiency, especially in municipalities where they are in majority. By being monolingual they are limiting their career options and putting themselves in a vulnerable situation, in which they live in a state whose language they do not speak. Language is one of the determinatives of their future education.

Our data analysis showed that students who often use Serbian in their communication, mostly choose to continue their education in Serbia. On the other hand, students who use Serbian language the least in their communication, usually choose to continue their education in their nation state. Students who are somewhere in between, i.e. who use Serbian in a medium frequency usually choose to take the entrance exam in both Serbia and the EU nation state and prefer to continue their education in the EU country. The rest have not yet decided in which country they would continue their education.

Somewhat surprisingly, our analysis showed that ethnic minority high school students who continue their education in their nation states, do not do that because of their below par Serbian language skills, but because they plan to get an diploma from an EU-based higher education institution, which they regard more prestigious than a diploma issued by a Serbian institution. Their answers to this question revealed the performative characteristics of the language, as most of the students in the questionnaire answered (regardless of their gender) that they would leave Serbia because the EU diploma will open better possibilities in the future and not because of the lack of Serbian language proficiency. This performativity could be explained by the fact, that by being Others (Spivak, 1985) in the country they were born, and by feeling this through their childhood, they can by having the chance to choose their career path and getting an EU diploma reverse the concept of Otherness (Jensen, 2011) and essentially capitalize from it.

Moving to the qualitative findings, first the Hungarian female students were analyzed, applying intersectionality as a dimension and focusing on the intersections of their ethnicity, language component and gender. There was a difference in the level of their language competency depending on the municipalities where they were born and raised. Some of the respondents knew the majority language in high level, however they also experienced an unease at the start of their studies because they had to "adjust their brains" to studying and passing exams in a different language, then they were using before. Language for them was only an inner struggle, not expressed in a wider content. Those who were from municipalities were Hungarians constitute the majority, were rarely speaking the majority language in an acceptable level for them to enter the higher education system of Serbia smoothly. For them, language was a source of inequality from the start as they were struggling to remain on their chosen career path. While this struggle was not so prominent for women in STEM studies, those who chose SSH studies in Serbian this was the main source of discrimination. We showed that in STEM fields language difficulties were a less prominent source of inequality.

Language proficiency is less prominent in STEM studies, where the students and professors often communicate via formulae and written examinations (Lendák-Kabók \& Lendák, 2017:291). This could be one additional motivation for minority women to opt for STEM studies and to induce a more favorable career path as well.

When analyzing the corelation between choosing a career path and language, we showed that young women from the Hungarian national community are the ones who willingly undertake the preservation of the national identity and culture as Yuval-Davis pointed out (Yuval-Davis, 1997: 196). They do this subconsciously and unwillingly, by opting either for SSH studies where they can study mostly in their mother tongue (Hungarian language and literature or Teachers Training Faculty in Subotica), or they opt for SSH field of studies were they risk facing most significant language-related difficulties (e.g. in law or philosophy). The young women are doing so, because of the well-embedded stereotypes, which are even more pronounced in minority communities. This could be attributed to the fact, that minority communities receive financial aid from their nation states for maintaining schools and teaching the necessary teachers, i.e. those aids are predominantly aimed at preserving the ethnic minority communities.

We continued with the analysis of the narratives of Hungarian female professors. We told that most finished their studies in a different political setting, in former Yugoslavia, which had a quite different approach towards minority and majority language teaching in schools. Namely, in municipalities where a sizeable minority community lived, Serbian pupils learnt the minority language as well. In this sense everybody spoke the others' language and there were no segregation and a higher level of tolerance was assured. Still, most of the professors narrated about having some issues regarding language as well, when they entered the Serbian higher education system. While this problem was almost unnoticeable for those who were already fluent in Serbian, it was quite significant to those who had lower Serbian language proficiency.

As years passed, knowing the Hungarian language became an advantage to the Hungarian professors, as they used their language skills and ethnic background to build connections with their colleagues from their nation states. This way they were using the concept of Othering as an advantage as Jensen (Jensen, 2011) suggested in his research. This is why the author refers to language a performative metaphor for (in)equality, as it can change/perform and serve as a strategic tool (as it is in the case of minority, female students) or as a source of discrimination and it can be a strategic tool for the senior minority female professors as well,
when it becomes an advantage. Hungarian female professors highlighted that language was important and that their ethnic minority students should have a high level of Serbian language competence in order to succeed in the higher education system. There was common understanding that even in STEM studies, high language competency should be a prerequisite.

The other two national minorities faced different challenges. Members from the Slovakian national community stated that they had no problems because of the similarity of the two languages. Within their community there is a "brain drain" as a lot of young Slovaks emigrate to Slovakia, where they easily get scholarships. Members of the Romanian national minority stated that they have problems with the language as well, if they finish elementary and high school in their mother tongue. As their's was the smallest of the three mentioned minority communities, some municipalities did not offer the option to obtain primary or secondary education in their mother tongue, mainly due to the low number of students. The obvious consequence of this was that Romanian children enrolled schools in Serbian. This is especially true for mixed marriages, in which one parent is Serbian and the other Romanian. In the Hungarian community this was also a pattern, which the parents are following in the case of mixed marriages, i.e. they enrolled children in schools in Serbian thereby trying to avoid future language difficulties. Additionally, those students who finished their schools in Romainan, usually went to study in Romania, mainly because of the state scholarships.

Serbian female professors narrated about the downsides of the language differences. In their narratives, language was the source of inequality for their Hungarian students and colleagues as well. In their narratives, we sensed that this language-induced unpleasantness was twosided, as they too were burdened by the necessity to help and thereby make exceptions. Obviously, this 'unequalness' affected the minority students and they lagged behind the majority students. We could sense from the narratives of the majority female professors how they assumed a somewhat hegemonic position when explaining language as a source of challenges when it comes to (ethnic) minority students. Some interviewees were slightly annoyed by the minority students (having the language difficulties, not all minorities per se!), because they lagged behind and needed extra effort from the teaching staff.

For male students studying in a language different from their mother tongue was more of a possibility, than a source of discrimination, even though they faced language-related difficulties just as females did. In their narratives they seemed very confident that they would overcome the difficulty and eventually become competent it two languages, rather than one. Although the language difficulty was an obstacle, they did not see it as something crucial in
their studies, they accepted the situation and tried to overcome it. They did not (admit to) lose their self-esteem due to the language difficulty. This was again an example of the language performativity, seeing language in a different way, than their female counterparts. In STEM studies, both men and women were relied on the common language of mathematics and they were supported by their colleagues and professors, in SSH this was not the universal case with the male respondent. One interviewee was overcoming the language difficulty methodically, by reading a lot as he wanted his language skills to be perfect. Even though he had one situation when he felt discriminated, overall, he did not connect language to his career success.

Based on the above presented analysis of the questionnaire and the interviews with professors and students the author concluded that language became a metaphor for performative social (in)equality. Minority women and men were using various language-related strategies. Minority women used language more to connect their status of being the Other (Spivak, 1985), while majority women are also using language as a strategy to make sense of the Othering concept they use towards minorities. Men relied on different language-related strategies, which highlighted language performativity, namely methodically turning disadvantage into an advantage by learning another language.

Based on the above summary of our findings, we concluded that language has a performative nature, it is a social construction which the different respondents (minority and majority females and males) used in different ways to explain their status or positions towards ethnicity.

## 10 ETHNIC MINORITY WOMEN IN SERBIAN ACADEMIA

The goal of this section is to analyse different aspects of ethnic minority women's careers in the Serbian higher education system. We will analyse work-life balance, career paths and motivation to reach decision-making positions. The narratives of women academic teaching staff of four nationalities (Serbian, Hungarian, Slovak and Romanian) will be analysed. We define the following as decision-making positions: head of department, vice-dean, dean, vicerector and rector. We will compare and contrast the narratives and strategies used by ethnic minority and majority women, as well as males from both groups. Only qualitative data will be analyzed and within that data, only teaching staff was asked to answer the abovementioned question.

Our goal is to identify the common 'strategies' used by the respondents to talk about their motivation/demotivation. The analysis of the interviews will show that the strategies differ between genders and that there is an ethnicity-based difference as well. We will conclude this section by an analysis into the different experiences of women who work in social sciences and humanities (SSH), or science, technology, engineering and mathematics (STEM) fields.

First the analysis of the interviews conducted with Hungarian female professors will be introduced, then the Slovak and Romanian female professors, Serbian female professors and the Hungarian, Slovak, Romanian and Serbian male professors will be analysed as one control group.

### 10.1 WOMEN IN DECISION-MAKING POSITIONS

### 10.1.1 Hungarian female professors

Hypothesis coding was used to code the interviews of ethnic Hungarian, female professors. A predetermined list of codes was generated. The codes were predefined and were divided into two main categories: Not motivated and motivated. Under the main code of being not motivated there were 5 sub-codes: politics within academia, not well paid, devoted to teaching, devoted to research, and people change (i.e. for the worse when in a decisionmaking position). Under the main code of being motivated, 5 more codes were introduced, namely: motivated, did not have a decision-making position, could not get a position, had a decision- making positions earlier and $\mathrm{N} / \mathrm{R}$ - as no response.

Table 25 contains the summarized findings based on the analyses of the coded interview transcripts.

Table 25 Motivation of Hungarian female professors for reaching decision-making positions

| Code | Field | Not motivated to reach top position |  |  |  |  | Motivated to reach top position |  |  |  | N/R |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Politics in academia | Not well paid | $\begin{aligned} & \text { Devoted } \\ & \text { to } \\ & \text { teaching } \end{aligned}$ | $\begin{aligned} & \text { Devoted } \\ & \text { to } \\ & \text { reserach } \end{aligned}$ | People change | Motivated | Did not have a decision -making position | Failed to reach position | Had a position earlier |  |
| HFP1 | STEM |  |  |  | x |  |  |  |  | x |  |
| HFP2 | SSH |  |  |  | X |  |  |  |  | x |  |
| HFP3 | SSH |  |  |  |  |  |  |  | x |  | x |
| HFP4 | SSH |  |  |  |  |  |  |  |  | x | x |
| HFP5 | SSH | x |  |  |  |  |  |  |  | x |  |
| HFP6 | STEM |  |  | x |  |  |  | x |  |  |  |
| HFP7 | SSH |  |  |  |  |  |  | X |  |  | x |
| HFP8 | STEM |  | x |  |  |  |  | X |  |  |  |
| HFP9 | STEM | x |  |  |  |  |  | X |  |  |  |
| HFP10 | STEM |  |  |  | x |  |  | x |  |  |  |
| HFP11 | STEM | x |  |  |  |  |  | X |  |  |  |
| HFP12 | SSH |  |  |  |  |  | x |  |  |  |  |
| HFP13 | SSH |  |  | x |  |  | x |  |  |  |  |

The above table summarizes our findings about the motivation of Hungarian female professors for reaching decision-making positions within academia. It is divided into two parts. As for the first one, respondents are demotivated because of the politics in the academia (HFP5, HFP9, HFP11), not well paid (HFP8), devotion to teaching (HFP6, HFP13), devotion to research (HFP1, HFP2, HFP10) or because of the fact the people change when they reach these positions. Two respondents were motivated (HFP12, HFP13), six did not have a decision-making position (HFP6, HFP7, HFP8. HFP9, HFP10, HFP11), one failed to reach such a position (HFP3), and four had a decision-making position earlier (HFP1, HFP2, HFP4, HFP5).

Only two professors stated that they would like to reach high positions. Some of them were not sure whether they would change their minds in the future, and might decide to strive to reach high positions.

Four Hungarian female professors (HFP1, HFP2, HFP4 and HFP5) had decision-making positions earlier, namely vice-dean, head of department, deputy-head of department, coordinator of a language center. The most experienced HFP1 was a vice-dean for academic
affairs, she was a head of department and a director of an institute as well. She had her decision-making positions in a mostly male environment. When asked about her positions, she narrated that, when she started working, in the communist era, there was a description of qualities by which people were selected for decision-making positions. She was always a successful researcher and she is of Hungarian origin; therefore, she was suitable for the decision-making positions in the old political regime. This is supported by the following longer quote:

> I was the head of an institute for many years. I was the vice-dean, as well, during my mandate, although I did not apply for a second term. In the city, during communism, there was a list of the qualities needed for a decision-making position. So, for the positions where they were looking for a female Hungarian engineer, I was the only one suitable. I was Hungarian, a woman, married, lived in a family, university graduate and an assistant professor as well. People were very curious about who this person was who had all the listed qualities. So, for many years I held various functions, like in the social union. I also worked in the House of Representatives for years, then in the main committee, the personnel commission, which still exits, and on the Serbian National Theatre board of directors, which still exists, as well. (HFPI).

HFP1 and HFP2, who had decision-making positions earlier, stated in their narratives that they would not accept high positions again. HFP4 who was a vice-dean as well, did not say anything in her narrative about accepting decision-making positions in the future. HFP4 stated that she was a vice-dean for academic affairs in two mandates and during those years she had to work long hours and, in the evenings as well. Her success compensated her for the extra work she did. She established numerous collaborations with universities in Hungary and then when a new dean was elected, she was slowly left out from those collaborations. This is something she attributes to the change of the 'political climate' at her faculty.

HFP1, HFP2 and HFP10 narrated that they were devoted to the teaching, therefore they were not interested to take a break and enter a decision-making position. Two of them had already decision-making positions, the first one was a vice-dean, and during that time, she had to do a lot of administrative work, which did not leave time for research. HFP2 narrated that she was asked a few times to become dean, but she refused each time. She loves her profession and lives for it, being in a decision-making position would mean that she would sometimes have to be strict with people. That is something she would not like to do. The following quote supports this statement:

I did not accept any decision-making positions. Neither would I accept the position of dean, because I like my profession very much /../ In addition, it is very difficult for me to rebuke people, and for these positions it is expected that you will be in charge; hence, this person should not be so sensitive and should be able to tell off someone who did not do his/her share of the work. (HFP2)

HFP3 said that she could not get a decision-making position, as by her boss opinion she was not suitable for a decision-making position. In the communist era, she could get a position, but then her children were small, therefore she was not active in the communist party, which was in turn judged negatively when considering her for a position. After her children grew up, her boss was always "over-protective" towards her, saying that she could not fulfil any high position because that would have affected her work. Her narrative is also a proof of a different working regime in the communist era. Women and men, ethnic minorities and the majority population had equal opportunities regarding the right to work and progress. But, loyalty to the party was obligatory.

I never got a decision-making position. I was not suitable. The party's leadership favored me, but my boss feared that if I got such a position, I would get promoted too quickly. He said that I would have a lot of obligations concerning my further training, and therefore I could not deal with the decision-making positions properly. (HFP3).

HFP5 stated that even though she had decision-making positions during her career, as she was the Coordinator of a Language Center, she was never interested in higher positions, namely to become a vice-dean, dean, vice-rector or rector.

One of the Hungarian interviewees narrated that she was obliged to work with students as that is her primary obligation. Work with students is the part of her profession which defines her work, therefore she was never motivated to change that for a decision-making position. The following quote supports this:

No, decision-making positions do not appeal to me. I was always more interested in working with students, I love working with them. I think I am better at this job. I have never longed for any decision-making position. (HFP6)

HFP8 narrated that she would like to do managerial work, e.g. the coordination of big science projects where the salaries are considerably higher. In her opinion, a dean has a lot of obligations and the salary increase (if any) is not pay is not aligned with that.

HFP5, HFP9 and HFP11 narrated that politics within the academic society is the reason why they are not motivated. This was a strategy they were using to explain why they were not
willing to get involved in neither internal faculty politics, nor the politics outside the walls of the faculty/university. This statement is supported by the following quote:

No, there is too much politics involved, and you should know how to deal with people. In my opinion, my biggest problem is my great sense of justice for my students, my boss and my fellow colleagues. It is difficult for me to deal with injustice. Maybe because I am too young, and maybe it is hard for me to understand. But then again, I think I am not that young anymore. (HFP11)

Only two Hungarian female professors (HFP12 and HFP13) told explicitly that they were interested in reaching decision-making positions. Both were members of the younger generation and they had no prior experience in decision-making positions in academia. Their family background provided support for their above-mentioned narratives. Namely, HFP12's grandfather was an academic himself, her mother has a PhD and held a decision-making position outside academia for a long period. It must be noted that HFP13 works at the Hungarian language Teachers Training Faculty in Subotica, where she is teaching in her mother tongue in an environment which is somewhat secluded from other faculties of the UNS. In small and familiar environments there is a bigger chance for having this kind of confidence and drive. In addition, HFP13's mother is a university professor and was the head of a department for years. She had healthy dose of self-esteem and a role model for this. HFP13 when asked what her goal would be while holding a top position, she stated that it would be the development of research. In her narrative, she stated that in Serbia there is a limited access to modern research equipment and methods.

Based on the analysis of the above-presented interviews, the author concluded that the main strategies for demotivation in the narratives of ethnic Hungarian women were politics in academia, devotion to research and/or devotion to research. One interviewee stated that she was devoted to teaching, and one narrated that top positions are insufficiently paid. The professors who held decision-making positions before, stated that during their terms, they had less time for their profession, referreing to teaching and/or research. One respondent had no chance to reach a higher position because of her superior(s), who thought of her as a constant rival for many years. The two youngest Hungarian female professors narrated that they were motivated to achieve decision-making positions, which could be attributed to their enthusiasm (a characteristic of young people) and to their family background, which both had very positive influence on them.

### 10.1.2 Slovak and Romanian female professors

Table 26 contains the summarized results of the analysis of the transcribed interviews conducted with the Slovak and Romanian female professors. The same topics were analyzed as for the Hungarian women professors, i.e. their motivation for reaching decision-making positions.

Table 26 Motivation of Slovak and Romanian female professors for reaching decision-making positions

| Code | Field | Not motivated to reach top position |  |  |  | Motivated to reach top position |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Politics <br> in <br> acade- <br> mia | Not <br> well <br> paid | Devoted <br> to <br> teaching | Devoted <br> to <br> research | People <br> change | Moti- <br> vated | Did not <br> have a <br> decision <br> -making <br> position | Failed <br> to reach <br> position | Had a <br> position <br> earlier | $\mathrm{N} / \mathrm{R}$ <br> SLFP1 SSH |
|  |  |  | x | x |  |  | x |  |  |  |  |  |
| SLFP2 | SSH |  |  |  |  |  |  | x |  |  | x |  |
| RFP1 | SSH | x |  |  |  |  |  |  |  | x |  |  |

The respondents were not interested in reaching decision-making positions, because of politics (RFP1), devotion to teaching (SLFP1) and devotion to research (also SLFP1). It can also be seen in the second part of the table that SLFP1 and SLFP2 did not have a decisionmaking position, whereas RFP1 had such a position earlier. Finally, SLFP2's narrative did not contain clues about motivation to reach top positions in academia.

In Table 26 it could be observed that one of the respondents (SLFP1) narrated that she could not fulfill her duties towards her students and her research career if she would have to deal with a decision-making position. She also narrated that her family was important and she needed to devote them enough time. SLFP2 did not say anything explicitly about wishing to reach high positions within the academia. However, SLFP2 and RFP1 in their narratives mentioned that the agreement between the teaching staff at their departments was, that everybody will get to be the head of department eventually, as the professors will rotate in that position. This is because the Slovak and Romanian language and literature departments are rather small and do not have many teaching staff. RFP1 stated that she was the deputy head of the department at the time of the interview. A decision-making position was something natural to come and they did not need to put extra effort into reaching it. Although not mentioned explicitly, implicitly it was understood as a glass ceiling for them. This is supported by following quote.

I am now the deputy head of department. We agreed within our department that we would alternate, and we'll all have a turn. We will not fight to be the head of the department. I do not think I can attain the role of dean. (RFP1)

RFP1 when narrating about the situation outside their department, said that there was a lot of politics involved and that she was not motivated to get involved in such politics. We conclude that the Romanian and Slovak female professors used the same strategies as Hungarian professors did, namely politics involved in academia and devotion to research/teaching.

### 10.1.3 Serbian female professors

In the following section, Serbian female professors' narratives will be analysed chronologically, starting from the most experienced one and finishing with the youngest professor. The interviewees were previously presented in the chapter entitled Interviews and their codenames were explained as well. Table 27 contains the summarized results of the analysis of the transcribed interviews with the Serbian female professors. Statements about their motivation for reaching decision-making positions were analyzed.

Table 27 Motivation of Serbian female professors for achieving decision-making positions

| Code | Field | Not motivated to reach top position |  |  |  |  | Motivated to reach top position |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Politics within academia | It is <br> not <br> well <br> paid | Devoted to teaching | Devoted to research | Peopl <br> e chang e then | oti <br> vat <br> ed | Did not have a decision -making position | Failed to reach position | Had a decision -making position earlier | $\begin{gathered} \mathrm{N} / \\ \mathrm{R} \end{gathered}$ |
| SFP1 | STEM |  |  | x |  | x |  | x |  |  |  |
| SFP2 | STEM |  |  | x | x |  |  | x |  |  |  |
| SFP3 | SSH |  |  | x |  |  |  | x |  |  |  |
| SFP4 | SSH |  |  | x |  |  |  | x |  |  |  |
| SFP5 | STEM | x |  |  |  |  |  | x |  |  |  |
| SFP6 | STEM |  |  |  |  |  |  | x |  |  |  |
| SFP7 | STEM |  |  |  | x |  |  | x |  |  |  |

It is interesting to mention that neither of the respondents held a decision-making position. This is important, as we could see how holding a decision-making position (on a departmental level) is a common thing for minority female professors, whereas for the majority this was different.

From the first part of the Table 27 it can be seen that one respondent (SFP5) was not interested in reaching decision-making position because of the involvement of politics, four
respondents (SFP1, SFP2, SFP3, SFP4) were not interested because of their devotion to teaching, whereas two respondents were devoted to research (SFP2, SFP7). Finally, one respondent did not want decision-making position because people change in management positions (SFP1). Two respondents were motivated to reach high positions (SFP1, SFP6). None had a decision-making position prior to the interviews.

SFP1 narrated that she thought about achieving decision-making positions, but then she realized that people change when they are positions of power. The following part of her narrative supports this claim.

Yes, I thought about it (reaching decision-making positions). /.../ Those positions require you to be different. People change a lot. You know someone for 40 years and then he/she becomes someone important, and you see that you misjudged them. Maybe I would change as well. It depends on a person and on the feeling of fake grandure, or real grandure - it does not matter. That is something which is not that appealing to me. (SFP1)

Although SFP2 acted as a working group leader in different projects, she did not have a decision-making position at her faculty. SFP2 was a very successful scientist who, besides her work at the faculty, had a significant role in a high-profile research group at a research institution. This is something about which she was very confident. When asked about decision-making positions, she said in her narrative, that she would turn down at the moment any decision-making position at the faculty. In her opinion, women in general are very unmotivated to achieve decision-making positions. This is because they are treated differently by men. She had a very good example to share in her narrative: although previously she had the feeling that male colleagues were paying her compliments, she had come to realize that by doing so, they were signalling that they did not think of her as a peer. The following passage from her narrative supports this.

I also think that women are very unmotivated to reach decision-making positions.
Here is a little example: for years, it was very appealing to me, but, I do not know, I did not give much significance to it and then, one day, I realized that it is so unappealing to me when elderly colleagues and colleagues who are in high positions call me "girl"! "How are you today, girl? You look so sweet today!" At first, you think that it is a compliment, but it is far from being a compliment. That is ageism and chauvinism, that's what it is. And then it starts annoying you. It means that a successful woman in our society will be either a girl or a hysterical woman, a witch. So, she will be assigned one of the two adjectives by men and it will then immediately block her from any further progress. (SFP2)

SFP2 was interested in 'enriching' the academic discourse at her workplace, by adding her ideas. She thinks that each generation ought to give something to the people they work with and that it is unfair that some professors (mostly men) occupy decision-making positions for a long time, leaving no space for younger colleagues with new or different ideas. SFP2 was commonly asked by women's organizations to promote successful women and women in STEM. She always rejected those invitations, because she would have not liked to be seen as a woman engineer, but as an engineer per se and not as a woman professor but as a university professor per se. When she received a prestigious award for her achievement in research, an equal number of men and women received awards. That made her think that maybe she had received an award because she was a woman, and perhaps some very successful man or woman missed out on the award because of the "forced gender equality." She thinks that such actions were jeopardizing scientific excellence.

Two of the respondents (SFP3, SFP4) stated that their work with students, i.e. the teaching dimension of their work, was primary for them. SFP3 is very determined when it comes to her work with students. The following passage supports this.

> That is the kind of aspiration I really do not have. No, I do not, if you mean whether I would like to be part of a dean's or the rector's pack. No. Those positions do not interest me, nor the tasks these positions impose. The positions of the rector, dean, head teacher-no, absolutely not. The essence of my job is primarily work with students; the university's emphasis should be placed on education because we are primarily teachers, only then scientists and researchers; it is the central part of the profession. (SFP4)

Thomas and Davis argue in their research, that a number of their female interviewees felt like the teaching duties and administrative tasks were forced upon female academic staff and "that they were excluded from research activities and were locked into departmental maintenance activities and emotional work in the department. Research, the new performance standard, was an activity they found increasingly difficult to engage due to the sheer size of teaching and administration workloads" (Thomas \& Davis, 2002:381). Thomas and Davis also point out that for many female interviewees "teaching was their primary interest in working in the higher education. This was especially so in vocational subjects where their motivation for working in the higher education was to teach" (Thomas \& Davis, 2002:389). The second statement of Thomas and Davis was surely supported by the narratives of female academic staff in the Serbian higher education system, who felt like teaching was their primary duty and every other academic duty came as second.

SFP5 claimed that she never wanted to hold any decision-making position because every one of those positions is defined by politics. This was a common strategy among the Hungarian women. SFP5 did not completely rule out the idea of decision-making positions, one day in the future.

> I am not attracted to decision-making positions within the faculty, I would not like to be a vice-dean for this or that. I am not the kind of person who/.../ within our society everything is always connected with politics, and I am not, so at the moment that is why I despise it, to be realistic. (SFP5)

The youngest respondent (SFP7) said that for her the most important thing was her career progress and evolution. She talked about being not interested in decision-making positions.

When summarizing the findings from the narratives of Serbian female professors, we conclude that the two main strategies they employed were the devoted to teaching and devoted to research. Additionally, they mentioned the politics in academia and people change during the time they occupy a decision-making position as well. We concluded that there was a difference between the narratives of ethnic minority women, where the direct correlation between decision-making positions and politics is one of the recurring reasons of discouragement to reach top positions. Although Slovak and Romanian professors did not mention this kind of difficulty, the Hungarian women were very sure about this in their narratives. This leads us to believe that Serbian women are not as wary of politics as are Hungarian minority women. Only one of the Serbian women mentioned politics as a discouragement; however, she did not dismiss the possibility of one day being interested in power positions. We can also conclude that ethnic minority female professors have greater opportunities to get decision-making positions, but only in their own environment, i.e. the ethnic minority language departments. Ultimately, we can conclude that there is no difference in answers between Serbian women from STEM and SSH studies regarding the strategies they employ: women from both STEM and SSH were using the same strategies equally. This was the case with ethnic minority women, as well.

### 10.1.4 Hungarian, Slovak, Romanian and Serbian male professors

Male professors were analysed together, their analysis was not chronological, nor was it divided by ethnicity, but instead by the similarity of their narratives. Table 28 contains the summarized results of the analysis of the transcribed interviews. The same aspects were analysed as for the Hungarian, Slovak, Romanian and Serbian women professors, i.e. their motivation for reaching decision-making positions.

## Table 28 Motivation of Hungarian, Slovak, Romanian and Serbian male professors for achieving decision-making positions

| Code | Field | Not motivated to reach top position |  |  |  |  | Motivated to reach top position |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Politics in acade -mia | Not well paid | Devoted to teaching | Devoted <br> to <br> research | People change | Moti vated | Did not have a decision -making position | Failed to reach position | $\begin{aligned} & \hline \text { Had a } \\ & \text { decision } \\ & \text {-making } \\ & \text { position } \\ & \text { earlier } \end{aligned}$ | $\begin{gathered} \mathrm{N} / \\ \mathrm{R} \end{gathered}$ |
| HMP1 | STEM | x |  |  |  |  |  | x |  |  |  |
| HMP2 | STEM | x |  |  |  |  | x | x |  |  |  |
| SLMP1 | STEM |  |  |  |  |  | x |  |  | x |  |
| RMP1 | STEM | x |  |  | x |  | x | x |  |  |  |
| SMP1 | STEM |  |  |  |  |  | x | x |  |  |  |

HMP1, HMP2 and RMP1 did not want decision-making position because of the politics involvement, and one male professor (RMP1) did not want it because he was devoted to research. In the second part of the table, it can be seen that four respondents were motivated to reach high positions (HMP2, SLMP1, RMP1 and SMP1). Four did not have such a position (HMP1, HMP2, RMP1 and SMP1), while one male respondent did (SLMP1).

Almost all male interviewees mentioned their interest in achieving high positions in academia. Most of them were not motivated at that specific moment, but they did not exclude the possibility of one day being seriously involved in occupying a decision-making position. At the time of the interviews, they distanced themselves from decision-making positions. HMP1, HMP2 and RMP1 stated that their disinterest was connected to politics. They did not want to get involved in that.

The following passages illustrate these opinions:

> I am an assistant professor at the moment. I am a member of the university council and a member of another few councils. I could say that I am a member of the faculty middle management. For the time being I am satisfied, considering the fact that only problems arise from having these decision-making positions. It is safer this way. (HMPI)

Two male professors (SLMP1 and SMP1) spoke about their motivation to reach decisionmaking positions. One of them was a vice-dean in two mandates. He stated that his promotion to high positions was not something he planned, but he had thought about it. The following passage gives his account.

I was vice-dean. I did not plan to reach a senior position, but I had thought about it. When I was a student, I was the vice president of the students' union. I had an inclination for these types of positions. (SLMP1)

The younger professor had thoughts about reaching high positions, as well. He narrated that being in a "less visible' position which also comes with a certain degree of power, is better for him. The following passage explains this.
...I do not see myself at the top of the hierarchy, rather in a supporting position that comes with a certain degree of responsibility (SMP1).

In their narratives, these male professors used a strategy different from the women's strategies. Although ethnic minority men in their narratives report disinterest in reaching top academic (management) positions because of the politics involved, four interviewees explicitly spoke of their willingness to assume a decision-making role one day or of having filled such a role for a long time. They articulated a strategy of postponing, i.e. assuming that kind of responsibility later on in their careers. Achieving a high-position was in the future (career) plans of most men.

### 10.1.5 Discussion: Decision-making positions

The above analysis showed that most women report not being motivated to attain academic decision-making positions. They used a range of strategies to back up their standpoints, the most frequent of which were politics in academia and devotion to teaching/research. Women, regardless of their nationality, were less motivated in achieving power positions within the academic hierarchy. The more experienced researchers spoke of getting (or having the opportunity to get) decision-making positions during the communist era (before 1988). During communism, minority women in position of power were common, there was a so called "key" 85 or "national key criterion" (Miladinović, 2003b: 39), which were quotas ensuring that every nationality is proportionately represented in all hierarchic structures. Kovačević argues that "the innovations of Eastern European communism were nevertheless great in the area of social welfare policies and the egalitarian ideology of social solidarity" (Kovačević, 2008:17). Hughson argues that the egalitarian ideology during socialism was highly instrumental and it was due to the necessity for the use of women as resources extensively and intensively both in private and public spheres (Hughson, 2015).

[^40]Only two female respondents were explicitly motivated in reaching high positions, where one of them narrated that her emphasis would be on research development. One respondent did narrate about the necessity of every generation putting their ideas in the managerial structure, but none of the women mentioned anything about reaching high positions to promote the advancement of women themselves. Some even had negative attitudes towards gender equality in research, because it might negatively affect scientific excellence. This leads us to conclude that even though women do reach or get a chance to promote science to other women or to reach high positions, they are not using it for getting more women motivated, rather they want to do the job like their male colleagues would do it.

We concluded that ethnic minority women more easily reach decision-making positions. The Slovak, Romanian and Hungarian language and literature departments employ relatively small numbers of teaching staff, therefore all the members will be a deputy head and head of the department, because by alternating they will all get a chance to fulfill a decision-making position. These departments are ethnic minority only and usually predominantly employ women as professors and teaching assistants. Unfortunately, the career path to reaching higher positions (e.g. dean, rector) is not open, as ethnic minority women face a glass ceiling on (their) departmental levels. Nevertheless, it should be noted, that being a minority in this sense is an advantage for them, rather than a disadvantage. The fact that none of the Serbian female respondents had a decision-making position before, could also back up this theory.

There was no significant difference between the answers of women in STEM and SSH fields, when it comes to answers about reaching decision-making positions. When it comes to the comparison between men and women, men were more interested in reaching decision-making positions compared to women, regardless of their nationality. Three out of five interviewees stated that they were interested in reaching decision-making positions and one was vice-dean in two terms. Most male professors connected decision-making positions to politics and this aspect was estranging them from the above-mentioned positions. Politics is an aspect and a strategy which is repeating itself in the responses of women professors as well, therefore there is no gender difference. There is however a significant gender difference when it comes to other reasons for not being motivated for decision-making positions. None of the men thought that their job at the faculty was primarily in teaching and working with students, while a significant number (4) of the female professors explicitly referred to teaching as their primary role. This leads us to believe that even in higher education, women feel that they are the ones responsible for the teaching part, while men are interested in research and in management.

Work with students is very time-consuming and has no options for extra earnings. The work with students is not limited to just classes, but to office hours and mentorship as well. Most of the mentorships are very demanding as students are required to write BSc or/and Master theses. In that process, they need extra time from the professors. There was a significant gender difference, when it comes to the answer about the devotion to the profession. Female professors used the strategy of devotion to teaching is why they were not motivated in reaching decision-making positions. Only one male professor identified with this strategy, but he also emphasized that the top reason for his temporarily disinterest is that high positions involved a lot of 'politics'. Base don this, we conclude that men are deciding more easily to invest effort into reaching decision-making positions compared to women.

We differentiate life and rhetorical strategies. The strategy of 'politics in academia' is both a rhetorical strategy and a life strategy, while devotion to teaching/research are mainly rhetorical strategies, keeping women "safe" in the academic environment, so that they do not have to deal with the inner political turmoil. It is somehow expected of women not to be interested in decision-making positions. Women in turn explain this setup in their narratives with rhetorical strategies. The strategy of decision-making positions being not paid well is also more a rhetorical one, than a life strategy, as beside of being time-consuming and sometimes not well paid, those positions bring a certain amount of power, which cannot be measured in money. The strategy of people changing when getting a position can be also a rhetorical strategy, because it cannot be generalized, and also serves as an explanation for turning away from higher positions.

When it comes to reasons which strategies are men using for explaining they demotivation to reach top positions in academia, we concluded that the main strategy they were using was the involvement of politics in academia. Men used this strategy rhetorically, which also provides them with a kind of justification for social expectations concerning their profession - that science and scientists are completely devoted to scientific production; therefore they should not be engaged in politics - however, without politics they cannot reach decision-making positions. Men do not have any other reasons to be disinterested and most of them do not dismiss the idea of one day being interested in decision-making positions. Men first build successful careers and then they invest effort into reaching decision-making positions. Women were less determined, mostly satisfied teaching and research. When offered a top position, some accepted, some refused. Those who accepted, devoted themselves entirely and worked very hard to meet the expectations attached to such positions.

### 10.2 ETHNIC MINORITY WOMEN IN SERBIAN ACADEMIA

In this section we analyse the narratives about the possibilities of ethnic minority women building careers in the higher education and research sector of Serbia. In the previous section we discussed the level of their motivation (or the lack of it) to reach decision-making positions in the higher education system of Serbia. We continue that analysis by enquiring how can ethnic minority women remain on the higher education/scientific career path and what are those (objective) possibilities they have for reaching decision-making positions. We will identify strategies used by the respondents in their narratives to explain and justify or to dismiss the possibilities of any difficulties occurring when minority women pursue a career in Serbian academia. We will focus on the following strategies: ethnicity-based discrimination, gender-based discrimination, intersection of gender and ethnicity-based discrimination and no discrimination.

### 10.2.1 Hungarian female professors

We applied hypothesis coding in our analysis. We created a list of codes as hypotheses. These codes were aligned with the questions used in the semi-structured interviews, namely: Is for minority women more difficult to pursue a career in academia? and Can minority women reach decision-making positions? The answers were coded with the following values: yes, no, not sure and $\mathrm{N} / \mathrm{R}$ (no response or I do not know).

Table 29 contains the summarized findings based on the analyses of the coded interview transcripts.

Table 29 Possibilities for minority women in academia - answers of Hungarian female professors

| Code | Field | Is for minority women more difficult to pursue a career in academia? |  |  |  | Can minority women reach decisionmaking positions? |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Not sure | N/R | Yes | No | Not sure | N/R |
| HFP1 | STEM |  | x |  |  | x |  |  |  |
| HFP2 | SSH | x |  |  |  | x |  |  |  |
| HFP3 | SSH | x |  |  |  |  |  |  | x |
| HFP4 | SSH |  |  | x |  | x |  |  |  |
| HFP5 | SSH |  |  | x |  | x |  |  |  |
| HFP6 | STEM |  |  |  | x | X |  |  |  |
| HFP7 | SSH |  | x |  |  |  |  |  | x |
| HFP8 | STEM | x |  |  |  |  |  |  | x |
| HFP9 | STEM | X |  |  |  |  |  |  | X |
| HFP10 | STEM | x |  |  |  |  |  | x |  |
| HFP11 | STEM | x |  |  |  | x |  |  |  |


| HFP12 | SSH |  |  |  | x | x |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HFP13 | SSH | x |  |  |  | x |  |  |

The left half of Table 29 contains our findings about the difficulties ethnic minority women face while they pursue a career in Serbian academia. The third column shows that seven respondents (HFP2, HFP3, HFP8, HFP9, HFP10, HFP11 and HFP13) narrated that for Hungarian women it was more difficult to pursue a career in academia, two of the female professors thought that there was no difficulty for Hungarian women (HFP1 and HFP7). HFP1 finished her education in Serbian (from kindergarten to university) and she never had any language difficulties. When narrating about her ability to write scientific papers in her mother tongue, she mentioned that being a challenge for her. It should also be noted that HFP7 was raised in a mixed marriage and she also finished high school in Serbian language. Even though HFP7 pursued a career at the Department for Hungarian Language and Literature she had no reversed problems with language skills (schooling in Serbian, teahing in Hungarian!) In the table above it can be seen that two respondents did not explicityly answer the question about the difficulty to pursue a career in academia, whereas two of them were not sure about the anwer.

The right half of the table summarizes our findings about minority women reaching decisionmaking positions. Eight respondents stated that it was possible for ethnic minority women to reach high positions (HFP1, HFP2, HFP4, HFP5, HFP6, HFP11, HFP12, HFP13). One respondent was not sure, while four did not talk about whether a minority woman can reach a decision-making position or not. The lack of answers on the proposed questions, might not be intentional, as the interviewer let the narratives flow without too much interruption. In this sense this was expected to happen.

HFP2 narrated that being a Hungarian had different advantages/shortcomings depending on where you lived. In Subotica where nearly half of the population is Hungarian, there was a larger chance of being accepted. The following quote supports this.

I did not have any difficulty regarding my nationality. I am convinced that it depends where you live. For example, in Subotica there is a place for Hungarians and there was always. But I am sure that she has difficulties. First, she has a different perspective, maybe she has a language barrier, maybe because of her minority community membership she was not accepted well enough. I do not know for sure, but I think that she has to fight more, than the members of the majority (HFP2).

HFP9 was a demonstrator for a few years at the university when the interview was conducted, which meant that she was a volunteer without a salary. She did not get any assurance that there will be an opening at her department. When the author spoke with her, she was very unsure about her future at the university and whether there was a meaning in what she was doing. She said that her father 'implanted' the idea in her head that because of her ethnicity (i.e. Hungarian), she could not look forward to any progress at all. This thought of her father could be backed up with the fact, that although she was as exceptional student, who deserved a position at their department, she did not have any support from the professors, which is supported by the following quote.

> My father told me a few years ago: "Are you realizing that you're never going to get into the university as a professor, or as a teaching assistant?" I asked why? "Because you are a Hungarian!". He 'implanted' this thought in my head and sometimes I am thinking about this, because in fact I do not see any more how could my situation be resolved from itself (HFP9).

When analyzing the above extract of HFP9's narrative, we did not identify any experience regarding direct or indirect discrimination. She connected her unfavorable position to fate and her ethnicity. In this narrative we identified the strategy of minority-burden, by which ethnic minority women explain their underdog position, forced upon them by fate and birth.

HFP11 spoke about her experience of being a woman at her department. She spoke about her boss (a middle-aged, male professor) at first had no confidence towards young female colleagues. She had to prove herself several times. She decided to postpone her decision to become a mother as well. She felt that this bias towards women loosened up as time passed and her boss was more open to hiring women. This might be her credit as well, because she worked a lot to prove herself.

> Now I cannot say that we are discriminated, but I was not sure about that at first. If I would choose to be absent for maternity leave at the beginning of my PhD - this is only true for my generation, then I suppose that my contract would not have been extended. Now my boss' attitude changed a bit. Maybe because we have proven to him, that we are not from those who just want to get a job somewhere. He was against hiring women. In the last two years, he changed his mind about it. For a long time, there were only the two of us with my female colleague, but slowly came other women colleagues (HFP11).

When asked about whether minority women can reach decision-making positions most of the respondents narrated about how ethnic minority women can reach decision-making positions
(precisely eight of them: HFP1, HFP2, HFP4, HFP5, HFP6, HFP11, HFP12, HFP13). One of them (HFP10) was not sure and three of them (HFP7, HFP8 and HFP9) did not answer this question or just skipped over this question without reflecting on it. None of the respondents narrated about ethnic minority women being unable to reach decision-making positions. HFP2 narrated about how women would restrain themselves from reaching decision-making positions, even when they had the chance.

I do not know. I think it is a dual thing. There is a double twist in the question. The first one is that she is Hungarian and the other one is that she is a woman. Women are accepted. Here the contribution for women's marginalization are the family expectations. A woman is "bound", at home she has a lot of housework and it is more difficult for her to have a position like that, while she ought to do the work at home and at her job as well, therefore women do not want to have a position like that. This is the feeling I have (HFP2).

From HFP2's narrative we might introduce the strategy of work-life balance, which is keeping women from away from decision-making positions.

HFP8 has an exact thought about Hungarian women having a decision-making position. To get "followed" by the others they have to have the most exceptional research background.

I think, that a Hungarian woman has to know more than others do. She has to show skills and results that only a few have, so you can prove that you excel. This is needed for them to accept you and to follow you as well (HFP8).

HFP8 was not the only one who thought that an exceptional scientific background is an "entry ticket" to the high positions. Acker and Arementi argue in their research that women who were members of a minority group felt they faced additional pressures related to what Tierney and Bensimon (1996) call 'cultural taxation' (Acker \& Armenti, 2004:12). Our results support this. For example, HFP9 was taught by her father how being a member of a minority community will always be a burden by itself. Therefore we conclude that HFP8 relied on the strategy of minority burden as well.

HFP13 narrated similarly about minority women having to have additional skills to be accepted in the scientific community. When analyzing the above-mentioned quote, we can introduce the strategy of scientific excellence as a very important category of the present meritocracy in the scientific community. By using the strategy of scientific excellence, the interviewee wanted to express how scientific background is even more important for women, especially if they do not want to be involved in politics in academia. This was very prominent in the chapter where decision-making positions were discussed and where women elaborated
how they were not interested and also had reservations towards politics in academia. In this sense, the interviewees claimed that gender-based discrimination could be mitigated with scientific excellence.

HFP13 talked about scientific excellence as well, which in her opinion very much determins her position in the scientific community. She narrated about a growing emphasis on scientific excellence. HFP13 did not further elaborate about what women need beside scientific excellence.

> In my opinion, if someone is a very strong researcher in her field, then she can get a high position. Yes. There is a growing emphasis on how strong someone is the field of his/her research, how well is she acknowledged, how famous she is. But of course, other things are needed as well (HFP13).

This last sentence in the above-quote from HFP13 reveals the value of scientific excellence was on the rise. However, this is something discussed in the previous section, where the level of motivation was measured through their narratives for achieving decision-making positions and Hungarian women were using the strategy of politics in academia. This might be the issue which is not revealed explicitly in the narrative of HFP13.

### 10.2.2 Slovak and Romanian female professors

Three semi-structured interviews were conducted with Slovak and Romanian female professors. The interviewees were selected through personal connections and with the snowball sampling method. The interviews were tape-recorded in late 2014 and early 2015, transcribed and sent back to the interviewees for authorization. The interviewees were codenamed SLFP1-SLFP2 (SLFP = Slovakian Female Professor) and RFP1 (Romanian Female Professor). The professors were born between 1972 and 1984 and raised in different parts of Vojvodina, namely: Pivnice, Bački Petrovac and Seleuš.

Table 30 contains the summarized results of the analysis of the transcribed interviews.

Table 30 Possibilities for minority women in academia - answers of Slovak and Romanian female professors

| Code | Field | Is for minority women more difficult to <br> pursue a career in academia? |  |  |  | Can minority women reach decision-making |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Not <br> sure | $\mathrm{N} / \mathrm{R}$ | Yes | No | Not <br> sure | $\mathrm{N} / \mathrm{R}$ |  |  |
| SLFP <br> 1 | SSH |  | x |  |  | x |  |  |  |  |  |
| SLFP <br> 2 | SSH |  |  |  | x |  |  |  |  |  |  |



Table 30 is also divided into two parts. The left half presents the findings related about difficulties for ethnic minority women to pursue a career in (Serbian) academia. One respondent (SLFP1) said it was not difficult, one stated the opposite (RFP1), whereas one respondent was not sure (SLFP2). The other part of the table was about whether ethnic minority women can reach decision-making positions. Two respondents stated that they can (SLFP1, SLFP2), while one respondent (RFP1) was not sure.

SLFP1 narrated that women from national minority communities have no difficulties when building a career in academia. SLFP2 did not answer whether Slovak women have difficulties when pursuing a career. RFP1 answered that there were difficulties for women members of national minorities when pursuing a career in academia. She emphasised that the language is a difficulty. It is a difficulty for her still, when she has to teach in Serbian to students who do not speak Romanian well-enough. She narrated about this in the following way.

I think that in this case the language difficulty is very important. Someone who speaks in his/her family only in Romanian and finishes schooling in Romanian and after he/she has to continue his/her education in Serbian or to speak only in Serbian, as I have a great difficulty when teaching in Serbian to my students who do not speak Romanian. This is maybe important, the language difficulty. Most people here in Banat, in Vojvodina are bilingual, I think that it should not be a barrier of some kind, they can get a job wherever they want but it depends on the employer as well... (RFP1).

In RFP1's narrative we identified the strategy of language difficulty, which can be a selflimiting factor for the respondents to endeavor towards reaching-decision-making positions. This strategy acts as a comfort zone, from which there is no need trying to get out.

When it comes to the question whether women from national minority communities can reach decision-making positions, both Slovak female professors gave positive answers. SLFP2 dissociated herself from the answer, as she said that at her faculty (i.e. the Faculty of Philosophy) she thinks that there is a possibility for women from any national minority to reach decision-making positions - as there are many minorities working at the mentioned faculty. She was not sure about the situation at other faculties.

It is possible, I think it is, at our faculty yes, I am not sure about others, at our faculty a lot of foreign and languages of national minorities are studied and that is one of the characteristics of this faculty. I have not noticed any discrimination regarding this question. I think they can (SLFP2).

SLFP2 relied on the strategy of ethnic-blindness, but her focus was on the environment she was most familiar with, i.e. the Faculty of Philosophy, which is, as SLFP2 is stating a multiethnic environment. Still, there was no dean in its history who would have been from one of the ethnic minority language departments. Hence, this is also a self-deceiving strategy, as by using this kind of narrative, she explained the implicit and subtle discrimination in work. Some interviewees seemed to accept certain inequalities without even noticing or thinking about them. This was one such example.

RFP1 thought that there was a big need for the support from the Romanian National Council. When asked if a Romanian professor will be ever become the dean of her faculty, she expressed her doubts that that could ever happen, because there should be a lot of support from other people as well. The following quote supports this.

> I have never thought about it whether a dean will ever be a Romanian. It can be, but I do not know whether we would have the support of the people from other departments, for us to become deans (RFP1).

She was relying on the strategy of politics in academia. In RFP1's opinion there was a chance for the Romanian minority community, if they were very cohesive and used their political power through the Romanian National Council. In this sense there was a consciousness about the ethnic cohesiveness, whereas this cohesiveness was never genderbased in the narratives. Neither the ethnic minority, nor the majority women mentioned the possibility for women to act together, reach decision-making positions and thereby empower other women in academia.

### 10.2.3 Serbian female professors

Seven semi-structured interviews were conducted with Serbian female professors. They were born between 1954 and 1985 and raised in different parts of Vojvodina and Former SFRY, namely: Novi Sad, Sombor, Šajkaš, Zagreb, Sarajevo.

Table 31 contains the summarized results of the analysis of the transcribed interviews.

Table 31 Possibilities for minority women to pursue a career in academia - answers of Serbian female professors

| Code | Field | Is for minority women more difficult to pursue a career in academia? |  |  |  | Can minority women reach decision-making positions? |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Not sure | N/R | Yes | No | Not sure | N/R |
| SFP1 | $\begin{gathered} \text { STE } \\ \mathrm{M} \\ \hline \end{gathered}$ | X |  |  |  |  |  |  | x |
| SFP2 | STE |  |  |  | X |  |  |  | X |


|  | M |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SFP3 | SSH | x |  |  |  |  | x |  |  |
| SFP4 | SSH |  |  |  | x | x |  |  |  |
| SFP5 | STE <br> M |  | x |  |  |  |  |  | x |
| SFP6 | STE <br> M |  | x |  |  |  |  |  | x |
| SFP7 | STE <br> M |  | x |  |  |  |  |  | x |

Serbian female professors were asked the same questions, whether a female professor from a national minority can pursue a career in academia without difficulties, and whether it was possible for them to reach decision-making positions? SFP1 and SFP3 narrated that there were difficulties for minority women when building a career in academia. SFP5, SFP6, SFP7 in their narratives pointed out that there were no difficulties for minority women in their careers and in reaching decision-making positions. SFP2 and SFP4 did not answer the question.

When it comes to the second question about minority women reaching decision-making positions, only two respondents answered this question explicitly. This might be because of the fact, that the respondents talked more about their motivation for building a career in academia and for reaching decision-making positions and thereby they exhausted this topic.

SFP3 narrated that members of national minorities cannot reach decision-making positions, referring to the position of the dean at the Faculty of Philosophy. SFP4 narrated that there were no obstacles for (ethnic) minority women. Both talked about only the Faculty of Philosophy, where there were many nationalities working together.

SFP5 narrated that being a member of a national minority does not play a part in the position of women. She narrated that there is a gender-based difficulty, because women have to balance a lot between their career and family. Women need to sacrifice part of their family life to be more present at work. The following quote supports this.

I do not think that they have any difficulties (when building a career). I think that women as women have difficulties, most of all because they have to balance between work and family obligations, because you have to push your way with your elbows, to fight, you have to be very present, and that means that your family will have to suffer a lot. Now, if someone is ready for these sacrifices. This is perhaps the only thing that is an obstacle for women, more for women than national minorities (SFP5).

SFP5 relied on the strategy of work-life balance which allowed her to analyse only the gender aspect instead of the intersection of gender and ethnicity aspects at play. In her narrative, there was no sense of whether she is perceiving the intersectionality between gender and ethnicity, therefore she pointed out only one possible disadvantage, while the other she marginalized.

SFP6 works at the Faculty of Technical Sciences. She narrated that in her environment people were not divided by nationality. She had no ethnic minority, female colleagues, but she had Hungarian male colleagues, and no one was paying attention to ethnicity. She narrated, that at her department there were male colleagues who were Bosnian as well. Being a member of a national minority is not the fact which defines relations.

> I do not know, but at FTN (Faculty of Technical Sciences), at least in our environment, I do not think (it is more difficult), I think there are no big divisions based on nationality. In particular, we do not have a female colleague who is a Hungarian, but we have a few male colleagues Hungarians and they do not have any problems, at least I do not see that anyone is thinking about their nationality. We have Bosnian colleagues as well, but I think no one thinks about it (SFP6).

In this sense, SFP6 also relied on the strategy of ethnicity blindness in her narrative. A different issue surfaced as well, as she explained that she never had an ethnic minority female colleague in her STEM field. This was an important finding, and another proof that in STEM fields ethnic women face the gender-based and ethnicity-based disadvantage, effectively keeping them away from these lucrative fields.

SFP7 narrated that there was no difference between people based on nationality at her faculty. She worked with members of different national minority communities (Hungarians, Croats, Slovaks) and (according to her) there were no distinction between them. She thought that having a "connection" - either family-related or other (for example political), would sometimes make a difference, but there was no significance of ethnicity at all. She formulated her thoughts about this topic in the following way.

I think that (ethnicity) has no part, I do not know, I did not have a chance to meet with such an example, but I think there is no significance of any kind. As I have mentioned earlier, I am surrounded by members of different nationalities: Hungarians, Croats, Slovaks. I think that we are all in the same position, there is no differentiation between us. Someone has more luck, then others, I think there are other things in question here. If we would have some "connections" we would have a better position, regardless of ethnicity. And is ethnicity the most important? I do
not think it is. I think it is important who are your family members or who do you know, but ethnicity is not important at all (SFP7).

In SFP7's narrative we identified the strategy of family support, which means the support from family members or acquaintances needed to progress on the career ladder. So-called "connections" could be interpreted in various ways, but mostly they imply family, ethnicity and/or political connections. SFP7 is using in her narrative the word "luck", by which she tries to explain how things in academia work by "luck". As André is suggesting in her study that there are four principal components: luck, good fortune, bad fortune and opportunity and these four perceptions have relations between self-esteem, anxiety and achievement motivation and irritations beliefs in chance (André, 2006:1461). SFP7 outruled ethnicity as an important aspect, thereby relying on the strategy of ethnicity blindness.

When it comes to the question about ethnic minority women reaching decision-making positions within in the academic hierarchy, two Serbian female professors had an explicit opinion about the mentioned question. Both mentioned the language difficulty as one potential difficulty for minority women. In their narratives they have a strong opinion, that for reaching decision-making positions in the higher education system the perfect knowledge of the majority language is very important. SFP3 narrated that beside the language, there are some other issues which are making possible for people to reach decision-making positions. A member of a national minority would have to get support from others at the faculty to reach a decision-making position. SFP3 narrated that the majority is not supportive towards minorities. Even though SFP3 is working in a multicultural environment, where different ethnic minorities are represented, she thought that there was no chance for them to reach a decision-making position yet. She is optimistic that in the future this might change.

> The language is surely important. I think that I do not have any examples which could prove in favour or against, but I think that it is difficult (for minority women), because to be in a decision-making position is a political decision, even though politics should not be present at the faculty. Not the politics in a classical way, but the politics at institutional level because you have to have the support of seventeen departments and to get the favour of the majority and I think that even in this faculty this is still not yet in practice: I would like to denied by reality in this regard (SFP3).

SFP3 applied the strategy of a language difficulty, which is in her opinion very important. Russo et al pointed out in their research, how "non-native accents can have a series of effects on non-native-accent speakers' work (job performance, job performance evaluation, task assignment) and career outcomes (career advancement, career satisfaction)" (Russo et al.,

2017:515). SFP3 also used the strategy of politics in academia, as she refered to politics within the institution, which is creating a politically cohesive constituency for the majority and in which minorities might become marginalized.

SFP4 worked at the same faculty as SFP3, but she had a different opinion about minority women reaching decision-making positions. She also mentioned the language difficulty, which she claimed was a big disadvantage for the minorities. Thereby she was using the strategy of a language difficulty. She narrated, that in her environment, there was no difference within people and ethnicity was not that important.

> No, it is the same. Only the language difficulty, but I really think, that in this environment, Novi Sad and the Faculty of Philosophy, ethnicity has no part. I think that years of minorities living together raised awareness of the people and ethnicity is not considered a relevant parameter (SFP4).

SFP4's narrative about the non-importance of ethnicity is somewhat idealistic and similarly to the previous respondents she was using the strategy of ethnicity blindness. She narrated about the language difficulty, thereby referring to language as a metaphor for (in)equality.

We identified an ethnicity-based difference between ethnic minority and majority women. Serbian female professors narrated from a privileged, majority position (majority's privilege), when were analysing and assessing the situation of ethnic minority women, especially when tackling the language issue. In their narratives there was a sense of superiority which was due to their majority status. Hence, minority women were Others (Spivak, 1985) to them in their narratives.

### 10.2.4 Hungarian, Slovak, Romanian and Serbian Male Professors

Table 32 contains the summarized results of the analysis of the transcribed interviews conducted with both ethnic minority and majority, male professors. The same aspects were analyzed as for Hungarian, Slovak, Romanian and Serbian female professors, i.e. is there a chance for minority women to pursue a career in academia without difficulties and is there a chance for them to reach decision-making positions as well?

Table 32 Possibilities for minority women to pursue a career in academia - answers of male professors

| Code | Field | Is for minority women more difficult to <br> pursue a career in academia? |  |  |  | Can minority women reach decision- <br> making positions? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Not <br> sure | N/R | Yes | No | Not <br> sure | N/R |  |
| HMP1 | STEM | x |  |  |  | x |  |  |  |  |


|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMP2 | STEM | x |  |  |  |  |  | x |
| SLMP1 | STEM |  |  |  | x |  | x |  |
| RMP1 | STEM | x |  |  |  |  |  | x |
| SMP1 | STEM | x |  |  |  |  |  |  |

We observed that four respondents (HMP1, HMP2, RMP1 and SMP1) stated that for ethnic minority women it was more difficult to pursue a career in academia. Only SLMP1 did not speak about this in his narrative, but he did narrate about how for minority women it was more difficult to reach a decision-making position within the academia. Only HMP1 stated explicitly that women from national minority communities can reach decision-making positions. Two respondents (HMP2 and RMP1) were not sure about whether women from national minorities can reach decision-making positions. SMP1 did not explicitly answer this question.

HMP2 narrated about gender stereotypes at work at the Faculty of Technical Sciences and he also touched the question of ethnicity, which can also be an important or rather a limiting factor for members of ethnic minorities.

The fact that someone is Hungarian, I do not know whether it has an impact or not...There are surely professors, who think that (nationality) is important. At the department, where I work, it tends to be important, but they do not say anything incorrect, but they are simply not working together. I think the situation is the same for women as well, regardless of their nationality (HMP2).

When it comes to gender stereotypes HMP2 claimed that men have stereotypical views of women in the "old boys club" and that they are sometimes reluctant to work with them. He mentioned a few times, how women only get administrative tasks within some teams at the Faculty of Technical Sciences and that this is due to gender stereotypes. We explained this narrative as an ocurrence of the strategy of gender stereotypes. The interviewee was aware of this, but he considered it normal and did not question the validity of this situation. By using this strategy, the interviewee was explaining how women were excluded from some teams and some roles in STEM due to gender stereotypes. In his narrative this situation seemed to be the "rule of the game" at the Faculty of Technical Sciences.
Although HMP1 was the only one who stated that women from minority communities can reach decision-making positions, his statement reveals the difficulties women must face if they are trying to climb the ladder of academic hierarchy. HMP1 witnessed a very successful
career of a woman from a national minority at his department. He narrated, that because of her, there were no boundaries for women, but he emphasized that the professor he was referring to had a name which did not reveal her ethnicity (i.e. Otherness), had no language difficulty and in addition she had exceptional scientific results. When he tried to generalize the situation and to speak about minority women in general, he had a slightly different view. He narrated, that the society we live in is very patriarchal, therefore it is difficult for women to progress in their careers. This is supported by the narrative below.
.... Serbian society is still very patriarchal, there is a need for a few generations to pass, before progress will become easier for women. If she is not speaking the language of the state perfectly then her position is even more difficult (HMP1).

In the above quote, we see traces of intersectionality at play when discussing the position of ethnic minority women in the higher education system of Serbia. HMP1 narrated about the patriarchal society which might hinder women's career progress, as well as ethnicity and language difficulties further complicating the situation of ethnic minority women.

It is also interesting to point out how in his narrative HMP1is using the strategy of future resolution and in this sense, we can deduct that HMP1 is taking off responsibility from himself and from the society in this very moment, as in the future it will be different for women and easier. This should be analysed even further, as future changes are conditioned by the present movements or actions. More specifically, if there are no actions today, nor anyone is taking responsibility, then we must wonder if changes will come by themselves at all.

SLMP1 was very determined when it comes to the question, whether women from national minority communities can reach the highest decision-making positions. His opinion was that women can reach the highest decision-making positions (i.e. a woman could become the dean of the Faculty of Technical Sciences), but hardly can a woman who is a member of a national minority become the dean of the above-mentioned faculty. This was drawn from his longterm, first-hand experience in the academic circles. The following quote supports this.

I think a woman could be the dean of the Faculty of Technical Sciences, but hardly
can a woman from an ethnic minority become the dean of the Faculty of Technical
Sciences (SLMP1).
SLMP1 himself was a member of an ethnic minority community, holding decision-making positions for a long time. He was subconsciously and unintentionally adopting an explicitly intersectional analysis, comparing the status of majority and (ethnic) minority women, and pointing out how the intersection of gender and ethnicity surely disallowed ethnic minority women from becoming the dean of his institution.

SMP1 explained that although he thinks that there was no difference between people, from his point of view, he cannot generalize this. At hist department there was no difference between people, and this was something he was sure of. However, in his work-environment he had no ethnic minority, female colleagues. This might be an indication for him, that even though there should not be any differentiation based on gender and nationality, he had no example which could prove his theory. This is supported by the following quote from his narrative.

> In my environment, at the department, and I have to say this from my perspective, I think that there is no differentiation, because if nationality is judged by the name and surname of a person and by what states in the ID card - passport of the person and so on, then it should not have to do with anything and as I have seen, there is no effect. Now, on the other hand, as I know, we at the department do not have anybody who is a female and a member of national minority (SMP1).

SMP1 was politically correct in his narrative, he made no differentiation between different nationalities and gender. When it comes to his actual experience within his working environment, he was using the strategy of accident, by which there were no ethnic minority women in his (STEM) department at the Faculty of Technical Sciences, which he explained by luck and chance.

### 10.2.5 Discussion: Ethnic minority women in Serbian academia

The interviewees were using various strategies to justify their positions, views and ideologies as well. Hungarian female professors used four strategies in their narratives to explain and justify the challenges minority women face in Serbian academia:
(1) minority burden,
(2) work-life balance,
(3) scientific excellence, and
(4) politics in academia.

Except for the strategy of "work-life balance", the rest of the strategies were rhetorical which the respondents use to justify their position. The strategy of minority burden was a rhetorical strategy and these women have even learnt to use it, through their minority identity. Bringing into play "scientific excellence" is also rhetorical because the circumstances in the academia are unfair, therefore even the high level of scientific production is sometimes insufficient when it comes to women. The strategy of "political involvement" is also a rhetorical one. As
already mentioned, politics should not be brought into connection with science, however, without politics it is difficult to reach top positions in academia.

Two interviewees mentioned in their narratives how a member of an ethnic minority community is destined to either have an underdog position, or to feel an implicit pressure to outperform their peers. When it comes to the strategy of work-life balance, it was used to distract from the minority issue and to set up the problem from a different angle, i.e. from the gender-roles perspective. In this sense, being a minority or a majority wound not mean anything, only the gender component is surfacing. By making ethnicity as a non-important category, gender is taking over the main role and unintentionally this problem is onedimensional. With the work-life balance strategy women are either complying to the embedded gender-roles or using it as an excuse for not taking any steps towards decisionmaking positions or in their career overall.

The strategy of a scientific excellence is a wish towards a very meritocratic system. Which would be of course highly preferable, but it is also a problematic category if we consider gender differences and the real problem with the work-life balance which are female scientist experiencing during their career. The strategy of political involvement is pervading the narratives of ethnic minority (mostly Hungarian) women as a constant fear and pressure, in the same time as a repulsive element of a career development. The politics involved might not be the outside politics, rather an inside, institution-wide politics. It should be pointed out, how even though meritocracy would be the most important and within it, scientific excellence, there is an always more to it. We should note that within the respondents, there were examples of decision-making positions, but those positions were focused on work with students (two of them were vice-deans for education). Being a vice-dean for education has a lot of responsibility and work, but it backs up the theory that women are the ones responsible for working with students in higher education as well, whereas positions of the vice-dean for finance is always saved for men. We could here mention as well, that one of the respondents was a vice-dean in Subotica, where there is a bigger exception for Hungarians, because they are making the biggest community in Subotica. Whereas, two of the respondents were head and deputy head of departments in their "own environment" namely where the teaching language was Hungarian and the colleagues as well were all Hungarians.

Analysing the narratives of women from the other two minorities (Slovak and Romanian) these women also used strategies to make sense of their career and possibilities at the university. They have used four different strategies, namely: self-deception, ethnicity
blindness, language difficutly and politics in academia. These are rhetorical strategies. The respondents were guided by a narrative pattern which was characterized by statements that would be socially acceptable or even ideal, if the situation that they were describing was really true. Some of these strategies we were noticing in the narratives of Hungarian female professors, however the self-deceiving strategy was a newly introduced within the Slovak and Romanian female interviewees, as one of the interviewees was narrating about how at a faculty were minority languages are studied, there is an equal chance for members of ethnic minorities (and she is using it in a gender-blind way) to reach decision-making positions. There was no example of a member of ethnic minority reaching decision-making position within the Faculty of Philosophy. The Romanian female professor narrated about the language difficulty and she used it as a strategy as well, as in her narrative, she was using the strategy of language difficulty to create a gap between the majority and minority staff in the academia. In this way she was devaluing herself and making sense of the majority's opinion and the importance of the state language and lack of its perfect knowledge, or a non-native accent can have a series of effects on non-native-accent speakers' work (job performance, job performance evaluation, task assignment) and career outcomes (career advancement, career satisfaction) (Russo et al, 2017:515). The Romanian female professor used the strategy of politics in academia, by which she expressed her concern about how politics within the institution is favouring the majority and not the minority. There should be a lot of political pressure from outside the institution to get the highest decision-making position (dean or rector).

In the narratives of the minority women professors, there is a constant resignation to fate, which is predestined for them, by this minority identity and they are not willing to fight against it, rather they are accepting it in a way it is. By accepting their fate, they are accepting that during their careers they will remain on middle positions without much possibility for promotion. In addition to this, they are accepting the patriarchal bargain (Kandiyoti, 1988) as well. Moreover, minority women are mainly present in those departments where their languages can be studied or where they can fulfil their caring function and also their role of preserving the nation. In some cases, being a member of an ethnic minority is an advantage for women (compared to majority women), as they can easily fulfil a decision-making position within their departments. This was a glass-ceiling for them and they cannot exceed this position.

It is interesting to mention that most of the Serbian female respondents did not narrate specifically about minority women's position, they were either talking about women's position or the position of members of minority communities in academia. Serbian women were mostly neglecting, or not realising the intersectionality in the question asked. Their ignorance was not intentional, they were just not used to thinking in two or more dimensions, which are intersecting and creating a new dimension of discrimination. One Serbian female professors, however explicitly narrated about how for minority women, or minorities in general would be very difficult to get the deans position even in a such multilingual and multi-ethnic environment as the Faculty of Philosophy is. It is connected to the fact, that minority language departments have less social and economic power within the faculty, because of the small number of students they have - less tuition fees are collected from the students. There was one contrary opinion from the above stated one, in which one of the majority female staff members from the same faculty narrated how because of the multicultural environment which is the characteristic of the faculty, minority women can reach decision-making positions. She mentioned the fact, that at the Faculty of Philosophy the third dean in the row is a woman. They have the power to succeed, although we should also keep in mind, that all of the women deans were from the Department for Serbian Language and Literature, which indicates that the dominant department is the one whose educators are teaching the majority language and in this sense the language of the state. Although the same interviewee narrated that there is a chance for minority women to reach decision-making positions, she also mentions the language difficulty, claiming that women with a language difficulty have no chance of getting a decision-making position within the academia. They have to be equal with the women members of the majority community in every sense. This was a common issue mentioned by majority women, where they used their majority privilege and talked about the less privileged or minority women.

The women in their narratives were not talking about how they could change something in the system by working together, rather they were adhering to fate and trying to make sense of their positions through various strategies. This lack of solidarity might be attributed to neoliberalism which crept into the academia, making the individual the most important and being gender blind, which makes women's task and role even harder. None of the women mentioned, that having a decision-making position might help other women. Solidarity, as it might seem, could be attributed to the past and to the communist regime, where women could represent themselves through women's organizations. It was never distinctiveness of an
academia, rather it was a solidarity through political engagement (e.g. the Anti Fascist Movement of Women after World War II).

When it comes to the analysis of the answers of the male professors, they were in their narratives almost all sure, that for minority women it is more difficult to build a career in academia. Men narrated about the intersections of gender and ethnicity, while the majority female professors were not reflecting on intersections of these two categories. We should keep in mind, that all five respondents were employed in STEM fields, in which women were underrepresented among faculty staff members and students as well. Although there were male professors from national minority communities employed at the faculty, their female counterparts are seriously underrepresented. This can be addressed to the fact that they are intersecting by two categories (gender and ethnicity), which double barrier is very hard to overcome in a mostly male environment. Minority women narrated how they have to have a brilliant career in order to be accepted and followed, these were the narratives of mainly women who work in STEM.

In an overall discussion, we could pose as the question, how can a Hungarian minority woman become a member of Hungarian academic elite and how can she become a member of a Serbian academic elite? From the perspective of an ethnic minority member to become a member of a Hungarian elite is not as difficult as it is to become a member of a Serbian elite. This is due to the fact, that minority women are living in this pillarized society, which is existing in parallel, in order for a minority women to become successful in both societies, she needs to be present in both of them (to write papers in both languages, to be present on both Hungarian and Serbian conferences) and to be an equal member of a Serbian academic society (i.e to speak the majority language perfectly) and also to present results, which are unique in their profession. This is not an easy task and requires more time and effort, the question remains still unanswered, can a minority woman become an equal member of a majority academic society in spite of every effort and sacrifices she makes?

### 10.3 Work-Life balance in Serbian academia

This chapter contains the analysis of the Hungarian, Slovak, Romanian and Serbian female and male professors' answers about work-life balance in academia. This aspect of their lives is an important piece of the puzzle which might help us understand the challenges they face during their academic careers and the reasons which motivate or de-motivate them to reach
decision-making positions. We will specifically analyse the differences and similarities based on gender and nationality.

Hungarian female professors' narratives will be analysed first, then the Slovak and Romanian female professors, followed by the Serbian female professors and in the end the narratives of the male professors from all above-mentioned nationalities. The findings will be presented in tabular format and detailed textual descriptions.

Although flexible working-hours are somewhat in favour of combining a family with a career in academia, the tight project deadlines, the constant pressure caused by the specific results needed for personal career progress and the fixed-term contracts (e.g. 5-year associate professors or 3-year teaching assistant contracts) make very hard for women to balance their career with their family, or even to start a family besides their career. Similarly, to the previous sections, we will identify the strategies, which the interviewees used to understand and explain the process of balancing between family life and an academic career.

### 10.3.1 Hungarian female professors

Thirteen semi-structured interviews were conducted with Hungarian female teaching staff who will be referred to in the text via code names HFP1-HFP13 (HFP = Hungarian female professor). Six interviewees worked in STEM and seven in SSH fields. They were born between 1952 and 1983 and raised in different parts of Vojvodina, namely Novi Sad, Subotica, Kula, Senta, Bezdan and Zrenjanin.

We applied hypothesis coding and created the following list of codes:
(1) relationship status,
(2) number of children,
(3) shortened their maternity leave,
(4) a supportive partner, and
(5) career impact on family.

Table 33 contains the summarized findings based on the analyses of the coded interview transcripts. Table 33 serves as an introduction and background information to the qualitative part of the research, where parts of the interviews will be analysed. The table shows us personal information about Hungarian female professors and their opinion about balancing between career and family.

Table 33 Answers of Hungarian female professors about family and career

| Code | Year <br> of <br> birth | Field | Relationship <br> status | Number of <br> children | Shortened <br> maternity <br> leave | Supportive <br> partner | Career impact <br> on family |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| HFP1 | 1952 | STEM | Married | 1 | N/R | No | Yes |
| HFP2 | 1953 | SSH | Single | 0 | - | - | Yes (?) |
| HFP3 | 1954 | SSH | Divorced | 2 | N/R | No | No |
| HFP4 | 1955 | SSH | Married | 1 | N/R | Yes | Yes |
| HFP5 | 1960 | SSH | Divorced | 1 | N/R | - | No |
| HFP6 | 1964 | STEM | Married | 2 | N/R | N/R | No |
| HFP7 | 1967 | SSH | Widowed | 1 | N/R | No | Yes |
| HFP8 | 1972 | STEM | Married | 3 | Yes | N/R | Yes |
| HFP9 | 1980 | STEM | Married | 0 | - | Yes | No |
| HFP10 | 1981 | STEM | Single | 0 | - | - | N/R |
| HFP11 | 1981 | STEM | Married | 0 | - | Yes | Yes |
| HFP12 | 1981 | SSH | In a relationship | 0 | - | N/R | N/R |
| HFP13 | 1983 | SSH | In a relationship | 0 | - | N/R | N/R |

In table 33 we summarize information about Hungarian female professors and the ways they were managing the balance between their careers and family life. Six professors (HFP1, HFP4, HFP6, HFP8, HFP9, HFP11) were married at the time of the interview and two were in a relationship (HFP12, HFP13). Two professors were divorced (HFP3, HFP5) and one of the respondents was widowed (HFP7). The professors talked about their children and their number of children. One respondent had three children (HFP8), two had two children (HFP3 and HFP6) and four of the respondents had one child (HFP1, HFP4, HFP5, HFP7). Five professors had no children (HFP9, HFP10, HFP11, HFP12, HFP13). In total the thirteen respondents had eleven children. One professor stated (HFP8) that she shortened her maternity leave all the three times she was on maternity leave, thereby she turned to the

## strategy of shortened maternity leave.

The researcher did not ask explicitly about whether the respondents' husbands/partners were supportive or not when it comes to their career at the faculty, but some of them talked about their partner's attitude towards their careers. From those who have partners three (HFP1, HFP3 and HFP7) stated implicitly or explicitly that their partners were not supportive when it came to their career or just were not able to share the caregiving duties around their children.

Three professors told that they shared their family duties with their partners and they could focus on their careers (HFP4, HFP9 and HFP11). The last category in this analysis was the effect of their career on their family life, which was not directly asked, rather it was mentioned by the respondents. Six respondents stated that their careers were (negatively) impacting their families (HFP1, HFP2, HFP4, HFP7, HFP8, HFP11) and four stated that their careers were not impacting their family lifes (HFP3, HFP5, HFP6 and HFP9).

We continue this section with a more detailed narrative analysis. We will identify the strategies helping the interview respondents to make sense of their choices regarding career development and family obligations.

HFP1 was the most experienced researcher. When asked about her childcare duties she was very proud of her son, who's now a grown-up and has his own family. HFP1's husband worked in STEM field as well, but run a private business, HFP1 had to do all the childcare duties by herself, i.e. enter the patriarchal bargain, which was the norm in the late 1970s and 1980s, when HFP1 started a family. She consciously did not want another child. This is supported by the following quote.

I do not have more children, just one child. I did not want more, I could not take it. Because, it's not just he finished all the schools, but he also studied languages, English, French, German, he was playing hockey all the time, went to music school, he did a lot of things (HFP1).

Based on the above, we conclude that HFP1 used the (life) strategy of one child. It allowed her to balance between career and family. If she would have had more children, her career would have suffered significantly. HFP1 narrated in her interview, that when her child turned 15 -years-old, and got more independent, she could again focus more on her career.

HFP3 was divorced and her ex-husband worked at the same faculty where she did. She had difficulties when her children were small. Her ex-husband was in a better position, he could go to the office to work, while she had to stay at home. She wrote her thesis at night when their children were asleep. Her not being present enough at the faculty affected her career and she was criticized by her superior.

[^41]older, he started earlier, and he came to the faculty and did it (his PhD) here. But someone had to stay at home. I was the one who stayed at home. Because of this, not because I wrote my papers at night, but because I did not go to the caucus and to other meetings. Because I did not do the "self-management" my boss wrote it in the re-election statement. I was not active (HFP3).

We could introduce the strategy of patriarchal bargain, where HFP3 had no choice but to abide by the rules of male dominance, where her husband had the privilege to write his thesis in the office, whereas she had no choice but to write hers during nights. This is a narrative, which is commonly used by female academic workers in the ENWISE report (ENWISE, 2004) as well, in which they narrate about how they lack decision-making rights. This was explicitly noted in the ENWISE report, how the double burden is still on women in the ENWISE countries and this is not changing: "young women drew attention in particular to their being denigrated by older male scientists and to problems of work-life balance in a society with a stereotypical gender contract still firmly in place" (ENWISE, 2004: 114). HFP3 did not manage to 'meaure up' to the male standards which were expected from her, when she did not attend the caucuses, therefore her career progress was slow and she received negative comments from her superior.

HFP4 stated that she was very lucky, her husband was always very supportive towards her career. They were mutually supportive during the time when they were building their academic careers. This is supported by her following statement.

I had no problems, because I am very lucky. Family and career combined very well. My husband finished his studies in Novi Sad, but we met in high school and the relationship lasted for many years before we got married. He had similar ambitions to me, so he enrolled magisterium. I enrolled as well. We supported each-other, with a little division of a labour, to explain it: if you study now, then I will help you a little bit, or the other way around, like in the housework or something similar. And there were no problems (HFP4).

HFP4 narrated about being lucky because her husband was very helpful when she was building her career and that she had a different, privileged life, compared to other women, whose husbands were less supportive. In their career paths they were taking terms in career progress, first her husband was doing his PhD and then she had her turn as well. They were in a sense building the same career, minimizing the unpaid-carework and being very focused on their careers. She used the strategy of luck, which was not uncommon in the narratives. We should keep in mind that HFP4 was supporting her husband in his academic career as well and when they were climbing the academic career ladder, her husband had the first turn.

HFP5 was divorced, her daughter did not live with her anymore, so the professor went back to live with her parents. She recalled that her mother took care of her daughter while she was a child. She mentioned that the positive side of her job were the flexible working-hours and that she could do the work from home as well. Her daughter usually remembered her mother as someone usually sitting in front of her computer at home. Although she had flexible workinghours, which are according to Jašarević (Jašarević, 2012) favouring women, the work had to be done. HFP5 refelected on this in the following words.

Then my mother was watching her (my daughter), before she started kindergarten.
She went to kindergarten when she was three years old and, in this workplace, it is good, that except the classes, the other work could be done from home. So, the research, the writing, it could be done at home. So, my daughter said last time, that she remembers me, as I sit in front of the computer. There is no matter that I was at home, the work had to be done (HFP5).

HFP5 narrated about flexible-working hours allowing a person to work from home or in the office, without fixed working-hours per day. However, there were tasks and deadlines which had to be met, therefore in the case of mostly female academicians, if they had young children, most of them had to work at home and/or at nights. Acker \& Armenti concluded in 'Sleepless in Academia' that „the 'old' norms that associate women with family and childcare are still operating in a way that makes it difficult to be both a mother and a faculty member" (Acker \& Armenti, 2004:18). In HFP5's narrative we identified the strategy of a flexible working hours, about which HFP5 narrated as misleading by pointing out that in such settings women needed to work at night to make up for the care-work they were doing during the day.

HFP6 stated about herself that she is a person who wss family-centric and that maybe she was not so focused on her career, because of her family, but she had no regrets.

I think of myself that as being family-centric, therefore I spend more time on my family-duties, I try to live for my family... In the end, I always managed to balance between my work duties with the expectations of my family, but it is possible that in my mind, my family was in the foreground. I sacrificed part of my career, because of my family, but I do not regret (HFP6).

HFP6's husband had a very demanding job and a successful career, while HFP6 had to take care of most of the family duties. When narrating about how her family was in the first place, she relied on the strategy of patriarchal bargain, accepting it as something unavoidable.

HFP7 spoke about the difficulties she had, when she became a mother. In the beginning her husband and her son went with her to her research expeditions, but when her husband got ill, she had to manage childcare differently. She stated that there were conflicts with her husband, as she travelled frequently, but they managed somehow:

> When the child came, it turned out to be more difficult, but he (my husband) came with me, we went as a family. The thing I could not do, was an opportunity for an exchange-professorship. I did that as well, because I got a scholarship for one month in Budapest and I took my two-and-a-half-year-old child with me. It was a little difficult, because I could not live in the Domus House ${ }^{86}$, they told me that I cannot bring a baby with me there. Then I brought that up in public. Allow me, only because I am a mother, I could be a scientist as well! But I went and rented an apartment myself. I took my family with me for the whole month. Then my husband went with me as well. I do not say, that we never had conflicts about me being on a trip and then when our child was born, he was telling me, that I always leave the child with him, that he is always looking after the child (HFP7).

HFP7 spoke about the challenges faced by female professor/researcher who had small children and also needed to travel to attend events abroad. In such situations it was always a challenge to find somebody to take care of the children. Such periods required clever negotiation and inevitably brought tension into their families. HFP7 narrated about the necessity of women being economically independent, thereby having a better position in negotiations in their relationships. Her husband was able to come with her and to take care of their child when she had to work. In this narrative we identified the strategy of supportive partner, when the husband/partner is taking care of the child, while women build their career and earn money. These setups are often not easy for women, as they require constant negotiations and women often feel the need to re-negotiate ofte and prove the importance of their academic careers in order to receive their partners' support in childcare.

HFP11 stated that she postponed her decision to become a mother because of her academic career. She was not sure whether her superior would have extended her contract, if she would have gone to maternity leave. She prioritized her career over her private life. Fortunately for her, she had a very supportive husband.

Actually, I postponed having children. When we enrolled PhD, it was a bit messy.
We did not know how it worked? We did not know the rules. Now, it is clear, the

[^42]younger ones know, what are the possibilities and the rules. We did not know at the beginning and I did not dare to have a child. It was not on purpose that I postponed. If it happened, then I suppose, we would have kept it, but more than likely, it was it, postponment (HFP11).

HFP11 was the first Hungarian female respondent who narrated how she postponed her decision to become a mother because of her career. She wanted to finish her PhD first and then to have children. This was a common strategy in academia for women, using the strategy of postponed motherhood to realize their career goals. Dubois - Shaik and Fusulier write about the university built on masculine figures, where an academician has to be "entirely engaged in work, freed from domestic necessities by the presence of an invisible carer (the person taking care), in order to devote himself entirely and unrestrainedly to his work" (Dubois - Shaik \& Fusulier, 2017:100). In this sense, postponing motherhood is the only solution for a young female academician to prove herself in the world of science. This is also connected to the fact that for academic success women should adopt and build a masculine figure, and this is connected to the fact that women have fewer children (Dubois Shaik \& Fusulier, 2017:100).

HFP12 narrated that although she is not married and has no children yet, she thinks it would be difficult to balance career and family obligations. She narrated about solidarity between colleagues who had little children in her department. She narrated about this in the following words.

> I do not have a family yet, in the sense, that I have not married yet, I do not have children. I do not know, I think it would be difficult. I see, that there are female colleagues, who are successful in their careers. I think that in the past few years, a solidarity emerged between colleagues, that those who have little children are being taken care of by the other colleagues (HFP12).

HFP12 was the first to mention solidarity between colleagues in academia. This is a rare feature as neoliberalism in academia is not favouring solidarity (Žarkov, 2015:270). HFP12 finished her PhD before starting a family, which meant that she also used the strategy of postponed motherhood.

The youngest Hungarian female professor was very short in her description about how she would balance between her career and family. She said that both family and career will be important for her.

I strive to balance, considering both. Both are important to me (HFP13).

This statement in her narrative was too short as she was not willing to speak about how she is coping now with family issues and how will it be in the future. However, she is also one of the respondents who did her PhD before starting a family. Doing a PhD with small kids is or would be for most of the respondents unbearable. Academia is not changing in this sense, even though there were numerous studies done and papers written on the questions of worklife balance. There is still a need for women to cope with the higher education institutions "greed" - which is like a family and it means that women in academia often suffer from the "double discipline" - they have to be professional and feminine and the "double burden" of work both at home and at work. Higher education plays a significant role in causing and reproducing gender privilege and subordinate status (Cotterill and Letherby, 2005:112). In this sense HFP13 used the strategy of equal importance, which might even seem a bit utopic to achieve. This should probably be the logical strategy for women in academia, because if they want to stay "in the game" they need to cope with the challenge of work-life balance. HFP13 had no children when the interview was conducted, therefore her family duties were considerably less complex, then for those women who had children, especially small children.

### 10.3.2 Slovak and Romanian female professors

We used hypothesis coding in our analysis. The following codes were created in the first cycle of coding as hypotheses: relationship status, number of children, date of birth, shortened maternity leave, supportive partner and career impact on family.

Table 34 contains the summarized results of the analysis of the transcribed interviews. The same aspects were analysed as for the Hungarian women professors, i.e. information about Slovak and Romanian female professors and their opinion about balancing between career and family.

Table 34 Answers about Slovak and Romanian female professors about family and career

| Code | Field | Date <br> of <br> birth | Relationship <br> status | Number <br> of <br> children | Shortened <br> maternity <br> leave | Supportive <br> partner | Career <br> impact on <br> family |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SLFP1 | SSH | 1972 | Married | 3 | N/R | Yes | No |
| SLFP2 | SSH | 1975 | Single | 0 | - | - | No |
| RFP1 | SSH | 1984 | Married | 1 | Yes | N/R | Yes |

Table 34 contains information about the ways Slovak and Romanian female professors were managing to balance between their careers and families. Two professors were married when the interviews were conducted. SLFP1 had three children and RFP1 had one child. SLFP2 was single at the time of the interview. The three interviewees had four children in total when the interviews were made.

SLFP1 stated that she had a supportive husband and she also stated that her career has no effect on her family, because she had flexible working hours and her children were in school and in kindergarten during her working-hours. SLFP2 said that her career did not affect her family and that she was also satisfied with the flexible working hours, which would enable her to balance between her career and family in the future. RFP1 stated that she had shortened her maternity leave to come back to work and do the lectures. She did not speak about whether her husband is/was supportive explicitly, but she stated that her career affected her personal life, however, she stated that there were periods when her husband took care of their daughter, while he was unemployed, and she worked at the faculty.

SLFP1 narrated that although she had three children, she could balance between her career and family. Between her first child and her twins there was a 10 -year difference and in those years she could do her magisterium and defended her PhD as well. She stated that the public pre-school institution and her family were the most helpful. Her narrative about this topic follows.

When I am asked such a question, I simply do not know what to answer, because I somehow manage, I have three children. I have twins of five and I have a big boy of fifteen, so in that ten and a half years between them, I could manage to do my magisterium and my PhD. And how is it manageable? With some clever logistics, big support from my husband, his parents and my parents, because it often happens that they must watch the younger children. When my older son was young, I could leave him with my parents for a few days, so that I could finish my ongoing work. The pre-school institution is helping me a lot, when my younger children are in there /.../ Working at the faculty is grateful, because you are not working every day, that is one of the advantages. To sum up: logistics and family support (SLFP1).

SLFP1's narrative about clever logistics and family support might be interpreted as class privilege. She also had a 10-year period with one child, which enabled her to focus on her career development. We identify two strategies in her narrative, namely the strategy of clever logistics and the strategy of family support. Neither of these strategies are easy to
implement, as the first requires hard work and a lot of planning, while the second relies heavily on unpaid care-work from (usually) the grandparents

SLFP2 was not married nor had children yet. She narrated that she would be able to manage the balance between her career and family, because work at the university did not require constant presence and she could work from home as well. The following quote supports this statement:

For now, I do not have that problem, because I do not have my own family yet, I live by myself. I think that family is important, and I would like to have it, therefore I hope I will succeed in that field as well. I think that the good side of my work is that I do not have to present every day at the faculty. I have days when I have classes. My research and writing the papers I do at home. That is why I think that work duties can be harmonized with family duties. Considering that I mainly organize my own time, I expect I will be able to harmonize family and career (SLFP2).

SLFP2 was in this sense using the strategy of flexible working hours. However, she had no first-hand experience regarding this question at the moment of conducting her interview.

RFP1 narrated that she did not have maternity leave when she had her baby, because of the lack of teaching staff at her department at that moment. She was a teaching-assistant back then and between classes she went home to breastfeed her child. Having only one child was not because of her career at the faculty, as she explained that she would like to have another child. She narrated about this in the following words.

While I was pregnant, I was working until the ninth month of pregnancy. I did not stay at home to wait for the labour. When I gave birth, I had a problem that I did not have a maternity leave, because at that moment there were teaching staff shortages at the department and there was no one to teach the subject. When I held exercises at the faculty, because I was a teaching assistant, I came home quickly to breastfeed the child, had classes and after three hours I went back home to breastfeed again. Therefore, I did not lose anything at work, and I could be a mother as well. It is true, that I had a crucial support from my mother and my husband. He was on and off work then, but mainly he was unemployed. So I worked and my husband looked after our child (RFP1).

RFP1 was using the strategy of supportive partner, as her husband took care of their child while she worked. She explicitly narrated that she continued to work even when she gave birth, as there was lack of staff members at the Department for Romanian Studies. She narrated about how she managed to balance between motherhood and work, going home to
breastfeed between her classes. This seemed to have been very challenging and stressful for her. Other interviewees stated that they did that as well to keep up in their careers.

### 10.3.3 Serbian female professors

We used hypothesis coding and the same codes as before to analyse the interviews of the Serbian female professors, namely: relationship status, number of children, shortened maternity leave, supportive partner and career impact on family.

Table 35 contains the summarized results of the analysis of the transcribed interviews. The same aspects were analyzed as for the Hungarian women professors and Slovak and Romanian female professors, i.e. information about Serbian female professors and their opinion about balancing between career and family.

Table 35 Answers of Serbian female professors about family and career

| Code | Field | Date of <br> birth | Relationshi <br> p status | Number of <br> children | Shortened <br> maternity <br> leave | Supportive <br> partner | Career impact <br> on family |
| :--- | :--- | :--- | :--- | :---: | :--- | :--- | :---: |
| SFP1 | STEM | 1954 | Widowed | 2 | N/R | - | Yes |
| SFP2 | STEM | 1971 | Married | 3 | No | N/R | Yes |
| SFP3 | SSH | 1976 | Married | 1 | Yes | Yes | Yes |
| SFP4 | SSH | 1979 | Married | 1 | Yes | Yes | Yes |
| SFP5 | STEM | 1979 | Married | 1 | No | N/R | N/R |
| SFP6 | STEM | 1984 | Married | 1 | No | Yes | No |
| SFP7 | STEM | 1985 | Single | 0 | - | - | - |

Table 35 contains information about relevant to the work-life balance of Serbian female professors. Five respondents (SFP2, SFP3, SFP4, SFP5 and SFP6) were married and had children. One was widowed (SFP1) and one was single (SFP7). Their relationship was related to their age, e.g. the youngest respondent (SFP7) did not have a family, but she was planning to have one. SFP6 planned to have more (than one) children. The two most experienced researchers had two (SFP1) and three children (SFP2). Four respondents (SFP3, SFP4, SFP5 and SFP6) had one child each. In summary, seven respondents had nine children in total when the interviews were conducted.

Three respondents (SFP2, SFP5 and SFP6) did not shorten their maternity leave. SFP3 and SFP4 did shorten it, so they could get back to their work earlier. SFP1 did not mention this period of her life.

Three respondents told that they had supportive husbands (SFP3, SFP4 and SFP6), while SFP2 and SFP5 did not mention their husbands in this context. Four respondents (SFP1, SFP2, SFP3 and SFP4) stated that their career had an impact on their families as they had to sacrifice part of their family time to work on their careers at least as much as it was expected from them. SFP5 did not speak about that aspect of her career. SFP6 stated that she had no problem with balancing between her career and family.

SFP1 narrated about being a single mother who had to take care of her sons by herself and to raise them alone. She had to work and sometimes, she had some very heartbreaking situations when she had to choose work against her motherly duties.

> When I was 34 I became a single-mother. That is now the age of my older son. I could hardly balance between my career and family obligations. My mother - in law helped me a lot, especially with my younger son. She unfortunately past away in 1994, when he was in elementary school. There is a five-year difference between the boys. My older son always said that he was born alone. That no one educated him, but himself and that he was brought-up by himself. He is relatively successful, he has a job, a wife and a child... I wish him to be happy, I hope he is happy. In America, they looked for female professors and when I was 47 years old, I got a chance as a "young talent" and I was in New Hampshire for five years. I did not take my children with me, I wanted to take my younger son with me, but he did not want to go. I remember that in the nineties we had to go to Obrenovac to do some measurement, there was no gasoline, but my colleague somehow managed to get it. My olddr son had an appendectomy attack. I told him that I cannot help him, because I have to go to Obrenovac. Then his younger brother watched him, while he was lying, and I was in Obrenovac. Some things cannot be postponed, that is the case with the lectures at the faculty as well. I have to be there for the lectures, all the other things can be postponed. On one hand, it is very convenient that I can put off some things, but then on the other hand, I have exams every Saturday and Sunday. I do not want to complain, I had my time, now someone else has to have his/her time as well (SFPI).

SFP1 used the strategy of flexible working hours when she told that except the lectures, everything else she was able to schedule on her own. SFP1 was in a unique position, as she went to work in the USA for 5 years and she was away from her children. Hence, they had to take care of themselves. SFP1 narrated about wanting to resign, i.e. quit from her professor's
job when she became a single mother, but she was encouraged by a senior female professor to stay and to continue her work. The senior female professor gave her an advice, that she must continue working for her son's sake, as they will have more use of a mother who is working and not from a mother who is a housewife.

SFP2 had three children and she stated that she never had to choose between her career and family. She wanted to have both. She had the help of the grandparents who were willing to look after the children when she was away. Her job demanded from her to travel a lot, and if she would not have had the grandparents' help, it would have been very difficult for her. When she got pregnant with her third child, she was told that when she gets back from her maternity leave, the course she developed and introduced might not be hers after the maternity leave. She got very angry back then and told everybody that it is not the way to treat someone who is willing to fight against the "white plague". She narrated about this experience in the following words.

> I have never had that dilemma, I always wanted a career and a family as well. Life did not put me in a situation where I had to choose. No one ever told me that if I get pregnant, then I will have problems at my work. But even if they told me, I would not care at all, I would make a fuss about it. In fact, they told me, when I think a little better, when I got pregnant and there was a course which I developed, it is not mine, it belongs to the state. But it is one situation when the course materials exist before you start teaching it, and it is another when you develop a subject and get it into the study programme. Then they told me at the department, ok, you are now going to a maternity leave and when you get back, we will see for that subject, that is a subject which belongs to our department, and we will see who will teach it. Then I got very angry, normally I think... I said everything I had on my mind, then I told them that it is unacceptable and that they want the "white plague" and if they think that children should not be born and so on... And that subject waited for me when I got back to work (SFP2).

SFP2 was very successful in STEM field. Her husband was also a university professor. She came from an upper-middle class family. Her father had a PhD , and her mother had a university degree. This might all suggest, how her very confident narrative could be connected to class privilege. She was also privileged by being a member of the majority community. In the above narrative, SFP2 used the strategies of clever logistics and family support. She started with the sentence that she knew all her life that she wanted career and family life equally, i.e. she also relied on the the strategy of equal importance.

SFP3 narrated how she had one child because they never had any help from the grandparents with her husband. Although she managed to work, teaching had an absolute priority. Her other work responsibilities were divided to various parts of the day and most of all at night. She narrated about this experience in the following words.

> When it is about the regular teaching activities, that is fine, because we have the privilege that when the schedule is made, we are asked what works for us, then I choose to have classes when my daughter is in the kindergarten. Luckily my husband's job is allowing him to stay with our daughter when she was ill, and I had classes, or during the afternoons. During these five years of her life, I have never been on sick leave, I was always able to fulfil all my responsibilities. The two of us are alone with her, we do not have grandmothers. He has the luck, that he can stay at home with her and of course he wants to stay as well. My lectures were never questioned, it was always a priority. As for the commitments beside teaching, the scientific part, writing papers, projects, which does not count into the workinghours, but takes away most of the time and energy, it is a little bit harder. I use my free-time when she is in the kindergarten and when I can manage, but often stay up during the night. (I stayed on one child), not because my career, but it is also crucial, because the two of us are alone and we never had any help. That is the reason that we agreed, that the three of us are a family and that we do not want more children. Our jobs and obligations are also the reason, mine as his as well, because both of us have a lot of obligations, outside the regular working hours, meaning that what is not countable in the regular eight working hours. That is why we agreed that there are the three of us and that is what we can afford and feel good (SFP3).

SFP3 narrative about using the strategy of one child, as they did not have outside support, i.e. no family support. She narrated how she was committed to her job, meaning that beside her classes, which she never missed, the research and writing she did when she could, mainly during nights. This is pointing back to Acker and Armenti's article, where they are referring to Bagilhoe's work on how women faculty respond to the difficulties in their lives, by using strategies. Three strategies were introduced: working harder, identifying with male rather than female professionals, and collective action (Acker \& Armenti according to Bagilhoe, 2004:14). In Acker and Armentie's research, the research participants relied mostly on the first strategy. "In fact, the primary approach which all women appear to use is to work harder and longer-well into the wee hours of the night. The references to getting up early and going to bed late evident in the quotations below were replicated in many of the other interviews" (Acker \& Armenti, 2004: 14). By working harder and by working by night women
academicians are trying to compensate the lack of working hours which they spend on childcare of other types of care-work. This wass support by SFP3 narrative, as she used the strategy of working at night, which is a common strategy when in academia. She also mentioned how they were „lucky" as her husband's work allowed them to raise a child without having external help. This luck might be interpreted again as privilege, as by being privileged with her husband's flexible working hours, they could sometimes use the strategy of supportive partner as well.

SFP4 emphasizes that she had no job, but a career which was very demanding. When you are young you meet all expectations to climb the career ladder until full professorship. This was very demanding, and she felt that she would sometimes rather have been with her child. She decided to have one child, because it was rather difficult to balance between career and family. This is supported by the following quote.
(My career is) very demanding, because this is not a job in the sense that you have fixed working-hours and when you finished your job, part of the burden is lifted off your shoulder. I always mention, that we do not have a job, but a career and it means that there is no routine, there is no patterns by which you can function, the job of the university professor means continuous improvement, especially now students evaluate the teachers and holding the job depends on it. Our job is specific in that we are not employed for an indefinite period, until we achieve full professorship, we are still in a situation in which we have to have a certain scientific production to keep our positions in higher education. It requires a lot of time at home for preparation of the classes, writing papers, editing reports and other documents. There is a quite wide and diverse range of activities, so I feel like it is claimin a lot of time, which I would gladly spend with my child. Sometimes my husband goes out with him to the city so that I could finish some part of my obligations. I thought (about having more children), but I decided that I will not have any more children. The decision stems precisely from the answer to the previous question how easy it is to balance between career and family, I find it difficult to balance. Probably it is a selfish decision, but I think it is better to raise one child well, as opposed to being torn apart on several sides and failing in this segment (SFP4).

SFP4 was very straightforward about her career. She was committed to it and consciously decided to have one child, to be able to focus on her career. She used the strategy of one child, thereby minimizing the years of intensive child-care, following which she could put more focus on her career as her child was growing-up. She also narrated about how sometimes her husband took their son for a walk in the afternoon, so that she could work from
home. This was a very difficult decision for her, as she would have also liked to spend time with her family. She felt that her work was so demanding, that she had to work very hard and whenever and wherever she could.

SFP5 narrated that it was very difficult for her to balance between career and family. She worked at the University of Belgrade and had to travel from Novi Sad to Belgrade. She had and had to be absent for two years, while she was pregnant and during the maternity-leave. She says that a job at the university has its benefits, but also has shortcomings. She could stay with her child for a day or two when he was ill, but the work-load she had to do in the rest of the days in the week. She spoke about these experiences in the following words.

> It is very hard for me (to balance between career and family). I think it is just going hard for me. I have one child for now, I do not know how is it when you have more. Mine has two years and the situation is improving, but it is still going hard. I think it is especially difficult when you are absent for a year on maternity leave, so everyone forgets you, especially if you are like me, absent for two years, during the whole pregnancy, which you had to spend in bed at home, and then you go back. It is hard, because although the work at the university has its advantages - in terms of it's a little flexible, when your child is ill, somehow you steal a day or two without anyone much noticing it, but you still must catch up in the next three days with what you missed - so it also has its disadvantages. The working-hours are not known, for example, one day, it comes from eight to two or three, and the next day from four to ten at night because the schedule is like that. Then it is really difficult, because you do not see your child for a day or two, which is really bad (SFP5).

SFP5 used the strategy of flexible-working hours, as she narrated about how she could be absent from work for a few days. In those weeks she had to work harder and longer during the days she was present at work. She also mentioned in her narrative, that she had a problematic pregnancy, because of which she had to be absent for an even longer time (almost two years). She had to adjust to a new situation when she came back to work, that some of her subjects, which she was teaching were no longer available to her. However, her main issue was, that she had to travel as she was living in Novi Sad and working at the University of Belgrade. This affected her private life, as she was absent sometimes the whole day, hence she had no time to spend with her son.

### 10.3.4 Hungarian, Slovak, Romanian and Serbian male professors

We applied hypothesis coding to analyse the interviews of the male professors. We identified the following hypotheses codes in the first cycle of coding, namely: relationship status,
number of children, supportive partner and career impact on family. Table 36 contains the summarized results of the analysis of the transcribed interviews. The same aspects were analyzed as for the women professors, i.e. information about Serbian female professors and their opinion about balancing between career and family.

Table 36 Answers of male professors about balancing between career and family

| Code | Date of <br> birth | Field | Relationship <br> status | Number of <br> children | Supportive <br> partner | Career impact <br> on family |
| :--- | :---: | :--- | :--- | :---: | :---: | :---: |
| HMP1 | 1978 | STEM | Married | 1 | N/R | Yes |
| HMP2 | 1984 | STEM | Married | 3 | Yes | Yes |
| SLMP1 | 1950 | STEM | Married | 2 | Yes | Yes |
| RMP1 | 1979 | STEM | Married | 2 | Yes | Yes |
| SMP1 | 1983 | STEM | Married | 2 | N/R | Yes |

Table 36 shows personal information about ethnic minority (Hungarian, Slovakian, Romanian) and Serbian male professors, their relationship status, number of children, worklife balance. All five respondents were married when the interview was conducted. HMP1 had one child, HMP2 had three children. SLMP1, RMP1 and SMP1 had two children. The five male respondents had ten children at the time of the interview.

Three respondents (HMP2, SLMP1 and RMP1) stated that their wives were supporting their academic careers. Two respondents (HMP1 and SMP1) did not speak about the topic. All respondents stated that it was very difficult for them to balance between career and family.

HMP2 was a father of three when the interview was conducted. He said that balancing between his career and family was very hard for him. He narrated how being with his family was very important, but he wanted to do his job professionally as well. He narrated about this topic in the following words.

It is difficult. Very difficult. It is difficult, because for me it is important to be with my family, not with my career. But I am a type of man, who is not doing something just to be done and not caring about how it is done. I somehow manage, when at home things get peaceful, the children are asleep, then I work on things for work, and sometimes at work I do things which are for home. I somehow weaved all together, which I do not think is smart, because it is very difficult to divide. In this way I can do both, so I can be in two places (HMP2).

HMP2 used the strategy of working at night in a sense that he was doing a lot for his work at home, later at night, when his children were asleep. He also mentioned in his narrative, that he was doing some family chores at the faculty and vice versa. He was combining the two worlds constantly.

SLMP1 stated in his narrative that for him it was easier than for his wife. His wife had a similar career at the university, but she did all the work around the children and took care of the household. This is supported by the following quote.

> It is very difficult. For me it was much easier than for my wife. It was easier, because she accepted all the responsibilities for the upbringing and care of children, about the household, etc. Plus, career. She went to the medical high school... We did not think that she will have a career of a full professor. She thought about her career in a sense of existence. To have a job. It was not important whether she would go to retirement as a full professor or as a teaching assistant, it was not as important for her. It was important, and I really appreciate it, to take our children on the right track (SLMP1).

SLMP1 was a senior professor, whose children were all grown up at the time of the interview. He narrated about his career which followed a clear path. His wife was also a university professor, but did all the carework around the children, while he was building his career. He narrated about this consciously, based on which we conclude that he relied on the strategy of a patriarchal bargain, i.e. he relied on his masculine privileges to pursue a career. He narrated that work-life balance was never an easy task for him neither.

RMP1 also narrated about how difficult was for him to balance between his family duties and his job at the university. He revealed the situation of a young, male professor working in a STEM field, who had an opportunity to earn extra income through working on projects. This required additional working hours which they might not have, or they have to take from their family.

I juggle around on one leg? It is very inconvenient because I have a lot of work, working on projects and then it is not a problem that I have work, if it would be only work. I would manage it, but I have a two-year-old and a three and a half-year-old at home and because of them I have to be extra efficient until four o'clock in the afternoon. After that, I am with them until eight, half past eight, then they go to sleep, after that I work. My wife goes to work earlier than I do, I am with them, we do not leave home until 8-9 (o 'clock) in the morning, so we hang out in the morning. But it is very difficult. I somehow managed that in the weekend more or less one day I am definitely all theirs. The rest if I can (RMP1).

RMP1 used the strategy of working at night, narrating about how he continued work, when his children went to sleep. This way he could spend the afternoons with his children and in the morning he was the one who took them to kindergarten. RMP1 relied on the academic privilege of flexible working hours, i.e. he used the strategy of flexible working hours, which enabled him to be with his children longer in the morning, when his wife had to travel to work.

SMP1 did not manage to balance career and family at first. He had both an academic career and he was also a successful musician. His first marriage ended up with a divorce and he had a son with his first wife. He was married for the second time and had a baby girl. He was managing to balance between career and family because his job allowed him to work from home. His wife was not working, they agreed that she would be at home with their child. He narrated about his experiences in the following words.

> I did not succeed to balance career and family first. That is why my first marriage ended with a divorce. From it I have a wonderful son, whom I took to basketball training right now. With my ex-wife I am in good relations. With my second wife, I have another child. That is now very well harmonized, as my wife does not have to work. She is a professor of Serbian language and we agreed that she will now be a mother, that will be her occupation and I will be the one who is earning. So, in that sense, this division of responsibilities is not problematic, especially in today's world, where a lot of computer science and programming tasks can be done from home, then this is practically a charm. It can be very well balanced, so I can be sometimes all-day at home, sometimes even for several days, and be also able to do my job (SMP1).

Although implicitly, but SMP1 reliead on the strategy of a patriarchal bargain. It was clear through the interview, that he favoured the decision of his wife to stay home with their child, even though she had a university degree and she might also wanted to pursue a career. This might be connected to his past, as he narrated about how his first marriage came to end, exactly because he was unable to balance family and career. Although he failed the first time, now he was confident that it will not be such a difficult task. He also used the strategy of flexible working hours, as he highlighted how most of the work he could do from home and be only present at the faculty when he had lectures.

### 10.3.5 Discussion: Work-life balance in Serbian academia

We analysed the narratives of ethnic minority and majority (Serbian) professors and identified a range of strategies they relied on the explain reality and their career choices in Serbian academia. The following were the most commonly used work-life strategies:

- Flexible working hours;
- Work at night;
- One child;
- Postponed motherhood;
- Shortened maternity leave;
- Supportive partner, i.e. husband takes (significant) part in childcare;
- Patriarchal bargain, i.e. only women do childcare and household chores;
- Equal importance (of family and work);
- Luck, i.e. being lucky to have a successful academic career;
- Clever logistics, i.e. good organization of own time and the time of others;
- Family support, usually in the form of grandparents' unpaid childcare.

The strategies of patriarchal bargain and luck were rhetorical, whereas the rest were life strategies, which the respondents employed to compensate for or to complement all the structural gaps that exist in academia, and which force them to do - at the expense of someone else (usually their parents or partners) - all those things that men do in academia without any hindrance.

Both men and women narrated that they faced certain difficulties when balancing between their careers and families. This was noted by Perista and Perista as well, in their research the men respondents referred to the fact that having a „family constrains social networking with colleagues on an informal level. They did not have enough time for after-work socialising and 'talking about science', where usable social contacts about next projects usually arise from" (Perista \& Perista, 2014:27).

The interviewees emphasized that although they had flexible working hours, theoretically enabling them to spend more time with their families (especially children), it was a disservice as well, because they had to do part of their work at home, sometimes during the night. This meant that the two related strategies (flexible working hours and work at night) were usually intertwined. By working through the evenings and nights they sacrificed their free time to do the work they were not able to complete during the day. Such careers do not turn
off the workplace stress when the paid working-hours are over, which other, "regular" jobs provide. This pressure is coming from the fact, that their contracts are (until they become full professors) signed for fixed periods (usually 3 to 5 years) and they have to collect the minimum achievements to get their contracts renewed. The situation is similar elsewhere in Europe as well, as Perista and Perista argue that "in science or in academia it is very rare to have a permanent job contract" (Perista \& Perista, 2014:29). Some interviewees stated that they willingly came back from their maternity leaves earlier so that they would not lose their subjects/courses or momentum in their careers. Perista and Perista argue through the narrative of one Italian female interviewee with two children about the „time and the impact that having maternity leave and subsequently working part-time has on her productivity. She says that for her it wasn't so much a prejudice against people with children per se but the fact that if you are not there you are 'invisible' - out of networks/group etc. and unable to be as productive and in academic research. You are at the end of the day only judged by one form of productivity and this is a direct relationship with time invested. Effectively, not working fulltime results in you being less competitive. So, it is an indirect form of inequality" (Persita \& Perista, 2014:26).

It is important to mention, that there was a significant difference between the interviewees' numbers of children at the time of the interviews. The thirteen Hungarian female professors had eleven children in total, the three Slovak and Romanian female professors had four children, while the seven Serbian female professors had nine children in total. At the time of conducting the interviews, the five professors had ten children. Until early 2019 three male respondents became fathers, in the total the five male respondents had 13 children, while the 23 women respondents only one gave birth and they had 25 children in total. There was a significant gender bias, as male professors had twice as much children on average as females. Most female interviewees explained their relevant family-relatd decisions by the strategies of one child and postponed motherhood. Based on this, we concluded that it is near impossible to successfully balance work and family in academia for women academicians.

There were a few notable exceptions to the above rules, as three professors had three children. These women relied on a combination of various strategies to balance work and family. If they had supportive husbands, then they usually narrated about the strategy of supportive partner, in which a significant part of childcare is done by the male partner. The strategies of clever logistics and family support were usually intertwined, essentially merging into a single strategy. They were used by women to explain their 'privileged' situation in which they
could rely on family members, mostly grandparents, to do a significant part of childcare and housework. The above three strategies were often intertwined with the strategy of luck, which was used by women to explain that they were in a somewhat better position compared to other women due to different factors which they connected to luck. A deeper analysis suggested that 'luck' usually meant that they were in a privileged situation, by either having a supportive partner, or being in position to do clever logistics with excessive family support. In one example, a female respondent narrated about how she was lucky that her husband was supportive towards her career. Of course, her strategy of luck was more connected to privilege than to luck itself, as the respondent and her husband were both in academia, having both flexible working hours and family support. Even in that situation, her partner's career always had the priority and her career was second, e.g. he was the first to do a PhD .

By identifying the strategy of patriarchal bargain in more than one interview, we found additional support for the findings in the ENWISE report, pointing out how work-life balance is still stereotypical in the ENWISE countries and that the 'gender contract' is still firmly holding its place (ENWISE, 2004: 114). Women entered the patriarchal bargain as a necessity, accepting it as something given by fate, whereas men were using the reversed patriarchal bargain, by narrating about how they had privilege to work on their careers, while their wives were taking care of their kids and households. Somewhat surprisingly, from the women, only Hungarians used this strategy, who were born in the 1950s and in the 1960s, which might point to the fact that the patriarchal bargain was more common at the time when they were raising their children and more common in the ethnic minority communities. The strategy of patriarchal bargain was a rhetorical strategy, which brought into play a social concept which was interwoven with academia. When entering this 'bargain', women did the childcare and household chores for years, and only after their children were older, did they manage to put more effort into their academic careers.

The strategy of equal importance was mentioned by only two respondents. One very successful Serbian professor in a STEM field and one younger, ethnic minority woman, who did not have a family yet. This strategy meant that these women wanted 'all', both a successful career and nice families. Our findings pointed to a situation, in which this strategy was available to only the most privileged, majority women in Serbian academia and probably a dream for the rest.

Men used slightly different strategies in their narratives to explain how they were coping with work-life balance: the strategy of work at night, strategy of the patriarchal bargain and the
strategy of flexible working hours. Additinoally, for men, as Perista and Perista argues "family acts more as a supportive structure rather than an inhibiting one" (Perista \& Perista, 2014:31).

When analysing the narratives of female professors, we can conclude that instead of asking structural questions, women want to deal with the challenge of work-life balance in academia on a micro level, in their own family and in their own way, as Leonard and Malina (1994:30) are referring to this "being a mother in academic life is a predominantly silent experience". This includes giving up or shortening the maternity leave in order to keep the pace. They are using mostly their class privileged by which they could either afford help, by minimalizing the unpaid care-work, or they can rely on the unpaid care-work of their family members. Not one of the female respondents questioned the current system of evaluation in academia, where everybody must perform and measure up to ever more demanding quality measures to climb the academic career ladder. Fortunately, there was a sense of optimism in the narratives of female respondents, as they were trying to solve the truly hard tasks of the academician life where there is a constant pressure for publications, there are always deadlines to keep and research to be done, with the family obligations and of course the unpaid/invisible housework, which is still more a woman's job than an equally shared chore. In this unbearable chaos they were trying to measure up and be successful in academia. They had no choice but to be optimistic, as if they wanted a career in academia, their understanding was that women needed to make it work on their own.

## 11 Women in STEM

In this section we analyse the attitudes about ethnic minority women in the science, technology, engineering and mathematics (STEM) fields. We begin the analysis with the questionnaire answers of national minority high school students (Hungarian, Slovakian and Romanian) about women in educational sciences and technical sciences. Our goal was to identify gender stereotypes among ethnic minority high school graduates. We continue with the qualitative analysis of the students' interview responses about women in STEM and conclude with the analysis of the professors' narratives on the same topic. In the qualitative analysis we mainly used holistic coding, which can help with grasping the data as a whole, not analysing it line by line (Saldana according to Dey, 2013:142). "Holistic coding may be more applicable to what might be labelled self-standing units of data" (Saldana, 2013: 142).

### 11.1 Questionnaire data on women in stem

The goal of this section is to analyse the career choices made by ethnic minority students (Hungarian, Slovak and Romanian) finishing high school in Serbia in 2014 and 2015. There was an emphasis on the faculty choices the students make and their opinion about women in STEM.

### 11.1.1 Faculty choices

The first question was about the faculty choices minority high school students make. Table 37 below shows the planned faculty or college type chosen by ethnic minority students.

Table 37 Faculty or college type chosen by the students

| Chosen field of study | Male | Female | Total |
| :--- | ---: | ---: | ---: |
| No answer | 518 | 399 | 917 |
| Social science | 82 | 250 | 333 |
| STEM | 317 | 164 | 481 |
| Medical science | 61 | 129 | 190 |
| Economy and marketing | 27 | 79 | 106 |
| Art | 18 | 51 | 69 |
| Law | 11 | 14 | 25 |
| Sport and Physical Education | 23 | 13 | 36 |


| Tourism and hospitality | 3 | 7 | 10 |
| :--- | ---: | ---: | ---: |
| Police academy | 7 | 7 | 14 |
| Not decided yet | 6 | 6 | 12 |
| Total | 1073 | 1119 | 2192 |

First of all, there was a significant gender difference in the "no answer" section, in which boys did not answer about their future studies. This was due to the fact that more boys, than girls were not planning to continue their studies, which was discussed earlier. There were statistically significant gender differences in planning future type of studies ( $\mathrm{x}^{2}=223,718 ; \mathrm{df}=$ 20; $\mathrm{p}<0,01$ ). Male students more frequently chose STEM than female students. Female students more frequently choose social and medical sciences. Female students are significantly oriented towards SSH studies and medicine, this comes as no surprise. Girls (and boys!) are taught from early on that a career in educational sciences are more suited for girls. There was a gender stereotype about boys as well, namely that STEM studies are more masculine. Female high school students were significantly more interested in social sciences, economy and art, compared to boys.

### 11.1.2 Are women better teachers?

In the next question we asked high school students about their thoughts about women in educational sciences and whether and why they were better as teachers than men? Table 38 below shows the answers of the ethnic minority high school students regarding their opinions.

Table 38 Girls' motivation to choose a career in education

| Chosen answer(s) | Male | Female | Total |
| :--- | ---: | ---: | ---: |
| 'Female profession' | 406 | 423 | 829 |
| Family and raising children | 264 | 387 | 651 |
| Other | 128 | 116 | 244 |
| Biologically better teachers | 193 | 111 | 304 |
| Combination: Family, raising kids <br> and other answers | 27 | 39 | 66 |
| No answer |  |  |  |
| Total | 1073 | 1119 | 2192 |

There was a significant gender differences in opinions why women choose education and teaching studies more than technical science ( $\mathrm{x}^{2}=58,756$; $\mathrm{df}=14 ; \mathrm{p}<0,01$ ). Male students more frequently did not answer the question, which can lead to the conclusion that they do not care about the question or simply to not want to share their opinion. Male students more frequently choose answer "biologically better teachers", and female students more frequently choose "family and raising children". Being a teacher is considered a female profession (according to the boys), because females are considered to be more emotional, "motherlier" towards children, they have more patience, hence they are doing what they are genetically programmed to do. This is a common understanding of women in among ethnic minority males. They were following in a greater extent the so called "gender stereotypes rules". On the other hand, girls thought that being a teacher, with shorter working hours and having holidays when children do (in the winter, autumn, and summer), will make possible for them to be more focused on their family. They seemed to be planning for their future roles as mothers and a wifes. This behaviour is something they learned from early childhood, at home and at school as well. They have almost all female teachers, especially at lower levels of their education. This is something which effects both male and female students as they see this type of role model.

### 11.1.3 Can women study in STEM?

We asked high school students in our questionnaire about their opinions about women entering STEM fields, i.e. choosing to continue their studies in a STEM field. The table below shows summarized findings about their opinions on women not choosing studies in STEM.

Table 39 Opinions about women not choosing STEM

| Chosen answer(s) | Male | Female | Total |
| :--- | ---: | ---: | ---: |
| Not interested in | 559 | 653 | 1212 |
| ,Male studies" | 278 | 228 | 506 |
| Social expectations | 77 | 84 | 161 |
| Combination: Not interested and <br> other answers | 73 | 79 | 152 |
| Family education | 51 | 45 | 96 |
| No answer | 35 | 29 | 64 |
| Total | 1073 | 1119 | 2192 |

There were significant gender differences in opinion why women do not study in technical sciences ( $\mathrm{x}^{2}=27,521 ; \mathrm{df}=14 ; \mathrm{p}<0,05$ ). Male students more frequently choose the answer "male studies", and female students more frequently choose "not interested in". The students considered technical sciences more masculine, they associated them with hard physical labour, or to mathematics and physics, which were considered as male fields as well. This is contrary to PISA tests, which show that in an early age, girls are as good in mathematics as boys, sometimes even better. The two dominant answers depict the major stream in the ethnic minority community. If technical sciences are "for boys only", then girls should not be interested in them.

### 11.1.4 Implications of having more women in STEM

We asked students about their throughts about positive implications of having more women in technical sciences. The main aim was to find out whether they saw any positive result if more women would opt for technical sciences. The table below shows our findings.

Table 40 Positive implications of having more women in technical sciences

| Chosen answer(s) | Male | Female | Total |
| :--- | ---: | ---: | ---: |
| Different method | 333 | 562 | 895 |
| Better chances on the labor <br> market | 197 | 304 | 501 |
| Nothing positive | 390 | 143 | 533 |
| Other | 81 | 49 | 130 |
| Combination: better chances <br> and different method | 16 | 26 | 42 |
| No answer | 56 | 35 | 91 |
| Total | 1073 | 1119 | 2192 |

There were significant gender differences in opinion about positive implications of more woman in technical sciences ( $\mathrm{x}^{2}=221,706 ; \mathrm{df}=12 ; \mathrm{p}<0,01$ ). Male students more frequently choose "nothing positive", and female students more frequently choose "different method" and "better chances on the labor market". They did not see girls as potential partners and developers in the "male professions". Some open-ended questions contained answers about boys seeing girls as obstacles in their own development in STEM. Girls, on the other hand,
had a sensible answer, they see the opportunity in technical sciences (different method and better chances on the labor market), but they are still "not interested" in them. These answers were somewhat encouraging and could be (hopefully) built upon in the future, e.g. by organizing lectures by successful women in STEM fields or training the teachers to nurture such thoughs in high school students.

### 11.2 QUALITATIVE DATA ON WOMEN IN STEM

This section contains the analysis of narratives about women in STEM. We will follow the chronology introduced in the previous section, namely we will first analyse the narratives of students and then the narratives of professors. We will separately analyse Hungarian female professors, Slovak and Romanian female professors, Serbian female professors and student(s), and male professors.

The narratives of the respondents were analysed and coded, the codes are presented in tables. Through the narratives, different strategies emerged, by which the respondents justified their opinions about why women should or should not opt for STEM sciences.

### 11.2.1 Hungarian female students

The Hungarian female student interviewees were born between 1986 and 1995, and raised in different parts of Vojvodina, namely: Novi Sad, Temerin, Subotica, Bačka Topola, Ada, Srbobran, Pančevo. Almost all finished their elementary and high schools in their mother tongue. Seven students studied in STEM fields and five in SSH.

The codes used to analyse the interview transcripts were developed in a bottom-up approach, during the first cycle analysis of the interviews. Table 41 contains the summarized findings based on the analyses of the coded interview transcripts about the opinions of Hungarian female students regarding women in STEM. We identified the following seven codes which might motivate or de-motivate women to choose STEM fields:
(1) gender stereotypes;
(2) more possibilities for women in STEM fields;
(3) equal abilities, i.e. there were no difference in abilities between women and men in STEM);
(4) novel contributions and innovations if more women entered STEM;
(5) female role models (and better education in elementary and high schools) needed to motivate women to choose STEM;
(6) no interest, i.e. women are just not interested in STEM;
(7) women thought process, i.e. their thought processes are not optimal for studying or working in a STEM field.

Table 41 Hungarian female students on women in STEM

| Code | Field | Gender <br> stereo- <br> types | More <br> oppotu- <br> nities | Equal <br> abilities | Different <br> abilities | Novel <br> contribu- <br> tions | Role <br> models | No <br> interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HFS1 | STEM |  | x | x |  |  |  |  |
| HFS2 | STEM | x |  |  |  |  |  |  |
| HFS3 | STEM | x |  | x |  |  |  | x |
| HFS4 | STEM |  |  |  |  | x |  |  |
| HFS5 | SSH | x |  |  |  |  |  |  |
| HFS6 | STEM |  |  | x |  |  |  |  |
| HFS7 | SSH |  | x |  |  |  |  |  |
| HFS8 | SSH | x |  |  |  |  |  |  |
| HFS9 | STEM |  |  |  |  |  | x |  |
| HFS10 | SSH | x |  |  |  |  |  |  |
| HFS11 | SSH |  |  |  |  |  |  | x |
| HFS12 | STEM |  |  |  | x |  |  |  |

The most frequently chosen answer was selected by five out of twelve (HFS2, HFS3, HFS5, HFS8, HFS10) respondents, who agreed that women do not opt for STEM because of gender stereotypes. Two respondents (HFS1 and HFS7) narrated that there would be more opportunities for women in STEM, three (HFS1, HFS3, HFS6) that there was no difference in abilities of men and women (necessary for being successful in STEM). One narrated that women would add their valuable contributions to STEM (HFS4). HFS9 narrated that women need to be educated about STEM fields and they need role models. Two respondents (HFS3 and HFS 11) narrated that women (just) do not have interest in STEM. One interviewee (HFS12) narrated that women think in a different way than required in STEM, i.e. that they have different abilities and capabilities.

HFS5 narrated about biases towards men and women, elaborating that men are better in mathematics, physics, and those fields are not for girls. According to her experience, children were ,,divided" by their abilities in elementary school, but there was no ,genetics" involved in this. She narrated about this in the following words.

At the Faculty of Technical Sciences, there are not so many women. I do not know, maybe it's within the culture and education as well. We are prejudiced that the boys are better in math, in physics, and that it is not for girls, so the teacher in schools
and the community has the same approach as well. For example, at a math contest there were more boys than on a Hungarian language contest where there were more girls. In primary schools, it is said that it has to do something with genetics, but it shouldn't be so obvious at that stage. It's better if the good students are sent to contests. This is a mind-boggling topic (HFP5).

We identified the strategy of gender stereotypes in the narrative of HFP5, claiming that teachers in elementary and high schools have their biases towards female students, therefore they are neglecting them in the STEM fields, not devoting them sufficient time and not putting effort into making the STEM fields more appealing to them.

HFS9 pointed out how girls would need practical examples from STEM in order to be more excited about them. Girls are brought up by not having any contact with STEM, they have no background information, therefore they do not know whether they have any talent for it. She narrated about this in the following quote.

> Maybe some sort of training should be introduced (to raise women's interest in STEM), because I did not think I'd like electronics, just after doing different trainings on circuits I realized it was interesting. I think many people do not even know what it is and how interesting it can be. They don't even know they have talent for it (HFP9).

HFP9 mentioned how to make STEM studies more interesting to women through practical examples. That was the way she got more familiar with STEM as well. She used the strategy of role models (in STEM studies) and better education, when explaining why women are not opting for STEM studies.

HFS10 assumed that gender stereotypes made us think that boys are more "at home" in technical sciences and girls chose law or the humanities. She pointed out that she had no knowledge why it was happening.

> It's a bit stereotypical that professions which are taught at technical universities were always predominantly for men, while women refused to enrol in the polytechnic university, but rather chose the faculty of law or humanities. I don't know the reason behind this (HFS10).

HFP10 used the strategy of gender stereotypes, by which men and women are discriminated based on their knowledge or dexterity. HFS10 was not getting into the problem more deeply, and questioning why were those stereotypes so prominent and how were they so entrenched in society. She just narrated about them as something given, not questionable.

HFS11 depicted the traditional society's gender rule in sciences and the certainty of it. According to her there was no need for changes, because there were typical fields for girls.


#### Abstract

Maybe they (girls) are not interested that much. I do not think this should be changed. There are typically women's departments, such as the Hungarian department, or the Vocational education for teachers of preschool children; I think there are mostly girls there, or at the Teachers Training Faculty (HFS11).


HFS11 used the strategy of no action needed, as she did not question the situation, rather accepted that girls were not interested in STEM and that there are typically male and female occupations and that changes are not needed regarding this.

HFS12 narrated about the logical way of thinking, which was not a strong suit for women at the moment. She claimed that in her opinion it was possible to learn that way of thinking in school. Part of her narrative on this topic is quoted below.

> If we take into consideration the number of pupils in my class the third of them were girls but the boys were more interested in it. I don't know. I was always interested. Fundamentally, it is said that girls have a different way of thinking and that boys are more drawn to math and to a more logical way of thinking. The girls were more into languages but we must be familiar with the fact that in the Kosztolányi high school there were predominantly girls. I don't know how can girls become more interested in it. I think it depends on the way of thinking. For example, the mother of one of the girls with whom I am in a good relationship, tried to explain the basics of programming, adapting a logical way of thinking which required to maintain that way of thinking through all the bits and pieces of a problem and if one cannot do that it poses difficulties. Through the four years of my high school education I learned to think in the above-mentioned way because there was no other way to think. It was strange to me at the beginning, but now it's the only way I know (HFSI2).

HFP12 used the strategy of different abilities in women, explaining how this different thinking is in fact adjustable and that girls can learn to have the mindset for STEM, but this should be adopted in high school and this is not the typical way for girls' thinking. She used the strategy of gender stereotypes as well, to explain how girls' and boys' minds functioned differently and that girls were more drawn to languages, while boys were more into mathematics. This was not backed up by any scientific knowledge of hers but drawn from her experience or just based on deeply rooted gender stereotypes.

### 11.2.2 Hungarian female professors

Thirteen semi-structured interviews were conducted with Hungarian female teaching staff who will be referred to in the text via code names HFP1-HFP13 (HFP = Hungarian female professor). The interviewees were selected by the snowball sampling method. Six
interviewees worked in STEM and seven in SSH fields. The interviews were recorded during late 2014 and early 2015, in an interval of approximately six months. They were transcribed and sent back to the interviewees for authorization. We used hypothesis coding in the analysis. For this type of coding a predetermined list of codes was developed after the first cycle analysis of the interviews. We identified the following six hypothesis codes for the types of motivation or de-motivation for women to enter STEM fields:
(1) gender stereotypes;
(2) more opportunities;
(3) equal abilities;
(4) different abilities;
(5) no action needed;
(6) novel contributions
(7) role models.

It is important to note, that we identified a (slightly) different set of codes during the first cycle analysis of the narratives of female professors, compared to the codes used in the analysis of the students' interviews. The same hypothesis codes were used for all interviews conducted with professors, regardless of ethnicity and gender.

Table 42 contains the summarized findings based on the analyses of the coded interview transcripts. It summarizes the opinions of Hungarian female professors on women in STEM.

Table 42 Hungarian female professors on women in STEM

|  | Field | Gender <br> stereo- <br> types | More <br> opportu- <br> nities | Equal <br> abilities | Different <br> abilities | No action <br> needed | Novel <br> contribu- <br> tions | Role <br> models |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HFP1 | STEM |  | x |  | x |  | x |  |
| HFP2 | SSH |  |  |  |  |  | x |  |
| HFP3 | SSH | x |  |  | x |  |  |  |
| HFP4 | SSH |  |  |  |  | x |  |  |
| HFP5 | SSH |  |  |  |  | x |  |  |
| HFP6 | STEM | x |  |  | x |  |  | x |
| HFP7 | SSH | x |  |  |  |  |  |  |
| HFP8 | STEM |  | x |  |  |  | x | x |
| HFP9 | STEM |  |  |  |  | x |  |  |
| HFP10 | STEM | x |  |  |  |  | x | x |
| HFP11 | STEM | x |  |  |  |  |  |  |


| HFP12 | SSH | $x$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HFP13 | SSH | x | x |  |  |  |  |

Seven out of thirteen respondents (HFP3, HFP6, HFP7, HFP10, HFP11, HFP12 and HFP13) thought that women do not opt for STEM because of gender stereotypes, which prevented women from studying in "typically male fields". Three respondents (HFP1, HFP8 and HFP13) thought that STEM would offer more opportunities for women - for example they would get a job more easily. Three respondents (HFP4, HFP5 and HFP9) thought that there was no need for any changes when it comes to the gender-based segregation in the fields of studies. Four respondents (HFP1, HFP2, HFP8 and HFP10) narrated that women would make valuable contributions to STEM, e.g. that they would add their expertise and provide a different angle for a research. Three respondents (HFP6, HFP8 and HFP10) thought that in order to raise women's interest in STEM, there was a need for better education, starting with preschool education and the introduction of female role models. Three respondents (HFP1, HFP3 and HFP6) mentioned that STEM fields were too difficult for women (i.e. they lacked the necessary abilities and where thereby different from men. Somewhat surprisingly, none of the Hungarian female professors explicitly narrated about women and men having equal abilities.

HFP1 did not believe in women possessed the necessary abilities for being successful in STEM fields. She narrated about a stereotypical view about women who study mechanical engineering without a background in STEM. According to her, they were doomed to fail. She narrated about her related experience in the following words.

> Women are not coming to mechanical engineering, because it is difficult. At our department, this year, some of the students who enrolled mechanical engineering, finished medical high school and they have no previous knowledge of anything, they do not know elementary mathematics. I know in advance, that they will drop out. Those, who finished mechanical engineering high schools, we have no bigger problems with. Those from a grammar school, for example, we have a good one, she is now in first year, but she is remarkably good. But her mother was a mechanical engineer as well and her mother was outstanding as well. Her mother was a student of mine, she was good, but the young girl is even better than her mother was, she has a 10,00-average grade, I think. She is the best student in the first year (HFP1).

Even though, HFP1 was an outstanding female professor in a STEM field, she seemed to be not welcoming towards female students in STEM studies. Her experience was telling her, that if the young female students had no previous knowledge (e.g. they finished medical high
school), they would drop out and that only the best would succeed. We named this approach the strategy of role models and better elementary and high school education, i.e. claimed that only the best female students coming from STEM high schools stood a chance at her department. Additionally, in HFP1's narrative we identified the strategy of gender stereotypes, as she lamented about female students being ill prepared for starting their studies at her department.

In HFP3's narrative we sensed the generalization which stems from stereotypes that women are not into STEM. But then she spoke about that we are thought like this, that STEM is not a job for a woman and that in general women are not interested in STEM. She decides that both reasons are plausible and that she was not interested in STEM. Part of her narrative on this topic can be read in the below quote.

Do women understand it? There is a friend of mine (at the Faculty of Technical Sciences), I think she is from Kula too. I don't know whether she has retired or is she still there. But she is the only woman that I know about. Usually, there are fewer female students who are attending technical sciences. We are brought up like this, that it is not a job for women. Well, I don't know, maybe it is a little bit of both. Technical sciences did not attract me, and I feel that I don't have a knack for them (HFP3).

HFP3 stated that women's under-representation in STEM sciences is due to their upbringing, therefore she also used the strategy of gender stereotypes. She also narrated about women being not well-prepared to enter STEM fields of study, thereby relying on to the strategy of different abilities to explain the reality perceived by her.

HFP6 explained that have a more fragile body which prevented them from studying in STEM fields. She referred to „average women" not willing to study at 'hard' faculties, instead opting for family in the first place. She narrated about this in the following words.

> I think for an average woman, man, or anyone else this kind of curriculum is hard and many of them who start doing it just simply burn out. It is possible that during schooling the majority of them become saturated, and perhaps the female mindset and their understanding is what leads them the other way. Many people are focusing on settling down, and then having children and they rather opt for a job that doesn't require a more serious mental strain (HFP6).

HFP6 used the strategy of different abilities and STEM being too challenging, by which she was justifying women's disinterest in STEM studies. She also narrated about a different mindset in women, more tuned towards planning a family, rather than hard work. She referred
to STEM studies being 'harder' than SSH and therefore not 'designed' for women. In this sense, she was also relying on the strategy of gender stereotypes to explain her experiences.

The narrative of HFP7 seemed to be influenced the traditional, rural community, in which it was very hard for women to 'break out' and have an unconventional and successful career. When she told her mother that she will be a teacher - her mother accepted that situation, because in that way the daughter fulfilled the expectations of their community. HFP7 did not explain that her status as a university professor was privileged and prestigious than the status of an elementary school teacher. HFP7 did not narrate explicitly about women in STEM, but she answered this question with her own example and how the present situation was caused by gender stereotypes, and that there was a need for dismantling them.

I guess it is a question of socialization. It should begin in childhood. For instance, let's start with stereotypes. All of them should be dismantled, all these are powerful things. Naturally, it is different: in an urban and in a less urban community. There still are communities in which the independent female career is considered strange. My mother always used to say, even though she never mentioned these thoughts, that a girl should either strive to become a schoolteacher or a kindergarten teacher. Well, when I told them that I am going to become a schoolteacher they were relieved. Later, when I was not living with them anymore, it was not clear for them what I wanted to achieve with my master's and doctoral degree (HFP7).

HFP7 used the strategy of gender stereotypes. She explained that those stereotypes act as barriers in women careers and that their creation begins from early age on. She emphasized the difference between urban and more traditional, rural environments, which affected the socialization of young people.

In HFP10's narrative there was a sense of understanding and protectiveness towards women, and anger towards the society at large, in which women were underestimated by men. This narrative raised the question about gender stereotypes, which should be deconstructed to improve women's position in STEM. She narrated about this topic in the following words.

> This is a very difficult question. Because, sometimes, I see that women choose their professions mainly in the field of social sciences because they think it's easy. Or simply because sometime in their life they were not confronted with a different example, in this case it doesn't matter if we are talking about men or women. Or they have heard the phrase "you girls are not good in math" too many times. This is often heard even in very public places. It almost breaks my heart every time I hear it. Then there are ample occasions when the question can you tell me about women who were successful is brought usually up by men. How can I name women who
were successful when we were only allowed to vote a hundred years ago, we couldn't even step into a university let alone do research? Otherwise, there are, indeed, very successful examples. There are not many. And then somehow they just disappear. /.../ I heard from a colleague who was a very intelligent, smart girl, that she graduated from college, got married to one of our colleagues, a colleague who was on the same year as she was, who was not even close to her intellectual abilities and she said that she enjoyed the situation very much because her parents told her that this is what she was supposed to do, this was her job. (HFP10).

HFP10 relied on the strategy of gender stereotypes to explain the reasons steering women away from STEM. She pointed out that women are opting more for SSH studies, because they might think, that those studies are easier to finish. Hence, she also used the strategy of different abilities and STEM being too challenging, as part of the reason because of which women not opt for STEM. HFP10 explicitly pointed out, how women lacked the female role models in STEM studies, whom they could follow. Thereby she used the strategy of role models.

HFP12 narrated about gender stereotypes and compared STEM and SSH. Part her narrative was about men in SSH fields. There was a sense of admiration towards men pursuing careers in SSH. Fassa argues in her study that „men are recruited in equal numbers as graduate assistants in disciplines where for several decades the majority of students were female; they thereby enjoyed an advantage from the outset of their careers" (Fassa, 2015:44). HFP12 narrated that there was no need for any forced changes in the sense of gender segregation between academic disciplines, because this was just a trend, which might change in the future. This is supported by her following narrative.

There may be such an attitude, a stereotype in society, concerning a teacher's career - because naturally everyone who finishes at the Faculty of Humanities attains a degree in teaching - that the teaching is more for women and that men choose the more practical side of the sciences. I don't think this prejudice has any basis, because there are so many talented men around me who have achieved so much in social sciences including my grandfather. I found out that when I was tested for school back in the days I also showed talent for mechanical engineering. Most probably all of this is just a hereditary stereotype. But I don't think it's necessary to change this, nor to force it. These are trends, and we do not know what the trend will be in 100 years, which is also part of the natural evolution of mankind, the thing is that we are looking at this differently now. In the animal world it is viewed differently than in the world of humans. I find it natural to have a belief that the boys do one thing, the girls do something else. The attitude is inherited. Maybe within
families the role of a boy and girl is passed down from generation to generation. (HFP12).

HFP12 relied on the strategies of gender stereotypes and no action needed, claiming that society was working optimally and that there was no need for forced interference.

HFP13 blamed the education system for not raising interest towards STEM, and strong gender stereotypes, which were influencing society at large. She mentioned trends, claiming that interest towards STEM among women were only a trend, which might also change in the future. She capitulated that in real life there was a bigger need for technical sciences, then for SSH studies. She narrated about this in the following words.

> Now, in the domain of technical sciences like programming, and computer sciencerelated disciplines became very popular when it comes to jobs and employment opportunities which is a great advantage. I think that this trend began, I have noticed among my friends. People are beginning to think more and more in that direction. But in my opinion, in order to work in the field of technical sciences, the material motivation is not enough, strong interest, and special skills are needed, which are not very well attained in elementary and high schools. There is a kind of gender stereotype, I think a hidden one. It was always through that languages, literature were more feminine subjects, while mathematics, physics, chemistry, and informatics are better for men and boys. Of course (for Hungarian women it would be beneficial because the knowledge of languages is not a basic condition), I think it's beneficial for everyone because concerning technological advances technical sciences are more important than social sciences or philosophy (HFP13).

HFP13 emphasised the role of gender stereotypes, and their deep embeddedness in society. She also used the strategy of gender stereotypes in this sense.

Most of the narratives criticized gender stereotypes. However, the narratives did not reflect on the possible solution and what should be done strategically to root them out. We identified a sense of superiority in the narratives of female professors in STEM, compared to those working in SSH. Unfortunately, STEM professors seemed to be gatekeepers of their professions, not willing to become champions of STEM who promoted STEM and thereby helped more women to choose their fields.

### 11.2.3 Slovak and Romanian female professors

Table 43 contains the summarized findings based on the analyses of the coded interview transcripts about the opinions of Slovak and Romanian female professors regarding women in STEM. Their narratives were not as detailed on this topic as the Hungarian students' and
professors', but we managed to identify the following codes: (1) gender stereotypes, (2) there was no action needed (to steer women towards STEM), and (3) there was no difference between the STEM-related abilities between men and women.

Table 43 Slovak and Romanian female professors on women in STEM

| Code | Field | Gender <br> stereo- <br> types | More <br> oppotuni- <br> ties | Equal <br> abilities | Different <br> abilities | No action <br> needed | Novel <br> contribu- <br> tion | Role <br> models |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- | :--- |
| SLFP1 | SSH | x |  |  |  | x |  |  |
| SLFP2 | SSH | x |  |  |  | x |  |  |
| RFP1 | SSH |  |  | x |  |  |  |  |

SLFP1 and SLFP2 narrated that there was no need for any special interference when it comes to the gender-based segregation in studies. RFP1 thought that there was no difference between of men and women in their abilities necessary to pursue careers in the STEM fields.

SLFP1 told that women opt for STEM if they have the interest for it. She constructed her thoughts in a specific way, saying that "if she has an interest in it, it is allowed for her to study in STEM. This led us to believe that studying in STEM for women is somewhat an exception from the rule, that women are more into SSH studies, then in STEM. She formulated her thoughts on this topic in the following narrative.

> I think it all depends on one's interests - if a girl is interested in science, then she is allowed to study in that field. It is evident that there are many more girls at The Faculty of Philosophy, than at the faculty that is opposite us - The Faculty of Mechanical Engineering. I didn't think much about whether it is a matter of differences in interests between different sexes, but I think that every girl who has interests in such fields doesn't have a problem to realize them (SLFP1).

SLFP1 used the strategy of gender stereotypes, when narrating about why women were under-represented in STEM studies. She pointed out that women can find their interests in STEM studies as well.

SLFP2 narrated that women were making career choices (e.g. opting for SSH studies), so that they could be more focused on their families. In her opinion, there was no need for any planned changes in these fields, it was more important for young people to study in those fields in which they had interests in. The following quote supports this.

I don't consider it a problem, neither do I think that it is something positive or negative. I think it is rather a set of circumstances that are natural, and that maybe social sciences are more suitable for women since their job, which they will do in
the future, is more convenient to harmonize with a family. I don't know if the belief that technical sciences are more suitable for men is a stereotype or a truth, I don't know. I think it's a spontaneous development, not intentional, and if anything changes, that should be spontaneous too. I don't see a reason for planning some changes. It is more important that the young choose their studies according to their own wishes and that they, after graduating, do the job which is appropriate for them and which they really like (SLFP2).

SLFP2 pointed out how these gender differences regarding STEM and SSH studies are natural, and that there is no need for any interference. She is using the strategy of gender stereotypes as well.

RFP1 saw no difference in the intellectual capabilities between men and women. According to her, women should not work on physically demanding jobs, because they are not up for it, however there should not be any other barrier for them. She narrated about this topic in the following words.

> Well, it doesn't mean that women cannot do everything that men can. A good friend of mine is a professor at the Department of Nuclear Physics here at the University. I think that the fact that it is nuclear physics doesn't play any role here, women and men can conduct the same kind of research. In my opinion, gender is not important. However, women maybe shouldn't choose a profession where they would have to work with massive machines or to teach students using massive machines. I think that women shouldn't do such things because of their physical strength. What a woman can do is some kind of intellectual or field work. Writing mathematical problems on the board or chemical reactions - that's what a woman can do, it's not a problem for them. Men are at advantage only when we speak about physical labour (RFP1).

RFP1 is pointing out how women are equal in intellectual abilities, in this sense she used the strategy of equal (intellectual) abilities. She also mentioned that women should not work physically demanding jobs, for example operate heavy machinery. She pointed out that women were more focused on their work-life balance from early on, therefore they opted for easier studies, which were (according to her) in the SSH fields. Breda and Ly are however, pointing out how people do differ in abilities, but when looking at students who have identical abilities, women are still between $50 \%$ and $70 \%$ less likely than men to complete a degree in the STEM subjects (Breda \& Ly, 2012:22).

### 11.2.4 Serbian female professors and students

As before, we used hypothesis coding to analyse the interviews conducted with seven Serbian female professors and a student regarding women in STEM. The same set of hypothesis codes was used as in the previous analyses, namely: gender stereotypes, more opportunities, equal abilities, different abilities, no action needed, novel contributions and role models.

Table 44 summarizes the opinions of Serbian female professors and student(s) about women in STEM. Two respondents (SFP3 and SFP4) narrated that women do not opt for STEM because of gender stereotypes. SFP6 and SFS1 narrated that there would be more opportunities for women in STEM. SFP3, SFP4 and SFP6 narrated that there was no difference in abilities between men and women. Two respondents (SFP2 and SFP5) narrated that there was no need for any interference when it comes to gender stereotypes. SFP4 and SFS1 narrated that there was a need for women's valuable contribution and two of the respondents (SFP2 and SFP6) narrated about how in order for women to opt more for STEM there was a need for education and (female) role models.

Table 44 Serbian female professors and students on women in STEM

| Code | Field | Gender <br> stereo- <br> types | More <br> opportu- <br> nities | Equal <br> abilities | Different <br> abilities | No action <br> needed | Novel <br> contribu- <br> tions | Role <br> models |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SFP1 | STEM |  |  |  |  |  |  |  |
| SFP2 | STEM |  |  |  |  | x |  | x |
| SFP3 | SSH | x |  | x |  |  |  |  |
| SFP4 | SSH | x |  | x |  |  | x |  |
| SFP5 | STEM |  |  |  |  | x |  |  |
| SFP6 | STEM |  | x | x |  |  |  | x |
| SFS1 | SSH |  | x |  |  |  | x |  |

SFP2 narrated that for her there was no sense in being in "women engineering" conference sections, in which only women take part. Even if there would be any men attending those sessions, they would feel uncomfortable. She would have liked to be considered as equal as men, and would not have liked to be a "woman engineer", but an engineer per se. She narrated about this in the following words.

All those workshops on women engineering came down to the fact that there are five women on stage and there is the all-women audience, and there are three men sitting aside, they feel uncomfortable because they are there, then the five of them complain how it is difficult to lead a career and a family life at the same time - I think it is a nonsense. I also experienced something that made me become stricter


#### Abstract

when it comes to the women issue. I was awarded a great prize by European Commission for a scientific project, so I went to Brussels and Hose delivered the award to me in person, and then I realized that there were twenty-four winners, among which twelve were men and twelve were women. It makes no sense, it makes me wonder whether my scientific paper was bad, whether there was a thirteenth man, who did fantastic work, but who did not get the award because they wanted to give it to me, or vice versa. Maybe there was a thirteenth woman, so her award was taken away because of this balance. The fact that the number of men and women was exactly the same makes no sense to me (SFP2).


SFP2's narrative stood out from the rest of the female narratives about women in STEM. She was a very successful woman and well-appreciated expert in STEM. She was using the strategy of no action needed and that STEM fields should not be changed by force. She narrated that she never went to female engineer panels, where women complained about how hard it was to balance family and career, and how this was nonsense from her point of view. According to her, women should be treated equally in STEM fields and they do not need any positive discrimination in order to succeed. SFP2's narrative was the most un-matching one, with a very strong attitude and personal experiences. She was unsatisfied with the fact, that when she got a prestigious award, which she received in Brussels and equal number of men and women got the prize, this was shocking for her, as she was constantly questioning why was she selected: because she was a woman or because she really deserved the prize?

SFP3's narrative was about patriarchal society and thought, which, she claimed, were the most influential in our society. Therefore, the gender stereotypes are the ones which are tailoring the career paths of women and men. The following quote is supporting this statement.

Our society still didn't get rid of that patriarchal way of thinking and upbringing, and the differences are still made since earlies age: boys are for mathematics, girls are for languages. This is utterly absurd. These is no naturally given skill for mathematics, or for languages - it is utterly absurd (SFP3).

SFP3 is using the strategy of gender stereotypes to explain why women are underrepresented in STEM fields. She connected gender stereotypes with the patriarchal nature of society. SFP4's narrative is also about the gender stereotypes, that our society is ruled by patriarchal thought, therefore children are thought from the earliest age that some professions are not for them. She did a research on the topic of female and male intelligence, and she could say that with certainty that there was no difference between men and women. She narrated about this topic in the following words.

Let me begin from the unequal gender representation in those different fields of knowledge, since I dealt with that issue. Research indicates that, for example, there are no intelligence differences between men and women, except in some periodical respects, in a sense that women are somehow verbally stronger, whereas men manage to find solutions to some non-verbal tasks more easily. It is possible that men, due to their somewhat specific structural intelligence, fought their way in, as stated in resources, quantitative domains, domains of technical sciences, economy, whereas women found their place in social sciences, humanities, since verbal skills in these fields define the success to the greatest extent. However, let me get back to the fact that our society has a tendency towards traditional, patriarchal way of thinking. It is possible that, since the earliest age, people start thinking that some professions are more suitable for women, and other for men. That is why we have few male kindergarten teachers, primary school teachers, psychologists, which for sure is not a matter of skills but such attitude is transferred through upbringing... For the majority, it is transferred through family. In that way, such attitudes have been built through socialization since the earliest age. Balance between male kindergarten teachers and female engineers would certainly have positive effects. A more balanced structure would be positive, at least, in terms of collegiality. Now, women possess certain other skills that would become more prominent in those typical male professions (SFP4).

SFP4 was an expert in the domain of male and female abilities and their differences in STEM. SFP4 also used the strategy of gender stereotypes for explaining why women were underrepresented in STEM fields. She criticized society, which was in her opinion very traditional and patriarchal, hence gender-based stereotypes were deeply entrenched. She pointed out near the end of her narrative, that women could contribute to STEM field of studies by adding their skills to it, thereby using the strategy of novel contributions. Thereby SFP4 narrative supported earlier research on women in STEM, e.g. Alper argued that the majority of researchers who studied gender preferences, argue that culture, rather than biology, points women and men in different directions. Almost from birth, society sends girls and boys different messages about their abilities and expectations. Once children reach school, those signals are reinforced by teachers (Alper, 1993: 410). Although Alper's paper was written in 1993 (about one generation ago), Serbian society showed no significant progress in this field, as women careers were (still) very much determined by the patriarchal 'regime'.

SFP6 narrated, that there were no differences in the term of skills between men and women, i.e. she explicitly used the strategy of equal abilities. Girls are thought from the earliest age that they should be princesses, that they should watch love-stories, because those are the
topics for girls. Whereas, boys are building, making things. She thinks that women would have more opportunities in STEM, they would get a job. Some of her female friends from high school, who were very successful in their SSH studies, are not happy with their jobs or do not have a job at all. She formulated her thoughts into the following narrative on this topic.

I think that there is a need for more women, since their number is small, and I think that there are no differences in terms of skills. Hence, there is no need for such a great difference between women and men, and I think the major issue is upbringing at the earliest age. We, as women, were told since then that we should be princesses, watch romantic movies and cartoons with a happy end, where the prince on a white horse appears. This is what our way of bringing female children up is built on. Boys, on the other hand, should become mechanics, the toys suitable for them are tools or construction toys. Boys put things together, build something, and I think that, because of such games, they are more tuned towards technical and similar sciences, whereas girls are directed towards fairy tales, stories - towards social sciences. In my opinion, in our country, the opportunities in STEM are better, considering the employment and money. Everyone who graduates from the Faculty of Technical Sciences finds a job, which is not the case with some other sciences and professions. I have female friends who graduated in medicine and psychology or something similar, and it is difficult for them to find a job, especially a job that they consider satisfactory. They are intelligent people who want to achieve something, and usually with such professions, there is something specific that they must do. A psychologist doesn't have that much choice. However, speaking of STEM fields, there are many possibilities. That is my standpoint, since I love my job, and I don't see a reason why women would be deprived of such an opportunity (SFP6).

SFP6 had a different point of view, as she experienced STEM fields as an insider at a STEM faculty. She referred to the strategy of gender stereotypes, where society was to blame, as there was constant pressure on boys and girls by creating a very gender-different society for them, from early age on. This was something which is in her opinion, very contra-productive towards women, as they could be more successful in the labor-market as well. This was especially true for Serbia, as in the IT sector there is a constant demand for engineers.

SFP7 elaborated that in every aspect (of life) there was need for balance. First, genderstereotypes should be deconstructed. In her opinion men and women can be successful in every field equally. The following quote supports this.

Well, exactly that, to maintain balance. It would be great if stereotypes about women didn't exist, that the belief that they are not good enough for something didn't exist... For example, that they are not good engineers, politicians, drivers,
anything... In my opinion, it is wrong. Everyone is good at something, we shouldn't be defined by being male or female, but by how much we love something and how hard we try. It could be mathematics, biology, something completely different $-a$ woman can do everything that a man can. I think they should be equal (SFP7).

SFP7 used the strategy of gender stereotypes to explain women's lower representation in STEM. She pointed out the typical beliefs created by men, how women are bad in typically male occupations.

SFS1 was the youngest Serbian interviewee. She narrated that everybody should act according to their own interests, but there should be a strive towards balance between the different fields of studies, to avoid gender segregation. Women in STEM would bring new methods, new perspectives in those fields. In her opinion, society was slowly changing, and thereby more and more women are opting for STEM. She narrated about this in the following words.

I think the number should be equal, i.e. that we should strive towards equal number of women and men in STEM. But I think that everyone should, above all, act upon their own interests and skills when choosing a profession or a faculty or a school, both in cases of science and humanities. I think that others can have an influence on one's interests. It depends on, above all, professors in elementary and secondary school, but maybe on the attitudes of society. It looks like it's embarrassing for girls to enrol into technical schools, such as secondary school of mechanical engineering or electrical engineering or something similar, because they see that there are twenty boys - males in a class, so it is possible that it makes them turn away from such schools. In my opinion, a difference is always a positive thing. Like when a class doesn't consist of one and the same group of people. It improves the quality of education. Yes, it is possible that women in STEM would influence science and achievements. It sheds new and maybe different light on sciences and on the ways of studying them. I think they would have more opportunities in STEM. It seems to me especially nowadays. I found out myself that more and more girls opt for The Faculty of Technical Sciences, departments for Power, Electronic and Telecommunication Engineering (E1), Computing and Control Engineering (E2). They find employment as easily as men, this profession is in high demand (SFSI).

SFS1 used two different strategies in her narrative. The first was the strategy of different abilities, by which she wanted to point out, how this might be the general rule in society. She continued by using the strategy of gender stereotypes, by which women are influenced by attitudes in society. She had a positive conclusion, claiming that these attitudes are slowly changing and that more and more women choose to study in STEM fields, especially
engineering, because they are aware of the demands of the labour market, the fact that engineers are in high demand.

### 11.2.5 Hungarian, Slovak, Romanian and Serbian male professors and students

We analysed the male attitudes towards women in STEM based on the interviews of nine Hungarian, Slovak, Romanian and Serbian male professors and students. The interviews were analysed in two cycles. In the first cycle we identified the same hypothesis codes used to analyse the interviews of the female professors, namely: gender stereotypes, more opportunities, equal abilities, different abilities, no action needed, novel contributions and role models. Table 45 contains the summarized results of the interview coding.

Table 45 Male professors and students on women in STEM

| Code | Field | Gender <br> stereo- <br> types | More <br> opportu- <br> nities | Equal <br> abilities | Different <br> abilities | No action <br> needed | Novel <br> contribu- <br> tions | Role <br> models |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SLMP1 | STEM |  | x |  |  |  |  |  |
| RMP1 | STEM |  |  |  |  |  | x | x |
| SMP1 | STEM |  |  |  |  |  | x |  |
| HMP1 | STEM | x | x |  |  |  |  | x |
| HMP2 | STEM |  |  |  |  |  | x |  |
| HMS1 | STEM |  |  |  |  | x |  |  |
| HMS2 | STEM | x |  |  |  |  | x |  |
| HMS3 | STEM |  |  | x |  |  |  |  |
| HMS4 | SSH |  |  |  |  | x |  |  |

Two respondents (HMP1 and HMS2) narrated that women are not opting for STEM because of stereotypes. Another two respondents (SLMP1 and HMP1) narrated that there would be more opportunities for women (if they chose STEM). HMS3 however, narrated that women can be successful in STEM if they have an affinity towards it. HMS1 and HMS4 narrated that there was no need for any interference or action. The most frequent answer was that there was a need for women's valuable contributions in STEM fields, supported by four respondents (RMP1, SMP1, HMP2 and HMS2). Two respondents narrated that women need to be educated about STEM and they need (female) role models (RMP1 and HMP1).

HMP1 narrated that traditional Serbian society is keeping women away from STEM. Even if they are in STEM, they still have to be very traditional wives, who accept the 'gender bargain' and do all the childcare and domestic chores. He narrated about this in the following way.

The social expectations are multifactorial, I think. There are theories that our brains are different, women communicate better, men are better in the abstract things, so I think there is some truth in that. Of course, it also depends on society. When comparing Scandinavian countries to Serbia's society we notice that it is greatly influenced by the social structures. It is well known despite all the efforts to hide it that in Afghanistan women are not allowed to read or to study. As far as science is concerned, I think it is simply a multifactorial thing, in Serbia the traditional patriarchal upbringing dominates. Men expect from women to cook and clean for them even when they are doing intensive researches for weeks. In my opinion the country should introduce a kind of positive discrimination towards women and push them more towards the sciences. Just as the Romany people can enrol in universities with fewer scores, since they are in disadvantaged group, women should be also supported, as in the parliament where there is a $30 \%$ quota for women. After ten to twenty years, the girls can prove that they can handle it without any difficulties. This would be just a little help from the country (HMP1).

In this way HMP1 is using the strategy of gender stereotypes, referring to traditional gender roles which were deeply rooted in Serbian society and effectively keeping women away from STEM fields. HMP1 also mentioned, how men were ignorant towards women's work and they expected from them to fulfil traditional gender roles beside running successful careers. HMP1 seemed to be gender-sensitivised as he referred to the need to introduce specific measures (e.g. quotas) to steer more women towards STEM fields, thereby using the strategy of affirmative action needed.

HMS1 narrated about his experience in school about STEM subjects. There is a connection between elementary and high school teachers teaching methods and STEM studies. If the teachers were good, students will be interested in STEM. The following quote supports this.

To lead people into something they do not want to be led in is impossible. It is difficult to lead and direct, but it depends a lot on the teacher's way and method of presenting those kinds of subjects in elementary schools (HMS1).

In the above narrative HMS1 relied on the strategy of role models needed, as he referred to the roles of teachers, who need to educate boys and girls equally and thereby dismantle the gender stereotypes built throughout the Serbian education system.

HMS2 made a statement about gender stereotypes, as according to him women were the ones who like to analyse things more, whereas men were more categorical. However, through the narrative he concluded that the differences are socially constructed and that with education
there could be made a significant change in this field. It could be drawn from the following quote:
... it is simple, a woman thinks differently from a man. Men mostly think in terms of yes or no. If something is a 'yes' then it is affirmative and approved if something is a 'no' then that is negative, and it's disapproved. Women prefer to analyse things. I am not claiming that it is because of the above mentioned since it is a fact that both genders can do their jobs but that is rather connected to a social aspect. There may be some discrepancies since men and women are not the same, including the biological aspects, but I would not say that this stands as a reason. I have read that in Finland children learn programming in elementary schools and that the number of girls and boys in a class is the same and that there is no segregation among genders. However, we cannot compare ourselves to them. Yes, the above-mentioned works very well. I think it is more connected to society which could be reorganized (HMS2).

HMS2 was in this sense using the combination of two strategies, namely the strategy of gender stereotypes and role models needed, when analysing women's under-representation in STEM. However, he had a good example from Finland, where children learn programming in elementary school and they are not divided by gender at all. This was in his opinion very good, but our society cannot be compared to the Finnish. He criticized the patriarchal society, in which children are taught from an early age to assume and accept their gender roles.

HMS3 concluded that for women the situation was the same in Serbia, as it was abroad. There was no difference between gender nor studies, only in affinities. If someone chooses according to his affinities and he/she is very diligent, success will come. He narrated about this topic in the following way.

My experience is that women's situation is not harder here compared to other places. I couldn't say. I know one girl, one of my friends, she attended the Faculty of Humanities. She is a really smart girl and she is very successful. So I do not think that much depends on whether you are a girl or a boy, or in which department one is, but rather how much it corresponds to the person and how much time one spends on it (HMS3).

HMS3 in his narrative used the strategy of equal abilities. He dismissed the socially created differences but made clear how women in our society have the same position as in other societies. He narrated how women can be successful at the Faculty of Humanities as well. However, he was not making any further comments on women's opportunities in the labour
market or the wages women make in the typically female occupations, e.g. teaching positions in elementary and high schools.

HMS4 spoke about how women are discouraged from pursuing careers in STEM. He claimed that the main reason was the fact that there were typically male professions. There was a strong influence on women from their family and that should be changed, because if women had affinities or endurance, there was no reason for them not to try (studies in STEM). He narrated about this topic in the following words.

Yes, this is quite interesting. It may be that many people are interested in these fields but still choose something else. They talk about that these are typically professions for men and maybe women get discouraged from enrolling in those kinds of universities. For example, if a woman wants to be a police officer despite her family most probably being against it. Still, they should support and encourage her if they see that she has talent and potentials to succeed. (HMS4).

HMS4 combined the strategies of gender stereotypes and equal opportunities in the above narrative, claiming that women do not opt for STEM sciences, even though they have abilities for $i$ i.

SLMP1 pointed out that a female engineer can have equal or even better qualities than a male. In his narrative, there were comments about how women were more systematic, meticulous, poised, which were the qualities necessary in STEM. His narrative on this topic follows.

Even a good woman, a good engineer, can have more qualities than a man, because she is, in a way, more systematic, meticulous, poised (SLMP1).

SLMP1 used a strange combination of strategies. By claiming that women can be excellent engineers, he was reliying on the strategy of equal abilities. At the same time, she referred to women having slightly different abilities, thereby using the strategy of different abilities. Implicitly, hwe was also relying on deeply rooted notions about gender differences, thereby using the strategy of gender stereotypes as well. In a sense, he referred to the best women in STEM being able to outperform an average man, by using their female qualities in STEM, which were in his opinion being more systematic, meticulous, poised etc.

RMP1 tried to explain why women are not so present in STEM workplaces. They are not hired because they could get pregnant in the middle of a project. He pointed out that women could work on projects during their maternity leaves as well. RMP1 mentioned that women were more systematic and that they had a better approach, therefore their contribution would be/is valuable to STEM. Thereby he was using the combination of the following strategies:
different abilities (in a positive manner) and novel contributions. He narrated about this in the following words.


#### Abstract

I simply know how employers react - a woman could get pregnant in the middle of a project. $90 \%$ of the jobs we do doesn't require from us to be physically present. So, if it is such a big problem, a woman can stay at home and still do some amount of work. My friend, who graduated from the Faculty of Technical Sciences, owns a private business, she creates websites, and usually works from home. She has a three-and-a-half-year-old girl and has enough time to work, to take care of her child and she is usually at home. So, she can manage to do everything. I also have a feeling that women think that our job is for men, at least the job I am doing. And that is not true at all, for the kind of work that I do one doesn't have to be strong enough to tighten a screw or doesn't have to get all dirty. This is an elegant and creative job, one creates software, there are rules and it is, on one hand, formalized to some extent, on the other hand, it is creative and both men and women can do this job equally well, as well as members of any national minority... anyone actually. Of course, not absolutely anyone, I mean, only those who have an affinity for that, and I think that women have an affinity for programming. It becomes evident that they are more systematic, that they have a better approach. Maybe men react in a better way to solving unplanned problems, but when the work should be ended, when it should be made to look good - women are then more successful (RMP1).


RMP1 used the the strategy of gender stereotypes as well, as he claimed that women need to establish a family at a certain moment, which might be a limiting factor for them, as they might not be able to start and finish a project. This part of the narrative was mostly focused on the private sector, which might be very discriminating for women in this sense, but he did not elaborate on women in STEM in academia.

SMP1 elaborated there was a lack of women (engineers) who would present the projects in a nice way, there was a need for women who would link the technology and the sales sectors. He narrated about what positions are suitable for women - those positions more oriented to communication, public sphere, presentation of projects, which require a certain amount of technical knowledge as well. His narrative on this topic follows.

I think that the natural tendency exists, that it is happening right now and that one shouldn't insist on that. Speaking of the representation of women, there is a natural tendency towards the increase... this is at least what I see from the number of students. Advertising certain departments should possibly be increased, especially nowadays, when electrical engineering is more oriented towards computers. Thus, there is no reason against the greater representation of women. Greater diversity is, of course, always more positive, since women think about solving certain problems
differently than men. On the other hand, they are more suitable for some other positions - the positions more oriented towards communication, public sphere, presentation of projects, which require a certain amount of technical knowledge as well. Hence, there is a need for more women and there is maybe a need for a more specific specialization of women from technical fields, that is, for a slightly different profile. Speaking of women, except the born problem solvers and those born to work on their computers twelve hours a day (that personality type can be found among men), they find some other activities more suitable. This is my standpoint, it doesn't mean that it is objective. Of course, there are women who are born engineers and can sit and solve problems, but our profession needs women who can present a project well and be, in a way, a link between the technology and the sales sectors (SMP1).

In SMP1 we identified a mild use of the strategy of gender stereotypes of women in STEM in a broader sense and the strategy of different abilities. He explained that women should use their feminine side to promote projects and to make presentations of the projects as well.

### 11.3 Discussion: Women in STEM

This section contained a combination of qualitative and quantitative data analysis. First, we discussed the gender-based stereotypes amongst ethnic minority high school graduates (Hungarian, Slovak and Romanian). That was followed by the qualitative analysis of the interviews conducted with students and professors. Similarly, to the previous sections, strategies were introduced when analysing the narratives, which were in this section used to analyse the common elements of the narratives of students and professors of different nationalities, which they used to explain the causes and possible solutions for the issue of low representation of women in STEM fields.

The analysis of the questionnaires analysed the effects of the deeply-rooted gender stereotypes on ethnic minority high school students. We showed that most high school girls are prepared for their future gender roles as mothers and wives. The data analysis showed that although female students are less interested in STEM studies, they thought that by having more girls in STEM, different methods could be developed, and that women would have more opportunities in the labour market in the future. Male students most frequently answered that STEM studies were reserved for boys. It was worrying to see in their answers to the question about the implications of having more women in STEM, that they claimed that thereby nothing would change, i.e. they saw no benefit in more women entering the STEM fields. We
concluded that this young generation was not open minded and not yet ready for any substantial change.

When it comes to the qualitative data analysis, the following strategies were identified in the first cycle analysis of the narratives:
(1) gender stereotypes;
(2) different abilities;
(3) equal abilities (of women and men in STEM);
(4) novel contributions;
(5) no (affirmative) action needed;
(6) affirmative action needed;
(7) role models and better, gender-sensitivised pre-university education in STEM; and
(8) more opportunities in the labor market.

Most students and professors, regardless of ethnicity and gender, used the strategy of gender stereotypes to explain why fewer women choose a career in STEM. The interviewees explained that society was patriarchal in Serbia, the gender roles were deeply rooted, steering women to SSH and men towards STEM. One respondent pointed out a very painful truth, about women in STEM being discriminated in the private sectors when establishing a family, because of the notion that they might use maternity leave and thereby leave an on-going project. This was, as one of the respondents explained, a discriminative action, which could be amended by women working from home, while caring for their babies. Maternity leave was one of the most stressful and difficult periods of women's lives, therefore asking them to work on project from home, would introduce additional stress, which might be unfair.

A recurring strategy used in combination with gender stereotypes was the strategy of different abilities, referred to by both men and women. It was often used by Hungarian professors, who mostly referred to innate, genetically pre-determined differences between men and women. Two Hungarian, female professor teaching in STEM narrated that women did not choose STEM because STEM studies were very demanding and not for women at all. Obviously, they were biased towards women in their narratives, regardless of the fact, that they themselves finished STEM studies and were quite successful. Female professor working in STEM fields even seemed to air some sort of superiority towards their female peers in SSH
studies. Thereby they continued to build gender-based stereotypes about women, proving that they were somehow superior to average women, more like men, they can measure themselves to men, while most of the women are not being able to compete with them at all. Younger interviewees, both ethnic minority and Serbian, as well as women and men were referring to different abilities acquired in elementary and high school.

The opposite strategy of equal abilities of men and women for being successful in STEM was mostly used by the majority, Serbian women and men. Somewhat surprisingly it was not explicitly mentioned in the narratives of Hungarian professors. The Slovak, Romanian and Serbian female professors seemed more progressive in their narratives, as many explicitly narrated about men and women having equal abilities necessary for building successful careers in STEM.

The strategy of novel contributions occurred often in the male narratives, i.e. they narrated about women's valuable contribution in STEM and how this contribution was really needed in STEM. Unfortunately, when they were elaborating on the types of jobs most suitable for women in STEM, some mentioned meticulous jobs and those in which there was a need for nice presentations. In this way, they supported and/or created stereotypes about women in STEM.

The interviewees were divided on the topic of introducing affirmative actions, which would steer more women towards STEM fields. Ethnic minority female professors were almost unanimously against such measures, thereby choosing the strategy of no action needed. One ethnic minority, male professor explicitly narrated about the possibility to introduce quotas, which would enforce that a certain percentage of students in STEM be women (e.g. 33\%). Another, also male professor mentioned the possibility of 'home office' for women with small children, thereby allowing them to work even when doing childcare. These professors were using the strategy of affirmative action needed.

Almost every group mentioned that it was necessary to have better education and female role models, thereby referring to the strategy of role models. According to them, better education in elementary and high schools combined with female role models who are successful in STEM fields could effectively battle the deeply-rooted gender stereotypes, raise interest in girls towards STEM fields and eventually steer them towards choosing to study and have a career in STEM. The Hungarian female students mentioned very practical examples for doing this, e.g, purpose-built exercises done in high schools, practical demonstration in STEM,
which could substitute for the lack of STEM skills which boys acquire in childhood in a greater extent, and girls were deprived of such (STEM) experiences.

Female interviewees agreed with and used the strategy of more opportunities in STEM, referring to more openings and better pay in STEM jobs.

We concluded earlier, that in STEM even the language difficulty would not cause such issues, as in SSH studies. Women are generally blaming stereotypes - for their unwillingness to change the world/society we are living in - either they were raised like that, or they were taught about the gender stereotypes at school. However, we should add in this discussion, that women did not seem to accept part any responsibility for the situation they were in, instead they blame society at large for enforcing the gender stereotypes. They were not self-reflexive and did not (explicitly) admit that they are members of the same society.

When comparing the narratives of the two genders on the question of women in STEM, we identified significant differences. While most women saw the obstacle in gender-based stereotypes, this was not the case with men. Research on why women are under-represented in the STEM fields mainly pointed out at how women are discouraged from majoring in the STEM fields, because of gender stereotypes in family and school, eventually resulting in segregation in higher education (Gender Differences in Educational Outcomes: Study on the Measures Taken and the Current Situation in Europe, 2010). This was supported by our findings, although gender-stereotypes and their negative effect on women in STEM were usually mentioned by female respondents. Men narrated about how women were very much needed in STEM and lamented about women not entering these fields because of their different thinking or different abilities or different interests. Male respondents would like to see more women in STEM, but usually in supporting roles, who communicate with customers or do repetitive labour.

## 12 POLICY RECOMMENDATION

The goal of this section is to propose targeted policies which could improve the position of ethnic minority women in the higher education system of Serbia.

In our short overview of the relevant documents and regulations of the European Union, it was stated that gender equality is often replaced by the political goals of the EU, i.e. how gender equality is not seen as a human right that is important in itself but is rather seen as such when it represents a tool for improving the economic prosperity of the EU. As the EU finds its economic interests more important than promoting human rights, some argue that the EU and EC do not manage to fulfil their normative power.

The CEDAW Serbia Government report 1 (1992-2006) mentions the number of women students and teaching staff in Serbia and the segregations when it comes to the fields of study. According to the available data, in 1991, women accounted for $70.80 \%$ of graduate students from Schools of Medicine; 33.60 \% on average from Schools of Engineering; 44.40\% from Schools of Agriculture; 73.10 \% from Schools of Natural Sciences; and, finally, for $60.10 \%$ of Law School graduates. According to the 2002 census, the percentage of women who had completed post-secondary (including two-year colleges) higher education stood at $9.87 \%$, for men it was $12.27 \%$. At the university level, the ratio was $55.59 \%$ female to $44.41 \%$ male students. 2001 Statistical Yearbook, out of the total number of 1,133 students who graduated from Schools of Medicine in 2000, $63.37 \%$ were women. In the preceding three years, that percentage stood at 57.47 in 1997; 59.56 in 1998; and at 61.86 in 1999. The percentage of women who graduated from Schools of Dental Medicine in 2000 stood at 53.56\%.

According to the Statistical Yearbook of the Republic of Serbia from 2016, the overall number of students studying at state and private faculties is $37,939.30,303$ of them study at state faculties, whereas 18,441 are women. Furthermore, 7,636 study at private faculties, while the total number of women is 4,053 . When it comes to the scientific fields in which the students are engaged, the results are the following: education (7.43\%); arts and humanities (11.46\%); social sciences, journalism and information (11.73\%); business, law and administration ( $25.30 \%$ ); natural sciences, mathematics and statistics (5.92\%); information and communications technologies ( $4.19 \%$ ); engineering, manufacturing and construction ( $15.43 \%$ ); agriculture, forestry, fishery and veterinary ( $3.03 \%$ ); health and welfare ( $10.73 \%$ ) and services $(6.49 \%)$. It is important to note one significant issue - the exact number of female
and male students in each of the abovementioned fields is not specifically given, therefore it is impossible to speak of the segregation of women and men in certain disciplines.

The CEDAW Serbia Government report 1 (1992-2006)) states that according to the data for the 1993/94 academic year, out of the total number of 30 deans of all schools/faculties of the University of Belgrade, two were women. According to the data of the Rector's Office of the University of Belgrade, two women were among the deans of this University in the 1999/2000 academic year, while in 2002/03, five of them were women. It is perhaps important to point out that the Rector of the University of Belgrade was a woman. Since the establishment of the University in Belgrade in 1905, there have been 33 men rectors and 1-woman rector. At the university level, female teaching staff consisted of $29.40 \%$ in 2002 . We should add to the abovementioned, that the number of female rectors rose, as at the time of writing this text the University of Belgrade had a female rector (prof. dr Ivanka Popović). Nonetheless, women were still very poorly represented in leadership positions at universities and in other decisionmaking positions in the educational system and in scientific institutions. There is still a huge disparity between female and male leaders at the university level. Men are overrepresented in almost every high-level decision-making position. These numbers could be changed, by encouraging women to step out and take decision-making positions and by also making those positions more accessible to women, e.g. women are not keen on reaching decision-making positions as their work-life balance is already tense, therefore they are not as willing to fight for a position. We showed in our findings the necessity of political involvement of the potential decision-makers, and we shed light on the fact that most women were estranged from (such) politics. In the end, academia should be more sensitive about the intersections of gender and ethnicity. In this way there would be more opportunities for women in academia and especially for minority women.

According to the CEDAW Serbia Alternative Report 1, the number of women in academic institutions slightly increased during the last 15 years. This is however, a result of women starting to take the "empty space", which emerged because of brain drain and other reasons. Jobs at universities and in scientific institutions were no longer prestigious and well-paid as they were during the communist era of 1945-1989. This can be supported with an example of the Department for Hungarian Language and Literature, at the Faculty of Philosophy, University of Novi Sad, as there are only currently female teaching staff and mostly female students, whereas until a few years ago there were male professors as well (who retired). This
is a well-known gender-sociologial cliché, that the less social prestige a profession has, the more women there are.

In CEDAW Serbia Alternative Report 1, it is emphasized that the alternative education programs (e.g. MSc or PhD in Gender Studies) at universities faced constant resistance and cynical comments made by the academia.

As mentioned in CEDAW Serbia Government report 2-3 (2007-2009), and according to EUROSTAT, the Republic of Serbia is in the fourth place, with over $40 \%$ of women as researchers, although funds in this area are insufficient as only $0.3 \%$ of the gross domestic product. It should be pointed out that the number of female scientists is significant, taking into account the fact that not much money from the government budget is invested into science itself. If more money was directed towards science, there would most probably be more male scientists as well.

In the Alternative report submitted in accordance with the Article 25, paragraph of the Framework Convention for the Protection of National Minorities (2007), when reviewing the Opinion of the Consultative Committee about the textbooks, there was a significant amount of criticism. As it is stipulated in the Law on the Protection of Rights and Freedoms of National Minorities, National Minority Councils necessarily take part in the preparation of the syllabus for the purposes of teaching the subjects which express specialties of national minorities in the language of national minorities, bilingual education and studying the native languages of national minorities with the elements of their culture. Despite this practice, there is space for improvement in this field, in terms of both increasing the number of teaching units related to history and culture of national minorities and eradicating negative stereotypes towards some minority groups. Since the first reporting period, apart from the Institute for Textbook Publishing and Teaching Aids, other publishers started printing textbooks in minority languages. In the textbooks in majority language there is a low percentage of cultural and historical topics related to the members of national minorities in this region. The members of national minorities are usually represented in fragments, through history of their home countries or in the scope of some greater historical events, e.g. World War II, sometimes in a negative fashion, which influences the emergence of the negative stereotypes towards them.

We concluded that insufficient attention was devoted to this question so far. In the future is to improve the quality of textbooks written in minority languages. Also, they should include more historical facts than they currently do, especially the facts that do not put minority members in a disadvantageous position.

According to the National Strategy for Improving the Position of Women and Promoting Gender Equality, there are three separate objectives of gender equality strategies in Serbia: 1) equal access to education, balancing gender representation at all levels and profiles of education; 2) building the capacities of the educational system by mainstreaming the gender perspective into education; 3) eradicating gender inequalities in education of groups discriminated on multiple grounds. Although these objectives are officially prescribed, they are hardly or not at all applied in practice. For example, there is a significant gap when it comes to the number of female and male teaching staff in education - women are overrepresented in this field. Furthermore, gender perspective is not an integral part of the education system. What speaks in favour of this statement are textbooks which do not use a gender-sensitive language, thereby further encouraging the development of gender stereotypes and discrimination.

In Serbia there is a need for a constant deconstruction of gender stereotypes, which prevent women to opt for STEM sciences by not making a chance to get introduced to STEM or even preventing them to choose STEM sciences. This research showed that young women (high school graduates) are aware of STEM bringing them more opportunities in the labour market, but they are still not choosing the relevant STEM fields of study on the college/university level. They were not entirely against, as they mentioned female role models in STEM and affirmative action (i.e. positive discrimination) as possible measures to steer more young women towards STEM fields of study. Their male high school graduates also needed gendersensitivisation, as they still thought that nothing would change if more women would opt for STEM.

Our research showed that the lack of Serbian lack skills was still a significant challenge for the members of national minorities. Apart from the analysed minority communities, it should be noted that other groups, such as the Roma students or the disabled children, also needed specific supportive policies.

The Alternative Report submitted in accordance with the Article 15 of the Charter for Regional or Minority Languages states that the inadequate teaching materials and textbooks as well as the lack of teaching personnel for subjects still have the influence on the quality of education conducted in minority languages in Serbia. There is no coherent strategy for training teachers in minority languages, whereas national councils generally take care of the training of the teaching personnel. The initiative for creating a possibility for the teachers to be trained as two-subject teachers, which would help overcoming the problem of insufficient
recruitment of teachers in minority languages, was still not adopted at the time of writing. There was still no practice of recruiting school supervisors for education in minority languages.

Furthermore, the Alternative Report stated that the national minorities requested, that the mother tongue with the elements of national culture is classified together with the compulsory subjects in elementary and secondary schools in Serbia. By satisfying this requirement, the minority pupils would be more stimulated to foster their mother tongue, since the final grade in this subject would be a part of the overall final year grade. They would not be in a dilemma about choosing this subject or IT or some other foreign language, which are all far more favourable to the requirements of the modern market. Satisfying this condition will especially have a positive effect on the pupils of those minority communities to which attending this course is the only form of education in their mother tongue, e.g. Slovak in elementary schools in Novi Sad.

When it comes to the question how to prevent the language difficulty faced by ethnic minority students in Serbia (especially in AP Vojvodina), although it is compulsory for Hungarian pupils to learn Serbian, the efficiency of Serbian language courses might be improved by teaching more classes per week or adapting the curricula, e.g. Hungarian pupils in settlements with a Serbian majority could be offered a higher level Serbian course, while in settlements with a Hungarian majority they should start from the basics and with more classes per week, thereby ensuring that (all) ethnic minority pupils acquire the necessary Serbian language skills, which will enable them to continue their studies in Serbian if there was no suitable choice of education in their mother tongue.

There is also the issue of the Law on Textbooks and Other Teaching Materials, which explicitly stipulates that the textbooks shall be printed in Serbian language - using the Cyrillic alphabet. By implementing this obligation, Serbia made a negative impact on ethnic minority pupils whose alphabet is Latin, who must learn a different alphabet forcibly, although earlier, in the Yugoslav era, all Serbian language textbooks were available in Latin alphabet as well. This practice resulted in minority students lagging behind their majority peers when it comes to the education outcomes. Being bilingual is a double-edged sword - it is beneficial for the minority members, however, there are many difficulties that the bilingualism causes and which they face day-by-day.

When reviewing the Opinion of the Consultative Committee about teaching personnel, the above-mentioned Alternative Report stated that the professional personnel shortage is due to
the shortage in appropriate study groups for education in minority languages, by which the education of teachers comes down to personnel trained for teaching mother tongue and literature. The abolition of language departments negatively impacted the options to acquire technical terminology in minority languages in some universities, thereby degrading the instruction given in minority languages.

The Strategy for Education Development in Serbia 2020 was adopted in 2012. It does not mention gender equality in education. Some of the prescribed objectives are to have the quality of education and the outcomes of education at the highest possible level, to reach and maintain the relevance of education, to use education resources in a more efficient manner, etc. However, it is necessary to further point out the importance of gender equality in education, i.e. to make achieving full and effective equality of women and men in education an explicit objective of education. (Strategy for Education Development in Serbia 2020, 2012).

In the end, the author of this thesis proposes that an ethnic minority research centre should be founded, where problems of the language-induced difficulties, ethnic minority-related issues in textbooks and ethnic migrations could be addressed. The research centre could address the problems of career choice and career advancement of Hungarian minority students, loosen up the constant migration and brain-drain from Serbia, by advising high school graduates which career paths to take in order to integrate and take advantage of their bilingualism in the Serbian labour-market. Even though there is VM4K (previously discussed in the Chapter number 2.) there is no research done in that centre, nor does it apply a significant number of full-time, experienced researchers. There is need for such an institution, which would allow us to methodically research the most challenging issues faced by the ethnic minorities, better understand the issues faced by their communities and create tailored policies to solve them.

Moreover, a bilingual university (Hungarian - Serbian) could be found, where both the minority (Hungarian) and the majority (Serbian) students could study. In this way, students could gain competency in both languages from their selected studies. It could be more advantageous for them and they could also gain more self-esteem during their studies. They could also focus more easily on their studies from day one at the university/college, instead of spending a couple of months (or even more) on learning the state language, i.e. Serbian.

Also, work - life balance in academia needs positive discrimination as well, a good example for this practice comes from Switzerland. As Fassa argues in her research done in Switzerland, the Swiss National Science Foundation (SNSF) eliminated the age limits for
applying for research funds, the shift from biological age to "academic age" took place in 2008 and takes account of the very clear statement at that time of the determination of the SNSF to practise a genuine equality policy" (Fassa, 2015:47). Academia in Serbia is not considerate of any work-life balance in Serbia. Women try to solve the above-mentioned problem on their own, instead of trying to tackle the issue on the structural level. Also, there is need more solidarity among women, thereby empowering themselves and eventually raising their challenges to higher decision-making levels. In this way, the micro level could become the macro level.

The constant performance evaluation-related pressure in neoliberal academia could and should be eased up, enabling a fairer environment in which the specific circumstances of academic workers are taken into account, e.g. young children, significant experience working in the private sector, care work for the elderly parents. Neoliberalism, as a political and society-wise construction should be criticized more in academia, as it is creating an individualistic model, which is gender and inequalities blind. Neoliberalism mainly impacts women, by constantly raising both research and education workload, making ever harder for women to balance between their family and career duties.

Finally, the author of this dissertation will reflect on the position of ethnic minority women special focus on Hungarian women, whose position and educational possibilities would need to be addressed by the National Councils in Serbia through their educational strategies. As the findings show in this dissertation ethnic minority high-school graduates are driven by gender stereotypes regarding women in STEM and educational sciences, this would have to change in order to achieve progress and open up to new perspectives. Moreover, the findings show how Hungarian female students in STEM studies had less problem regarding language during their studies in the Serbian Higher Education System, therefore in the educational strategy of the National Councils this perspective should be included as well.

## 13 CONCLUSIONS

The goal of this PhD research project was to assess the situation of ethnic minority women in the higher education system of Serbia. We limited our analysis to the most numerous Hungarian, Slovak and Romanian ethnic minorities living in Vojvodina, the Northern province of Serbia. We reviewed relevant scientific results, the legal framework, the minorityspecific, educational solutions offered by the nation states of the minorities analysed (i.e. Hungary, Slovakia and Romania), the national councils and non-government organizations (NGOs). We identified the relevant gaps in the state-of-the-art and defined research questions, which were in turn formed into the following three hypotheses: (1) ethnic minority women are negatively affected by the language difficulty, they encounter during their studies, (2) they avoid science, technology, engineering and mathematics (STEM) fields of studies, and (3) they have (very) limited motivation to climb the 'career ladder' and reach decision-making positions in the higher education system and/or research institutes.

We set out to prove the above hypotheses by covering different aspects of involvement with the higher education system: (1) we asked high school students about their (future) career (college/university/faculty) choices, (2) students about their experiences during their studies, and (3) professors about their experiences during their studies and their professional careers.

Our data collection consisted of two phases. In the first phase, we reached out to high school students via a purpose-built questionnaire which was filled in by 2192 Hungarian, Slovak and Romanian high school graduates. Based on the questionnaire data we were able to analyse the career choices, language skills of the respondents, as well as to identify gender steretypes. In the second phase we collected 43 semi-structured interviews with narratives of ethnic minority women studying or working in the higher education system of Serbia (the System). The interviews allowed us to find out what are the possibilities, advantages and disadvantages of being ethnic minority women in the System. We focused our analyses on ethnic minority women and used ethnic minority males, and both majority (i.e. Serbian) women and men as control groups.

### 13.1 LANGUAGE AS A PERFORMATIVE METAPHOR

In order to discuss and summarize our findings related to the first hypothesis, namely the notion of language as a performative metaphor, we analysed both quantitative and qualitative data. We assessed the effects of Serbian language skills on the career choices of Hungarian,

Slovak and Romanian high school students (i.e. which college or university they would choose). We explained that it is possible for ethnic minority students to graduate from high school with a very low level of Serbian language proficiency, especially in those communities where they constitute a majority. This lack of language skills puts them later in an unfavourable position compared to the members of the Serbian majority both when entering the higher education system and the job market. Somewhat surprisingly, we found that even high school students with solid Serbian language skills usually choose to study in the EUmember nation states where the main bodies of their nations live (i.e. Hungary, Slovakia and Romania). An alternative solution chosen by many is to take entrance exams both in the EUmember states and in Serbia, but usually preferring the first option, due to the future career prospects offered by college/university degree from an EU-based higher education institution and recognized in the entire EU. We showed that the reason why ethnic minority students study abroad is not the language difficulty (i.e. lack of Serbian language skills), but the perceived better future after obtaining an EU-based university/college. In this sense, the students seem to reverse the concept of Otherness by being in a (slightly) better position to transition to the education and job market of the EU (compared to Serbian high school graduates).

We used the interviews to obtain and analyse the opinions of minority and majority female and male students and professors. Our findings indicate that a gender difference exists. Namely, Hungarian female students see language as a source of inequality and discrimination. This is more significant in language-intensive SSH fields of study, than in STEM. We identified two main reasons for this trend: (1) gender stereotypes and that (2) women are steered towards SSH studies by their communities and their nation states, as they need to become the future educators, librarians, museum curators, etc. All these professions are regarded as necessary to maintain the ethnic minority communities. Additionally, these professions and the related (SSH) fields of study are recognized by the minorities' nation states and receive considerable financial support. Our findings indicate that women are unaware of the second reason which steers them away from STEM studies. Or at least none of them explicitly mentioned it. Hungarian female professors spoke about language-related challenges, but, in contrast to the female students, in their case, the role of a language changes and serves as a beneficial tool for building connections with the colleagues from their respective nation-state. Slovaks faced the least difficulties, possibly due to the similarity of the Slovak and Serbian languages. The Romanian community is gradually disappearing,
which is followed by a limited system of financial and other aid which would keep the Romanian students in the Serbian higher education system. Serbian female professors acknowledge national diversity, but seldom are willing to adjust to the situation. They usually explain that limited Serbian language skills force a portion of the minority students to lag behind their peers from the majority community. Ethnic minority male students were overall more confident and saw learning and perfecting the Serbian language as an additional opportunity. This attitude was different from the opinions of their female counterparts, which is also an illustration of language performativity.

We asked majority professors what they thought about the status of ethnic minority women in the higher education system of Serbia and found that they emphased the importance of overcoming a language difficulty. We found that thereby they unintentionally neglected or dismissed that ethnic minority women might face difficulties because of the intersections of ethnicity and language. Male professors shared this opinion, emphasizing the importance of language skills as a key entry criterion.

The language related challenges faced by minority students would virtually disappear if there were more study programs in their mother tongue. As we elaborated earlier, there were initiatives in this domain, but without any palpable success. One might conclude that the Hungarian ethnic minority living in Vojvodina is in a more disadvantageous situation then the Hungarian minorities living in the Ukraine, Romania and Slovakia, where the Hungarian government founded universities and colleges in which Hungarian-language education takes place.

We identified language as a performative metaphor for social (in)equality and identified relevant differences between men and women. Minority women use it as a principal component of their Otherness. Majority women also rely on language to make sense of the Othering concept. Minority men claimed that perfecting their (often) limited Serbian language skills open additional opportunities and possibilities for them. Finally, language intersects with gender and class, resulting in a new inequality concept. All things considered, the quantitave and qualitative analyses supported our first hypothesis $(\mathrm{H} 1)$, which said that: There are difficulties (language- based, ethnicity-based, gender-based and others) for women members of national minorities during their studies and building up their careers. These difficulties female students get beyond easier in STEM fields of studies, then in SSH. One factor in this phenomenon is that teaching, and research is less grounded in the perfect knowledge of the majority language in STEM fields.

### 13.2 Women in academic decision-making positions

When it comes to balancing between an academic career and family obligations, women of different nationalities seem to face similar challenges. In a traditional, partriachal society they face social pressure to spend more time with their family compared to men. This prevents them from devoting as much time to their careers as males can. The strategies women referred to in the interviews as possible solutions to catch up with men include flexible working hours combined with working at night, having one child and having luck. Both the work at night and one-child strategy mean have long-lasting consequences for women and society at large. It comes as no surprise that none of the women ask any structural questions which would signal their desire to improve the position they find themselves in. They rather decide to try to cope with the difficulties they encounter on a micro level, in their own lives, in their own ways. They usually have to find help and delegate part of the care-work to other members of their families, most commonly to their mothers.

Men balance career and family and their most frequently used strategies are flexible working hours combined with working at night and the patriarchal bargain. A significant gender difference in this respect was that women accept the patriarchal bargain, while men use the reversed form of this regime to advance their careers. We can even argue that women accept the "patriarchal bargain" (Kandiyoti, 1988). Contrary to common belief that higher education and research are easy jobs, both men and women agree on the fact that being employed in this domain has its own challenges and is everything but easy. Even though men work at night as well, this is because they are eager to advance their academic careers as much as possible, but also because academic neoliberalism inflated the expectations and sometimes sets hardly reachable targets and performance indicators for career advancement. The current legal and societal framework does not ask from men to somehow make up for the time women spent on care-work. Common belief says that men will earn more by being able to spend more time on their careers and will thereby pay their debts to their partners. We should add here as well, that unpaid care-work, mostly done by women is very much political as it is a resource which keeps society going and functioning on daily basis.

Speaking of reaching decision-making positions, we observed that women are overall, regardless of their nationality, rarely interested in such an endeavour. They explain this by strategies such as the involvement of politics, devotion to teaching and devotion to research. Even though a few female respondents do mention that they hold or strive to reach high positions, none of them stated that they would use their high position to act as role models or
to be a source of encouragmenet for other women. The reason behind this stance might be academic neoliberalism, which is gender-blind and puts individualism and success first.

Another very important point where a gender difference can be noticed lies in the fact that men have a clear set goal in their career that they are striving to achieve, i.e. eventually reaching a decision-making position. The only strategy they employ when explaining why they avoid decisions-making positions is politics, i.e. the fact that they would need to drum up support both within their institutions and outside it.

It should be noted that it is significantly easier to reach decision-making position within the minority-langauge departments for the Hungarian, Slovak or Romanian language and literature, as they constitute "small islands" where relatively few professors and researchers work and rotate on the decision-making positions (e.g. head of department). In these organizations, everyone gets a chance to obtain experience in a decision-making position sooner or later.

Men are more interested in reaching decision-making positions or are already holding them. While the strategy of the involvement of politics repeats in this case as well, other strategies widely differ. Most importantly, women usually saw their roles as educators, not researchers or managers in the higher education system. They are comfortable with teaching and mentoring. Our findings indicated that men were significantly more interested in research and/or managerial positions.

Based on our analysis of the interviews conducted with ethnic minority and majority female and male professors, we concluded that there is a strong hierarchy in the higher education system, which is defined by ethnicity and gender as well. This hierarchy usually succeeds in keeping women away from decision-making positions, and keeping ethnic minority women in a marginal position, in their own isolated islands of language and literature departments. Fortunately, there were a few exceptions, who had exceptional scientific excellence allowing them to progress in the Serbian higher education system. For ethnic minority women, their ethnicity is sometimes seen as an advantage compared to their Serbian counterparts, as ethnic minority women in some cases are getting decision-making positions more easily, but those positions usually have less real power (e.g. Head of the Department of Slovak language and literature), compared to larger departments. When it comes to the legacy of communism, ethnic minority women in the Serbian higher education system are aware that during the communist era, they had certain privileges if they were following the unwritten rules of the communist regime imposed on higher education and research. It seems however, that
although they were more easily accepted in academia during the communist era, if they were able to act like their male counterparts did, they got marginalized and were unable to climb up the ladder of the academic hierarchy. When speaking in the terms of the current situation in Serbian academic society, it could be sensed from the narratives of the female professoras and/or researchers, how neoliberalism creeped into research and higher education, pressuring women to be as productive as possible, without asking them about their work-life balance. This appeared in the male narratives as well, who also work hard, mostly in the evenings or at night, outside of their paid working hours.

Ethnic minority scholars working in Vojvodina often have to deal with the sense of dividedness between the three academic worlds they belong to: (1) the Serbian academic society in which they are embedded through their everyday work and employment contracts, (2) the Hungarian academic society in Hungary (or its counterparts in Romania and Slovakia), which is a rich source of collaboration and funding opportunities, and (3) the (small) Hungarian academic society in Vojvodina. Both ethnic women and men need to work hard be recognized in one, two, or in exceptional cases, in all three of these separate ivory towers. This type of Otherness has its distinct advantages, opening up additional networking and project opportunities. This setup has its pitfalls as well, as they can be caught on "a no womens' land", especially those who are not strongly embedded in any of the three academic societies.

If one considers of the narratives of the minority women together, one concludes that these women are discouraged to fight for themselves in a society they live in, accepting the current situation, even though it is unfavourable for them. We should also mention, that there are invisible barriers for ethnic minorities in reaching decision-making positions, which occurred in the narratives as lack of support for minorities within faculties.

The above listed findings support our third hypothesis (H3): The level of motivation to reach high positions/decision-making positions within the faculty hierarchy is lower for women.

### 13.3 Women in STEM

The author identified a distinctive gender difference in the answers about women in STEM. Female high school students recognized that they would benefit from continuing their studies in a STEM field, but they still had no interest to actually do that. We found that high school graduate boys categorically negated that there would be benefit if more women would opt for STEM studies.

We used the snowball sampling method to identify the student and professor interviewees. We were not surprised when we struggled to find ethnic minority women holding a teaching or research position in the STEM fields. While women narrated about how gender stereotypes are holding back women from STEM, men narrated how different thinking between women and men are the main reason why women are underrepresented in STEM.

The interview and questionnaire analysis allowed us to prove hypotheses. But it allowed us to do more, as we concluded that ethnic minority women are following the gender order, which is nurtured by education, as well as that there is an intersectional matrix of gender and ethnic stereotypes which shape the lives and academic careers of ethnic minority women. The principal component of the above-mentioned gender order is traditional patriarchy, which pushes women towards educational sciences and other more "feminine occupations". Our findings indicate, that both in SSH and STEM female professors usually emphasize the educational element of their work and do research only after their teaching duties.

Female students and professors might feel that they are hostages of the national politics of their nation states (e.g. Hungary), forcing them to study literature or teacher training in Serbia (all SSH fields), which will allow them to become the educators of future (ethnic minority) generations.

Workforce statistics point out significant openings and high wages in professions requiring a STEM degree. We showed that even ethnic minority high school students are aware of such trends. They are even aware of the fact that positions in those industries are attainable even with lower Serbian language skills. Still, ethnic minority girls finishing high school show very limited interest towards continuing education in one of the STEM fields. Unless this trend is reversed, if women continue to stay outside the STEM fields, they will have worse chances on the job market and will continue to be deprived of power. And not only financial power, but also the power of being part of innovations and the advancement of society at large. This is an urging task for future generations, which need to get women more involved in STEM. The first step obvious step toward it is dismantling social and gender stereotypes.

The above summarizes findings support and prove our second hypothesis (H2): Regardless that the completion of studies in some STEM fields makes it easier to find a job and often offers more financial power, small number of women choose the STEM fields of study.

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## 16 ApPENDICES

### 16.1 APPENDIX 1 - BASIC INFORMATION ABOUT THE INTERVIEW RESPONDENTS

Table 6 Hungarian female professors

| Code | Type of studies | Education parents <br> Mother | of their <br> Father | Environ ment in which they were brought up | Language of the elementary and high school | Languag e of the faculty | Career stage | Relationship status | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HFP1 | STEM | Faculty | Faculty | Hungari an | Serbian | Serbian | Senior researcher | Married | 1 |
| HFP2 | SSH | High school | High school | Hungari an/Serbi an | Hungarian | Hungari an | Senior <br> researcher | Unmarried | 0 |
| HFP3 | SSH | High school | High <br> school | Serbian | Hungarian | Serbian | Senior researcher | Divorced | 2 |
| HFP4 | SSH | Elementa <br> ry school | High school | Hungari an/Serbi an | Hungarian | Serbian | Senior researcher | Married | 1 |
| HFP5 | SSH | 1 | 1 | Serbian | Hungarian/ <br> Serbian | Hungari an | Senior researcher | Divorced | 1 |
| HFP6 | STEM | Faculty | Faculty | Serbian | Hungarian/ <br> Serbian | Serbian | Mid-career researcher | Married | 2 |
| HFP7 | SSH | Elementa <br> ry <br> school | High school | Hungari an | Hungarian | Hungari an | Mid-career researcher | Widowed | 1 |
| HFP8 | STEM | Faculty | Faculty | Hungari an/Serbi an | Hungarian | Serbian | Mid-career researcher | Married | 3 |
| HFP9 | STEM | High school | High school | Serbian | Hungarian | Serbian | Early career researcher | Married | 0 |


| HFP10 | STEM | High <br> school | High <br> school | Hungari <br> an/Serbi <br> an | Serbian | Hungari <br> an | Early career <br> researcher | Unmarried | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| HFP11 | STEM | High <br> school | High <br> school | Hungari <br> an/Serbi <br> an | Hungarian | Serbian | Early career <br> researcher | Married | 0 |
| HFP12 | SSH | Faculty <br> (PhD) | Faculty | Serbian | Hungarian | Serbian | Early career <br> researcher | Unmarried | 0 |
| HFP13 | SSH | Faculty <br> (PhD) | Faculty | Serbian | Hungarian | Serbian/ <br> Hungari <br> an | Early career <br> researcher | Unmarried | 0 |

## Table 7 Hungarian female students

| Code | Type of studies | Educati <br> Mother | of their parents <br> Father | Environment in which they were brought up | Language of the elementary and high school | Language of the faculty |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HFS1 | STEM | High school | High school | Hungarian/Serb ian | Hungarian | Serbian |
| HFS2 | STEM | High school | High school | Serbian | Hungarian | Serbian |
| HFS3 | STEM | Faculty | Faculty | Serbian | Hungarian | Serbian |
| HFS4 | STEM | High school | High school | Hungarian/Serb ian | Hungarian | Serbian |
| HFS5 | SSH | Faculty | Faculty | Serbian | Hungarian | Serbian |
| HFS6 | STEM | College | Faculty | Serbian | Hungarian | Serbian |
| HFS7 | SSH | Faculty | Faculty | Hungarian/Serb ian | Hungarian | Hungarian |
| HFS8 | SSH | Faculty | Faculty | Hungarian/Serb ian | Hungarian | Serbian |
| HFS9 | STEM | High school | High school | Hungarian | Hungarian | Serbian |


| HFS10 | SSH | Faculty | Faculty | Hungarian/Serb <br> ian | Hungarian | Serbian |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| HFS11 | SSH | High <br> school | High school | Hungarian/Serb <br> ian | Hungarian | Hungarian |
| HFS12 | STEM | High <br> school | High school | Hungarian/Serb <br> ian | Hungarian | Serbian |

## Table 8 Slovak and Romanian female professors

| Code | Type of studies | Education parents <br> Mother | of their <br> Father | Environ ment in which they were brought up | Language of the elementary and high school | Languag e of the faculty | Career stage | Relationship status | Num ber of child ren |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SLFP1 | SSH | Faculty | Faculty | Slovaki an | Slovakian | Serbian | Mid-career researcher | Married | 3 |
| SLFP2 | SSH | High school | College | Slovaki an | Slovakian/ <br> Serbian | Slovakia <br> n | Junior researcher | Unmarried | 0 |
| RFP1 | SSH | Elementa <br> ry school | Elementar y school | Romani an | Romanian | Romani an | Mid-career researcher | Married | 1 |

## Table 9 Serbian female professors and a student

| Code | Type <br> of <br> studies | Education of their <br> parents | Environ <br> ment in <br> which <br> they <br> were <br> brought <br> up | Language <br> of the <br> elementary <br> and high <br> school | Languag <br> e of the <br> faculty | Career stage | Relationship <br> status | Num <br> ber <br> of <br> child <br> ren |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Mother | Father |  |  |  |  |  |


| SFP3 | SSH | High <br> school | High <br> school | Serbian | Serbian | Serbian | Early career <br> researcher | Married | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SFP4 | SSH | College | Faculty | Serbian/ <br> Hungari <br> an | Serbian | Serbian | Early career <br> researcher | Married | 1 |
| SFP5 | STEM | College | High <br> school | Serbian | Serbian | Serbian | Early career <br> researcher | Married | 1 |
| SFP6 | STEM | Faculty | Faculty <br> (PhD) | Serbian | Serbian | Serbian | Early career <br> researcher | Married | 2 |
| SFP7 | STEM | Faculty | Faculty | Serbian | Serbian | Serbian | Early career <br> researcher | Unmarried | 0 |
| SFS1 | SSH | Faculty | Faculty | Serbian | Serbian | Serbian | $/$ | $/$ | $/$ |

Table 10 Hungarian, Slovak, Romanian and Serbian male professors and students

| Code | Type of studies | Education parents <br> Mother | of their <br> Father | Environ ment in which they were brought up | Language of the elementary and high school | Languag e of the faculty | Career stage | Relationship status | Num ber of child ren |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HMP1 | STEM | Faculty (PhD) | Faculty (PhD) | Serbian | Hungarian | Serbian | Early career researcher | Married | 2 |
| HMP2 | STEM | Faculty | High school | Serbian | Hungarian | Serbian | Early career researcher | Married | 4 |
| $\begin{aligned} & \hline \text { SLMP } \\ & 1 \end{aligned}$ | STEM | Elementa ry school | High school | Slovaki an | Slovakian/ <br> Serbian | Serbian | Senior researcher | Married | 2 |
| RMP1 | STEM | Faculty | Faculty | Serbian | Serbian | Serbian | Early career researcher | Married | 3 |
| SMP1 | STEM | High school | Faculty | Serbian | Serbian | Serbian | Early career researcher | Married | 2 |
| HMS1 | STEM | Faculty | Faculty | Hungari an | Hungarian | Serbian | 1 | 1 | 1 |
| HMS2 | STEM | Faculty | Faculty | Hungari | Hungarian | Serbian | / | / | / |

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|  |  |  |  | an |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| HMS3 | STEM | High <br> school/F <br> aculty(?) | High <br> school | Serbian | Hungarian | Serbian | $/$ | $/$ |  |
| HMS4 | SSH | High <br> school | High <br> school | Hungari <br> an | Hungarian | Serbian | $/$ | $/$ | $/$ |

### 16.2 Appendix 2 - Questionnaire built and used for the minority STUDENTS

## Questionnaire for the Hungarian students

## Kérdőív

## Kedves Adatközlő!

Ez az anonim kérdőív a doktori disszertációm alapjául szolgál, ezért, kérlek, őszintén válaszolj a feltett kérdésekre. A felkínált lehetőségek közül karikázd be, illetve a vonalak helyére írd be az általad megfelelőnek ítélt választ! A megfelelő mezőbe viszont tegyél X-et!

## 1. Személyes adatok:

Nemed: a) Fiú b) Lány
Születési év és hely: $\qquad$

## 2. Melyik iskolába jársz és milyen szakra?

Iskola neve és helysége: $\qquad$
a) 3 éves szakközépiskola
b) 4 éves szakközépiskola b) Gimnázium

Szak: $\qquad$

## 3. Hányadik osztályba jársz?

a) 4 .
b) 3 .
4. Mi az anyanyelved?
a) Magyar
b) Szerb
c) Mindkettő
d)Más:

## 5. Édesanyád/gyámod anyanyelve:

a) Magyar
b) Szerb
c) Mindkettő
d) Más: $\qquad$
6. Édesapád/gyámod anyanyelve:
a) Magyar
b) Szerb
c) Mindkettő
d) Más: $\qquad$
7. Mi a szüleid/gyámjaid legmagasabb iskolai végzettsége?

|  | Édesanyám | Édesapám |
| :--- | :---: | :---: |
| Befejezett általános iskola | $\square$ | $\square$ |
| 3 éves szakközépiskola | $\square$ | $\square$ |
| 4 éves szakközépiskola | $\square$ | $\square$ |
| Gimnázium | $\square$ | $\square$ |
| Főiskola | $\square$ | $\square$ |
| Egyetem | $\square$ | $\square$ |
| Egyetemnél magasabb végzettség | $\square$ | $\square$ |

## 8. Milyen gyakran használod a szerb nyelvet a kommunikációdban?

a) Ritkábban, mint
b) Hetente egyszer
c) Hetente többször hetente
d) Naponta egyszer
e) Naponta többször
9. A következő nyelveket milyen szinten beszéled?

|  | Magyar | Szerb |
| :--- | :---: | :---: |
| Sehogy | $\square$ | $\square$ |
| Nem beszélek, csak értek | $\square$ | $\square$ |
| Alig néhány szót | $\square$ | $\square$ |
| Nem nagyon jól | $\square$ | $\square$ |
| Jól | $\square$ | $\square$ |
| Nagyon jól | $\square$ | $\square$ |
| Anyanyelvi szinten | $\square$ | $\square$ |

## 10. Melyik kultúrával azonosulsz?

a) Magyarral
b) Szerbbel
c) Mindkettővel d) Egy harmadikkal

## 11. A középiskolai diploma megszerzése után gondolkodtál-e a továbbtanulás

 lehetőségén?a) Igen
b) Nem
12. Hol szeretnél továbbtanulni (amennyiben nem szeretnél, folytasd a 17. kérdésnél)?
a) Szerbiában folytatom tanulmányaimat
b) Magyarországon folytatom tanulmányaimat
c) Magyarországon és Szerbiában is megpróbálom majd a felvételit, és ha sikerül Magyarországon, ott folytatom tanulmányaimat.
d) Még nem tudom, bizonytalan vagyok
13. Miért választod a Szerbiában való továbbtanulást? Több válasz is lehetséges!
a) Nincs elég pénzünk, hogy külföldön tanuljak
b) Az itthoni oklevéllel jobban tudok érvényesülni Szerbiában
c) Családi kötődés
d) Baráti kör
e) Csak akkor maradok itthon, ha nem sikerül a külföldi felvételi
f) A hazai felsőoktatás is magas szintű tudást biztosít
g) Egyéb:

## 14. Miért választod a Magyarországon való továbbtanulást?

a) A szerb nyelvtudás hiánya miatt
b) Jobbnak tartom az EU-s diplomát
c) Magyarországon akarok dolgozni
d) Itthon nincs olyan szak amire íratkoznék
e) Egyéb: $\qquad$ -
15. Milyen főiskolára vagy egyetemre szeretnél-e iratkozni? (karikázd be az intézmény típusát és azt, hogy állami vagy magán)

| Szakfőiskola | 1. állami | 2. magán |
| :--- | :--- | :--- |
| Egyetem | 1.állami | 2. magán |

Még nem döntöttem

## 16. Mely felsőoktatási intézménybe iratkozol és milyen szakra?

17. Amennyiben nem, mi az oka annak, hogy nem akarsz továbbtanulni?
a) Nyelvi gátlások
b) Anyagi gondok
c) Elegendőnek tartom a középiskolai diplomát
d) Munkába szeretnék állni
e) Rossz középiskolai átlagom van
f) Nincs olyan szak, ami érdekelne
18. Szerinted miért választják a lányok nagyobb számban a neveléstudományokat (tanári szakok) mint a műszaki tudományokat?
a) Biológiailag jobbak a tanárnők
b) „Női hivatás"
c) gyerekvállalás, család
d) Egyéb:
19. Miért nem iratkoznak a lányok a műszaki tudományokra?
a) „fiús szakok"
b) nem érdekli őket
c) társadalmi elvárások
d) otthoni nevelés
20. Mit gondolsz, mi lenne pozitívuma annak, ha több lenne a nő a műszaki tudományok terén?
a) Más kutatási módszerek kifejlesztése
b) Nagyobb esély a munkaerőpiacon
c) Nem lenne pozitívuma
d) Egyéb:

## Köszönöm a segítséged!

## Questionnaire for the Romanian students

## Upitnik

Ovo je anonimni upitnik koji služi za izradu doktorske disertacije, pa Te molim da iskreno odgovoriš na postavljena pitanja.
Kod datih odgovora zaokruži, na linije upiši odogovor, a u odgovarajuće polje upši X!

## 21. Lični podaci:

$\begin{array}{lll}\text { Pol: a) Muški } & \text { b) Ženski }\end{array}$
Godina i mesto rođenja: $\qquad$

## 22. Koju školu pohađaš i koji smer?

Naziv škole i mesto: $\qquad$
a) trogodišnja stručna škola b) četvorogodišnja stručna škola c)gimnazija

Smer: $\qquad$

## 23. Razred?

a) 4 .
b) 3 .

## 24. Maternji jezik?

a) Rumunski
b) Srpski
c) Oba $\qquad$ d) Drugo: $\qquad$
25. Maternji jezik majke:
a) Rumunski
b) Srpski
c) Oba $\qquad$ d) Drugo: $\qquad$
26. Maternji jezik oca:
a) Rumunski
b) Srpski
c) Oba $\qquad$ d)Drugo: $\qquad$
27. Koji je najviši stepen školske spreme tvojih roditelja ili staratelja? U odgovarajuće polje stavi X !

|  | Majka | Otac |
| :--- | :---: | :---: |
| Završena osnovna škola | $\square$ | $\square$ |
| Trogodišnja stručna škola | $\square$ | $\square$ |


| Četvorogodišnja stručna škola | $\square$ | $\square$ |
| :--- | :---: | :---: |
| Gimnazija | $\square$ | $\square$ |
| Viša škola | $\square$ | $\square$ |
| Fakultet | $\square$ | $\square$ |
| Više od fakultetetske diplome | $\square$ | $\square$ |

28. Koliko često koristiš srpski jezik u komunikaciji?
a) Ređe od jednom
b) Jednom nedeljno
c) Više
puta nedeljno nedeljno
d) Jednom na dan
e) Više puta na dan
29. Na kojem nivou poznaješ sledeće jezike? U svakoj koloni na odgovarajuće polje stavi X!

|  | Rumunski | Srpski |
| :--- | :---: | :---: |
| Nikako | $\square$ | $\square$ |
| Ne govorim, samo razumem | $\square$ | $\square$ |
| Jedva par reči | $\square$ | $\square$ |
| Ne baš dobro | $\square$ | $\square$ |
| Dobro | $\square$ | $\square$ |
| Jako dobro | $\square$ | $\square$ |
| Kao maternji | $\square$ | $\square$ |

## 30. Sa kojom kulturom se positovećuješ?

a) Rumunskom
b) Srpskom
c) Sa obe
d) Nekom trećom
31. Nakon završetka srednje škole da li si razmišljao/la da nastaviš školovanje?
a) Da
b) Ne
c) Možda
32. Gde bi želeo/la da nasatviš školovanje (ukoliko ne želiš nastavi kod pitanja br. 15)?
e) U Srbiji
f) U Rumuniji
g) I u Rumuniji i u Srbiji ću da pokušam da položim prijemni ispit, ako mi uspe u Rumuniji, tamo ću da nastavim školovanje.
h) Još ne znam

## 33. Zašto si izabrao/la da nastaviš školovanje u Srbiji? Moguće je zaokružiti više odgovora!

h) Nemamo dovoljno novca, da nastavim u inostranstvu
i) Sa domaćom diplomom ću lakše doći do uspeha
j) Porodične veze
k) Krug prijatelje
l) Samo ondah ću da ostanem kod kuće, ako mi ne uspe prijemni u inostranstvu
m) Visoko školstvu kod kuće mi pruža visok nivo znanja
n) Nešto drugo: $\qquad$
14. Zašto se odlučuješ da nasataviš školovanje u Rumuniji?
f) Nedovoljno znanje srpskog jezika
g) Mislim da je bolja diploma EU
h) U Rumuniji želim da radim
i) Kod kuće nema smera na kojim želim da se upišem
j) Drugo: $\qquad$ -

## 15. Na koju visoku školu ili fakultet želiš da se upišeš? (Zaokruži)

Visoka škola

1. Državna
2. Privatna
Fakultet
3. Državni
4. Privatni

Još nisam odlučio/la

## 16. U koju visokoškolsku ustanovu ćes se upistai i na koji smer?

## Ukoliko ne želiš da nastaviš školovanje šta je razlog tome?

g) Jezičke barijere
h) Finansijski problemi (nedostatak novca)
i) Dovoljna mi je srednjoškolska diploma
j) Želim da se zaposlim
k) Nemam dobar prosek u srednjoj školi

1) Ne postoji smer, koji bi me interesovao
17. Zašto se opredeljuju devojke više za pedagoške nauke (nastavničke smerove) nego za tehničke nauke?
e) Biološki su bolje nastavnice
f) ,„̌̌ensko zanimanje"
g) Vaspitanje dece, porodica
h) Drugo (navedi šta):
18. Zašto se ne upisiju devojke na tehničke nauke?
a) „muški smerovi"
b) ne interesuje ih
c) očekivanja društva
d) kućno vaspitanje
19. Šta misliš šta bi bila pozitivna strana, kada bi bilo više žena u tehničkim naukama?
e) Druga vrsta istraživačkih metoda
f) Veća šansa na tržǐštu rada
g) Ne bi bilo pozitivne strane
h) Drugo $\qquad$

## Hvala na saradnji!

## Questionnaire for the Slovakian students

## Upitnik

Ovo je anonimni upitnik koji služi za izradu doktorske disertacije, pa Te molim da iskreno odgovoriš na postavljena pitanja.

Kod datih odgovora zaokruži, na linije upiši odogovor, a u odgovarajuće polje upši X !

## 34. Lični podaci:

$\begin{array}{ll}\text { Pol: a) Muški } & \text { b) Ženski }\end{array}$
Godina i mesto rođenja: $\qquad$

## 35. Koju školu pohađaš i koji smer?

Naziv škole i mesto: $\qquad$
a) trogodišnja stručna škola b) četvorogodišnja stručna škola c)gimnazija

Smer: $\qquad$

## 36. Razred?

a) 4 .
b) 3 .

## 37. Maternji jezik?

a) Slovački
b) Srpski
c) Oba $\qquad$ d) Drugo: $\qquad$
38. Maternji jezik majke:
a) Slovački
b) Srpski
c) Oba $\qquad$ d) Drugo: $\qquad$

## 39. Maternji jezik oca:

a) Slovački
b) Srpski
c) Oba $\qquad$ d) Drugo: $\qquad$
40. Koji je najviši stepen školske spreme tvojih roditelja ili staratelja?

|  |  |  |
| :--- | :---: | :---: |
| Završena osnovna škola | $\square$ | $\square$ |
| Trogodišnja stručna škola | $\square$ | $\square$ |
| Četvorogodišnja stručna škola | $\square$ | $\square$ |
| Gimnazija | $\square$ | $\square$ |
| Viša škola | $\square$ | $\square$ |
| Fakultet | $\square$ | $\square$ |
| Više od fakultetetske diplome | $\square$ | $\square$ |

## 41. Koliko često koristiš srpski jezik u komunikaciji?

a) Ređe od jednom
b) Jednom nedeljno nedeljno
c) Više
puta nedeljno
d) Jednom na dan
e) Više puta na dan

## 42. Na kojem nivou poznaješ sledeće jezike?

|  | Slovački | Srpski |
| :--- | :---: | :---: |
| Nikako | $\square$ | $\square$ |
| Ne govorim, samo razumem | $\square$ | $\square$ |
| Jedva par reči | $\square$ | $\square$ |
| Ne baš dobro | $\square$ | $\square$ |
| Dobro | $\square$ | $\square$ |
| Jako dobro | $\square$ | $\square$ |
| Kao maternji | $\square$ | $\square$ |

## 43. Sa kojom kulturom se positovećuješ?

a) Slovačkom
b) Srpskom
c) Sa obe
d) Nekom trećom
44. Nakon završetka srednje škole da li si razmišljao/la da nastaviš školovanje?
a) Da
b) Ne
c) Možda
45. Gde bi želeo/la da nasatviš školovanje (ukoliko ne želiš nastavi kod pitanja br. 17)? i) U Srbiji
j) U Slovačkoj
k) I u Slovačkoj i u Srbiji ću da pokušam da položim prijemni ispit, ako mi uspe u Slovačkoj, tamo ću da nastavim školovanje.

1) Još ne znam

## 46. Zašto si izabrao/la da nastaviš školovanje u Srbiji? Moguće je zaokružiti više

 odgovora!o) Nemamo dovoljno novca, da nastavim u inostranstvu
p) Sa domaćom diplomom ću lakše doći do uspeha
q) Porodične veze
r) Krug prijatelja
s) Samo onda ću da ostanem kod kuće, ako mi ne uspe prijemni u inostranstvu
t) Visoko školstvo u Srbiji mi pruža visok nivo znanja
u) Nešto drugo: $\qquad$
47. Zašto se odlučuješ da nasataviš školovanje u Slovačkoj?
k) Nedovoljno znanje srpskog jezika
l) Mislim da je bolja diploma EU
m)U Slovačkoj želim da radim
n) Kod kuće nema smera na kojim želim da se upišem
o) Drugo: $\qquad$ -
48. Na koju visoku školu ili fakultet želiš da se upišeš? (Zaokruži)
Visoka škola

1. Državna
2. Privatna
Fakultet
3. Državni
4. Privatni

Još nisam odlučio/la
49. U koju visokoškolsku ustanovu ćes se upistai i na koji smer?

## 50. Ukoliko ne želiš da nastaviš školovanje šta je razlog tome?

m) Jezičke barijere
n) Finansijski problemi (nedostatak novca)
o) Dovoljna mi je srednjoškolska diploma
p) Želim da se zaposlim
q) Nemam dobar prosek u srednjoj školi
r) Ne postoji smer, koji bi me interesovao
51. Zašto se opredeljuju devojke više za pedagoške nauke (nastavničke smerove) nego za tehničke nauke?
i) Biološki su bolje nastavnice
j) „žensko zanimanje"
k) Vaspitanje dece, porodica

1) Drugo (navedi šta): $\qquad$
52. Zašto se ne upisiju devojke na tehničke nauke?
a) „muški smerovi"
b) ne interesuje ih
c) očekivanja društva
d) kućno vaspitanje
53. Šta misliš šta bi bila pozitivna strana, kada bi bilo više žena u tehničkim naukama?
i) Druga vrsta istraživačkih metoda
j) Veća šansa na tržǐštu rada
k) Ne bi bilo pozitivne strane
1) Drugo

## Hvala na saradnji!

### 16.3 APPENDIX 3 - INTERVIEW GRID BUILT AND USED FOR THE STUDENTS AND

 PROFESSORS
## Questionnaire in Hungarian

## Kérdőív:

1. Kérlek mondd el a rövid életrajzod: hol születtél, mikor, szüleid foglalkozása, hol élsz most, hova és milyen nyelven jártál középiskolába, voltak-e nemzetiségen alapuló konfliktusok a gyerekkorodban és az iskoláztatásod alatt, egy konkrétat mesélj el, hogyan döntöttél az xy egyetem mellett?
2. Milyen nehézségekkel kellett szembesülnöd az egyetemi éveid alatt? mesélj egy történetet, mikor úgy érezted, hogy azért kerülsz rosszabb helyzetbe mert magyar vagy? Kik voltak a szereplők? mi lett a történet vége? Milyen mértékben hatott ki rád az a tényező, hogy magyarul jártál iskolába?
3. Volt-e olyan tanárod aki nagy hatással volt rád? Valaki akire számíthattál az iskoláztatásod alatt? Miben segített?
4. Gondolkodtál-e azon, hogy Magyarországon íratkozzál egyetemre? Vagy, hogy Magyarországon képezd magad tovább? Mi határozza meg a döntésedet?
5. Hányan íratkoztak elsỏ évre az egyetemi szakodra és milyen volt a nemi összetétel? Beszéltetek erről a diáktársaiddal? Lányokkal? Fiúkkal?
6. Hány magyar nemzetiségű egytemista íratkozott a szakodra és abból hány nő?
7. Volt-e lehetőséged magyarul felvételezni az egyetemre? Van-e lehetőséged magyarul hallgatni egyes tantárgyakat?/Tartasz-e magyarul órákat az egyetemistáknak? Milyen nyelven olvasol szakirodalmat?
8. Hogyan fogod összeilleszteni a karriert és a családot?/ Hogyan tudod összeilletszteni a a karriert és a családot? Van állandó partnered? Milyen nemzetiségű? Hogyan tervezitek a közös életet?
9. Szeretnél-e betölteni magasabb posztokat az egyetemi hierarchiában? Milyet? Miért? Mi lenne a programod?
10. Mit gondolsz arról, hogy egy magyar nemzetiségủ nő milyen nehézségeket kell, hogy leküzdjen annak érdekében, hogy magas posztot töltsön be az egyetemen? Honnan gondolod ezt?
11. Mi motivál arra, hogy kiépítsd az egyetemi karriert? Miért döntöttél az egyetemi karrier mellett?
12. Mely nehézségekkel kell megküzdeni annak érdekében, hogy kiépítsd az akadémiai karriert? Mondj egy konkrét példát, amit már megtapasztaltál? Hogyan próbálsz ezzek szembeszállni?
13. A szerbia magyar szervezetektől kapsz valami segitséget? A magyarországiaktól?
14. Mit gondolsz hogyan lehetne a felkelteni a nők érdeklődését a Science, Technology, Engineering and Mathematics (STEM) iránt? Van-e valami javalsatod? Mi lenne a pozitívuma annak ha több nő lenne a STEM-ben?
15. Mit gondolsz egy magyar tannyelvű Szabadkai Egyetem könnyített volna-e a tanulmányaidban? Ha lett volna lehetőséged választani a Szabadkai Egyetem és az Újvidéki Egyetem között, melyiket választottad volna?

## Interview grid in Serbian

Upitnik:

1. Molim te ispričaj mi tvoju kratku biografiju: gde si rođena, kada, šta su tvoji roditelji po zanimanju, gde živiš sada, gde si išla u osnovu i srednju školu, da li si imala neki kontakt u detinjstvu sa pripadnicima mađarske nacionalne zajednice, kako si se opredelila za FTN?
2. Da li si možda bila svedokinja nekog konflikta koji ja nastao zbog različitosti po nacionalnosti? Ko su bili učesnici?
3. Da li si imala nekih poteškoća na fakultetu? Da li si osećala da si možda u podređenom položaju zato što si žena?
4. Da li si imala nastavnicu/ka, profesorku/ra koji su na neki način uticali na tvoje odluke u životu? Koji su ti bili primer?
5. Da li si razmišljala da posle osnovnih studija nastaviš svoje školovanje u inostranstvu? Ili posle srednje škole?
6. Koliko vas se upisalo na prvu godinu studija i koja je bila rodna struktura? Broj studentkinja - studenata?
7. Da li je bio među tvojim kolegama-koleginicama pripadnika mađarske nacionalne zajednice? Koliko studentkinja - koliko studenata?
8. Da li si primetila da su oni možda imali neke poteškoće za vreme studiranja, zbog nedovoljnog znanja srpskog jezika?
9. Kako ćeš da uskladiš karijeru i porodicu? Da li si udata ili imaš stalnog partnera? Da li ti je bitno koje je nacionalnosti? Kako planirate vaš zajednički život?
10. Da li želiš da postigneš visoke pozicije u hijerarhiji Univerziteta? Šta su za tebe pozicije moći na fakultetu i univerzitetu? Šta bi bio tvoj program?
11. Šta misliš da li žena iz mađarske nacionalne zajednice može nesmetano da napreduje $u$ karijeri na fakultetu? Odnosno sa kojim poteškoćama treba da se izbori kako bi mogla da bude u vrhu?
12. Koja je tvoja motivacija da izgradiš karijeru na fakultetu? Kako si se opredelila za karijeru na fakultetu? Da li postoje neke poteškoće?
13. Da li si dobijala stipendije za vreme studiranja ili neke nagrade?
14. Šta misliš kako bi mogla da se poveća prisutnost žena na STEM-u? Kako da se kanališu prema STEM-u?
15. Da li misliš da bio Fakultet u Subotici koji bi imao nastavu na mađarskom pomogao pripadnicima mađarske nacionalne zajednice ili bi samo još više otežao njihovu integraciju u društvu?

### 16.4 Appendix 4 - The high schools where ethnic minority students CAN STUDY IN THEIR MOTHER TONGUE

Table 1 The high schools where ethnic minority students have the possibility to study in their mother tongue

| Hungarian |  |
| :---: | :---: |
| Tehnička Škola Ada | Technical School Ada |
| Poljoprivredno-tehnički srednjoškolski centar | Agricultural - technical high school center <br> „Besedeš Jožef" Kanjiža |
| „Besedeš Jožef" Kanjiža |  |


| Kostolanji" Subotica | Kostolanji" Subotica |
| :---: | :---: |
| Ekonomska srednja škola „Bosa Milićević Subotica | Economics high school „Bosa Milićević Subotica |
| Srednja medicinska škola Subotica | Medical high school Subotica |
| Hemijsko - tehnološka škola Subotica | Chemical - technological school Subotica |
| Tehnička škola „Ivan Sarić" Subotica | Technical School „Ivan Sarić" Subotica |
| Muzička škola Subotica | Music school Subotica |
| Gimnazija „Veljko Petrović" Sombor | Gymansium „Veljko Petrović" Sombor |
| Srednja medicinska škola „Dr Ružica Rip" | Medical high school „Dr Ružica Rip" Sombor |
| Gimnazija Bečej | Gymansium Bečej |
| Ekomomsko - trgovinska škola Bečej | Economics - trade school Bečej |
| Tehnička škola Bečej | Technical school Bečej |
| Gimnazija „Svetozar Markovič" Novi Sad | Gymnasium „Svetozar Marković" Novi Sad |
| Elektrotehnička škola „Mihajlo Pupin" Novi Sad | Electrotechnical school „Mihajlo Pupin Novi Sad |
| Medicinska škola „7. April" Novi Sad | Medical school „7. April" Novi Sad |
| Poljoprivredna škola sa domom učenika Futog | Agricultural school with a dorm - Futog |
| Škola za dizajn „Bodan Šuput" Novi Sad | School for design „Bogdan Šuput" Novi Sad |
| Srednja škola „Lukijan Mušicki"Temerin | High school „Lukijan Mušicki" Temerin |
| Slovak |  |
| Gimnazija „Mihajlo Pupin" Kovačica | Gymnasium „Mihajlo Pupin" Kovačica |
| Gimnazija „Jan Kolar" sa domom učenika Bački Petrovac | Gymansium „Jan Kolar" with a dorm Bački Petrovac |
| Romanian |  |
| Ekonomska - trgovinska škola „Dositej | Economics - trade school „Dositej Obradović" |


| Obradović" Alibunar | Alibunar |
| :---: | :---: |
| Gimnazija „Vojislav Petrov Braca" Vršac | Gymnasium „Vojislav Petrov Braca" Vršac |

### 16.5 APPENDIX 5 - SECONDARY DATA ANALYSIS (TABLES)

Table 11 The number of Hungarian students and their gender structure at the faculties of the University of Novi Sad, from the 2009/2010 to 2012/2013 academic year

| Academic year/description | 2009/10. | 2010/11. | 2011/12. | 2012/13. |
| :---: | :---: | :---: | :---: | :---: |
| Faculty of Agriculture - total | 145 | 136 | 140 | 160 |
| -number of female students | 66 | 62 | 67 | 78 |
| $\%$ of female students in the total number | 45,52 | 45,59 | 47,86 | 48,75 |
| Faculty of Philosophy - total | 273 | 236 | 242 | 299 |
| -number of female students | 201 | 180 | 185 | 207 |
| $\%$ of female students in the total number | 72,30 | 76,27 | 76,45 | 69,23 |
| Faculty of technology - total | 42 | 44 | 39 | 47 |
| -number of female students | 28 | 30 | 28 | 30 |
| $\%$ of female students in the total number | 66,67 | 68,18 | 71,79 | 63,83 |
| Faculty of Law - total | 131 | 162 | 149 | 110 |
| -number of female students | 75 | 101 | 93 | 68 |
| $\%$ of female students in the total number | 57,25 | 62,34 | 62,42 | 61,82 |
| Medical Faculty - total | 203 | 201 | 197 | 182 |
| - number of female students | 145 | 141 | 147 | 136 |
| $\%$ of female students in the total number | 71,43 | 70,15 | 74,62 | 74,73 |
| Faculty of Technical Sciences total | 424 | 412 | 463 | 547 |
| -number of female students | 152 | 184 | 205 | 218 |
| $\%$ of female students in the total number | 35,85 | 44,66 | 44,28 | 39,85 |
| Faculty of Economics-total | 489 | 481 | 402 | 329 |
| -number of female students | 317 | 262 | 228 | 224 |
| $\%$ of female students in the total number | 64,83 | 54,47 | 56,71 | 68,08 |
| Faculty of Natural Sciences and Mathematics - total | 416 | 497 | 447 | 459 |
| -number of female students | 294 | 336 | 289 | 223 |
| $\%$ of female students in the total number | 70,67 | 67,60 | 64,65 | 48,58 |
| Academy of Arts - total | 90 | 77 | 79 | 67 |
| -number of female students in the total number | 54 | 51 | 43 | 37 |
| $\%$ of female students in the total number | 60,0 | 66,23 | 54,43 | 55,22 |
| Faculty of Civil Engineering - total | 151 | 148 | 133 | 137 |
| -number of female students in the total number | 59 | 53 | 44 | 45 |


| \% of female students in the total number | 39,07 | 35,81 | 33,08 | 32,85 |
| :---: | :---: | :---: | :---: | :---: |
| Faculty of Technical Sciences "Mihajlo Pupin" in Zrenjanin total | 115 | 118 | 102 | 130 |
| -number of female students in the total number | 43 | 60 | 48 | 61 |
| \% female students in the total number | 37,39 | 50,85 | 47,05 | 46,92 |
| Faculty of Sport and Physical Education - total | 60 | 80 | 71 | 59 |
| -number of female students in the total number | 15 | 22 | 16 | 12 |
| \% female students in the total number | 25,0 | 27,50 | 22,53 | 20,33 |
| Faculty of Education in Sombor total | 34 | 36 | 16 | 36 |
| -number of female students in the total number | 28 | 29 | 13 | 29 |
| \% female students in the total number | 82,35 | 80,55 | 81,25 | 80,56 |
| Teachers' training faculty in Hungarian language in Subotica total | 252 | 248 | 241 | 248 |
| -number of female students in the total number | 224 | 210 | 189 | 213 |
| \% female students in the total number | 88,89 | 84,68 | 78,42 | 85,89 |
| University - total | 2.825 | 2.876 | 2.721 | 2.810 |
| - number of female students in the total number | 1.701 | 1.721 | 1.595 | 1.581 |
| $\%$ female students in the total | 60,21 | 59,84 | 58,62 | 56,26 |

Source: The University of Novi Sad and the author's calculations

Table 12 The number of Romanian students and their gender structure at the faculties of the University of Novi Sad, from the 2009/2010 to 2012/2013 academic year

| Academic year/description | $\mathbf{2 0 0 9 / 1 0 .}$ | $\mathbf{2 0 1 0} / \mathbf{1 1 .}$ | $\mathbf{2 0 1 1 / 1 2 .}$ | $\mathbf{2 0 1 2 / 1 3 .}$ |
| :--- | :---: | :---: | :---: | :---: |
| Faculty of Agriculture - total | 6 | 7 | 7 | 9 |
| -number of female students | 3 | 3 | 3 | 4 |
| $\%$ of female students in the total <br> number | 50,00 | 42,85 | 42,85 | 44,44 |
| Faculty of Philosophy - total | 26 | 21 | 22 | 13 |
| -number of female students | 18 | 16 | 17 | 9 |
| $\%$ of female students in the total <br> number | 69,23 | 76,19 | 77,28 | 69,23 |
| Faculty of technology - total | 4 | 3 | 5 | 5 |
| -number of female students | 3 | 2 | 3 | 3 |


| \% of female students in the total number | 75,00 | 66,67 | 60,00 | 60,00 |
| :---: | :---: | :---: | :---: | :---: |
| Faculty of Law - total | 16 | 17 | 13 | 14 |
| -number of female students | 10 | 10 | 8 | 9 |
| $\%$ of female students in the total number | 62,50 | 58,82 | 61,54 | 64,28 |
| Medical Faculty - total | 8 | 6 | 6 | 8 |
| - number of female students | 5 | 4 | 4 | 5 |
| $\%$ of female students in the total number | 62,5 | 66,67 | 66,67 | 62,50 |
| Faculty of Technical Sciences - total | 4 | 4 | 5 | 4 |
| -number of female students | 1 | 1 | 2 | 1 |
| $\%$ of female students in the total number | 25,00 | 25,00 | 40,00 | 25,00 |
| Faculty of Economics-total | 11 | 8 | 9 | 7 |
| -number of female students | 6 | 5 | 5 | 4 |
| $\%$ of female students in the total number | 54,54 | 65,50 | 55,55 | 57,14 |
| Faculty of Natural Sciences and Mathematics - total | 18 | 28 | 15 | 23 |
| -number of female students | 13 | 20 | 10 | 16 |
| $\%$ of female students in the total number | 72,22 | 71,42 | 66,67 | 69,56 |
| Academy of Arts - total | 5 | 6 | 3 | 3 |
| -number of female students in the total number | 3 | 4 | 2 | 2 |
| \% of female students in the total number | 60,0 | 66,67 | 66,67 | 66,67 |
| Faculty of Civil Engineering - total | 1 | 1 | 0 | 0 |
| -number of female students in the total number | 0 | 0 | 0 | 0 |
| \% of female students in the total number | 0 | 0 | 0 | 0 |
| Faculty of Technical Sciences "Mihajlo Pupin" in Zrenjanin - total | 14 | 25 | 23 | 17 |
| -number of female students in the total number | 5 | 10 | 9 | 6 |
| \% female students in the total number | 35,71 | 40,00 | 39,13 | 35,29 |
| Faculty of Sport and Physical Education - total | 1 | 0 | 0 | 1 |
| -number of female students in the total number | 0 | 0 | 0 | 0 |
| \% female students in the total number | 0 | 0 | 0 | 0 |
| Faculty of Education in Sombor total | 0 | 0 | 0 | 1 |
| -number of female students in the total number | 0 | 0 | 0 | 1 |
| \% female students in the total number | 0 | 0 | 0 | 100,00 |
| Teachers' training faculty in | 0 | 0 | 0 | 0 |


| Hungarian language in Subotica <br> total |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| -number of female students in the <br> total number | 0 | 0 | 0 | 0 |
| \% female students in the total number | 0 | 0 | 0 | 0 |
| University - total | 114 | 126 | 108 | 105 |
| - number of female students in the <br> total number | 67 | 75 | 63 | 60 |
| \% female students in the total number | 58,77 | 59,52 | 58,33 | 57,14 |

Source: The University of Novi Sad and the author's calculations

Table 13 The number of Slovak students and their gender structure at the faculties of the University of Novi Sad, from the 2009/2010 to 2012/2013 academic year

| Academic year/description | 2009/10. | 2010/11. | 2011/12. | 2012/13. |
| :---: | :---: | :---: | :---: | :---: |
| Faculty of Agriculture - total | 63 | 59 | 57 | 51 |
| -number of female students | 31 | 28 | 28 | 25 |
| $\%$ of female students in the total number | 49,21 | 47,46 | 49,12 | 49,02 |
| Faculty of Philosophy - total | 43 | 39 | 39 | 36 |
| -number of female students | 31 | 29 | 30 | 28 |
| $\%$ of female students in the total number | 72,09 | 74,26 | 76,92 | 77,78 |
| Faculty of technology - total | 19 | 20 | 14 | 22 |
| -number of female students | 13 | 13 | 9 | 15 |
| $\%$ of female students in the total number | 68,42 | 65,00 | 64,28 | 68,18 |
| Faculty of Law - total | 24 | 33 | 42 | 38 |
| -number of female students | 14 | 19 | 27 | 24 |
| \% of female students in the total number | 58,33 | 57,57 | 64,28 | 63,16 |
| Medical Faculty - total | 46 | 45 | 38 | 39 |
| - number of female students | 33 | 34 | 29 | 29 |
| $\%$ of female students in the total number | 71,74 | 75,55 | 76,31 | 74,36 |
| Faculty of Technical Sciences - total | 170 | 118 | 86 | 226 |
| -number of female students | 65 | 42 | 35 | 94 |
| $\%$ of female students in the total number | 38,23 | 35,59 | 40,70 | 41,59 |
| Faculty of Economics-total | 37 | 36 | 39 | 33 |
| -number of female students | 24 | 21 | 22 | 22 |
| $\%$ of female students in the total number | 64,86 | 58,33 | 56,41 | 66,67 |
| Faculty of Natural Sciences and Mathematics - total | 93 | 82 | 94 | 94 |
| -number of female students | 64 | 58 | 57 | 61 |
| $\%$ of female students in the total number | 68,81 | 70,73 | 60,64 | 64,89 |
| Academy of Arts - total | 12 | 11 | 10 | 9 |


| -number of female students in the total number | 7 | 6 | 6 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| $\%$ of female students in the total number | 58,33 | 54,54 | 60,00 | 55,55 |
| Faculty of Civil Engineering - total | 3 | 0 | 1 | 1 |
| -number of female students in the total number | 1 | 0 | 0 | 0 |
| $\%$ of female students in the total number | 33,33 | 0 | 0 | 0 |
| Faculty of Technical Sciences "Mihajlo Pupin" in Zrenjanin - total | 9 | 10 | 11 | 9 |
| -number of female students in the total number | 4 | 4 | 5 | 4 |
| \% female students in the total number | 44,44 | 40,00 | 36,36 | 44,44 |
| Faculty of Sport and Physical Education - total | 18 | 19 | 25 | 13 |
| -number of female students in the total number | 4 | 5 | 7 | 4 |
| \% female students in the total number | 22,22 | 26,31 | 28,00 | 30,77 |
| Faculty of Education in Sombor total | 30 | 26 | 24 | 25 |
| -number of female students in the total number | 26 | 21 | 20 | 21 |
| \% female students in the total number | 86,67 | 80,77 | 83,33 | 84,00 |
| Teachers' training faculty in Hungarian language in Subotica total | 0 | 0 | 0 | 0 |
| -number of female students in the total number | 0 | 0 | 0 | 0 |
| \% female students in the total number | 0 | 0 | 0 | 0 |
| University - total | 567 | 498 | 480 | 596 |
| - number of female students in the total number | 317 | 280 | 275 | 332 |
| \% female students in the total number | 55,91 | 56,22 | 57,29 | 55,70 |

Source: The University of Novi Sad and the author's calculations

Table 14 The comparative overview of the percentage share of female students in the total number of Serbian, Hungarian, Slovak and Romanian nationality at the University of Novi Sad, from 2009/2010 to 2012/2013 academic year

| Number | Academic <br> year/description | $\mathbf{2 0 0 9 / 1 0 .}$ | $\mathbf{2 0 1 0 / 1 1 .}$ | $\mathbf{2 0 1 1 / 1 2 .}$ | 2012/13. |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 1. | Number of Serbian students <br> at the UNS | 37.767 | 38.834 | 38.131 | 37.268 |
| 2. | Number of females | 21.402 | 22.571 | 21.171 | 20.653 |
| 3. | Level index $(2009 / 10=100)$ | 100,0 | 105,46 | 98,91 | 96,50 |
| 4. | \% of female students in the <br> total number of Serbian <br> students | 56,67 | 58,12 | 55,52 | 55,42 |


| 5. | Number of Hungarian <br> students at the UNS | 2.825 | 2.87 | 2.721 | 2.810 |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 6. | Number of females | 1.701 | 1.721 | 1.595 | 1.581 |
| 7. | Level index $(2009 / 10=100)$ | 100,0 | 101,18 | 93,77 | 92,94 |
| 8. | \% of female students in the <br> total number of Hungarian <br> students | 60,21 | 59,84 | 58,62 | 56,26 |
| 9. | Number of Slovak students <br> at UNS | 567 | 498 | 480 | 596 |
| 10. | Number of females | 317 | 280 | 275 | 332 |
| 11. | Level index (2009/10=100) | 100 | 88,33 | 86,75 | 104,73 |
| 12. | \% of female students in the <br> total number of Slovak <br> students | 55,91 | 56,22 | 57,29 | 55,70 |
| 13. | Number of Romanian <br> students at UNS | 114 | 126 | 108 | 105 |
| 14. | Number of females | 67 | 75 | 63 | 60 |
| 15. | Level index $(2009 / 10=100)$ | 100 | 111,94 | 94,03 | 89,55 |
| 16. | \% of female students in the <br> total number of Romanian <br> students | 58,77 | 59,52 | 58,33 | 57,14 |

Source: The University of Novi Sad and the author's calculations

### 16.6 APPENDIX 6 - Respondents' CITATIONS IN SOURCE LANGUAGES

This appendix contains respondents' citations in source languages, that are found in the Findings section.

## 9. FINDINGS

### 9.1. LANGUAGE AS A PERFORMATIVE METAPHOR FOR (IN)EQUALITY

### 9.1.2. Qualitative data on language

### 9.1.2.1. Hungarian female professors

Ott elég "nehéz" volt a kezdet, ugye, tíz évig tiszta magyar környezetben, magyar nyelven jártam iskolába, úgyhogy ismeretlen volt számomra a táblán fölolvasni, olyat, például, hogy három plusz kettő, négy minusz három szerbül (HFP6).

Szerbül, igen. Ez volt előnye a magyar nyelvnek, hogy nagyon aktuális kisérleteket végezhettem Magyarországon, meg tudtam velük beszélni a problémát, mert ez a téma még mindig nagyon aktuális, valójában nagyon jól lehet publikálni munkát, nekem elég sok publikációm megjelent külföldön, ezekben az impakt faktoros szaklapokban (HFP8).

### 9.1.2.2. Hungarian female students

A vizsgán folyamatosan úgy érzem, hogy hátrányom van (a nyelv miatt)... (Negativ megkülönböztetés) soha nem nyilvánult meg, a tanárok nem adtak ilyen utalásokat. Mindenki segítökész volt. Soha nem csúfoltak, nem néztek ki azért, mert hibásan beszélek, meg ilyesmi. De egyszerüen zavarban érzem magam, és csak félve merek megszólalni, hogy most jól mondok-e mindent. Meg az a baj, hogy nagyon tömondatokban beszélek, hogy minél helyesebb legyek... Felelésnél azért elég sokat kell filozofálni, és nem megy az, hogy egy mondatot öt formában elmondjak, így-úgy, amúgy, átforgatva (HFS7).

Nem szeretek így odamenni tanárokhoz, mert inkább hallgatok. Kérdéseket se nagyon szeretek föltenni. Ha nem muszáj, nem teszek föl. Például, mikor volt a kollokvium, akkor is az asszisztenst meg kellett kérdezni, hogy a negatív számok is számítanak vagy nem. Mert ha a negativ számok is számitanak, akkor nem jó a példa. Ha igen, akkor háromféleképp kell, ha pozitív mindkettő, az egyik pozitív, másik negativ, és így körbe az egészet, ez úgy túl sok, és akkor meg kellett kérdezni, hogy hogy nézi. És akkor is úgy össze-vissza nyögtem, rossz érzés volt (HFS12).

Igen. Pont németből, azért, mertazegyik, nem is tudom, verset, nemverset, szöveget, az volt a feladat, hogyforditsuk le, hogymegértsük. Ésénleforditottammagyarra,
ésminusztkaptamazért, mertnemszerbrefordítottam le. Pedigaz volt a cél, hogymegértsem. Ahhoz, hogyénmegértsemahhozmagyarrakellhogyleforditsam. Azt, hogyszerbreforditom le, hogy a többiekmegértsék, önekik is ugyanez volt a feladatuk, ők sajátmaguknak kell, hogy leforditsák, hogy megértsék. Így nem értettem, hogy én miért kaptam erre minuszt?(HFS11)

És akkor ö mondta, hogy hát azért második év, illene megtanulni az állam nyelvét. Meg hát olyan is elhangzott, hogy a szüleim, amikor ide jöttek, akkor megtanultak szerbül?... Nem akartam megkérdezni, hogy maga az öslakos? Volt, igaz, ez volt. S utána elmentem konzultációra hozzá, megkérdeztem, hogy mit ajánl, hogyan tanuljam meg a nyelvet? Mondta, hogy olvassak Dosztojevszkijt szerbül. Ez volt a megoldása (HFS7).

### 9.1.2.3. Hungarian male professors and students

Nem volt semmi nyelvi gátlásom. Már az általános iskolában is jobban tudtam a szerbet, mint a szerbek. Sokszor csináltam nekik a házi feladatot, úgyhogy általános iskolás korom óta egy szinten beszéltem (HMP1).

Azt nem tudom, hogy milyen szinten tudtam a nyelvet, de tudtam elbeszélgetni, de a szerb szaknyelvet abszolut nem tudtam, az ismeretlen volt számomra. Beültem az első matek órára és az olyan volt, hogy vau. Szép és jó, de meg kéne érteni. Akkor hát ez másodikban kicsúcsosodott a szerb nyelv nem tudása, összejöttek a tantárgyak, amelyeket nem tettem le mert túl nehéz volt, és megismételtem a második évet. Végülis belejöttem, nem volt szörnyü. Nem is voltam a legszorgalmasabb, azt is el kell ismernem, másik meg a nyelvtudás hiánya, úgy gondolom, hogy nyelvtudás most nem lehet kimondott akadály a tanulmányoknak. Ha valaki be akarja fejezni, az be fogja. (HMS2)

Egyetlen helyzetben éreztem, a mai napig is szoktam emlegetni, egy általam kedvelt választott tantárgyról volt szó, olyan hogy besoroltak és azt választottam, de ettől függetlenül nekem tetszett a tantárgy, parlamentáris jogról volt szó, ami érdekes meg ha az ember követi az eseményeket akkor félig meddig már ismert számára ezek az eljárások. Olyan professzor adta elő aki hát konkrétan ugye a Radikális Pártnak az elnök jelölt volt még annak idején. Attól függetlenül, hogy részben nézeteket váltott, hogy jelenleg a Haladó Párt tagja, de a régi értékeket azt gondolom, hogy még továbbra is hordozza magában és az meg is nyilvánult elég szépen az órán egyes kijelentésekkel, de ennek ellenére én bevállaltam egy órás beszámolót. A vizsgán mind a három kérdésre jól tudtam a választ, ráadásul ott volt a beszámoló, amit természetesen nem vett figyelembe, igy azt hiszem közvetett diszkrimináció alapján hatost kaptam. Szerintem szebb osztályzatot érdemeltem (HMS4).

Biztos vagyok benne, hogy az önbizalomhiány erősebben fellép a nőknél, elöfordul, hogy egy kudarc után esetleg gyorsabban feladják, lelkileg összetörnek. Konkrétan, volt egy kolléganőm első évben, aki szociológiából a kudarc után elsírta magát, végül ki is iratkozott. Tehát az önbizalom mindenképpen. A férfiaknál ritkábban fordul elő (HMS4).

### 9.1.2.4. Slovak and Romanian Female and Male Professors

Ja mislim da je tu jako bitna jezička barijera...kao što se ja jako mučim u predavanjima na srpskom sa mojim studentima koji ne znaju rumunski jer moram da predajem na srpskom. (RFP1)

Mislim da ne, odnosno znam da nisam, jedino što je ponekad akcentovanje problem, koje ostaje kao problem. Čak i sada ponekad pogrešim akcenat naročito kada sam umorna onda počinjem i da mešam dva jezika, po tome znam da mi je već dosta predavanja. (SLFP1).

A inače ja sam imao šefa Mađara. Profesor mi je bio šef. On je bio iz Kanjiže, iz tog dela. To je bilo interesantno sa njima, ja kad sam došao kod njih ja sam samo prezimenu, Jožef Rekecki se prezivao, i po tome sam znao da je Mađar. A onda kako je stario, taj mađarski naglasak je dolazio do izražaja. A to kažu i kod mene isto tako. Izgleda da je to genetski ili biološki. (SLMP1).

Možda nemaju najbolje ocene, mislim da pogotovo tamo onaj pismeni deo gde treba da se pismeno odgovori tu verovatno ne mogu da pariraju studentima iz većinske zajednice, što se tiče onog praktičnog dela, to nikada nije bio problem da će se tu dobiti desetka? Pismeni deo im predstavlja problem, obzirom da profesor ocenjuje se šta ste odgovorili pa ako vi sad omašite ili ne znam mislim neće niko skidati bod zbog padeža ali problem je ako nemate dovoljni fond reči možda ne znate najbolje da se izrazite pa ne znate najbolje to da opišete onda to zna da bude poprilično problematično jer vi ne znate zbog čega se neko nije izrazio. Ne možete ući sad u to eventualno ako dođe na konsultacije pa onda pokuša da objasni uvek postoji i ta mogućnost, sada sve zavisi od profesora postoji opcija da se omogući usmeni pa da se bolje to odradi ali uvek mora da se vodi računa da svi dobiju isti tretman. To je vrlo nezgodno mislim, da je jedno vreme bila neka priča da se obezbedi da se studira na maternjem jeziku? (RMP1)

### 9.1.2.5. Serbian Female and Male Students and Professors

...kao asistentkinja uočavam problem jer neki naši studenti koji su mađarskog porekla ne razumeju i ne govore dovoljno dobro srpski. To nije problem za mene, jer mi uspevamo da nađ̃emo rešenje $i$ da oni na svom maternjem jeziku, što $i$ jeste njihovo pravo, ispunjavaju svoje predispitne obaveze s druge strane to vidim kao problem za njih jer teško mogu da budu ravnopravni sa ostalim kolegama na studijama jer ovi drugi daleko brže i bolje mogu da urade svoje zadatke jer ne
postoji jezička barijera. Mi imamo iskustvo sa studentima koji tek na fakultetu progovaraju srpski zato što im sistem to dozvoljava. Kažem, to je opet njihovo pravo, s druge strane sistem omogućava da oni do tog fakulteta uopšte ne moraju da progovore srpski, što je loše postavljeno. Udžbenici su potpuno neprilagođeni nekome ko uči srpski kao strani jezik i stvara se velika barijera i nedostatak motivacije. Mislim da država sistemski to nije dobro postavila, a opet kažem prednost je kada neko zna više jezika (SFP3).

Mislim da imaju poteškoća. Jedan od mojih saradnika, koji radi samnom, koji je fantastičan naučnik, ali zaista onako jedan od najboljih u mojoj grupi, mogu iz njegovog iskustva da pričam, ali to je i iskustvo koje sam posle čula od mnogih drugih čija deca su išla u osnovnu školu na mađarskom pa i u srednju školu na mađarskom, on stiže na fakultet gde je njemu na mađarskom omogućeno da polaže, ne znam sociologiju, a sve ostalo na srpskom. Mislim da je njima bilo mnogo teže, i sad mislim recimo da sam ja majka iz mađarske nacionalne zajednice, da vaspitavam dete na mađarskom jeziku, ne znam da li bi se odlučila da dete ide u osnovnu i srednju školu na mađarskom, zato što će mu biti teško na fakultetu ...To je moje mišljenje. On (moj saradnik) svojim radom i super rezultatima, (jer samo ćuti i donese fantastične rezultate) on se bori za svoju poziciju, ali mislim da mu je bilo teže. Teško mu je i danas kad treba da spremi prezentaciju i vežbe, ali opet ne znam koliko je to jezik, a koliko je zbog njegove prirode. (SFP2)

Poteškoća imaju u smislu nedovoljnog poznavanja jezika. I mi zaista imamo slučajeve da student dođe do master rada i da se mučimo jer taj master trebamo ozbiljno i temeljno lektorisati. Iz nekih predmeta kad je profesor Genc bio tu, sad je njegova ćerka zaposlena tu, preuzela je njegove predmete koje mogu polagati na mađarskom, ali većinu predmeta polažu na srpskom i u tom slučaju uvek, ne da kažem olakšica, nego nas upozore na to, da će možda biti formulacija, gramatički neispravnih rečenica, ali mi jednostavno zanemarimo taj aspekt i jednostavno gledamo sadržajno i tako ih i ocenjujemo. Jedino tu vidim neku poteškoću u nedovoljno savladanom jeziku. To ostaje i kao neka njihova karakteristika do samog kraja studija. Ja sam nedavno dobila mejl od devojke koja je četvrta godina psihologije a kao da je koristila google translate. Nije to naravno slučaj kod svih dvojezičnih studenata, ali ne zamerljiv procenat njih prilično se muči sa učenjem drugog jezika dok studira (SFP4).

Da, malo ih je, a jako ih volim, baš su slatki, dođu i ne znaju često Srpski. I onda kako uče Srpski, tako im i prosek raste, vredni su. Skoro uvek to je sinonim za jako dobrog studenta. Vrlo su čestiti, vrlo su radni, baš sa velikim elanom rade, imam jako dobra iskustva. Treba im jedno vreme da nauče jezik. Sad je baš položio jedan mladi kolega, dobio je iz mog predmeta 6, ali ja njega prvi put kad sam videla, bilo
je jasno, da ne zna srpski. Kako je naučio srpski, tako je i položio ispit. Malo im fali to znanje jezika. A i puno im pišem preporuke za stipendije. (SFP1).

### 9.2. WOMEN'S LACK OF MOTIVATION FOR REACHING DECISION-MAKING POSITIONS IN ACADEMIA?

### 9.2.1. Qualitative data on decision - making position

### 9.2.1.1. Hungarian Female Professors

Egy intézet igazgatója voltam jónéhány évig, dékánhelyettes is egy mandátum alatt, de nem akartam újra pályázni erre a pozicióra. Volt egy pontos leirás, hogy az adott döntéshozói pozícióra milyen tulajdonsággal rendelkező emberek kellenek. Például egy helyen egy egyeteme végzett magyar nöt kerestek. Én voltam az egyetlen alkalmas jelöl, magyar voltam, férjnél, egy családban éltem, egyetemet végzett és docens is. Kíváncsiak voltak, hogy vajon ki lehet ez, akire az összes felsorolt tulajdonság ráillett. Úgyhogy évek hosszú során különbözö funkciókat töltöttem be, a társadalmi szövetsége is voltam. Azt se tudom, hogy hivják. A képviselöházban is éveket át dolgoztam, továbbá a fó bizottságban, a káder komisszióban - ami még mindig létezik, amint az irányitó bizottság is a Szerb Nemzeti Színházban, amelyik még úgyszintén megvan (HFP1).

Nem vállaltam el semmilyen döntéshozói pozíciót, és a dékáni posztot sem szeretném betölteni, mert a szakmámat még most is nagyon szeretem... Azonkivül nehezemre esik embereket megbántani, és ezek a pozíciók velejárója, hogy az ember ellenőrzése alatt kell tartsa a helyzetet, szóval nem lehet annyira érzékeny, hogy ne merjen rászólni valakire, aki nem végezte jól el a munkáját." (HFP2).

Soha nem kaptam döntéshozói poziciót, nem voltam alkalmas a betöltésére. Az újvidéki pártvezetőség támogatott ugyan, de a fönököm félt, hogy ha kapok egy pozíciót, és akkor gyorsabban elöreléphetek. Azt mondta, hogy sok kötelezettség vár rám, ami a továbbképzéseket illeti, ezért nem láthatom el a döntéshozói pozíciókat. (HFP3).

Nem, nem vonz az ilyesmi. Mindig is az egyetemistákkal való munka érdekelt jobban, szeretek velük dolgozni. Úgy gondolom itt jobban megállom a helyem. Nem vágyódtam soha semmilyen döntéshozói pozícióra. (HFP6).

Nem, túl sok benne a politika, és tudni kell hogyan bánni az emberekkel. Szerintem, a legnagyobb hibám a nagy igazságérzetem: az egyetemistákkal, a fönökömmel, és a munkatársaimmal szemben. Nehezen viselem az igazságtalanságot. Lehet, hogy túl fiatal vagyok, és meglehet, hogy nem tudom ezt felfogni, bár szerintem nem vagyok már annyira fiatal. (HPF11).

### 9.2.1.2. Slovak and Romanian Female Professors

Ja sam sada zamenik šefa, mi smo se ovde dogovorili na odseku da se samo smenjujemo, pa ćemo svi doći na red, nećemo se boriti da budemo šefovi katedre. Ne mislim da stignem do uloge dekana. (RFP1)

### 9.2.1.3. Serbian Female Professors

Da, jesam. Ne bih se preterano gurala. To su takve pozicije da treba biti drugačiji. Ljudi se jako promene. Znate nekog 40 godina i onda postane neko i nešto i onda vidite da ste se prevarili u proceni. Možda bih se i ja promenila. To je stvar čoveka i osećanja lažne veličine, ili prave veličine, svejedno. To me nešto preterano ne privlači. (SFP1).

A isto tako mislim da su žene, sasvim sigurno, nemotivisane da budu na vodećim pozicijama. Evo jednog malog primera: recimo to je nešto što je meni godinama bilo pa simpatično, ne znam, nisam uopšte pridavala tome nikakav značaj, a onda jednog dana sam shvatila da mi je to užasno nesimpatično, kada me starije kolege i kolege koje su na položajima moći, zovu devojčice! „Kako si devojčice, jao slatka si mi danas!" Prvo što pomislite je da je to kompliment, ali to je jako daleko od kompliimenta. To je ageizam i šovinizam i to je sve to. I onda to počne da vam smeta. Znači da će uspešna žena kod nas ili biti: devojčica - još ste vi mladi, ili će biti histerična ženturača, veštica. Znači jedno od ta dva prideva će dobiti od muške zajednice i to će je onda odmah blokirati u daljem napredovanju (SFP2).

Tu aspiraciju zaista nemam. Nemam, ako mislite na to da budem deo dekanatske garniture ili rektorske. Ne. Zato što me te pozicije ne zanimaju kao i poslovi koje te pozicije nameću. Pozicija rekora, dekana, direktora ne zaista ne. Suština mog posla je pre svega rad sa studentima, univerzitetski akcent treba da stavljaju na nastavu, jer mi smo pre svega nastavnici, a onda naučnici, istraživači, to je centralna opcija zanimanja (SFP4).

Ne privlače me upravne funkcije na fakultetu, da budem prodekan za ovo, prodekan za ono ili nešto slično. Ja verovatno nisam osoba koja... kod nas je sve uvek povezano sa politikom, a ja nisam, pa me trenutno valjda zbog toga najviše odbija, budimo realni (SFP5).

### 9.2.1.4. Hungarian, Slovak, Romanian and Serbian Male Professors

Jelenleg docens vagyok. Benne vagyok az egyetemi tanácsban, és még néhány tanácsban, mondhatom középvezetői szerepet töltök be. Pillanatnyilag meg vagyok elégedve, és ami azt illeti, az embernek csak meggyyülhet a baja ha döntéshozó pozícióban van. Így biztonságosabb." (HMP1)

Igen is, meg nem is. A pillanatnyi helyzetben- nem, gondolok itt a politikára, amúgy szakmailag lehet hogy igen. Igy ahogy most müködik ez a társadalom, semmilyen szerepet nem szeretnék." (HMP2).

Trenutno uopšte ne razmišljam o tome, trenutno bih samo da se bavim naukom da se bavim tim istraživanjima i tako tim stvarima koje trenutno i radim a ko zna jednog dana ako bi se umorio onda bi to verovatno bio neki novi korak, nešto novo za probati ali ne tako visoko, ne znam nekako baš zbog toga što znate pozicija recimo šefa katedre ne deluje politički. Biraju vas ljudi sa kojim vi radite i za koje radite i kojima vi nešto možete da doprinesete, nešto da uradite a ono tamo već onako nisam siguran koliko vi možete da budete na nekoj od tih pozicija ako nemate neku političku pozadinu (RMP1).

Nisam planirao visoke pozicije, mada sam o tome i razmišljao. Kao student bio sam zamenik predsednika saveza studenata. Imao sam neki sklon. (SLMP1).

Ne mogu da kažem da bih odbio hijerarhijsku poziciju, ali to nije ono čemu primarno težim. Kada u paralelnom univerzumu posmatram sebe kao nekog ko zaista želi hijerarhijsku poziciju, onda nikada sebe ne vidim na najvišoj, već na nekoj pomoćnoj hijerarhijskoj poziciji, koja naravno nosi sa sobom određenu odgovornost. Možemo to postavili ovako: ne bih nikad voleo da budem na dekanovom mestu, čak i da za obavljanje te dužnosti dobijem neverovatne povlastice. Odgovornost je jednostavno previše velika, i ne ostavlja mesto za izražavanje ličnosti. Međutim, to tako vidim sada... (SMP1).

### 9.3. NATIONAL MINORTY WOMEN'S CAREER IN ACADEMIA?

### 9.3.1. Qualitative data on career in academia

### 9.3.1.1. Hungarian female professors

Az, hogy magyar? Nem tudom, nekem nem voltak ilyen nehézségeim. De biztos vagyok benne, hogy ez helytől is függ, hol él az ember. Mondjuk, Szabadkán azért még mindig megvan a helye a magyarságnak, és mindig megvolt. De biztos, hogy nehézségei vannak. Egyrészt más a látásmódja, lehet, hogy még nyelvi nehézségei is vannak, lehet, hogy kisebbségiként kevésbé fogadják el. Ezt nem tudom, de biztosan jobban meg kell küzdenie, mint annak, aki az államalkotó nemzethez tartozik. Azt hiszem, hogy itt a nöiség is kérdés, bár örömmel látom, hogy női elnökök is vannak, én felnézek rájuk (HFP2).
,,Édesapám, azt mondta, ez pár évvel ezelőtt volt, hogy "te tisztában vagy azzal, hogy te soha nem fogsz az egyetemre bejutni, mint tanár, vagy asszisztens?" Miért? "Hát azért, mert magyar vagy!" Beültette a fejembe, és néha gondolkodok ezen, mivel valójában tényleg nem látom most már, hogy megoldódik-e ez az én helyzetem így magától." (HFP9)
"Nálunk a szakon nem mondhatom, hogy meg lennék különböztetve, de azért ez nem volt mindig így. Ha mindjárt a doktori elején - tehát ha az én generációmat vesszük-
szülésre mentem volna, akkor feltételezem, hogy nem lett volna meghosszabbitva a szerzödésem. Most egy kicsit változott a hozzáállása a fönökünknek. Lehet, hogy azért, mert bebizonyitottuk, hogy nem azok vagyunk, akik csak azt nézik, hogy valahova felvegyék őket. De másik szempontból sokáig ellenezte a nők felvevését. Az utóbbi két évben változott ez meg. Sokáig ketten voltunk csak a kolléganőmmel, de lassan jött a többi lány is" (HFP11).
"Én nem tudom. Azt hiszem, itt kettős a dolog. Kettős csavar van a kérdésben, az egyik az, hogy magyar, a másik az, hogy nő. Azért a nőt elfogadják. Itt a nők háttérbe szorulásához hozzájárulnak a családi elvárások. Egy nő nagyon „kötött", ugye otthon rengeteg minden hárul rá, és sokkal nehezebb neki egy ilyen pozíciót betöltenie, hogy közben otthon is helyt álljon, meg a munkahelyén is, úgyhogy a nők ezért nem is vállalják. Valahogy ez az érzésem (HFP2).
, U'Ugy gondolom, hogy egy magyar nőnek mindig többet kell tudni a többitől. Megmutatni olyan eredményeket és készségeket, ami kevésnek van, hogy megmutassad, hogy jobban tudsz, hogy ök elismerjenek és kövessenek." (HFP8)
„,Szerintem, ha valaki nagyon erős kutató a saját területén, akkor lehet. Igen. Egyre nagyobb hangsúly van azon, hogy valaki tudományos szinten mennyire jó, mennyire elismert, mennyire hires. De persze más is kell hozzá." (HFP13)

### 9.3.1.2. Slovak and Romanian female professors

Ja mislim da je tu jako bitna jezička barijera. Zato što ne može neko ko u porodici samo priča na rumunskom i škole završava samo na rumunskom, a sutra-preksutra će morati da studira ili da radi u nekoj sredini gde su Srbi ili da se koristi samo srpskim jezikom kao što se ja jako mučim u predavanjima na srpskom sa mojim studentima koji ne znaju rumunski jer moram da predajem na srpskom. To je možda bitno, ta jezička barijera. Ali pošto su ljudi dvojezični ovde u Banatu u Vojvodini, mislim da to ne bi trebalo da bude neka barijera da se zaposle gde žele ali to zavisi i od poslodavaca u slucaju da je neka privatna firma, mislim da je to ipak prednost govoriti, misliti i pisati na dva jezika istovremeno (RFP1).

Moguće je, mislim da jeste, na našem fakultetu da, za druge ne znam, jer na našem fakultetu se ipak uče mnogi strani jezici i jezici nacionalnih manjina i to jeste jedna od odlika ovog fakulteta. Nisam primetila neku diskriminaciju po tom pitanju do sada. Mislim da može (SLFP2).

Nisam o tome razmišljala, da li će ikad biti dekan Rumun. Pa može biti, ali ne znam da li ćemo ikad imati podršku drugih ljudi i drugih katedra da budemo dekani (RFP1).

### 9.3.1.3. Serbian female professors

Mislim da nemaju, bar ja nisam primetila u tom kontekstu. Mislim da možda žene kao žene imaju većih poteškoća, pre svega zbog usklađivanja porodice, jer vi morate da se laktate i da se borite i da budete jako puno prisutne, a to znači da će porodica jako puno da trpi. Sad, ko je spreman na takve žrtve. To je možda jedino što predstavlja prepreku više za žene kao žene nego nacionalne manjine (SFP5).

Pa ne znam, kod nas na FTN-u, barem u našem okruženju mislim da nije, mislim da nema tako velikih podela na nacionalnoj osnovi. Konkretno nemamo ni jednu devojku koja je Mađarica ali imamo na primer kolegu Mađara nekoliko i nemaju nekih problema barem ja ne vidim da na toj osnovi da uopšte bilo ko razmišlja o tome. Imamo i kolege Bosance, pa mislim niko ne razmišlja o tome (SFP6).

Mislim da to ne igra toliko ulogu, ne znam, nisam imala priliku da se sretnem sa takvim primerom, ali mislim da ne. Kao što sam rekla, okružena sam raznim nacionalnim manjinama, Mađarima, Hrvatima, Slovacima i mislim da smo svi negde $u$ istome, da nema neke razlike. Neko ima više sreće, neko ima manje sreće, neke druge stvari su pre u pitanju. Možda kada bi imali vezu, bolje bi prošli nebitno o kojoj nacionalnoj zajednici je reč. A da li je nacionalna pripadnost presudna? Mislim da nije. Mislim da je bitno ko ti je u porodici šta is kim se poznaješ ali nacionalnost mislim da nije (SFP7).

Svakako jezik jeste bitan. Mislim da sad nemam ni jedan primer koji bi ukazao za ili protiv, ali mislim da je negde teže jer biti na poziciji na fakultetu jeste jedna poltička odluka, koliko god politika ne sme biti prisutna na fakultetu, ne politika u smislu one suve politike, nego politike na nivou ustanove jer vi morate imati podršku svih sedamnaest odseka i zadobiti nakolonost većine ljudi a mislim da čak i na ovom fakultetu to još uvek nije praksa: volela bi da me realnost demantuje u tom smislu (SFP3).

Ne, isto je. Jedino jezička barijera, ali zaista mislim u ovoj sredini, Novi Sad i Filozofski fakultet zaista nacionalna pripadnost ne igra ulogu. Mislim da godine suživota različitih nacija je jednostavno podigla svest ljudi i nacionalni pripadnost ne smatra relevantnim parametrom (SFP4).

### 9.3.1.4. Hungarian, Slovak, Romanian and Serbian Male Professors

,,Az, hogy magyar, nem tudom mennyire hat ki... Vannak biztos tanárok, akiknél ez fontos. Már az én katedrámon is, de nem mondanak ők semmi rosszat, csak egyszerűen nem müködnek közre egyáltalán. Ez gondolom van a nök iránt is, bármilyen nemzetiségü legyen. " (HMP2)
,,...a szerb társadalom az még mindig eléggé patriarchális beállitottságú, itt kell még néhány generáció, hogy a nőknek könnyebb legyen az elörehaladás, és ha még nem is beszéli a jól az államnyelvet, akkor biztos még nehezebb a helyzete." (HMP1)

Mislim da žena može da postane dekanka Fakulteta tehničkih nauka. Teško može žena iz nacionalne zajednice da postane dekanka. (SLMP1).

Pa konkretno u mom okruženju, na katedri, opet kažem iz moje perspektive, ja mislim da to nije slučaj, zato što opet nacionalna pripadnost, ako se ogleda samo u imenu i prezimenu i onome što piše u ličnoj karti- pasošu i tako dalje, onda zaista i ne bi trebalo da ima nikakve veze i koliko sam ja video, nema veze. Sada opet sa druge strane, koliko znam, mi na katedri i nemamo nikog ko je žensko a da je pripadnik druge nacionalne zajednice (SMP1).

### 9.4 BALANCING BETWEEN ACADEMIC CAREER AND FAMILY

### 9.4.1. Qualitative data on balancing between academic career and family

### 9.4.1.1. Hungarian Female Professors

Nincs több gyerekem, csak egy. Nem akartam többet, azt már nem tudtam volna vállalni. Mert nem csak hogy befejezte az iskolát, hanem nyelveket is tud, angol, francia, német, hokizott végig, zeneiskolába járt, nagyon sok mindent csinált (HFP1).

Hát persze, hogy volt (gondom a család és a karrier összeillesztésével).Nem volt ki vigyázza a gyerekeket. Éjjel írtam. Úgyhogy meg is szoktam, hogy reggel nem tudok felkelni. A magiszterit és a disszertációt is. A magiszterit a konyhában, mert kicsi volt a lakás. A doktorit azt nem a konyhában, de azt is föleg délután meg éjjel. Akkor már a gyerekek is nagyobbak voltak. Nem (a volt férjem), ö jobb helyzetben volt. Idősebb volt, előbb kezdte, meg ő bejött az egyetemre. És itt csinálta. De valakinek otthon kellett maradni. Én maradtam otthon. Ez miatt annak idején, nem azért, hogy éjjel írom a munkáimat, hanem azért mert nem jártam be a pártgyűlésekre és egyéb gyülésekre. Nem önigazgattam, és ezt beirta a fönököm az újraválasztásom kimutatásában. Nem voltam aktiv (HFP3).

Nem volt gond, mert nagyon szerencsés vagyok. A család és a karrier nálam átfonja egymást. A férjem, igaz, hogy Újvidéken fejezte az egyetemet, de még megismerkedtünk valahol a gimnáziumban, és ez a kapcsolat hosszú ideig tartott még, mielött összeházasodtunk volna, és őneki is olyan ambiciói voltak, mint nekem, tehát ő is beirta a magiszteri képzést, én is beirtam, és támogattuk egymást, egy kis
munkamegosztással, hogy igy mondjam: hogyha most te tanulsz, akkor én segitek egy kicsit, vagy fordítva, mondjuk a házi munkában vagy ehhez hasonló. És nem volt gond (HFP4).

Akkor az édesanyám vigyázott rá (lányomra), mielőtt elindult volna oviba. Három éves korától ment óvodába, és ebben a munkahelyben az a jó, hogy az órákon kivül a többi munkát otthon is lehet végezni. Tehát a kutatást, az írást, otthon is lehet. Úgyhogy a lányom mondja a múltkor, hogy úgy emlékszik rám, ahogy a számitógépnél ülök. Hiába voltam én otthon, dolgozni kellett (HFP5).

Úgy gondolom magamról, hogy családi beállitottságú, családcentrikus vagyok, úgyhogy több időm, nem mondhatom, hogy megy rá, de igyekszem a családomnak élni... Végül is mindig sikerült összeillesztenem a munkahelyi feladataimat a család elvárásaival, de lehet, hogy gondolatban a család mindig elötérben volt. Lecsíptem a karrieremből a család végett, de nem bántam meg (HFP6).

Amikor lett a gyerek, akkor egy kicsit nehezebb lett, de akkor is még volt, hogy eljött (a férjem), elmentünk családostól. Amit nem birtam megcsinálni, az egy cseretanári lehetőség volt. Igazából még azt is megcsináltam, mert egy hónapos ösztöndijat kaptam Budapestre, és elvittem a két és fél éves gyermeket is. Kicsit nehezebb volt, olyan értelemben, hogy nem bírtam a Domus házban lakni, mert azt mondták, hogy babát nem hozhatok ide. Aztán én ezt nyilvánosságra hoztam. Engedtessék meg, attól, hogy anya vagyok, még lehetek tudós. De azért elmentem, és magam béreltem lakást. Azt is megcsináltam, hogy egy hónapra elvittem a családot is. Akkor a férjem is ment. Azt nem mondom, hogy soha nem volt konfliktus közöttünk, hogy mindig úton vagyok, meg ilyesmi, és akkor, amikor a gyerek megvolt, mondogatta, hogy mindig rá hagyom a gyereket, ő vigyáz a gyerekre (HFP7).

Hát tulajdonképpen a gyerekvállalást (késleltettem). Amikor beiratkoztunk az egyetemre, a doktori képzésre, akkor elég kusza volt az egész. Nem tudtuk hogy s mint megy? Nem tudtuk a szabályokat. Most már ki van kristályosodva, a fiatalok tudják, hogy mik a lehetőségek és a szabályok. Mi az elején ezt nem egészen tudtuk, és nem mertem belevágni abba akkor, hogy legyen gyerek. Nem szándékosan toltam ki. Ha közbejött volna, akkor feltételezem, hogy vállaltuk volna, de több mint valószínü, hogy ez az volt, késleltetés (HFP11).

Még nincs családom olyan értelemben, hogy nem mentem férjhez, nincs gyerekem. Nem tudom, azt hiszem, hogy nehéz lenne. De látom, hogy vannak kolleganők, akik sikeresek a karrierben és gyerekük is van. Azt hiszem, hogy az utóbbi pár évben az egyetemen megjelent egy szolidaritás az anyákkal szemben: azokat, akik anyák vagy szülés elött vannak, azoknak gondjukat viselik a kollegák (HFP12).

Én törekszem egyensúlyba hozni, figyelembe venni mind a kettöt. Mind a kettö fontos számomra (HFP13).

### 9.4.1.2. Slovak and Romanian female professors

Kad mi se postavi takvo pitanje ja ne znam šta da odgovorim jer nekako uspevam, imam troje dece. Imam blizance od pet godina i imam velikog dečaka od petnaest godina tako da između tih deset i po godina što je razlika između dece nekako sam uspela da odradim magistarski rad i doktorat. A kako sve to uspeva? Nekom velikom organizacijom, velikom podrškom supruga, njegovih roditelja i mojih roditelja jer se često događa da posebno ovu malu decu treba da pričuvaju. Kada je stariji sin bio mali mogla sam da ga ostavim kod mojih roditelja na par dana i onda da ja odradim svoje poslove. Takođe mi puno pomaže predškolska ustanova, kada su deca u predškolskoj ustanovi pre podne ja mogu sebi da odvojim jedno dva sata dnevno. Rad na fakultetu je isto veoma zahvalan, jer se ne radi svaki dan, to i jeste jedna od prednosti. Da sumiram: organizacija i podrška porodice (SLFP1).

Pa za sada nemam taj problem, pošto nemam još svoju porodicu i živim sama. Smatram da je porodica važna i htela bih da je imam, tako da se nadam da ću uspeti i na tom polju. Mislim da je dobra stvar mog zaposlenja upravo to, što ne moram svaki dan da budem prisutna na fakultetu, imam dane kada imam nastavu, a svoje istraživačke radove sprovodim i pišem kod kuće i zato verujem da je moguće da se radne obaveze relativno dobro usklade sa porodičnim obavezama. $S$ obzirom na to, da u stvari sama najviše organizujem svoje vreme, očekujem da ću dobro usklađivati i porodicu i karijeru (SLFP2).

Dok sam bila trudna, radila do devetog meseca trudnoće. Nisam ostala kod kuće da čekam porođaj nego kad sam se porodila imala sam taj problem što nisam imala trudničko bolovanje jer je bilo manjka profesora baš na odseku i nije bilo ko da predaje taj predmet. Kada sam držala vežbe, pošto sam bila asistentkinja, ja sam brzo došla kući podojila dete, držala časove i posle tri časa otišla kući da dojim dete ponovo. Tako da nisam izgubila na poslu ništa, a mogla sam i da budem u ulozi majke. Jeste, da sam imala veliku podršku moje mame, koja je došla da mi pomogne $i$ mog muža koji je tada stalno ili radio ili nije radio, uglavnom je više bio nezaposlen nego što je bio zaposlen, tako da sam ja radila, a moj suprug je čuvao dete (RFP1).

### 9.4.1.3. Serbian female professors

Eto s 34 godine sam počela (da budem samohrana majka). To je sada uzrast mog starijeg sina. (U Americi) tražili su žene predavače i ja sam sa 47 godina kao ,,mladi talenat" dobila priliku i onda sam provela 5 godina u New Hampshire-u. Decu nisam povela, zelela sam barem mlađeg da povučem ali se on nije dao. Sećam se, devedesetih smo morali da idemo negde na merenje u Obrenovac, nije bilo benzina, a kolege su ga nekako nabavile. A moj stariji sin, dobio napad slepog creva. Ja kažem, dete ne mogu nista pomoci, moram na put. A onda ga je mladji brat čuvao, veliki ležao, mali čuva, ja u Obrenovcu. Mislim, šta da radimo, neke
stvari ne mogu da se odlažu, isto kao i predavanja. Ja za predavanja moram da budem prisutna, a sve ovo drugo može da se odlaže. Sa jedne strane, jako je lepo što imam mogućnost da neke stvari pomerim, ali zato svaka subota ispit, svaka nedelja ispit. A neću ni da se žalim, imala sam i ja moje vreme, sad treba da ima neko drugi (SFP1).

Nikada nisam imala tu dilemu uvek sam želela i jedno i drugo, život me nije doveo u situaciju da moram da biram. Nikada mi niko nije rekao, ako ostaneš u drugom stanju imaćeš problema na poslu. A i da mi je rekao, baš bi me bilo briga, ja bih napravila veliku frku. Ustvari rekli su mi, kada malo bolje razmislim, kada sam ostala u drugom stanju, tada sam već sam bila profesor odnosno bila sam docent. Sa trećim detetom sam ostala u drugom stanju, i onda je bio neki predmet koji sam ja razvila, nije to moje, sve je to državno, ali jedno je kad neki predmet postoji, a drugo je kad vi osmislite neki novi predmet i uvedete ga u nastavu. Onda su mi rekli na katedri, pa dobro vi sad idete na porodiljsko a kad se vratite videćemo za taj predmet, to je predmet koji pripada našoj katedri, pa videćemo ko će ga držati. Tada sam se ja jako naljutila, ja sam inače...kažem sve što mislim, onda sam rekla da je to nedopustivo i da oni hoće belu kugu i kako oni to misle, da deca ne treba da se rađaju i tako dalje... i taj predmet je mene čekao kad sam se vratila na fakultet (SFP2).

Uh, kada je reč o ovim redovnim nastavnim aktivnostima, to je u redu, zato što, imamo tu neku privilegiju kada se pravi raspored da nas sve pitaju da li vam odgovara pa izaberem da imam nastavu u vreme kada mi je ćerka u vrtiću. Znači tokom pre podneva, s druge strane, srećom pa i muž ima takav posao da može da u slučaju da imam časove ili obaveze po podne, on može da uskoči ili da u slučaju da je naša ćerka bolesna, da ostane kod kuće jer za ovih pet godina koliko ona ima, nikad nisam izostala sa posla zbog njene bolesti niti sam bila na bolovanju, znači uvek sam postizala svoje obaveze na fakultetu. Nas dvoje smo sami sa njom, nemamo bake. On ima tu sreću da može da ostane kod kuće i naravno to i želi. Nikad se moj odlazak na nastavu nije dovodio u pitanje, to je uvek prioritet. Što se tiče obaveza mimo nastave, onaj naučni deo, pisanje radova, projekti, što se ne računa u radno vreme, a oduzimaju najveći deo vremena i energije, to je već malo malo teže. Koristim slobodno dok mi je ona u vrtiću i kada mogu da uskočim, često ostaje samo noć. (Ostala sam na jednom detetu) Ne zbog karijere, mada je presudno i to, jer kažem nas dvoje smo sami i nikada nismo imali neku pomoć. To je negde razlog da smo se dogovorili da smo nas troje porodica i da ne želimo više dece. Jeste razlog i posao i obaveze i njegove i moje, jer oboje imamo puno obaveza mimo tog redovnog radnog vremena, znači ono što se ne računa u tih nekih osam radnih sati, tako da smo saglasni da je nas troje i toliko možemo sebi da priuštimo, a da se osećamo dobro (SFP3).
(Karijera me) sputava zato što ovo nije posao u smislu da imaš fiksno radno vreme $i$ kad završiš sa poslom ti si rasterećen. Ja to uvek pominjem da mi nemamo posao, nego karijeru, a ona znači da nema rutine, nema nekih šablona utabanih po kojima ti funkcionišeš posao univerzitetskog nastavnika traži stalan rad na sebi, stalno usavršavanje, naročito sad kad u situaciji kad je uvedeno ocenjivanje od strane studenata i posao zavisi od toga. Specifičan je po tome što mi faktički nismo primljeni na neodređeno na stalno, dok ne postignemo zvanje redovnog profesora, mi smo uvek u situaciju da imamo određеnu naučnu produkciju da budemo dobri u nastavnom segment. Zahteva dosta vremena i kod kuće u smislu pripreme za nastavu, pisanje radova, lektorisanje radova i dosta je širok i raznovrstan spektar aktivnosti, tako da osećam da mi krade vreme, koje bih vrlo rado provela sa detetom. Recimo dešava se da suprug odlazi sa njim iz kuće izlazi sa njim u grad da bih ja mogla da završim neki deo svojih obaveza. Razmišljala sam (da imam još dece) i odlučila sam da neću više imati dece. Odluka upravo proizlazi iz odgovora na prethodno pitanje koliko je lako balansirati. Meni je teško da balansiram. Verovatno sebična odluka, ali mislim da je bolje kvalitetno se baviti jednom detetom, nego na više strana, i podbaciti u tom segment (SFP4).

Jako teško (usklađujem karijeru i porodicu). Mislim da to baš ide teško. Imam jedno dete sada, ne znam kako je onome ko ima više. Moje ima dve godine i sada se malo popravlja situacija, ali ipak teško ide. Mislim da je pogotovo teško kada ste odsutni godinu dana na porodiljskom pa vas svi zaborave, a naročito ako ste još, kao ja, odsutni dve godine i celu trudnoću preležali kod kuće, pa onda treba da se vratite. Ali teško ide zato što, iako rad na fakultetu ima svojih prednosti - u smislu da je malo fleksibilno, pa kada vam je dete bolesno, nekako ukradete dan-dva da to baš niko previše ne primeti, ali se opet mora nadoknaditi u naredna tri dana sve što ste propustili - takođe ima i svoje mane. Ne zna se radno vreme, na primer, jednog dana se radi od osam do dva-tri, a sledećeg dana od četiri do deset uveče jer su tako vežbe nameštene. Tada je baš teško i ne vidite dete po dan-dva, što je loše (SFP5).

### 9.4.1.4. Hungarian, Slovak, Romanian and Serbian Male Professors

Nehezen. Nagyon nehezen. Nehezen, azért, mert azt tartom fontosnak, hogy a családdal legyek, nem pedig a karrierrel (foglalkozzak), de közben olyan tipusú ember vagyok, hogy nem akarok olyat csinálni, hogy csak megcsináljam és nem érdekel, hogy van megcsinálva. De valahogy érkezek, ahogy otthon lenyugszik a helyzet, a gyerekek elalszanak, akkor dolgozok itteni dolgokat, meg itt is néha dolgozok otthoni dolgokat. Valahogy az egészet összefontam, amit nem tartok nagyon okosnak, mert nehéz szétválasztani. Így tudom csinálni mind a kettöt, hogy ott legyek mind a két helyen (HMP2).

Vrlo je to teško. Meni je bilo mnogo lakše nego supruzi. Pa bilo je lakše zato što je ona prihvatila sve te obaveze oko vaspitanja i brige dece, oko domaćinstva, itd. Plus
karijera. Ona je išla medicinsku... Mi nismo ni mislili da će ona karijeru terati do redovnog profesora. Ona je karijeru gledala u smislu egzistencije. Da ima posla. Sad da li će ona otići u penziju kao profesor ili kao asistent njoj je bilo sve jedno. Njoj je bilo bitno, što ja jako cenim, da decu izvede na pravi put (SLMP1).

Žongliram na jednoj nozi otprilike? Vrlo je nezgodno zato što ovde imam posla, imamo prilike za razne projekate i onda nije problem što posla ima da je samo posao stizao bih, pošto imamo jedno dete od dve godine, jedno dete od tri i po kod kuće i onda moram do četri sata posle podne da budem ekstra, ako mora do pet znači ono do četri da budem kod kuće. Nakon toga sam s njima do osam pola devet, tada oni idu na spavanje onda posle toga ja još radim. Obzirom da moja supruga ide ranije na posao uglavnom, onda sam ja pre podne sa njima, pa ne krenem odmah u osam nego ono do devet, onda se tu još malo družimo i tako, ali naporno je. Nekako sam uspeo da namestim barem vikend koliko -toliko jedan dan vikendom sam definitivno njihov, a ostalo koliko stignem (RMP1).

Karijeru i porodicu nisam nikako uspeo da uskladim prvi put, zato što se moj prvi brak završio razvodom. Iz njega imam divnog sina, kojeg sam upravo vodio na trening košarke, a sa bivšom ženom sam u dobrim odnosima. Sa drugom ženom imam drugo dete. To je sada vrlo dobro usklađeno, iako žena nema posao. Ona je profesor srpskog jezika, a dogovorili smo se tako da ona sada bude majka, te da joj to bude kao zanimanje, a ja da budem taj koji privređuje. Tako da u tom smislu podele odgovornosti to uopšte nije problematično, pogotovo u sadašnjem svetu, kada dosta kompjuterskih poslova može da se radi i od kuće onda je to praktično milina. Može da se baš jako dobro balansira, pa da ja budem nekad i po ceo dan prisutan kući čak nekad i po više dana a da radim svoj posao (SMP1).

### 9.5. WOMEN IN STEM IN ACADEMIA

### 9.5.2. Qualitative data on women in STEM

### 9.5.2.1. Hungarian female students

A Müszaki Karon miért nincs annyi nő, nem tudnám, lehet, hogy ez benne van a kultúrában is, és az oktatásban is. Ilyen előitélettel vagyunk, hogy a fiúk a matekban, a fizikában a jobbak, és az lányoknak nem való, vagyis már a tanár is így áll hozzá meg a közösség is. Például a matek versenyen sokkal többen voltak fiúk, mint például egy magyar versenyen, ahol lányok voltak. Az általános iskolában akárhogy mondják, hogy ilyen a genetika, de ott még nem kellene, hogy látszódjon, inkább a jó tanulók menjenek versenyre. Ez egy elgondolkoztató téma (HFS5).

Talán valamilyen különbözö gyakorlatokat végezzenek (annak érdekében, hogy felkeltsük a nök érdeklödését a STEM iránt), mert én sem gondoltam, hogy nekem
tetszene egy elektronika, csak miután gyakorlatokon csináltunk különböző áramköröket, akkor jöttem rá, hogy érdekes. Szerintem sokan nem is látnak mögé, hogy miből áll és mennyire érdekes is tud lenni. Eleve azt sem tudhatják, hogy van tehetségük hozzá (HFS9).

Ez egy kicsit sztereotipia, hogy azok a foglalkozások, amik a müszaki egyetemen vannak, ott mindig is férfiak voltak az ilyenekben jobban otthon, a nök pedig úgy vannak vele, hogy nem megyek el a müszaki egyetemre, hanem a jogra vagy a Bölcsészettudományi Karra. Nem tudom, mi lehet az oka (HFS10).

Lehet, hogy nem is érdekli öket (lányokat) annyira. Nem gondolom (hogy kellene változtatni ezen). Vannak tipikusan női szakok is, mint például a Magyar Tanszék, vagy mint az Óvónőképzö, szerintem ott, gondolom, hogy ott is többnyire lányok vannak, vagy a Tanitóképzö (HFS11).

Ha azt vesszük, hogy mi hányan voltunk, annak a harmada lány, de azért inkább a fiúkat érdekelte. Nem tudom. Engem érdekelt mindig. Alapból azt mondják, hogy a lányoknak más a gondolkodásuk, hogy inkább a fiúkat vonzza a logikai gondolkodás, a matek. A nyelvek meg a lányokat, csak arra kell gondolni, hogy a Kosztolányi például tele van lányokkal. Nem tudom, hogy lehetne-e, hogy a lányokat jobban érdekelje. Szerintemii a gondolkodáson múlik. Például az egyik lánynak az anyja, akivel jóba vagyok, próbáltam magyarázni a programozást, épp az olyan logikai gondolkodást, le kell logikázni az egész példát, és ha nem tud úgy gondolkodni, akkor nehéz. Én megtanultam 4 év alatt, mert egyfolytában úgy kellett gondolkodni az iskolában. Nekem is az elejében fura volt, de most meg már úgy normális (HFS12).

### 9.5.2.2. Hungarian Female Professors

A nők azért nem jönnek gépészetre, mert nehéz. Bár nálunk beiratkoztak az idén olyanok, hogy az egyik lány az egészségügyi középiskolát fejezte be, és beiratkozott gépészetre, és fogalma sincs semmiröl, az elemi iskolai matematikát sem tudja, már elöre látom, hogy ki fog esni. Azok viszont, akik a gépészeti középiskolát befejezik, azokkal nincs nagy gond. Meg a gimnáziumból, akik jönnek, például most is van egy nagyon jó, aki most iratkozott be, elsőéves, de már most kimagaslóan jó. De annak az anyja is gépészmérnök és az anyja is nagyon jó. Az anyja is az én egyetemistám
volt, nagyon jó volt, de a kislány még jobb, mint az anyja, 10 volt az átlaga, azt hiszem. Ő a legjobb egyetemista az egész első éven (HFP1).

Vagy a nök értenek-e hozzá? Van ott (a FTN-n) egy ismerősöm, azt hiszem ő is kúlai származású, nem tudom, hogy elment-e már nyugdijba, vagy még ott van. De mint nőről csak róla tudok. De általában nő hallgatók is sokkal kevesebben vannak műszakin. Így vagyunk nevelve, hogy ez nem női munka. Hát nem tudom, lehet, hogy egyik is meg a másik is. A müszaki tudományok engem nem vonzottak, és úgy érzem, hogy nem is értek hozzá (HFP3).

Szerintem az átlag nőnek, férfinak, bárkinek, nehéz az effajta tananyag, és sokan, akik belekezdenek, egyszerűen valahogy kiégnek. Lehet, hogy az iskoláztatás során a zöme megcsömörlik, és egyszerűen talán a nöi konstitúció, a felfogás az ami más irányba tereli őket. Sokan a, a családalapitást helyezik elötérbe, jönnek a gyerekek, és inkább olyan munkát, vállalnak amelyek nem igényelnek komolyabb agyi megterhelést (HFP6).

Azt gondolom, hogy ez egy ilyen szocializációs kérdés is. A gyerekkorban kellene kezdeni az egész dolgot. A sztereotípiáknál. Ezeket mind lebontani, ezek olyan erös dolgok. Persze különböző: más egy urbánus, meg más egy kevésbé urbánus közösségben. Egyáltalán vannak olyan közösségek, ahol még az önálló női karrier, az egy nagyon-nagyon furcsa dolog. Nekem is azt mondta anyukám, még ha nem is mondta igy ki, de az, hogy egy lánynak egy tanítóképző, vagy egy óvóképző a megfelelö. Na, akkor, amikor mondtam, hogy igen, majd tanár leszek, abba belenyugodtak. Később - akkor már nem velük éltem - az, hogy mit akarok ezzel a magiszterivel meg doktorival, az már kevésbé érthető dolog volt számukra (HFP7).

Ez egy nagyon nehéz kérdés. Mert, néha azt látom, hogy a nők azért választanak mondjuk föleg társadalomtudomány irányzatú szakmát mert úgy gondolják, hogy az könnyü. Vagy mert egyszerüen valahol az életük során vagy nem találkoztak példákkal, most teljesen mindegy, hogy nő vagy férfi vagy nagyon sokszor az is van, hogy hallották, hogy „ti lányok nem értenek a matematikához". Ez nagyon sokszor elhangzik. Olyan nyilvános helyeken, hogy szinte nekem néha belefájdul a szivem, hogy ez miért hangzik el. Akkor nagyon sokszor hallom azt, hogy felhozzák föleg férfiak, hogy mondjál nekem nöt, aki sikers volt. Hogy tudok mondani nöt, aki sikeres volt, amikor még csak száz éve, hogy tudok szavazni, hát egyetemre sem volt szabad betenni a lábomat, nemhogy valamit még kutassak. Egyébként vannak, sőt nagyon sikeresek vannak. Csak nem sok van. És akkor valahogy sikerül a nőket úgy eltávolítani. Nem is biztos, hogy ő nem akarna. Amit konkrétan hallottam az egyetemen az egyik kolleganőtől, ö egy nagyon inteligens, okos lány volt, de azt mondta, ő elvégezte az egyetemet, hozzáment az egyik kollegánkhoz, a saját évfolyamtársához, aki intelektuális képességekben közel sem volt hozzá. És azt
mondta, hogy ő most nagyon élvezi, mert a szülei azt mondták, hogy neki ez a dolga (HFP10).

Lehet, hogy van egy ilyen hozzáállás, sztereotípia a társadalomban, a tanári pályával kapcsolatban, a bölcsészkaron ugyebár mindenki tanári diplomát kap, hogy a tanári pálya nőknek való, a férfiak meg a tudományok praktikus oldalát választják. Szerintem ennek az elöitéletnek nincs alapja, mert annyi tehetséges férfi van körülöttem, aki társadalomtudományban ért el eredményt, például a nagyapám is. És rólam is kiderült annak idején a tesztelésen, hogy van tehetségem a gépészeti tudományokhoz. Ez csak egy öröklődő sztereotípia valószínűleg. De szerintem nem kell semmin, ezen sem, erőszakkal változtatni. Ezek trendek, és nem tudjuk 100 év múlva mi lesz a trend, ez is része az ember természetes evolúciójának, csak mi ezt más szemmel nézzük. Az állatvilágban másként néznénk rá, mint az embereknél. Természetesnek találom, hogy van egy vélekedés, hogy a fiúk ezt csinálják, a lányok meg azt. Van egy hozzáállás, ami öröklödik. Lehet, hogy a családban öröklödik a fiúszerep, lányszerep (HFP12).

Most a müszaki tudományokban a programozás, a számitógépekhez kötődő tudományok nagyon felkapottak, ami a munkahelyet meg a munkába állas lehetőségét illeti, ez nagy előny, mindenféleképp. Szerintem el is kezdödött egy ilyen trend, az ismerősöknél is észrevettem. Az emberek egyre jobban ebbe az irányba kezdenek gondolkodni. De szerintem ahhoz, hogy valaki müszaki tudományokkal foglalkozzon, nem elég az anyagi motiváltság, ahhoz egy nagyon erős érdeklödés, és speciális képességek is kellenek, amit az általános és a középiskolában nem nagyon fejlesztenek. Jelen van egyfajta nemi sztereotipia, szerintem. Akár burkoltan is. Mindig is úgy volt, hogy a nyelvek, az irodalom jobban női tantárgyak, a matematika, fizika, kémia, informatika pedig jobban férfiaknak, fiúknak valók. Persze (a magyar nőknek előnyös lenne, mert a nyelvtudás nem alapfeltétel), szerintem mindenkinek előny, mert, hogy ami a technikai fejlödést illeti, a müszaki tudományok sokkal fontosabbak, mint a társadalom vagy a bölcsészet (HFP13)

### 9.5.2.3. Slovak and Romanian female professors

Ja mislim da sve to zavisi od nekog interesovanja, ako neku devojku interesuju prirodne nauke, onda je za nju dozvoljeno da studira prirodne nauke. Evidentno je da ima puno više devojaka na Filozofskom fakultetu nego recimo fakultet koji je preko puta nas, na Mašinskom fakultetu. Da li je tu baš reč o razlici interesovanja na osnovu razlike u polovima nisam o tome razmišljala ali mislim da svaka devojka koja ima takva interesovanja nema problem da ih realizuje (SLFP1).

Ja ne vidim u tome nikakav problem, niti da je u tome nešto posebno pozitivno ili negativno. Mislim da je to pre splet nekih okolnosti koje su prirodne i da možda društvene nauke ženama više odgovaraju zbog toga što im posao, koji će kasnije da
rade, više odgovara da bi mogle da ga usklade sa porodicom. Ne znam da li je to predrasuda ili istina da tehničke nauke više odgovaraju muškarcima, ne znam, mislim da je to neki spontani razvoj, a ne namerni, i ako se bude menjao isto bi to trebalo da se desi spontano, ne vidim da bi sada trebalo da se planiraju neke promene. Važnije je da mladi ljudi biraju i upisuju studije u skadu sa sopstvenim željama i da nakom završenih studija rade posao koji im odgovara i koji im se zaista sviđa (SLFP2).

Pa ne mora da znači da žene ne mogu da rade isto što rade muškarci. Imam dobru prijateljicu, ona je profesor na atomskoj fizici ovde na univerzitetu. Mislim da nema veze ako je to atomska fizika, ista istraživanja mogu da rade i žene i muškaraci. Mislim da pol nije bitan, jedino, možda, žene ne bi trebale de izaberu neku profesiju gde bi stvarno trebale da rade na mašinama, na nekim teškim mašinama ili da predaju studentima na teškim mašinama, mislim da žene ne bi mogle da rade ovakve stvari zbog njihove fizičke snage. Tamo gde je neki intelektualni posao ili terenski to može i žena da radi. Kao i matematičke zadatke na tabli ili bilo gde može i žena da uradi nije problem ili hemijske neke reakcije to može i žena nije problem. Jedino tamo gde su neki teži fizički poslovi, tu su muškarci u prednosti (RFP1).

### 9.5.2.4. Serbian female professors and students

Sve te sekcije za women engineering su se svodile na to da imate pet žena na bini i čistu žensku pubuliku i tri muškarca koji sede ovako sa strane i prosto im je neprijatno što su tu, i onda njih pet kao kukaju kako je oh to sve teško koordinirati porodicu i karijeru, to mi je bez veze. Takođe imam jedno iskustvo koje me malo nateralo da budem strožija ženskom pitanju. Ja sam dobila jednu veliku nagradu Evropske komisije za naučni projekat, pa sam išla u Brisel pa mi je Hoze to lično uručio, i onda sam shvatila da je bilo dvadeset četiri dobitnika, od doga dvanaest muškaraca i dvanaest žena. To je bez veze, zato što sada to mene pravi da se zapitam, možda je moj naučni rad bio loš, možda je bio neki trinaesti muškarac, koji je imao fantastični naučni rad, kome su uzeli nagradu da bi dodelili meni, ili obrnuto možda je bila neka trinaesta žena znači taj ključ je oduzeo nagradu. To da nas je bilo baš dvanaest -dvanaest, to mi je bez veze (SFP2).

Mi se još nismo oslobodili tog patrijarhalnog načina i vaspitanja i dalje se još kod male dece pravi razlika: kao dečaci su za matematiku, a devojčice za jezike. Što je potpuno besmisleno, ne potoji prirodno data sposobnost za matematiku a ovde za priču, mislim to to je potpuno besmisleno (SFP3)

Da krenem prvo od nejednake polne zastupljenosti u tim različitim oblastima znanja, pošto sam se bavila time. Istraživanja pokazuju da recimo da nema razlika u inteligenciji između muškaraca i žena osim u nekim periodičnim aspektima da su žene nekako verbalno jače, a muškarci se više snalaze u nekim neverbalnim zadacima. Moguće je da su muškarci zbog malo specifične strukture inteligencije
više se izborili za, kao literatura naziva, kvantitativne domene, domeni tehničkih nauka, privreda, a žene za društvene, humane nauke, jer se verbalne sposobnosti tu najviše determinišu uspeh. Ali, da se opet vratim tome da naše društvo naginje ka tradicionalnoj, patrijarhalnoj, verovatno od malena se izgrađuje taj stav da su neke profesije više za žene, neke za muškarce. Zašto imamo malo vaspitača, učitelja, psihologa, to sigurno nije stvar sposobnosti, jednostavno se to prenosi kroz vaspitanje....Kod vecine se prenosi u porodici. Tako se od malena izgraduje kroz socijalizaciju. Izbalansiranost između vaspitača i inženjerki bi sigurno (bilo pozitivno) da bi bar u smislu nekih kolegijalnih odnosa da je više balansirana homostruktura. E sad žene imaju neke druge sposobnosti koje bi u tim tipičnim muškim poslovima mogle da dođu do izražaja (SFP4).

Ja mislim da postoji potreba zato što je jako mali broj žena, a mislim da ni po kakvim sposobnostima nema razlike, nema razloga za to da bude tako velika razlika u broju žena i muškaraca i mislim da je osnovni problem vaspitanje od malih nogu. Mi smo od malih nogu vaspitane da treba da budemo princeze, da gledamo ljubavne filmove i crtane koji se završavaju hepiendom, gde je došao princ na belom konju. Na tome se zasniva naša kultura vaspitanja ženske dece, dok dečaci treba da budu majstori, za njih su neke igračke koje su alati ili sa kojima se može konstruisati nešto. Dečaci nešto spajaju, grade i mislim da su oni samim tim igrama više usmererni ka nekoj tehnici i takvom tipu nauke, dok se devojčice više usmeravaju možda ka nekim bajkama pričama znači nekim društvenim naukama. Mislim da je konkretno kod nas (u STEM-u), što se tiče posla i novca mnogo bolja situacija. Svako ko završi FTN, može da se zaposli, dok za neke druge nauke, druga zanimanja nije slučaj. Imam drugarice koje su završile medicinu i psihologiju i slično i teško mogu da nađu posao i pogotovo teško mogu da nađu posao koji ih zadovoljava. To su inteligentne osobe koje žele nešto da postignu, a obično u takvim zanimanjima ima nešto konkretno šta one moraju da rade, ipak psiholog nema toliko izbora, a opet sa STEM smerovima, barem ja na to tako gledam, obzirom da ja volim to što radim i onda tu vidim da ima mnogo mogućnosti za rad i ne vidim zašto bi sad žene bile uskraćene za tako nešto (SFP6).

Pa upravo to, da se izbalansira. Bilo bi dobro da ne postoje stereotipi o ženama, da one nisu dovoljno dobre u nečeти ... Na primer da nisu dobre inžinjerke, nisu dobri političari, nisu dobri vozači ili bilo šta... Mislim da je to pogrešno, jednostavno svako od nas je dobar za nešto, uopšte ne mora da nas definiše to, da li smo muško ili žensko, nego koliko nešto volimo i koliko se trudimo. Ako je to matematika, ako je to biologija ako je to nešto deseto, što može muškarac može i žena. Mislim da bi to trebalo da bude ravnopravno (SFP7).

Mislim da bi trebalo da bude, odnosno da treba da se teži ka tome da bude podjednako žena i muškaraca u STEM-u, ali mislim da pre svega svako treba da se
vodi svojim interesovanjima i sposobnostima kada bira zanimanje ili fakultet ili školu, nebitno da li su društvene ili prirodne nauke u pitanju. Mislim da sigurno može (da se utiče na interesovanje), da pre svega sve zavisi od profesora u osnovnoj i srednjoj školi, ali možda i od stava okoline. Čini da je sramota za devojke da upisuju neke tehničke škole, kao što je mašinska ili elektrotehnička ili slično i kada već vide da je razred od dvadeset dečaka - muškaraca, to ih možda već odvraća od upisivanja tih škola. Mislim da je uvek pozitivno ako postoji nekakva različitost i kada se ne sastoji samo od jedne iste grupe ljudi. To uvek doprinosi boljoj nastavi i možda nekim drugačijim.. Da, moguće je (da bi žene u STEM-u uticale na nauku i dostignuća), to onda otvara možda i neke drugačije poglede na neku nauku i na neke nove načine proučavanja. Mislim da bi imale više mogućnosti (u STEM-u). Pogotovo sada, čini mi se. Saznala sam i sama da sve više devojaka upisuje FTN i to smerove E1, E2 i da su one jednako brzo zapošljavaju kao i muškarci, to je najtraženije zanimanje (SFS1).

### 9.5.2.5. Hungarian, Slovak, Romanian and Serbian male professors and students

Társadalmi elvárás, szerintem ez egy multifaktorális. Vannak az elméletek, hogy már az agyunk különböznek, a nök jobban kommunikálnak, a férfiak jobbak az absztraktban, úgyhogy szerintem ebben biztos van valami. Természetesen a társadalomtól is függ, ha összehasonlitjuk a skandináv országokat meg a szerbiai társadalmat, a társasstruktúrát nagyon befolyásolják nyilt titok, hogy Avganisztánban a szegény nőknek nem szabad irni se tanulniuk. Ami a tudományt illeti, szerintem egyszerüen multifaktorális dolog, lehet hogy Szerbiában mindig ez a tradicionális patriarchális nevelés. A férfiak elvárják, hogy a nők hetekig kutatnak valamit, és nem tűrnék el, hogy valaki ne fözzön, ne mosson rájuk. Szerintem maga az ország lehet hogy kellene egyfajta pozitív diszkriminációval, hogy belenyomja a nöket ezekbe a tudományokba. Ahogy a romáknak meg van engedve, hogy kevesebb pontszámmal vegyék az egyetemet, mivel bizonyos hátrányos helyzetben vannak, de hogy a nöknek is hogy egyfajta, mint a parlamentben is 10-15 százalék, kvótákkal. Utána tíz-húsz év után a lányok bebizonyitják, hogy semmi gond. Egy kis löktetés az ország részéről (HMP1).

Irányítani azt, aki nem akar oda menni, nem lehet. Irányítani nem lehet, de mondjuk rá, elég sok minden múlik azon, hogy általános iskolában, a középiskolában a tanárok milyenek, hogy adták elő az ilyen tantárgyakat (HMS1).
...egyszerüen másként gondolkodik egy nő mint egy férfi. A férfi az nagyrészt úgy gondolkodik, hogyha igen akkor így van, ha nem akkor nem igy van. A nök jobban szeretik analizálni a dolgokat. Nem mondom, hogy konkrétan ez miatt van, mivel hogy mind a két nem tudja azokat a munkákat elvégezni, hanem mégis inkább azt mondanám, hogy társadalmi dolgok. Lehet van valami eltérés, hogy a férfi és a nő nem egyforma, nézzük biológiailag sem, de nem azt mondanám, hogy azért. Mondjuk
olvastam, hogy Finnországban megy most már az általános iskolában a programozás oktatása, és a gyerekek ugyanolyan arányban vannak, lányok és fiúk, és ott nem is annyira jellemző a két nemnek a külön szétválasztása, hogy most ez arra, ez amarra. Csak ezt nem lehet hozzánk hasonlítani. Igen, és ez működik nagyon szépen. Én gondolom, hogy inkább társadalmi. Át lehetne nevelni (HMS2).

Az én tapasztalatom az, hogy nekik sem nem nehezebb itt, mint máshol. Nem tudnám megmondani. Akit ismerek a Bölcsész Karon, az egyik barátnöm, ö tényleg nagyon okos lány, és nagyon sokra is viszi. Úgyhogy szerintem nem annyira attól függ, hogy lány vagy fiú, vagy hogy melyik karon van, hanem hogy mennyire felel meg neki, amit tanul, meg hogy mennyire fordít idöt rá (HMS3).

Igen, ez elég érdekes, Lehet, hogy sokan érdeklödnek ez a terület iránt is de mégis valami mást választanak. Emlegetik ugye a tipikus férfi szakmákat és talán elbátortalanodnak, attól hogy ilyesmit irjonak be. Például, ha valaki rendőrnő szeretne lenni, már a család is azon van hogy ne, de mindenféleképpen ösztönözni kellene, olyanképpen hogy van ehhez tehetségük vagy kitartásuk, akkor miért is ne (HMS4).

Čak dobra žena, dobra inženjerka može biti kvalitetnija nego muškarac. Jer je ona, na neki način, sistematičnija, pedantnija, staloženija (SLMP1).

Ja to prosto znam kako poslodavci reaguju, da bi žena mogla u sred projekta da zatrudni. U 90\% slučajeva posao koji mi radimo ne zahteva fizičku pristunost, znači ako je to takav problem, ona može i kod kuće da sedne i da odradi nešto. Moja drugarica, koja je završila FTN, ima svoj privatni biznis, pravi sajtove, uglavnom radi od kuće. Ima devojčicu od tri i po godine i stigne i da radi i da brine o detetu i uglavnom je kod kuće. Znači sve može. Takođe imam osećaj da žene misle da je naš posao za muškarce, barem što se tiče ovog čime se ja bavim. A to uopšte nije istina, znači za ovo što ja radim ne treba imati snagu da zavrnete šrafove ili da se zablatite do lakta. Ovo je elegantan posao i kreativan, sastavlja se program, imate pravila i jeste do jedne mere je formalizovano do druge mere je kreativnost i to može da radi i muško i žensko podjednako, i pripadnici bilo koje nacionalne manjine... bilo ko u suštini. Naravno ne može baš bilo ko, mislim ko god ima afiniteta prema tome, a mislim da devojke imaju afiniteta prema programiranju, pogotovo se pokazuje ono što mi vidimo da su one sistematičnije imaju bolji pristup muškarci možda bolje reaguju na rešavanje nekih neplanskih problema, ali zato kad treba da se to odradi, da se privede kraju, da to bude onako lepo upakovano, to bolje rade devojke (RMP1).

Mislim da postoji prirodna tendencija, da se to već dešava i da ne treba posebno insistirati na tome. Što se tiče prisutnosti žena, postoji neka prirodna tendencija povećavanja, koliko barem ja vidim po studentima. Moguće je da bi trebalo povećati marketing određenih smerova, pogotovo danas kada je elektro sturka više
orijentisana ka kompjuterima. Dakle - nema razloga da ne bude veća prisutnost žena, a naravno uvek je veći diverzitet bolji, zato što žene ipak malo drugačije posmatraju rešavanje problema nego muškarci. Sa druge strane, one su možda bolje za neke pozicije drugačijeg tipa. Pozicije koje su možda malo više orijentisane na komunikaciju, na javnost, na prezentacije projekata, a opet sa dovoljnim tehničkim znanjem. Tako da postoji potreba za više žena i postoji potreba za možda specifičnim usmerenjem obrazovanja tih žena koje su u tehničkim strukama, znači za malo drugačiji profil. Kada posmatrate žene, osim osim primera onih koje su rođene za to da rešavaju probleme, i da sede za kompjuterom po dvanaest sati dnevno (takvi tipovi ličnosti se ipak više mogu susresti među muškarcima), njima više leže drugačiji tipovi aktivnosti. To je kako ja lično vidim stvari, što naravno ne mora da znači da je objektivno. Postoje naravno žene, koje su baš rođeni inženjeri, sede i rešavaju probleme, ali našoj struci fali onih žena koje znaju dobro i lepo da prezentuju projekat i da budu na neki način spona između tehničkog i prodajnog sektora (SMP1).


[^0]:    ${ }^{1}$ The Act on the foundation of the education system ("Offical Gazette RS" number: 72/2009, 52/2011, 55/2013, 35 /2015 - authentical interpretation, 68/2015 и 62/2016 - decision of the CC) by which the education system in Serbia and in Vojvodina is governed, enabled the education of members of national minorities in their native language.

[^1]:    ${ }^{2}$ Zakon o zabrani diskriminacije, Sl.glasnik br. 22/2009

[^2]:    ${ }^{3}$ Ustav Republike Srbije, Sl. glasnik RS, br. 98/2006
    ${ }^{4}$ Zakon o ravnopravnosti polova, Sl. glasnik br. 104/2009

[^3]:    ${ }^{5}$ Zakon o vojsci, Sl. glasnik RS, br. 116/2007, 88/2009, 101/2010 - dr. zakon, 10/2015, 88/2015 - odluka US i 36/2018
    ${ }^{6}$ Nacionalna strategija za poboljšanje položaja žena i unapređivanje rodne ravnopravnosti, Sl. glasnik RS, br. 15/2009

[^4]:    ${ }^{7}$ http://www.un.org/womenwatch/daw/cedaw, accessed 21.04.2016

[^5]:    ${ }^{8}$ This is a not an accurate statement in the CEDAW Serbia Government report 2-3, as the Center for Gender Studies were established at the ACIMSI, University of Novi Sad, not at the Faculty of Philosophy as the Government report states.

[^6]:    ${ }^{9}$ Council of Europe, European Charter for Regional or Minority Languages, 4 November 1992, ETS 148, available at: http://www.refworld.org/docid/3de78bc34.html [accessed 21 October 2018]

[^7]:    ${ }^{10}$ There is no information about the Teachers' Training Faculty in Hungarian Language in Subotica which started with its work in 2006, but it was founded in 2004, and which has its studies organized entirely in Hungarian.
    ${ }^{11}$ This information was given by one of the interviewees included in the research.
    ${ }^{12}$ The Vojvodina Human Rights Center (VHCR) is a NGO with an office in Novi Sad
    ${ }^{13}$ Alternativni izveštaj koji se podnosi na osnovu Člana 15 Povelje o regionalnim ili manjinskim jezicima (2010) Dostupno na: http://chris-network.org/wp-content/uploads/2010/06/Alternativni-izve\%C5\%A1taj-o-primeni-Evropske-Povelje-o-regionalnim-ili-manjinskim-jezicima-2010.pdf

[^8]:    ${ }^{14}$ Council of Europe. (1995). Framework Convention for the Protection of National Minorities. Council of Europe Treaty Series 157. Strasbourg: Council of Europe.

[^9]:    ${ }^{15}$ See Article 4.1. of The Council of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{16}$ See Article 4.2 of The Council of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{17}$ See Article 4.2 of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{18}$ See Article 4.3 of the Council of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{19}$ See Article 5 of The Council of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{20}$ See Articles 6, 7, 8, 9 of The Council of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{21}$ See Articles 9, 10, 11 of The Council of Europe's Framework Convention on the Protection of National Minorities

[^10]:    ${ }^{22}$ See Article 12 In Article 12 of the Council of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{23}$ See Article 15 of the Council of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{24}$ See Articles 16 and 17 of The Council of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{25}$ See Article 12 In Article 12 of the Council of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{26}$ See Article 13 of the Council of Europe's Framework Convention on the Protection of National Minorities
    ${ }^{27}$ See Article 14 of the Council of Europe's Framework Convention on the Protection of National Minorities

[^11]:    28 In year 2006 the Teacher's Training Faculty in Hungarian Language in Subotica had been founded, where the teaching langauge is Hungarian.

[^12]:    ${ }^{29}$ Zakon o visokom obrazovanju, Sl. glasnik RS, br. 76/2005, 100/2007 - autentično tumačenje, 97/2008, 44/2010 i 93/2012

[^13]:    ${ }^{30}$ See Article 14 of the third report submitted by Serbia pursuant to article 25, paragraph 2 of the framework convention for the protection of national minorities in 2013 (Third report)

[^14]:    ${ }^{31}$ See Article 14 of The third report submitted by Serbia pursuant to article 25, paragraph 2 of the framework convention for the protection of national minorities in 2013
    ${ }^{32}$ See Article 14 of The third report submitted by Serbia pursuant to article 25, paragraph 2 of the framework convention for the protection of national minorities in 2013
    ${ }^{33}$ See Article 14 of The third report submitted by Serbia pursuant to article 25, paragraph 2 of the framework convention for the protection of national minorities in 2013
    ${ }^{34}$ Zakon o osnovama sistema obrazovanja i vaspitanja, Sl. Glasnik RS, br. 88/2017 i 27/2018 - dr. zakoni
    ${ }^{35}$ See Article 3, Paragraph 1, Point 5 of the Alternative report submitted in accordance with the Article 25, paragraph of the Framework Convention for the Protection of National Minorities (2007)

[^15]:    ${ }^{36}$ Zakon o zaštiti prava i sloboda nacionalnih manjina, Sl. list SRJ, br. 11/2002, "Sl. list SCG", br. 1/2003 Ustavna povelja i "Sl. glasnik RS", br. 72/2009 - dr. zakon i 97/2013 - odluka US.
    ${ }^{37}$ See Article 14, Paragraph 1 of the Law on the Protection of Rights and Freedoms of National Minorities
    ${ }^{38}$ See Article 14, Paragraph 2 of the Law on the Protection of Rights and Freedoms of National Minorities
    ${ }^{39}$ See Article 94, Paragraph 4 of The Law on the Foundations of the Education System

[^16]:    ${ }^{40}$ Zakon o udžbenicima i drugim nastavnim sredstvima, Sl. glasnik br. 72/2009
    ${ }^{41}$ See Article 4, Paragraph 1 of the Law on Textbooks and Other Teaching Materials

[^17]:    ${ }^{42}$ Alternative report submitted in accordance with the Article 25, paragraph of the Framework Convention for the Protection of National Minorities (2007)
    ${ }^{43}$ The Constitution of Serbia was adopted in 2006, when the Alternative report was written, the application of the Constitution was still new.
    ${ }^{44}$ See Article 79, Paragraph 2 of the Law on Textbooks and Other Teaching Materials
    ${ }^{45}$ See Article 184 f the Law on Textbooks and Other Teaching Materials
    ${ }^{46}$ See Article 7, Paragraph 2 of the Law on the Foundations of Education System

[^18]:    ${ }^{47}$ See Article 4, Paragraph 1, Point 6 of the Law on Higher Education
    ${ }^{48}$ See Article 4, Paragraph 2 of the Law on the Foundations of the Education System
    ${ }^{49}$ See Article 46, Paragraph 1 of the Law on the Foundations of the Education System
    ${ }^{50}$ See Article 46, Paragraph 2 of the Law on the Foundations of the Education System
    ${ }^{51}$ See Article 145, Paragraph 1, Point 3 and Paragraph 2 of the Law on the Foundations of the Education System
    ${ }^{52}$ See Article 131, Paragraph 1, Point 4 of the Law on the Foundations of the Education System
    ${ }^{53}$ See Article 131, Paragraph 2 of the Law on the Foundations of the Education System

[^19]:    ${ }^{54}$ See Article 7, Paragraph 2 of of the Law on the Foundations of the Education System
    ${ }^{55}$ See Article 80 of the Law on Higher Education

[^20]:    ${ }^{56}$ Zakon o univerzitetu, Sl. Glasnik RS, br. 21/2002

[^21]:    ${ }^{57}$ This number has increased by one faculty - The Teachers' Training Faculty in Hungarian language, which was established in 2006. The Alternative Report is mentioning the difficulties occurred when establishing the mentioned faculty. This will be presented as a part of an Alternative Report written by the National Council of the Hungarian National Minority in later in this chapter. The part which was made by VHCR still does not mention the establishment of the faculty.

[^22]:    ${ }^{58}$ Odluka o organizacijonij strukturi Univerziteta u Novom Sadu, Sl. glasnik AP Vojvodine, br. 14/2004

[^23]:    ${ }^{59}$ Zakon o zaštiti prava i sloboda nacionalnih manjina ("Sl. list SRJ", br. 11/2002, "Sl. list SCG", br. 1/2003 Ustavna povelja i "Sl. glasnik RS", br. 72/2009 - dr. zakon i 97/2013 - odluka US).
    ${ }^{60}$ See Article 13 of the Law on the Protection Rights and Freedoms of National Minorities

[^24]:    ${ }^{61}$ Gender Differences in Educational Outcomes: Study on the Measures Taken and the Current Situation in Europe (2010), European Commission

[^25]:    ${ }^{62}$ Strategy for education development in Serbia 2020 (SEDS) (2013), Ed. Ministry of Education, Science and Technological Development, Belgrade: Ministry of Education, Science and Technological Development ${ }^{63}$ Magyar Nemzeti Tanács, Oktatásfejelesztési Stratégia 2016-2020, (http://www.mnt.org.rs/dokumentum/oktatasfejlesztesi-strategia-2016-2020) accessed: 12.11.2018.

[^26]:    64 In this dissertation only, the faculties were be listed and discussed, while the higher education schools are not included in the research.

[^27]:    65 The Teachers' Training Faculty in Hungarian in Subotica is the youngest higher education institution of the University of Novi Sad that was founded in January 2006. The Faculty was established when the branch in Subotica, where the teaching was conducted in Hungarian, became independent from the Faculty of Education in Sombor (Učiteljski - Osnovna, 2017).

[^28]:    ${ }^{66}$ Zakon o zaštiti prava i sloboda nacionalnih manjina ("SI. list SRJ", br. 11/2002, "SI. list SCG", br. 1/2003Ustavna povelja i "SI. glasnik RS", br. 72/2009 - dr. zakon i 97/2013 - odluka US).
    ${ }^{67}$ Zakon o nacionalnim savetima nacionalnih manjina ("Sl. glasnik RS", br. 72/2009, 20/2014 - odluka US i 55/2014)

[^29]:    ${ }^{68}$ Zakon o nacionalnim savetima nacionalnih manjina ("Sl. glasnik RS", br. 72/2009, 20/2014 - odluka US, 55/2014 i 47/2018)
    ${ }^{69}$ Európa Kollégium opened its doors in Novi Sad in September 2015 with the aim of providing home to Hungarian-speaking students studying in the provincial capital, as well as students belonging to the Serb community in Serbia but studying in Novi Sad.
    ${ }^{70}$ Academic Prof. Tibor Várady has donated 100.000, 00 US dollars for the foundation of the scholarship program in 2013. The scholarship is also supported by the Bethlen Gábor Alap Zrt. from Hungary.

[^30]:    ${ }^{71}$ The Bethlen Gábor Fund is a separate state fund designed to promote the achievement of the goals of the Hungarian Government's national strategy. Its primary task is to provide grants to help individual and community prosperity, material and spiritual growth in the homeland of the Hungarians from abroad and to preserve their culture.
    ${ }^{72}$ In the Serbian Higher Education System, the grades are beginning from 5-10, where 5 is not a passing grade, while 10 is the highest grade.

[^31]:    ${ }^{73}$ This fact was determined by the author of this dissertation via phone, as the website of the Romanian National Council is temporarily not working.
    74 There are other Hungarian civil societies acting on the territory of Vojvodina, but the author selected the four most significant for this thesis.

[^32]:    75 In year 2017. the Crystal Globe award was given to the author of this dissertation.
    ${ }^{76}$ There was a project in 2017 titled: „Hungarian Scientific Database of Vojvodina" which was funded by the Provincial Secretariat for Science and Technological Development, Vojvodina.

[^33]:    ${ }^{77}$ The author gained this information from one of the Professors at the Department of Slovak Studies, Faculty of Philosophy, University of Novi Sad.
    ${ }^{78}$ The author gained this information from one of the Professors at the Department of Romanian Studies, Faculty of Philosophy, University of Novi Sad.

[^34]:    ${ }^{79} \mathrm{~N} / \mathrm{R}$ refers to no response given.

[^35]:    ${ }^{80}$ All the interviews in this thesis are presented in English. The citations in the respondents' source languages can be found in Appendix 6.

[^36]:    ${ }^{81}$ The data was provided by the Provincial Secretariat for Education, Regulations, Administration and National Minorities - National Communities, AP of Vojvodina and it was used only for the purpose of this reserach.

[^37]:    ${ }^{82}$ All data containing information about the respondents are summarized in Appendix 1. Table 6 gives information about Hungarian female professors, Table 7 about Hungarian female students, Table 8 about Slovak and Romanian female professors, Table 9 about Serbian female professors and a student, and, finnaly, Table 10 offers details about Hungarian, Slovak, Romanian and Serbian male professors.

[^38]:    ${ }^{83}$ The percentage of minority population in various municipalities are listed in chapter 9.3.1.

[^39]:    84 In the table number 20, 21,22 and 23 is stated only if the interviewee were education in Serbian language, as it was the exception, whereas the rest of the interview respondents were educated in Hungarian.

[^40]:    85 This „key" or „ključ" in Serbian was basically a quota which was predifined in the Communits Party and represented the number of minority and majority people needed for some postions.

[^41]:    Of course, that I had problems (with balancing between my career and family). I had no one to look after my children. I wrote at night. I got used to it, so I still cannot get up in the morning. My magisterium and my PhD dissertation as well. I wrote my magisterium in the kitchen, because our apartment was small. I did not write the PhD in the kitchen, but I wrote it mainly during the afternoons and at night. Then the children were older. My ex-husband was in a better position. He was

[^42]:    ${ }^{86}$ Domus Guest House in Budapest focuses mainly on hosting Domus Fellowships and the members of the Hungarian Academy of Sciences. In addition, it offers discounted accommodation for other academic and university circles belonging to the Hungarian scientific community living across the borders of Hungary. The guesthouse is also ready to host professional events. It opened in 1999 and has been operating since then.

