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Chapter 3.

How gender and economic, cultural and social capital influence educational decisions of students in the Croatian context?

Branislava Baranovic and Silvia Rogosić

Abstract

The research presented in this chapter focusses on exploring gender differences regarding the access to higher education (HE) and the secondary students' choice of type of HE institution. The questionnaire was administered to 1814 secondary school students in Croatia in 2014/2015, with an average age of 19. The research draws on Bourdieu's theory of cultural, economic and social capital (1973, 1977) with the integration of students' opinion on HE institutions and gender perspective. Hierarchical regression analyses indicate that the students' gender intersects with the cultural capital and the students' opinion on HE institutions in shaping their decision to attend HE and their choice of type of HE institution. Differences in the structure of cultural capital of male and female students that influence choice of HE institution point to its stereotypical nature. Furthermore, female students are more concerned than male students about whether their choice of study is appropriate for their gender, while for male students the prestige of higher education institutions is more important.

Key words: Gender; Cultural, economic and social capital; Secondary school students; Students' educational decisions, Students' opinion on higher education institutions.

Introduction

In the past few decades, the number of HE students has increased globally, showing that the universities have shifted from elite to mass universities. This trend is characterised by an increased rate of women's participation in HE. Moreover, women today are over-represented in HE as compared to men (Eurostat 2020). According to UNESCO's data for the past 40 years, the proportion of women in HE in North America and Western Europe has increased to 56.4%, in East Asia and Pacific to 51%, in Latin America and Caribbean to 56.3% (Parvazian and Chiera

2017). According to Eurostat (2020), in 2018 women made up 53.7% of all tertiary students in the EU. However, this trend does not imply that gender equality in HE has been achieved. Patriarchy or hegemonic masculinity in HE is still strongly felt and experienced (Ullah and Ali 2012). This is observed in: (1) gendered study choice with over-representation of women in the study areas such as social sciences and humanities that lead to lesser paid jobs (OECD 2015); (2) gendered internal stratification in the system of HE where the type of institutions in which educational credentials are gained can maintain or reduce gender inequalities (Egerton and Halsey 1993; Fiuza et al. 2016).

In order to understand gender equality in HE in Croatia, it is necessary to describe the Croatian educational context. After completing 8-year compulsory education, the students at the age of 14-15 enrol in different types of secondary education schools: gymnasiums (grammar schools), art and different types of 4-year and 3-year vocational schools. From the perspective of equal access to HE education, it should be noted that the first social and gender differentiation commences at the secondary education. The 3-year vocational prepare the youth primarily for their occupations but not for the continuation of education at the universities or other HE institutions. The students who complete a 4-year vocational school can continue schooling at HE level, but they are faced with a limited range of opportunities for the enrolment at universities. They need to sit for the state matura exam, which is based on the curriculum of gymnasiums, and not of vocational schools. Unlike vocational schools, gymnasiums are considered elite schools whose role is to prepare students for university education. Therefore, the expanding access to HE remained societally controlled by the differentiation of secondary schools, where the more prestigious gymnasiums were, and still are, dominated by socially privileged groups. This social differentiation is continued at the level of tertiary education by internal stratification in the system of HE into more prestigious university institutions (faculties and academies of arts) and less prestigious polytechnics. From a gender perspective, it should be noted that the internal stratification in the HE system also generates the types of institutions relevant in maintaining gender inequalities (Baranovic 2000; Baranovic and Doolan 2005).

Our research focusses on gender differences in students' decisions to attend an HE institution and their choice of the type of HE institution with respect to their social, economic and cultural capital and their opinion on HE institutions in the Croatian context. An overview of research on

gender differences in HE in different countries, which will be presented in more detail in the next section, points to the inconsistency of the findings as a function of variability in research goals, studied population and societal context in which the research was conducted. This inconsistency in the findings blurs the overall picture of gender differences, especially in terms of gender differences regarding the students' cultural, economic and social capital in HE. Such situation implies the need for further research on the topic. Through our research, we seek to contribute to a more comprehensive understanding of gender differences in HE in relation to the cultural, economic and social resources of students.

Research review and theoretical framework

Gender differences in education are affected by a wider societal context, its various social inequalities and gendered structure. Accordingly, gender is a complex category that intersects with and is shaped by different social categories and individual characteristics of women and men. This indicates that women and men as social groups are not homogeneous groups. They are stratified by class background, ethnicity, race which affect their access to HE and the choice of HE institutions. This within-group social distinction makes a difference to HE access by limiting or facilitating educational opportunities of male and female students (further in the text: males and females) of different social statuses and group affiliations (Eccles et al. 1984; Skeggs 2004; Buchmann et al. 2008; Parvazian et al. 2017).

In this chapter, we examined how gender differences in access to HE and the choice of HE institutions are connected with cultural, economic and social capitals of students and their opinion on HE institutions. The effects of cultural and economic capital on HE achievement have been abundantly examined, but far less studies have explored gender differences in HE in relation to cultural, economic and social capital. Most studies of the effects of cultural, economic and social capital draw on Bourdieu's theory of social reproduction (1973) and capitals (1977), whereby concepts of capitals are conceptualised and operationalised in various ways depending on the study goals and contexts where research was conducted. This is particularly accurate in terms of defining the concept of cultural capital. In general, it could be argued that the definitions of cultural capital in empirical research include knowledge and experience of high culture, high cultural assets, educational level of parents, while, in more recent research, extracurricular

activities of students are also regarded as cultural capital. Economic capital is usually defined in literature by parental occupation, income and possession of material goods (Katsillis and Robinson 1990; Mohr and DiMaggio 1995; Kalmijn and Kraaykamp 1996; Dumais 2002; Baranovic et al. 2016). Therefore, it is not surprising that studies on the effects of capitals on students' educational attainment and trajectories have also yielded different, even contradictory results, especially in terms of cultural capital which has been mostly explored (Dumais 2002). For instance, some researchers found a strong effect of cultural capital on grades and educational attainment of students in United States (as Di Maggio 1982; Kalmijn and Kraaykam 1996), while Katsillis and Robinson, who conducted their research in Greece (1990), did not find such a correlation. Unlike Di Maggio (1982), Aschaffenburg and Maas (1997) found that cultural capital equally benefited the educational transition of male and female students in the United States.

In addition, cultural capital was the most important predictor of educational success in most empirical studies conducted in Croatia (Jokic and Ristic Dedic 2010; Baranovic et al. 2014; Jugovic et al. 2016). It should be noted that most of these studies refer to compulsory and secondary education, while research of higher education is very scarce and lacking.

Furthermore, it is worth mentioning that recent research also highlights the significant role that students' family capitals play in shaping gender inequalities in education. Studies (Kaufman and Gabler 2004; Kataoka 2015) indicate the role of family resources, especially the role of cultural capital in gendered differentiation of the study course choice and HE institutions.

Kaufman and Gabler (2004) found that parents' cultural activities and cultural knowledge play a significant role in determining whether their children will enrol in an elite college. The parents' interest in arts equally improves male and female chances of attending an elite college. The exception are some elite colleges that preferred students that are "unique among peers", such as males who participate in stereotypically female activities. This research is important because it indicates that the cultural practices of parents (cultural capital) are more important for the enrolment of males and females in elite colleges than the students' exposure to arts (e.g., visiting museums). It also points to the important role of extracurricular activities in the students' prospects with regard to HE, including its gender aspects. Lehman and Dumais (2016) also point to the gendered character of extracurricular activities as the components of cultural capital by

showing that males are bullied for participating in cultural activities that are often considered as less masculine.

In his research conducted in the Japanese context, Kataoka (2015) found that shadow education (exam preparation schools) determines men's academic performance and lengths of formal schooling, while the decisive factor for women's academic success and attainment of a high level of education is cultural capital. Gender gap is also indicated in the study choice. Unlike men who tend to choose science-oriented courses in universities, women's educational trajectories and choices tend to focus on liberal arts.

Sheng's (2015) research confirmed that undergraduate course choice is also considerably gender-differentiated in China. Employing Bourdieu's concept of habitus, Sheng explores how gender differences in study choice intersect with students' social class background. The findings reveal that males and females, especially females, who come from families with high economic income and a good occupation and social network have more gender-stereotypical study choice, as compared to their counterparts from the working-class background. This is explained by insufficient economic capital and the lack of effective social and cultural capital which results in working-class female students opting for economically favourable and typically male study courses as opposed to female students from the middle-class background.

Our research draws on Bourdieu's theory of capitals (1977) expanded with gender approach (Jugovic et al. 2016). Following McCall's (1992), Laberge's (1995), and Reay's (1998) observations, we considered Bourdieu's theory as an appropriate framework for exploring the effects of capitals on gender differences in education. We used Bourdieu's concepts of economic, cultural and social capital in order to examine how family's cultural, economic and social resources interact with gender in shaping students' educational decision to pursue HE and their choices of HE institution. In Bourdieu's view, cultural capital exists in three forms: embodied (high culture knowledge and understanding, linguistic competences and cultural tastes), objectified (cultural goods such as paintings, books and other high culture assets) and institutionalised (educational qualifications/credentials). Economic capital, which is closely linked to cultural capital, is defined as the family possession of financial resources and material goods. Unlike cultural and economic capital, Bourdieu interprets social capital as social

networking outside the family that allows an individual to use the capital / resources of the social group to which he/she belongs (Baranovic et al. 2015).

In addition to the role of capitals, the Croatian research points to gender differences in students' opinions about the HE subject area as an important factor in their choice of study (Jugovic et al. 2016). In order to gain a more comprehensive insight into the factors influencing the students' educational decisions, the students' opinion on HE institution, study field and study programme was also included in our analysis. In the following sections, we will describe the research design and procedure, its results including a discussion of the findings, and draw relevant conclusions from the findings.

The research study

The aim of this research was to explain how gender in interaction with cultural, economic and social capital and the students' opinion on higher education institutions shapes their decision to attend HE institutions and their choice of the type of institution they want to enrol in (faculties/art academies or polytechnics). This research was part of a broader research project *Social Identities, Access to Higher Education and Course Choice* (2013-2016) funded by the Croatian Science Foundation and approved by the Ministry of Science, Education and Sport of the Republic of Croatia. A quantitative research design (i.e. questionnaire research) was employed for the research conducted in 2014/2015 on a national representative sample of students in the final years of their secondary school education in Croatia.

The research focussed on the following questions:

1. Are there any gender differences in the students' decisions to continue schooling at HE level?
2. Are there any gender differences in the students' choices of the type of HE institution they want to enrol in (faculties and art academies or polytechnics)?
3. Are there any gender differences in the students' possession of different forms of capitals?
4. How do cultural, economic and social capital in interaction with gender shape males' and females' decision to attend an HE institution?

5. How do cultural, economic and social capital in interaction with gender shape males' and females' choice of the type of HE institution they want to enrol in (faculties and art academies or polytechnics)?
6. How do students' opinions on prestige and gender appropriateness of an HE institution in interaction with the capitals affect the males' and the females' choice of HE institution?

In order to answer the research questions and to achieve the research aim, the research design was directed by the following hypotheses:

1st hypothesis: Data for EU countries (Eurostat, 2020) and other countries (Parvazian et al. 2017) indicate that the share of women in tertiary education has increased to over 50% over the last few decades, resulting in their over-representation as compared to men. The same applies to Croatia, where women accounted for 57% of all tertiary students in 2018/19 (Croatian Bureau of Statistics, 2020:28). Based on this trend, we hypothesised that female students were more likely to continue schooling at HE level than male students.

2nd hypothesis: According to the studies conducted in Croatia (Jugovic et al. 2016) and other countries (Kataoka, 2015), women tend to choose study courses in social sciences, humanities and arts. Since most of these study courses in Croatia are taught at university institutions and art academies, we expect women to be more likely to choose faculties or art academies, while men are more likely to choose polytechnics.

3rd hypothesis: In recent research, Bourdieu's concept of cultural capital has been extended to extracurricular activities because they play an important role in students' academic achievement and choice of studies (Kaufman and Gabler, 2004; Baranovic et al., 2015; Lehman and Dumais, 2016). Similar to other components of cultural capital, extracurricular activities also show their gender-stereotypical nature. Drawing on these findings, we assume that there are gender differences in the students' structure of cultural capital, i.e. females (more than males) attended extracurricular activities, such as ballet and singing in a choir, which are considered as stereotypically female activities.

4th hypothesis: Many studies point to the prominent role of cultural capital in the students' achievements and educational pathways (Di Maggio, 1982; Kalmijn and Kraaykam, Kataoka, 2015). Therefore, we expect that cultural capital will be the strongest predictor of the students'

decisions (both men and women) to continue their education at HE level and their choice of the desired type of HE institution (faculty/art academy or polytechnic).

5th hypothesis: Bearing in mind the above-mentioned gendered nature of cultural capital, we assume that the components of cultural capital will differently affect the males' and the females' decision to continue schooling at HE level and their choice of the type of HE institution.

6th hypothesis: As the studies show (Jugovic, 2016), the students often choose a field of study in accordance with their perception of their own gender identity, whereby their study choice is usually stereotypical. Accordingly, our hypothesis is that the students' opinions on prestige and gender appropriateness of the HE institution, study field and programme will differently affect the males' and the females' choice of HE institution.

Operationalisation of Variables and Instruments¹

According to the research goal and hypotheses, the applied questionnaire consisted of questions measuring the concepts of cultural, economic and social capital, questions measuring the students' decisions to continue schooling at HE level and their choice of the desired type of HE institution. Based on the theoretical framework of the research described in the previous section, the capitals, the students' decisions to continue education and their choice of desired type of HE institution were operationalised as follows.

Cultural capital was examined by scales that measure embodied, objectified and institutional capital.

Institutionalised capital was measured by *the highest level of education completed by the students' parents*. Participants were asked to indicate the highest educational level completed by their mother and father (from 1=incomplete primary school, to 8=master or doctorate degree).

Embodied capital was explored with four scales:

- *Cultural practices of the students' parents*. Students were asked to estimate how often their parents 'read fiction, 'read prose and poetry', 'attend training courses, programmes or lectures', 'visit museums or art galleries', 'go to the theatre', and 'visit the opera, ballet or classical concerts' (from 1=never to 5=very often). The scale was unidimensional; $\alpha=.84$.

¹ For a detailed description of all scales in the research, see Baranovic et al. (2015).

- *Students' cultural practices*. Students indicated how often they 'visited museums or art galleries', 'went to the theatre', and 'visited the opera, ballet or classical concerts' during the past year (from 1=never to 4=more than four times). The scale was unidimensional; $\alpha=.77$.

- *Students' reading practices*. Participants were asked how often they read 'daily or weekly newspapers articles about politics or culture', 'popular-scientific journals or magazines with topics from the cultural domain', 'fiction', and 'prose and poetry' that are not part of their school obligations. Possible answers ranged from 1=never or almost never to 5=a few times a week or every day. The scale was unidimensional; $\alpha=.67$

- *Students' extracurricular activities*. Participants were asked to indicate whether they attended the following activities outside of school: 'a drama group', 'ballet or modern dance', 'singing in a choir', 'music school' and 'school of foreign languages or individual instruction in foreign languages' (0=no, 1=yes).

Two scales were used to investigate *the objectified cultural capital*:

- *Possession of cultural goods*. Participants were asked whether they have 'professional books or manuals', 'classical literature books', 'books written in a foreign language', 'works of art like paintings or sculptures' and 'CDs or other recordings of classical or jazz music' in their home. Possible answers were *yes* or *no* (0=no, 1=yes).

- *Number of books in the household*. The students estimated the number of books in their homes on a 6-point scale (1='0-1', 2='11-25', 3='26-100', 4='101-200', 5='201-500', and 6='more than 500 books').

Social capital was measured by the extent to which the relationships with the significant others: (members of the extended family, girlfriend/boyfriend, peers, school colleagues, neighbours, parents' friends) and institutional social capital (teachers, school support staff and professional orientation counsellors) have influenced the students' educational decisions. The scale comprised nine questions, and the participants could respond on a 5-point Likert-type scale from 1=they did not influence my educational decisions at all to 5=they greatly influenced my educational decisions. The scale was unidimensional ($\alpha=.89$).

Economic capital was measured by 1) the possession of material goods (real estate) and 2) the subjective evaluation of the financial situation of the family. The students were asked 'What is the total number of residential real estate your family owns?' The possible answers ranged from 1=none to 4=three or more. In addition, they were asked to assess their family's financial

situation, and the participants could respond on a 5-point scale from 1= my family barely makes ends meet to 5=my family is rich.

- *Students' opinions on HE institutions* was operationalised as the students' estimate of the importance of prestige and gender appropriateness of HE institutions, fields of study and study programme as desirable characteristics for the choice of study.

Desirable characteristics of HE institution, field of study and study programme the students intend to enrol were measured by three statements set on a 5-point Likert scale:

1. 'It is important for me that the HE institution I enrol in is respectable';
2. 'It is important for me that the field of study I enrol in is respectable (e.g. medicine, agriculture, mechanical engineering)';
3. 'My choice of study programme is influenced by whether I consider it to be appropriate for my gender.'

Participants' responses ranged from 1=totally disagree to 5=totally agree with the statements.

- *The students' decision to continue schooling at the HE level* was measured by the *Yes/No* question: 'Do you plan to continue schooling at HE level?' (0=no, 1=yes).

- *The choice of the desired type of HE institution* was measured by a question: 'I will continue education at a faculty or art academy'. Participants could respond on a 5-point Likert scale (from 1= definitely won't to 5= definitely will). Only those students who confirmed that they will continue their schooling at HE level could answer this question. A higher response rate means it is more likely for a student to enrol in a university course (faculty or art academy), while a lower rate response implies that the student is more likely to choose a polytechnic.

Methodology of research

Procedures and data collection

The survey was conducted on a sample of students in three and four-year vocational schools and gymnasiums. An official letter was sent to the principals asking them for a permission for students' participation in the research. After the consent was obtained, the principals were contacted by the members of the research team and agreed on the term of the survey. In each school, only one class of students was surveyed, and the survey was conducted in classes, during one school hour. The survey was anonymous and with the informed consent of the students.

Sample

The survey was conducted on a national sample of 1814 students in 98 secondary schools in 2014/15. The sample was representative according to gender, the type of school the students attend and the counties and regions of Croatia. In total, 22.3% participants attended three-year vocational schools, 43.8% attended four-year vocational schools, 32.7% attended gymnasiums and 1.2% of all participants attended art schools. In addition, 25.3% of all participants lived in villages, 30.8% lived in small towns, 16.9% lived in big cities and 16.3% lived in the capital of Croatia (Zagreb). Furthermore, 49.6% of all students were females and 50.4% of them were males. On average, the students were 19 years old.

Data analysis

Considering the type of variables, we applied the T-test and the Chi-square test, respectively, to examine statistically significant differences between male and female respondents on each variable used to test the 1st, 2nd and 3rd hypotheses.

The logistic regression analysis was used to examine the extent to which different forms of capital predict the students' decision to continue their schooling at HE level. We performed two logistic regressions: one on the female sample and the other on the male sample in order to compare the results and to test the 4th hypothesis.

The hierarchical regression analysis was used to examine the extent to which different forms of capital and students' opinion on the prestige and gender appropriateness of HE institutions predict their choice to continue education at the faculty or art academy. We performed two hierarchical regressions: one on the female sample and the other on the male sample in order to compare the results and to test the 5th and 6th hypotheses.

SPSS 19 software was used for the statistical data analysis.

Results

As a test that measures relationships between the categorical variables, the Chi-square test was used to explore the statistical differences between female and male respondents in their plans to continue schooling at HE level and in the possession of different types of capital. Table 1 presents only the statistically significant differences.

Table 1 χ^2 test: Statistically significant differences between males and females in their plans to continue schooling at HE level and the possession of different types of capital

Variables	Frequency (Answer YES)		Value	Yates' Correction for Continuity
	Females	Males		
Do you plan to continue schooling at HE level?	733	565	23.106	.000
For at least a year, I attended drama classes (e.g. in theatre).	129	72	18.397	.000
For at least a year, I attended ballet or contemporary dance.	205	57	99.141	.000
For at least a year, I attended chorus singing.	335	86	195.227	.000
For at least a year, I attended foreign language school or individual foreign language classes.	250	203	7.443	.006
I have my own room.	722	790	11.889	.001
I own books of classical literature.	641	578	13.573	.000
I own professional books or textbooks.	623	678	7.383	.007

The χ^2 test results indicate the statistically significant differences between males and females regarding their decisions to continue schooling, i.e. more females than males plan to continue schooling at HE level. There are also statistically significant differences between males and females in attending extracurricular activities, (i.e. females more frequently attended ballet, drama classes, chorus singing, foreign language schools), in owning professional/classical literature (females more frequently own some classical literature, while males more frequently own some professional literature). Interestingly, the statistically significant differences between male and female respondents were detected in having their own room (males more frequently than females have their own rooms).

In order to explore the differences between male and female students in choosing the desired type of HE institution, we examined the statistical significance of the differences between their plans to continue education at a faculty or an art academy. The T-test was used because the males' and females' intentions to enrol into a faculty or an art academy were measured on a Likert-type (continuous) scale. It is important to bear in mind that a response indicating a higher value on the scale means it is more likely for a student to enrol in a university course (faculty or

art academy), while a lower grade response implies that the student is more likely to choose a polytechnic. Table 2 shows only the statistically significant differences.

Table 2 T-test: Statistically significant differences between males and females in their plans to continue education at the faculty or art academy

Variables	Subsamples	M	P
I will continue my education at the faculty or art academy.	Females	4.324	.000
	Males	4.118	

The results of the T-test indicate statistically significant difference between males and females in the type of HE institution they want to enrol in, females more frequently choose faculties and art academies, while males more frequently choose polytechnics.

The regression analyses were used to examine the extent to which the different independent variables predict two dependent variables: 1) decision to continue schooling at HE level and 2) decision to continue education at the faculty or art academy, for each sub-sample of males and females separately.

Table 3 presents the results of the final models of the binary logistic regression measuring the extent to which different forms of capital predict males' and females' decisions *to continue their education at HE level*.

Table 3 Final models of the binary logistic regressions with *continuation of education at HE level* as a dependent variable (for each sub-sample separately: males and females)

Predictors	B	P	B	P
	Females		Males	
1. Cultural capital				
Highest educational level of mother	.827	.000	.334	.000
Highest educational level of father	.350	.011	.307	.000
Parental cultural practices	-.075	.798	.005	.976
Student's cultural practices	.319	.240	.146	.433
Student's reading practices	.748	.000	.664	.000

Number of books at home	.389	.002	.270	.002
Computer	-1.112	.042	.060	.902
Professional books or textbooks	-.178	.512	.625	.006
Books of classical literature	.077	.784	-.174	.447
Books written in a foreign language	-.021	.938	.213	.310
Artwork	-.191	.459	.078	.719
CDs or other audio media	.436	.162	.557	.026
Drama group (e.g. in theatre)	.335	.438	-.237	.593
Ballet or contemporary dance	-.764	.060	.742	.102
Chorus singing	-.204	.461	.310	.495
Music school	.799	.135	-.224	.508
Foreign language school or individual foreign language classes	.832	.029	.643	.028
2. Economic capital				
Possession of material goods	-.070	.691	.122	.328
Family's financial situation	.274	.098	-.129	.337
3. Social capital (significant others)	.089	.285	.174	.004
<hr/>				
Cox & Snell R ²	.284		.270	
Nagelkerke R ²	.481		.393	
Hosmer and Lemeshow Test:	p>.05		p>.05	
Classification	87.5		80.9	
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Both logistic regressions (samples: males and females) consisted of three identical steps. The order of insertion of variables into the logistic regressions was aligned with the findings of the previous research presented in the research overview. The components of cultural capital were included in the first step of the logistic regressions as the studies show that cultural capital is the most important predictor of educational success in most empirical studies conducted in Croatia

(Baranovic et al. 2014). Economic capital was added in the second step. The third and final step included social capital. With respect to the dependent variable *intention to continue schooling at the HE level*, the convenience index in the logistic regressions indicated the adequacy of the models which included only variables of cultural capital as opposed to the null model (for both subsamples: males and females).

The last step (Table 3) which shows the entire regression model based on the *sample of females* explains between 28.4% and 48.1% of the variance (Cox & Snell $R^2=.284$; Nagelkerke $R^2=.481$) and accurately classifies 87.5% of cases (females who decided to continue schooling at HE level and those who decided against it). The significant predictors for the females' decisions to continue schooling at HE level were: *highest educational level of mother* ($p\leq.001$), and *father* ($p\leq.05$), *student's reading practices* ($p\leq.001$), *number of books at home* ($p\leq.01$), *owning computer* ($p\leq.05$), *attending foreign language school or individual foreign language classes* ($p\leq.05$). Only the variable *owning computer* was negatively correlated with the dependent variable, suggesting that females with fewer computers are less likely to attend the HE institution.

The last step (see Table 3), which shows the entire regression model based on *the sample of males*, explains between 27% and 39.3% of the variance (Cox & Snell $R^2=.270$; Nagelkerke $R^2=.393$) and accurately classifies 80.9% of cases (males who decided to continue schooling at HE level and those who decided against it). The statistically significant predictors for males' decisions to continue their schooling at HE level were: *highest educational level of mother* ($p\leq.001$), *highest educational level of father* ($p\leq.001$), *student's reading practices* ($p\leq.001$), *number of books at home* ($p\leq.05$), *professional books or textbooks* ($p\leq.01$), *owning CDs or other audio media* ($p\leq.05$), *attending foreign language school or individual foreign language classes* ($p\leq.05$), *social capital* ($p\leq.01$). Independent variables which were significant predictors in the logistic regressions positively correlate with the dependent variable, i.e. the students with a higher level of cultural are social capital are more likely to continue schooling at HE level.

In order to identify how the capitals and students' opinions about HE institutions predict their *intention to continue education at a faculty or art academy*, two hierarchical regression analyses were conducted: for females and males separately. The results of the hierarchical regressions (final step) are shown in Table 4.

Table 4 Final steps of the hierarchical regressions for variables predicting decision *to continue education at the faculty or art academy* (for each sub-sample, males and females separately)

Predictors	β	P	B	P
	Males		Females	
1. Cultural capital	$R^2=13.8\%; p \leq .01$		$R^2=12.4\%; p \leq .001$	
Highest educational level of mother	.049	.325	.056	.246
Highest educational level of father	.074	.141	.172	.000
Parental cultural practices	-.085	.144	-.075	.173
Student's cultural practices	.127	.015	.070	.121
Student's reading practices	.142	.004	.101	.021
Own room	.048	.257	-.036	.352
Computer	.005	.903	.012	.756
Professional books or textbooks	.034	.445	.037	.371
Books of classical literature	-.021	.675	.002	.967
Books written in a foreign language	-.100	.028	-.026	.543
Art works	-.020	.666	-.013	.755
CDs or other audio media	-.087	.047	.056	.167
Number of books at home	.042	.417	.158	.001
Drama group (e.g. in theatre)	-.057	.193	.038	.330
Ballet or contemporary dance	.024	.624	-.048	.222
Chorus singing	.017	.720	-.012	.777
Music school	-.053	.215	.007	.876
Foreign language school or individual foreign language classes	-.063	.143	-.011	.788
2. Economic capital	$R^2=13.9\%; p > .05$		$R^2=12.6\%; p > .05$	
Possession of material goods	-.049	.282	.014	.731

Family's financial situation	.020	.656	.018	.670
3.Social capital	R ² =13.9%; p>.05		R ² =12.7%; p>.05	
Significant others	-.056	.211	.005	.901
4. Importance of prestige and gender appropriateness of the HE institution	R ² =15.9%; p≤.01)		R ² =14.4%; p≤.01)	
It is important for me that HE institution I enrol in is respectable.	.140	.009	.067	.203
It is important for me that the field of study I enrol in is respectable (e.g. medicine, agriculture, mechanical engineering).	.004	.947	.074	.159
My choice of study programme is influenced by whether I consider it to be appropriate for my gender.	-.022	.625	-.105	.010

Both hierarchical regressions (samples: males and females) consisted of four identical steps. As in the logistic regression, the components of cultural capital were included in the first step of hierarchical regressions. Economic capital was included in the second step. The third step included social capital, while the fourth step involved variables related to students' opinions about HE institutions (importance of prestige and gender appropriateness of the HE institution the students want to enrol in).

Concerning the *females' sample*, in the final step where a total of 14.4% variance was explained, a significant contribution to explaining the dependent variable was given by the: *highest educational level of father* (p≤.00), *students' reading practices* (p≤.05) *number of books at home* (p≤.01. In addition to the components of cultural capital, a significant predictor for females' decisions to continue education at the faculty or art academy is the variable *My choice of study programme is influenced by whether I consider it to be appropriate for my gender*. This variable is negatively correlated with the dependant variable. Therefore, the females whose choice of study programme is influenced by whether they consider it to be appropriate for their gender are more likely to choose polytechnics over faculties or art academies.

As for the *sample of males*, in the final step where a total of 15.9% variance was explained, a significant contribution to explaining the dependent variable was given by the: *student's cultural*

practices ($p \leq .05$), *student's reading practices* ($p \leq .01$), *books written in a foreign language* ($p \leq .05$), *owning CDs or other audio media* ($p \leq .05$).

In addition to the components of cultural capital, a significant predictor for males' decisions to continue education at the faculty or art academy is the variable *It is important for me that HE institution I enrol in is respectable*.

All the significant variables-predictors, except the variables *owning the books written in a foreign language* and *CDs or other audio media*, are positively correlated with the dependent variable. This implies that the males owning fewer books written in a foreign language and CDs or other audio media are more likely to choose polytechnics.

Discussion

This research aimed to examine how gender differences in students' decision to attend an HE institution and their choice of HE institutions are connected with their cultural, economic and social capital and opinion about HE institutions.

According to the findings, in Croatia there are statistically significant differences between males and females in their decisions to pursue HE, which is in accordance with our 1st hypothesis that females are more likely to continue schooling at HE level. This finding is also in the line with the current trends in HE. As the statistics show, women are overrepresented in HE as compared to men; they comprise over 50% of university undergraduate students in most countries (Eurostat, 2020; Croatian Bureau of Statistics, 2020).

As expected in the second hypothesis, females are more likely to enrol in university institutions (faculties and art academies), while males are more likely to choose polytechnics. The greater number of males in the polytechnics can be explained by the institutional structure of HE in Croatia. Specifically, many of these schools offer study programs that are attractive to men, such as ICT and management.

The findings also indicate a gender difference in the structure of cultural capital, pointing to its stereotypical nature, which is consistent with our third hypothesis. More males than females own professional books or textbooks, while more females own books of classical literature. Also, there are statistically significant differences between males and females in pursuing

extracurricular activities: females are more likely to attend drama classes, ballet, choir and language schools which are considered typically female activities. This is not surprising, because males' participation in cultural activities is often perceived as lacking masculinity (Lehman and Dumais, 2016). Since it is considered significant for accessing the HE (Kaufman and Gabler, 2004), the gendered structure of extracurricular activities contributes to the maintenance of its gender-stereotypical structure.

As expected (the fourth hypothesis), the results of both regressions (logistic and hierarchical) indicate that cultural capital is the strongest predictor of students' decision to continue education at HE level and their choice of faculties/art academies or polytechnics. This finding is in the line with the research in other contexts, e.g. aforementioned Kataoka's research (2015). Social capital was an important predictor only for males' decision to continue schooling at HE level, but not for their choice of the desired type of HE institution. Interestingly, economic capital was not a significant predictor of neither males' nor females' decisions. This finding corresponds with an earlier Croatian research (Baranovic et al. 2014), which confirms that economic capital has less impact on males' and females' education than cultural capital, as in the case of other countries.

Gender differences can also be noticed in terms of individual components of cultural capital and their contribution to explaining the students' decision to continue their schooling at HE level, as predicted by our fifth hypothesis. In this regard, it should be noted that the decision of males to continue their education at HE level, in contrast to females, was significantly influenced by their possession of professional books or textbooks, CDs or other audio media and social capital (the influence of significant others, e.g. peers, extended family, in decision making). None of these components had a significant impact on the decision of females to continue their education at HE level. Although some components of cultural capital influence the decision of both males and females, the mentioned components of cultural capital which are usually more associated with men, confirm the previously described gender-stereotypical nature of factors influencing students' decision to pursue HE.

Considering males' and females' decisions to continue education at the university (faculty or art academy) as opposed to polytechnics, the results of hierarchical regression analysis show a slightly different structure of predictors. For instance, the highest educational level of the father is the most significant predictor for females' decision to continue education at a university institution, while it was not a significant predictor for males' decisions. This finding suggests

that in terms of the university education of female students, their fathers play a more significant role than their mothers, reflecting thus the patriarchal structure of gender roles within a family.

A very important finding of the hierarchical regressions is related to gender differences in students' opinion regarding the desirable characteristics of the HE institution (including field of study and study programme) they want to enrol in. Specifically, prestige of the institution is an important predictor of males' decision to continue education at a university institution, indicating their orientation towards socially prestigious occupations as indicators of power.

It should be noted that males who reported the importance of prestige of their desired HE institution are more likely to choose university institutions as opposed to polytechnics. Unlike males, the important predictor of females' decisions to continue education at a university is gender appropriateness of the study programme. There is a negative correlation between gender appropriateness of the HE institution and dependent variable (continuation of education at the faculty or art academy). Accordingly, females whose choice of the study programme is significantly influenced by their opinion whether the programme is appropriate for their gender are more likely to choose polytechnics (this also confirms the sixth hypothesis). Such choice made by females could be explained by their stronger gender-traditional socialisation in the families with lower cultural capital (lower level of parental education) (Jugovic et al., 2016).

Conclusions

The findings reveal statistically significant gender differences in the components of cultural capital possessed by students, indicating the stereotypical nature of capitals. It derives that the gender-stereotypical character of cultural capital plays a significant role in both genders' decisions to continue their education at HE level and to choose the type of HE institution they plan to enrol. Consequently, the gendered structure of cultural capital of students' family points to the patriarchal structure of family and its impact on students' educational pathways that contribute to the maintenance and perpetuation of stereotypical gender roles and gender differences in education and society in general.

Additionally, the research suggests that cultural capital is a stronger predictor of students' educational decisions than economic and social capital. This finding confirms that Bourdieu's theory of capitals also applies to the Croatian context as a theoretical framework for researching gender differences in education, as in the case of other countries.

As noted in the research overview section, the existing studies have produced various and inconsistent findings on the role of cultural, economic and social capital in generating gender differences in education, depending on their conceptualisation, research sample and social context in which the research was conducted. By providing findings within the Croatian educational context, our research contributes to a more comprehensive picture of gender differences in students' decisions regarding their educational pathways. Specifically, it contributes to the field by revealing the stereotypical structure of students' educational decisions with respect to their cultural, economic and social resources as well as their gender. This highlights importance of intersection between social class (resources) and patriarchy within the family and educational institutions relevant to the students' construction of gender identity. Accordingly, it brings forward an exploration of the stereotypical structure of students' educational decisions by combining the students' individual and social characteristics (socio-cultural and socio-economic position) in their joint influence on the students' decisions about their educational pathways.

Gender differences in education have been underresearched and undertheorised and, therefore, require further exploring. In this context, our research points to the need for further exploring the interrelation of gender difference in education and stereotypical structures of families, schools and other institutions within the society which are relevant for the process of students' socialisation.

The findings provide transformative knowledge that implies a demand for the development of educational policy and school strategies to reduce gender stereotypes in the curricula, as well as in pre-tertiary education teaching and learning. A significant impact of family capital on students' gender-stereotypical educational choices indicates a need for intense cooperation between schools and parents in order to reduce gender stereotypes.

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