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GENDER INEQUALITIES IN HIGHER EDUCATION. EVIDENCE FROM THE "PARTIUM" REGION[1]

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Abstract In this paper, the vertical segregation in tertiary education is investigated by gender (the percentage of boys and girls in Bachelor's and Master's training is compared) first. Then the differences in social mobility are examined by gender in higher education. Finally, the acquired cultural capital of students is compared by gender. The research is based on new quantitative empirical research in a borderland Central - Eastern - European region, called "Partium". Our results show that the vertical segregation at the two stages of tertiary education can not be detected, and the advantage of girls in participation is even larger in Master's training than in Bachelor's training in the "Partium" region. Furthermore, girls' social mobility is higher at both stages of the training (but in Master's training their advantage is slightly smaller). Finally, the girls' acquired cultural capital is superior to the boys' in accordance with the literature (but boys are in the lead in using ICT). Overall, our results show that boys are in a disadvantageous situation in tertiary education concerning several aspects.

Keywords higher education, gender differences, social mobility, regional empirical research

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INTRODUCTION

In our paper, we have three research questions: (1) First, we want to examine the vertical segregation by gender in tertiary training, so we will compare the percentage of boys and girls in Bachelor's and Master's training. (2) Secondly, we will examine and compare the differences in social (school) mobility by gender in the two stages of higher education. We do not examine the whole status attainment process; we will compare the cultural and material background of higher education students focusing on gender differences. (3) Finally, we will examine the students' acquired cultural capital by gender which could also play an important role in students' social mobility. (Higher cultural capital can affect the school efficiency and education achievement positively, and this effect could be even larger than the effect of parents' education.)

We do not formulate hypotheses, our goal is to explore and describe gender differences in higher education concerning these three aspects. To examine the vertical segregation and the social background of the students by gender is important, especially because higher education is becoming a female-dominated field, and there were rapid changes in the past decades. Furthermore, it is important because there are only few works in international and domestic special literature concerning the mentioned research questions. Our research is based on new quantitative empirical research in the so-called "Partium" region. The regional character of our results will be discussed in the summary.

It is important to state that girls are in majority at secondary grammar schools and higher education in developed countries (Bae et al. 2000; Freeman 2004; Buchmann et al. 2008). In higher education, females are also in a large majority in adult and part-time education. The advantage of girls in higher education is the greatest in the USA (the rate of girls has gradually been increasing since 1970) but France, Portugal, the post-communist countries and Latin America also have a female majority over 50% (Jacobs 1996). The greatest increase took place in business training and in the fields of accounting and psychology. In engineering, agrarian training and sciences, girls are still in minority but the difference is rapidly decreasing (Bae et al. 2000). In 2007 in the USA, 59% of the students in Master's degree courses were females, and also girls at PhD training are slowly catching up with boys (the rate of girls at PhD training is 49% both in Hungary and in the USA) (NCES 2007).

Female students are better represented at secondary grammar schools and higher education in Hungary as well, compared to males (Róbert 2000;

Székelyi et al. 1998). Our previous research (Fényes 2008, 2010a, 2010b, 2010c) showed that boys are in a disadvantageous situation in education concerning several aspects. According to our results, boys who study in higher education read less, their cultural consumption is lower, and they are at a disadvantage in most aspects of informal learning as well (Fényes 2010a). Moreover, boys' school efficiency is worse concerning some aspects at secondary grammar schools and higher education, despite their superior social background (Fényes 2010b).

We also pointed out that one of the most significant disadvantages of boys in education is that their social mobility is lower compared to the girls, which is in accordance with the fact that they are in minority in the training. They study at secondary grammar schools and in higher education only with much better cultural and material background as compared to girls (Fényes 2008, 2010a), which was supported by American studies as well (Buchmann–DiPrete 2006). Girls – based on American data – are also in majority in higher education as compared to boys, and boys' ambition for continuing studies showed a decreasing tendency, primarily if their parents gained secondary or lower-level education. Meanwhile, the girls' ambition increased with similar background. So a self-selection of boys can be traced concerning higher education studies. There are fewer boys studying in higher education and we can presume that that is why their social background is better.

It has to be noted that – concerning some aspects – the disadvantageous educational status still exists in the case of women. On the one hand, while the rate of women increased at secondary schools and higher education, the prestige of these trainings has decreased (Nagy 1999). In addition, vertical and horizontal segregation is found by gender in higher education (the vertical differences will be discussed in more detail later), which may also disadvantage women. The prestige and the labor market return of the fields of training and professions that are becoming more feminine, is gradually decreasing by the growing rate of women participating.

VERTICAL SEGREGATION IN EDUCATION BY GENDER, PREVIOUS EMPIRICAL FINDINGS

As it was mentioned above, the majority of female students in higher education can be traced not merely at Bachelor's training but also at Master's training, and they are in majority at most highly prestigious university majors

as well (Bae et al. 2000; Freeman 2004, NCES 2007). However, vertical segregation may also be detected by gender in training.[3]

Vertical segregation is present in three forms in education. First, by progressing higher and higher at the educational levels, the rate of women is decreasing (although, approximately 50% of full-time PhD students are women in Hungary and in the developed countries as well nowadays). Second, the rate of women in elite higher education institutions is lower, and their rate is higher in evening classes and part-time trainings, which represents lower prestige. The third sign of vertical segregation is that the rate of women decreases in higher education among staff members and researchers by going higher in the hierarchy of positions.

The background of the phenomenon that elite schools[4] admit fewer girls could be that there are fewer women preparing for engineering careers, and the training institutions for these careers are elite schools, while there are more women in teacher training and part-time education, whose training institutions are considered lower-status schools. Using multi-variable methods, Jacobs demonstrated that after the inclusion of the two explanatory factors (engineer vs. teacher's degree and part-time vs. full-time training), the effect of gender on choosing an elite institution was not significant any more (Jacobs 1999).

Researchers (Charles, Bradley 2002) examined segregation in higher education in various countries. They formulated a segregation index, and examined the effect of three macro features on segregation[5]. The first one was the prevalence of the idea of gender equality by countries and also, its opposite, i.e. identification with traditional gender roles. The second factor was the character of the educational system (the prevalence of non-university tertiary-level trainings, the prevalence of university training and the rate of women participating in these trainings). The third factor was the level of female employment by countries. The results showed that the idea of gender equality affected the rate of women in elite training positively. Moreover,

3 The phenomena of vertical segregation can be traced also at the labor market, which can be one of the consequences of the segregation in training. According to vertical segregation, women do not take/get leading positions, which is called „glass ceiling effect" denoting attitudes and practices that prevent women from getting high-level positions, even though there are no actual laws or rules to stop them (Hunter College Woman's Studies Collective 1983).

4 Jacobs defined elite schools as schools where the SAT (Standard Aptitude Test) scores were higher, the enrolment rates were lower, and finally, the percentage of graduated students were lower than the average.

5 Concerning vertical segregation, they distinguished three stages of tertiary training: non-university tertiary level, first (Bachelor's) degree, and finally the postgraduate degree (Master's degree or PhD degree).

where non-university tertiary-level trainings were more frequent, the number of women in the non-elite sector was larger. Their last result was that the prevalence of the ideas of gender equality reduces vertical inequalities more significantly than horizontal ones (Charles, Bradley 2002).

Concerning Hungarian results, until about 2000 in Hungary, vertical segregation by gender was still noticeable in the sense that, compared to the average, boys succeeded in entering state universities (five year training) at a higher rate than girls, while state colleges (three-four year trainings) and part-time trainings admitted girls at a higher rate (Liskó 2003; Hrubos 2001a). Nevertheless, it was detectable that, while the rate of women in higher education was continuously increasing, their flow into university-level programs was stronger than into colleges, therefore, vertical segregation decreased in time (Hrubos 2001b). Our results (Fényes 2010c) showed that contrary to our hypothesis, females studied at university and college faculties at somewhat the same rate (67%) in 2003 in the "Partium" region. The rate of girls was even a bit higher at university faculties than at college faculties, although the difference was not significant. Explaining this phenomenon, we state that this may occur due to the fact that there was no Technical University in the examined region, only a college faculty in engineering, and thus there were more male students at colleges than there would have really been if there exists a Technical University. Nevertheless, it has to be noted that vertical segregation was present in the training after all – in the sense that males have PhD plans at greater rates than girls do (Fényes 2010c).

It is also important that during the time of sampling in 2003 and 2005, the new type of training (Bologna Declaration) was not yet introduced on a grand scale in Hungary. However, in 2006 the new type of tertiary training was implemented, thus now we can examine the rate of female and male students in the Bachelor's training and in the Master's training based on our new quantitative databases. We will examine only one aspect of vertical segregation in education by gender in our present research, and we do not study the causes of segregation. We compare the rate of boys and girls at the two stages of tertiary education. Based on the literature of vertical segregation in education by gender, we suppose that at higher levels of training the percentage of boys is increasing.

SOCIAL MOBILITY OF BOYS AND GIRLS, MEASUREMENTS AND PREVIOUS RESULTS

As we have already mentioned, besides the rate of boys and girls, we will examine their social mobility in tertiary education. Our research is related to the second generation of social mobility research (Ganzeboom et al. 1991). We do not examine the whole status attainment process, we study the cultural and material background of one special group (higher education students), and we focus on gender differences. We measure in the empirical part of our paper the cultural and material capital based on the theories of Bourdieu (1973, 1986), and the application of his theory by DiMaggio (1982), and DiMaggio and Mohr (1985). We differentiate between the cultural capital owned by students and their parents.

Based on the theory of Bourdieu (1973, 1986), material and cultural capital are the elements of one's status. Social status and social mobility can be examined by Bourdieu's theory at least in three dimensions: material capital of the family, cultural capital of the family, and social capital of the family. (The third component is not examined in our work.) Social mobility in Róbert's work (1986, based on Hungarian data) can be detected in the changes in occupation comparing parents and children, changes in material status (for example the changes in income), changes in cultural status (changes in education, and other forms of cultural capital), and changes in the place of residence.

So in our approach, social mobility is a multidimensional process (based on the works mentioned above), and when we examine the students' social background, we reduce this term to its two most important components. We examine the cultural and material capital of the family, and the changes in this capital. To examine cultural capital we examine not only the education of parents (the education of parents is the institutionalized cultural capital), but we try to measure other forms of cultural capital as well. [6] Furthermore, we also examine the material capital of the family, and based on this we estimate mobility. Of course, the material and cultural capital of the family (but not the education of parents) could be an outcome of the occupation and the education

6 The three main types of cultural capital in our research are institutionalized cultural capital (e. g. the qualification of parents), high culture activities (e. g. reading habits, cultural consumption of parents and students) and finally, the objective cultural capital (e. g. the number of books, the possession of encyclopedias, dictionaries, books in foreign languages, books on art, classical music records, paintings per students and their parents).

of parents, so in this sense these are intermediate variables between the parents' status and the children's status. [7]

There are two problems in our research. One is that we do not have data on the future cultural and material capital of students, and we can not examine the *changes* in cultural and material capital exactly. We only know that the students study in higher education, and they might have a higher education degree. But we can suppose that if someone is highly educated, his/her cultural and material capital will be higher as well in the future. The other problem, that we can not examine the whole status attainment process. In the sample, the status of the children is only one type; they are all higher education students, so we can not use for example regression models.

In our work, if parents have better education and maybe partly because of this the families have more cultural and material capital as well, we can state that the social mobility of higher education students is smaller. If the students' social background is better, this means that they are less mobile, they seek higher education only with better background. Those higher education students whose parents are less educated, and the family have less cultural and material capital, we can assume that their social mobility is higher, compared to the previous group.

We have to mention that concerning the social mobility of boys and girls, we only know that the social background is better for boys, who seek higher education. But using the Bayes-rule we can estimate the probability of entering higher education conditional on having worse social background. The social mobility is higher if this probability is higher.

The Bayes-rule in our case is:

$$P(A|B) = P(B|A)*P(A)/P(B)$$

Where P means probability, A event is: entering higher education and B event is: having poor social background (being not sufficiently equipped with material and cultural resources).

We can compare these probabilities by gender. In the case of boys the probability of being not sufficiently equipped with resources conditional on having higher education – marked by P(B|A) – is smaller than in the case of girls based on our further empirical results. The probability of having higher education degree (P(A), unconditional probability) is smaller for boys as well

7 In DeGraaf's (1986, 1989) and Róbert's (1991) works, cultural and material background variables play intermediate role between parental status and children's position.

(for example due to the different preferences for higher education compared to girls, this will be discussed in detail later on). Finally the probability of being not sufficiently equipped with resources (P(B), unconditional probability) could be similar to that of the girls (boys' and girls' social background in general is similar, only the boys who study in higher education have better background). So the overall probability of being mobile [entering higher education conditional on having poor social background marked by P(A|B)] will be smaller in the case of boys based on the results of the Bayes-rule, and based on our further results.

Treiman (1970) emphasized that in modern societies, the education of the individual has the greatest effect on the individual's status. Concerning our research, we aim to measure the differences in social mobility according to gender. We suppose that in the case of girls, the relation of education and social status is weaker; thus, if we observe higher (school) mobility among girls, it does not necessarily mean a greater mobility concerning their social status. As we know, boys are in advantage in the labor market, therefore even if boys' school mobility is lower, they will have better social position in the future as compared to girls, so their "real" mobility could be higher than that of girls. Accordingly, we also have to take this aspect into consideration in our research.

As we will see, in our work the social background (measured by the cultural and material capital) is not the only factor, which has an effect on the participation in higher education.[8] Boys and girls behave differently, girls study in higher education to a larger extent, boys go to vocational schools to a larger extent, and boys do not try to study in higher education in large numbers. The background of this phenomenon could be that there are different preferences concerning higher education, which is not independent of gender. During the socialization process boys are encouraged to develop a stronger preference for practical knowledge while girls are "allowed" to develop a preference for theoretical knowledge. As long as physical power has played a dominant role in society, women have had no chance for equal rights. However, the cognitive abilities of females are not worse than those of males; moreover, their school performance is better (Czeizel 1985). Due to this fact, the rate of females has increased in intellectual professions i.e. girls wanting to have a higher level of education compared to boys. Women benefit more from education than men.

8 In the literature we can find lot's of pieces of evidence for the fact that the higher education students have better social background compared the other members of the generation examined.

The other explanation for female majority in higher education could be that girls much more identify themselves with credetialism (using the term of Miller and Roby 1974). They want to acquire a higher education degree, and they think that this will help them to be successful in the labor market, compared to boys, whose main attitude is the so called "status-striving" [the key hypothesis of evolutionary theory, that there are sex differences in the strength of the status striving motive (Buss 2008)]. Boys are much more ambitious to earn money as soon as possible (may be because they identify themselves with the traditional "breadwinner" role), and they think, that they could be successful in the labor market without a higher education degree as well. [According to results in the US, boys can have decent job opportunities even with secondary qualifications (Bae et al. 2000; Jacob 2002).] Another reasoning concerning this phenomenon could be that–as we have mentioned before–the linkage between the level of education and the future status is weaker in the case of boys. Treiman's (1970) meritocracy-hypothesis is not so pronounced in the case of boys compared to girls. An economic explanation of the fact that boys enter higher education in smaller numbers could be that the wage advantage of higher education is bigger than that of secondary education amongst young women. Another economic explanation could be that the relative return of education for girls increased, compared to that for boys (decreasing discrimination on the labor market, decreasing the wage disadvantage of girls), although boys are still in an overall advantage (DiPrete–Buchmann 2006).

Coming back to the social mobility of boys and girls in tertiary training, we have to mention that when the rate of girls was smaller in higher education, their social mobility was weaker as well, and the social background of girls studying in higher education was superior to that of boys' (Alexander - Eckland 1974). However, according to the greater flow of girls into higher education, girls with poor social background are also represented in the training; moreover, the social mobility of girls is more advanced in higher education than that of boys (Buchmann - DiPrete 2006; Fényes 2010a). So today, boys are in the minority in higher education, and due to this they are more selected in higher education, so their social background is better than that of girls.

Our former results showed that in the case of first year college and university students in 2003, boys' parents were more educated, their material background was more advantageous, and the locality type they were coming from, was of a more auspicious type. Therefore boys' social mobility was smaller than the girls'. In the fourth year student database in 2005, however, the qualification of boys' and girls' parents became similar (because of educational expansion

or drop-out). The locality type of girls' place of residence became similar as well to that of boys (girls may have moved by fourth year), and the "only" advantage remaining for boys was their better material background. When interpreting the phenomenon, we relied on the rational decision theory model. The wealthier families of the boys who are in minority in post-secondary training, were able to undertake further schooling, although, girls appear in higher education even with less advantageous material backgrounds. Besides, it is logical to assume that those boys and parents who had a material background similar (disadvantageous) to that of girls, rather chose vocational schools following primary school because of their lower costs enabling them to find jobs faster. (Fényes 2010a).

Bukodi (1999) also distinguished between the social mobility of males and females. Her Hungarian results showed that in 1995, girls reproduced their parents' qualification (cultural reproduction model took place), and in the case of boys, they behaved in accordance with the rational decision model, the material background of their family influenced their continuing studies. Nevertheless, we presume that boys studying in higher education will have higher material and cultural capital as well.

In the present paper, boys' and girls' social background is compared at the two stages of higher education training. In our previous research concerning the difference in social mobility of boys and girls in the former higher education system, we differentiated between colleges (three-four year training) and universities (five-six year training). Our results showed that opposed to our hypothesis, not considering the case of male students at universities, the social background of college male students was also more advantageous– males here were also less mobile than girls, so in less prestigious training the social background of boys was better as well (Fényes 2010c).

METHODS, DATABASES AND EXAMINED VARIABLES

To examine the research questions, quantitative data were used. We conducted the data-analysis with SPSS program, we use cross-tabulation and compare means runs, and Chi-square and Anova tests. In our research, the two databases of the TERD research ("The Impact of Tertiary Education on Regional Development", supported by OTKA T-69160) were used. In the first sample, there were 1361 third-year, full-time students from Bachelor's training (BA, BSc) (approximately one third of the full population), and in the second one, 602 first-year full-time students from Master's training (MA, MSc) (approximately two thirds of the full population). The samples are

regional, as data were collected in the so-called "Partium" region. This is a historically cross-border region of Hungary, Romania and Ukraine.[9] The data collection took place in the Hungarian-speaking tertiary-level institutions of the three countries, in Bachelor's training in 2008 and in Master's training in 2010. The samples are representative concerning the faculties of the examined universities and colleges (in the Master's training database cases are weighted to ensure the sample is representative).[10]

The examined variables are: (1) the sex of students; (2) variables concerning the cultural background of students and their parents (the education of parents, the reading habits of parents and students, the objective cultural capital of the family (possession of encyclopaedias, dictionaries, books in foreign languages, books on art, classical music records, paintings per students and their parents); (3) the material background of the family (possession of durable consumer goods of students' family[11], the number of siblings, subjective material background variables: including "standard of living better than 10 years before", "possible financial problems" and as well as the subjective status of the family as compared to an average family in their homeland); (4) the type of place of residence of the student; (5) and finally, other cultural resources of students' [language exam certificate, cultural consumption (attending theatres, museums, movies and classical music concerts), the use of ICT)].

9 In present-day Hungarian usage, "Partium" refers only to Romanian part of the historical region, but we defined it differently, by concerning the historical "Partium" usage.

10 The institutions involved in the research: University of Debrecen (Hungary), Reformed Teacher Training College (Kölcsey), (Debrecen, Hungary), Nyíregyháza College (teacher training, health care) (Nyíregyháza, Hungary), II Rákóczi Ferenc Hungarian Teacher Training College of Transcarpathia (Beregszász, Ukraine). Partium Christian University (Oradea, Romania), University of Oradea (Oradea, Romania), Branch of Babes-Bolyai University in Satu Mare (Satu Mare, Romania).

11 The components of the index are: possession of flat, cottage, house, computer, internet subscription, hi-fi, air-conditioning, home movie equipment, car and plasma TV.

RESULTS

Table 1 *Rate of boys and girls in Bachelor's and Master's training in the "Partium" region, percentages*

	Bachelor's training	Master's training
Girls	70.2	73.1
Boys	29.8	26.9
N	1340	599

As we can see in *Table 1*, boys are in minority at both stages of tertiary education in the examined region, and the percentage of girls is even larger in Master's training than in Bachelor's training. This means that vertical segregation in tertiary training can not be detected by gender. During the explanation of this phenomenon, we looked at the rate of boys and girls in the separate branches of Bachelor's and Master's training. In Bachelor's training boys were in majority in the fields of engineering and ICT (their rate was over 70% in these trainings), while in Master's training boys were in majority only in the field of engineering, and their rate in this field was even a bit smaller (67%) than in Bachelor's training. In the case of ICT, the rate of boys decreased from 78% (in Bachelor's training) to 48% (in Master's training). In the sciences the rate of boys also decreased from 42% to 32% at the higher level of tertiary training. So the advantages of boys concerning their participation rate decreased at the higher level of tertiary training in these traditionally masculine fields, and the greatest changes took place in the field of ICT. The reason for this might be that for boys, the three-year training in ICT is enough to achieve a good job (e.g., as an information system administrator), while girls are preparing for a computer programming mathematician (five-year training) to achieve the same job opportunities. Similarly, in the field of engineering and sciences, it is harder to take fine jobs for girls, so this could be the reason why they decided to study further in Master's training in these fields to a larger extent than boys. Our other major result is that in the fields that are traditionally feminine (faculty of arts, teacher training faculties, healthcare colleges), the rate if girls was high and did not change in Master's training as compared to Bachelor's training.[12] Overall, these facts could cause girls to participate in Master's training to a larger extent in the examined region as compared to boys.

12 Our further result is that at the faculty of economics, the rate of girls increased slightly but in agrarian sciences, it decreased.

Cultural capital owned by students' families by gender

After examining vertical segregation, we attempted to find differences in students' social mobility by gender. First, the cultural capital of students' parents is examined, and then the material background of students is described. De Graaf's (1986, 1989) results showed that the effect of parents' material resources decreased but the effect of parents' cultural capital was constant in time, and the effect of cultural capital was stronger on education achievement than that of material capital. Among cultural background variables, the effect of reading habits was the most superior. Róbert (1991) found similar result concerning the effect of material and cultural resources in Hungary.

Our previous results showed that boys' social (cultural and material) background is better in accordance with the fact that they are in minority in higher education, so in the case of boys there is a lot more selectivity in tertiary education. However, in our present research we aim to present the differences in social mobility at the two stages of tertiary education. First, we examine the qualification of parents in Bachelor's and Master's training by gender.

Table 2 *The education of student fathers and mothers in Bachelor's and Master's training by gender, percentages*[13, 14]

	Fathers				Mothers			
	Bachelor's training		Master's training		Bachelor's training		Master's training	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Primary	36.2	45.3	24.7	28.4	22.2	30.4	13.8	14.3
Secondary	39.9	38.9	37.3	47.2	46.5	45.4	41.4	50.6
Tertiary	23.9	15.8	38	24.3	31.4	24.2	44.7	35.1
N	373	886	150	415	370	894	152	419
Chi-square	***		**		**		NS	

As we can see in *Table 2*, the students' parents are more educated in Master's training in general. Describing gender differences, concerning fathers, higher education degree is more frequent in the case of boys, both in Bachelor's and

13 In the following tables, $0.01<p<0.05$ is marked by *, $0.001<p<0.01$ is marked by **, $p<0{,}001$ is marked ***, and NS is non-significant relation by gender according to the Chi-square or ANOVA tests.

14 In the present table, primary-level education includes elementary school or vocational school certificate, secondary level includes secondary grammar school or vocational secondary school certificate, and tertiary level includes higher education degree.

Master's training in accordance with our previous results (the difference is significant and the advantage of boys is approximately similar at both stages of the training). Concerning the mothers' qualification only in Bachelor's training, boys are in the lead (tertiary level education is approximately 30% larger in the case of boys' mothers), and in Master's training, the difference in qualification of mothers by gender is not significant any more. The boys' parents in both trainings are more educated but in Master's training, only fathers' education is more auspicious, so boys' social mobility concerning parents' qualification is smaller than girls', and the difference is weaker in Master's training than in Bachelor's training.[15] (See the explanation of this phenomenon in the summary.)

Our other primary result is that the mother's education level is generally higher than the father's in our databases, which means that in higher education, the education of students' mothers has a greater effect on the future qualification of students. (These results are in accordance with the literature, see Pusztai 2004, 2009.)

Based on the works of Bourdieu (1973, 1986) and De Graaf (1986, 1989), besides institutionalized cultural capital (the qualification of parents), we examine the participation in high culture activities of the parents as well. (The theoretical background of the types of cultural capital can be found in Bourdieu's (1986) work.)

Table 3 *Regularity of non-compulsory reading of mothers by gender in Bachelor's training (percentages)*

	Mothers of boys	Mothers of girls
Regular readers	41.0	34.0
Non-regular readers, or non-readers	59.0	66.0
N	376	871
Chi-square	*	

As we can see in *Table 3*, in accordance with the higher-level qualification of mothers in Bachelor's training in the case of boys, the boys' mothers read more regularly (probably fiction) but the reading habits of the boys' fathers is similar to girls (these data are not presented here due to the lack of significance), contrary to the fact that the qualification of boys' fathers is also superior. During the explanation of this phenomenon, we can state

15 We have data on parents' labor market position (whether the father/mother is employed at the time of data collection) but there was no significant difference by gender in Bachelor's and in Master's training.

that in the case of parents even nowadays, the traditional gender role model could play a part in the examined region. The model suggests that males play the "breadwinner" role, and mothers are the "home-makers". We can suppose based on this model that fathers with high qualification might have better jobs and better salaries, but they will not read more. Mothers read more frequently, especially if they are more educated, and fathers even with high-level education do not read as much as mothers. Mothers prefer enlarging their cultural capital, and they might use this not just during their paid work but also in the family, while bringing up children.[16]

Beside institutionalized cultural capital and high culture activities, we can measure the objective cultural capital of the students' parents as well. The difference in the number of books owned by parents is not significant by gender in Bachelor's and in Master's training (the data are not presented here), despite the fact that boys' parents are more educated, and that boys' mothers in Bachelor's training read more frequently. The reason for this could be that nowadays the new forms of reading are more frequent (especially in the case of males, for example reading e-books) or that people use libraries more frequently and do not buy books, due to the economic crisis.

The following table shows the possession of encyclopedias, dictionaries, books in foreign languages, books on art, classical music records and paintings by students' family.

Table 4 *Possession of encyclopedias, dictionaries, books in foreign languages, books on art, classical music records, paintings per students' parents by gender in Bachelor's and Master's training*

	Bachelor's training	Master's training
Encyclopedias	Boys' parents have more (*)	NS
Dictionaries	Boys' parents have more (*)	NS
Books in a foreign languages	NS	NS
Books on art	Boys' parents have more (*)	NS
Classical music records	NS	NS
Paintings	NS	NS

The table is based on the cross tabulation runs of the SPSS program (0: none 1: only one 2: two or more). NS marks non-significant relations by gender according to the Chi-square test (the tests were significant, if $p<0.05$). The detailed data of cross-tabs are not presented here.

16 In general, we can state that boys' social background, concerning the qualification of parents and high culture activity (measured by reading habits) of parents is better, however, no data are available on parents' cultural consumption, and we have data only on reading habits (as an indicator of high culture activity), and only in Bachelor's training.

As we can see in *Table 4*, the more educated parents of boys in Bachelor's training have also more objective cultural capital (they have more encyclopedias, dictionaries and more books on art), while as we have seen it in Master's training, the differences in institutionalized cultural capital (qualification) of parents by gender is smaller, and that could be the reason why there are no differences in objective cultural capital by gender. The mothers' qualification was similar in Master's training by gender, and this might cause the similarity in objective cultural capital of the families of boys and girls. We can suppose that the effect of mothers' cultural capital on objective cultural capital of the family is greater than the effect of fathers, which is supported by the literature as well (Pusztai 2004, 2009).

Material capital, owned by students' families by gender

The financial background of the family could be measured by objective and subjective variables. No data are available on the income of parents but in the questionnaire, the objective material background was measured in terms of possessing durable consumer goods in the family. The questions included ten types of consumer goods, and we created an index of these variables (the averages of the index by gender can be seen in *Table 5*).

Table 5 *Parents' possession of durable consumer goods (averages of the index: 0-10) in Bachelor's and Master's training by gender*

	Bachelor's training	N	Master's training	N
Boys	5.83	338	5.35	136
Girls	5.34	788	5.37	378
Anova	***		NS	

The components of the index are: flat, cottage, house, computer, internet subscription, hi-fi, air-conditioning, home movie equipment, car and plasma TV (0: do not posses 1: possess).

As we can see in *Table 5*, the boys' objective financial background is better in Bachelor's training, in accordance with the better qualification of parents. However, in Master's training where only fathers' education-level was higher in the case of boys, financial background is more similar by gender. These results imply that in Master's training, the better qualification of the boys' fathers unexpectedly did not affect the financial situation of the family. Explaining this result we can state that today, when gender roles are changing,

mothers' salaries may influence the financial position of the family as well. (But as it was mentioned above, the traditional gender role model still plays a part in the case of parents' reading habits.)

The different results in Bachelor's and Master's training could also be due to the fact that the data collection in Master's training took place two years later, in 2010, when the economic crisis was more detectable in the examined region. Students in Master's training represent a generation a year younger, and the crisis could have affected their financial situation (measured by the possession of consumer goods) more negatively. The data in *Table 5* show that the crisis might have affected the financial position of the boys' families more than the girls. The reason for this could be that as we have proven, the qualification of boys' parents was better, and the more educated, middle-class families' purchases might decrease more concerning durable consumer goods than lower-class (not highly educated) families' that have fewer durable consumer goods in general. In the case of girls, their parental background is poorer, and the possession of durable consumer goods did not change that much from 2008 to 2010 (the index is more or less similar, see *Table 5*).

The questionnaire included three subjective material background variables as well. The first question was that the standard of living is worse, same or better than 10 years before, according to the opinion of students' parents (the results can be seen in *Appendix Table 1*). The boys' material background measured by this variable was better again but only in Bachelor's training (in Master's training there is no significant difference by gender). Therefore subjective material background (measured by this variable) was in accordance with the objective situation (a significant difference by gender in objective material background was detected also only in Bachelor's training).

The second subjective measurement of material background included the frequency of financial problems emerging in students' families according to students' opinion (the results can be seen in *Appendix Table 2*). The results show that both in Bachelor's and in Master's training, the boys rarely have financial problems compared to girls. Here, the difference is significant by gender in Master's training as well, contrary to our results concerning the objective financial position. The reason for this could be that boys' more educated fathers in Master's training have a positive effect on the perception of the financial situation of the family by this subjective measurement but this does not affect the objective material background. [The subjective and objective measurements of material background are not totally in accordance, as it can be read also in the literature based on Hungarian data (Róbert 2001)]. Another potential result is that in 2010, both boys and girls had financial problems more frequently, most probably due to the economic crisis.

The third subjective material background variable was the estimation of the financial position of the family by the student (1-10), compared to an average family (5) in students' homeland. Here the averages were similar by gender both in Bachelor's and Master's training (around 5.5 both for boys and girls, the data are not presented due to the lack of significance). The better objective financial situation of boys in Bachelor's training can not be detected by this subjective indicator. The reason for this could be that the differences in objective material capital was not as high by gender as students place their families higher or lower in the social ladder, they place themselves in the same social class.

The number of individuals in the students' household can also be an indicator of the financial situation of the family, but we have data only on the number of students' siblings, from which we can estimate the number of individuals in the household (the results can be seen in *Appendix Table 3*). The results show that girls have significantly more siblings in Master's training, and this fact can cause more financial problems. However, these results are in contrast with the results on objective material background, where it is only in Bachelor's training where boys have better material background (the results on the number of siblings in Master's training are only in accordance with the results on possible financial problems variable). The fact that girls have more siblings in Master's training does not cause worse objective material background. The reason for this could be that the number of siblings is not a correct measurement of the number of individuals living in the same household. There might be older brothers and sisters, who do not live together with the family any more, and do not need financial support. Another problem with this indicator is that the number of siblings could be rather a social capital variable than material capital variable.[17] In the case of more siblings, there might be less social capital for children, as there is less time to spend for childrearing by parents per children. But there could be an opposite effect as well. Highly educated elder brothers or sisters can demonstrate more dominant social capital in the family, and can have a positive effect, for example on students' school achievement. Overall, more siblings do not necessarily demonstrate worse social background.

17 In this analysis, we do not measure students' social capital, which is the third element of social background based on the theory of Bourdieu.

Type of settlement of students' place of residence by gender

The students' material background could be related to the type of settlement of students' place of residence as well. However, the type of settlement can influence also the cultural consumption of the family (unfortunately, we do not have data on parents' cultural activity, for example on theatre, museum or concert attendance). Róbert (1991) showed that in Hungary, the type of settlement has a stronger effect on cultural activity than on material background (his conclusion was drawn by factor-analysis method). In villages and small towns, there is far less opportunity to perform high culture activities.

Table 6 *Type of settlement of place of residence in Bachelor's and Master's training by gender, percentages*

	Bachelor's training		Master's training	
	Boys	Girls	Boys	Girls
Farm or village	32.5	35.1	25.5	30.4
Small town	34.1	37.4	24.2	34.3
County seat	31	24.6	46	32.9
Capital	1	1.2	4.3	1.8
N	384	908	161	435
Chi-square	NS		*	

As we can see in *Table 6*, the type of settlement is more or less similar in the case of boys and girls in Bachelor's training, but in Master's training the boys' background is again better, there are more girls who live in villages or small towns than boys. These results are not in accordance with our previous results, where the qualification of parents and the objective material background were much better for boys in Bachelor's training database, and in Master's training only boys' fathers were more educated. The worse type of settlement of girls in Master's training does not have a negative effect on financial situation (it may only affect the frequency of possible financial problems, which are more likely in villages but the relation is apparent only in Master's training). The effect of the type of settlement could be larger on parents' cultural consumption rather than on their financial position, in accordance with Róbert's results.[18] (However, our previous result that girls

18 The effect of the type of settlement on students' cultural consumption can not be detected (there is no significant difference in cultural consumption by gender in Master's training, see later), the reason for this could be that most students live at the place of tertiary training during the semesters.

have more siblings in Master's training is in accordance with that they live in villages more frequently.)

Cultural capital owned by students (acquired cultural capital)

When we want to examine the social mobility of boys and girls, it is important to explore a students' acquired cultural capital, as well. DiMaggio (1982), and DiMaggio and Mohr (1985) showed that the students' cultural capital demonstrate a huge effect on the school efficiency and on the education achievement, and the effect of students' cultural capital was even larger than the effect of fathers' qualification. Blaskó (1998) also showed that the effect of the cultural resources of the students was greater compared to the cultural resources of parents on the later social status of the students based on Hungarian data. Besides this, based on South-Korean data Byun (2006) showed that the reading habits have a positive effect on schools performance of boys and girls, while the cultural consumption (for example theatre, museum or concert attendance) has a negative effect on the performance of boys, and there is no effect in the case of girls. Dumais (2002) also establishes that the students' cultural capital has a positive traceable effect on the grades of girls, while this effect is weaker in the case of boys.

DiMaggio (1982) showed that the cultural capital (he measured it by participation in traditional "high-culture" activities) of girls studying in American secondary schools was much higher than that of boys. The author draws our attention to the fact that cultural interest and practice are culturally expected from girls. However, this is less characteristic of boys, moreover, it may result in negative sanctions from their peers. Further reason for the greater cultural activity of girls could be that "women who wish to be recognized as eligible partners for men from high status background may need cultural capital to a greater extent than men who wish to achieve in the world of work" (DiMaggio 1982: 198).

Hungarian girls in 2003 and in 2005 also displayed greater cultural interest than boys did; girls tend to have greater cultural consumption (attending theatres, museums, art movies and concerts) and read more, especially more fiction. However, our former results showed that boys use the internet more frequently, so it can be said that the boys' cultural activity differs from that of girls, and it is not necessarily inferior (Fényes 2010a, 2010b). DiMaggio's (1982) results support that at secondary school, the cultural activities, preferred by girls, improved their school performance. On the other hand, cultural activities, preferred by boys, may improve their chances on the labor market.

In this paper, the students' reading habits are examined by gender first (we suppose that girls read more regularly based on our previous results) but we have data in Master's training on reading habits on the internet as well, where the advantage of boys can be expected.

Table 7 *Regularity of students' non-compulsory reading by gender in Bachelor's training (percentages)*

	Boys	Girls
Regular readers	39.6	48.9
Non-regular readers, or non-readers	60.4	51.1
N	386	903
Chi-square	**	

As we can see in *Table 7*, girls read significantly more frequently in Bachelor's training, in accordance with DiMaggio's (1982) results. In Master's training we have data not only on paper-based reading habits, but on internet usage and reading e-books as well (the results can be seen in *Appendix Table 4*, concerning the paper-based books the data are not presented, because the lack of significance). The results show that the advantage of girls in paper-based reading is no more detectable (both in Hungarian and in foreign language). The reason for this could be that girls have boyfriends more frequently in older ages, and they can motivate boys to read more. The data also show that in reading e-books, even boys are in the lead, but the difference in frequency of using the internet at home was not significant by gender (the data are not presented due to the lack of significance), so the advantage of boys in ICT might not be so dominant.[19]

We examined the students' cultural consumption by gender as well (attending theatres, museums, art movies and concerts, the data are not presented here), but there was a significant difference only in theatre attendance by gender, and only in Bachelor's training. There was a small advantage of girls, despite their worse material background. Our further result is that the average regularity

19 We have further data on reading on internet in Master's training, on different subjects of reading by gender, which could imply further advantages of boys (the results can be seen in *Appendix Table 5*). Boys were in the lead in reading papers, articles, blogs, forums, special literature and popular literature, but there was no significant difference by gender in reading news, tabloid papers, poems, and community pages on the internet (these data are not presented due to the lack of significance). This means that boys generally read more on the internet but in the case of some subjects of reading, girls catch up with them. The results are in accordance with the gender stereotypes and with girls' good relationship-building characteristics.

of theatre and art movie attendance has a decreasing tendency in the young generation compared to 2003 (see data in Fényes 2010a). The cultural consumption in 2010 in Master's training – which represents a higher level of training – was similar to the 2003 data, where the first-year university students were asked. The reason for this could be that today, students have less free time, they might work more in addition their studies, they might spend more time on the internet, and that is why the frequency of these traditional types of cultural consumption is lower.

Our next result is that gender differences mostly disappeared as compared to 2003. Girls go only to the theatre more frequently and only in Bachelor's training, and girls do not go to art movies, classical music concerts and museums more frequently than boys (contrary to DiMaggio's results in secondary schools). This could be due to the fact that they do not have as much free time as in 2003 (boys' cultural consumption was low even in 2003, and it did not change in 2008 or 2010). Comparing the two stages of the training, cultural consumption became even more similar by gender in Master's training in all types of traditional cultural consumption, which might be due to the fact that in a bit older ages, when girls have boyfriends more frequently, girls can motivate boys to perform cultural activities, and they go to theatre together.

In our further analysis, students' objective cultural capital is compared by gender. First, the differences in the number of books students' have are examined (the results can be seen in *Appendix Table 6*).

In accordance with our previous results, girls who read more frequently in Bachelor's training have more books. However, in Master's training there was no difference in reading paper-based books by gender, and in accordance with this, the difference in the number of books students possess was not significant by gender either (data are not presented due to the lack of significance).

The other measurements of objective cultural capital are the possession of encyclopedias, dictionaries, books in foreign languages, books on art, classical music records and paintings per students.

Table 8 *Possession of encyclopedias, dictionaries, books in foreign languages, books on art, classical music records, paintings per students by gender in Bachelor's and Master's training*

	Bachelor's training	Master's training
Encyclopedias	NS	NS
Dictionaries	Girls have more (**)	Girls have more (**)
Books in foreign languages	Girls have more (*)	Girls have more (**)
Books on art	NS	Girls have more (**)
Classical music records	NS	Girls have more (*)
Paintings	NS	NS

The table is based on the cross tabulation runs of the SPSS program (0: none 1: only one 2: two ore more). NS marks non-significant relations by gender according to the Chi-square test (the tests were significant, if $p<0.05$). The detailed data of cross-tabs are not presented here.

As we can see in *Table 8*, girls are in the lead at both stages of the training but the difference is even more pronounced in Master's training by gender in these types of objective cultural capital. The reason for this could be that girls in Master's training might be interested more in art, in classical music, and thus they may have more books on art, classical music records, while in the case of boys, there is no such effect. Another explanation could be that here again the traditional gender role models could play a part but now in the young generation. Thus it is the task of girls to buy encyclopedias, dictionaries, books in foreign languages, books on art, classical music records and paintings, and this effect does not change in Master's training where girls have a partner more frequently.[20]

20 As it can be seen, girls have more books in foreign languages, so we can suppose that they have more language exam certificates as well (this can be a measurement of students' institutionalized cultural capital). However, data show, both in Bachelor's and Master's training, that there is no significant difference in language exam certificates by gender (data are not presented due to the lack of significance), which is an interesting result compared to our previous results concerning secondary schools where girls were in the lead in language exam certificates (see Fényes 2008). The reason for this could be that at universities, language exam certificate is required to obtain the degree, thus both boys and girls are equally motivated to acquire it.

SUMMARY

The phenomenon of vertical segregation by gender has not disappeared in education, in spite of the fact that today there is a female-majority in higher education, and that girls are in an advantageous situation in several aspects at other levels of education as well. Based on the literature, the rate of women in developed countries declines at the higher levels of training (mostly in PhD training and among tertiary-level staff members).

Our present results show that contrary to previous results, girls are even more represented at the tertiary level in Master's training than in Bachelor's training in the "Partium" region (but in accordance with the literature, they are in majority at both stages of the training). We examined the rate of boys and girls at the separate branches of higher education, and we found that the rate of girls especially increased in Master's training in the fields that are traditionally "masculine". Our explanation is that the rate of girls is higher in Master's training in the examined region, as they aim to obtain higher-level degrees in "masculine" fields in order to achieve better position on the labor market. (The other reason for this phenomenon can be found, when the regional feature of our results are discussed at the end of our paper.)

Our second research question addressed what the social background of students of different gender is like in higher education.

Table 9 *Summarizing table of the cultural and material capital of students' parents focusing on gender differences*

Background variables	Bachelor's training	Master's training
Parents' cultural capital		
Qualification of the father	Better for boys	Better for boys
Qualification of the mother	Better for boys	NS
Fathers' reading habits	NS	No data
Mothers' reading habits	Boys' mothers read more	No data
Objective cultural capital	Boys have more	NS
Financial background		
Possession of durable consumer goods	Boys have more	NS
Whether the family lives better than 10 years before	Boys' families more likely do	NS
Financial problems in the family	Boys have rarely	Boys have rarely
Estimation of the financial position of the family	NS	NS
Number of siblings	NS	Boys have less
Type of settlement of place of residence	NS	Better for boys

Based on our results (see the summarizing *Table 9*), we can state, that concerning the parental background at Master's training, there was a weaker difference by gender than in Bachelor's training, so the advantage of girls in social mobility is smaller in Master's training (although girls' social mobility is larger at both stages of the training than that of boys). In Bachelor's training girls with worse social background are represented (as opposed to boys who come to study only with much better social background), while in Master's training girls study only with much better social background than in Bachelor's training (may be due to their lower self-confidence), compared to boys, whose background is more similar at two stages of the training. (The other explanation could be that boys with better background, after Bachelor's training might go to study in Master's training to other regions of Hungary, this will be discussed later on.)

The reason for that boys' social mobility is lower in both stages of higher education could be that there is a self-selection of boys in higher education. As a consequence of this, they will be in minority in training, and they are more selected concerning the social background. Only boys with better cultural and material background are more motivated to study further in higher education. Boys with worse social background might get a certificate at vocational schools or vocational secondary schools, and they do not try to study further in higher education. (They might get fine salaries even with secondary-level qualification, as compared to girls.)

According to the literature, to examine the cultural capital, owned by students (acquired cultural capital) is also important, which can also play a part in students' social mobility.

Table 10 *Summarizing table of students' acquired cultural capital focusing on gender differences*

Cultural capital owned by the student	Bachelor's training	Master's training
Reading habits (paper-based)	Girls read more frequently	NS
Reading e-books	No data	Boys read more frequently
Reading on the internet	No data	Boys read more frequently
Cultural consumption	Girls do more (only theatre)	NS
Objective cultural capital	Girls have more (+)	Girls have more (++)

As we can see in *Table 10*, girls were in the lead in paper-based reading and in cultural consumption (but only in theatre attendance) in Bachelor's training, and they have more objective cultural capital as well. Comparing the two stages of the training, the advantage of girls in acquired cultural capital is decreasing in Master's training, and we have data at this stage on the use of ICT, where even boys are in the lead. In Master's training, reading habits and cultural consumption have become more similar, which might be due to the fact that boys and girls have partners more frequently, and they perform cultural activities together. Our further result was that traditional cultural consumption has decreased in general, due to the fact that students have much less free time, and new types of activities are emerging.

Concerning objective cultural capital (the possession of encyclopedias, dictionaries, books in foreign languages, books on art, classical music records, paintings per students), our results showed the advantage of girls, while their advantage is even larger in Master's training than in Bachelor's training. Explaining this phenomenon, we can state that traditional gender roles play a part in the case of the young generation in the examined region, in a sense that it is still the task of girls to buy these things despite the fact that they already might have a partner in Master's training more frequently. The effect of the traditional gender role model still exists concerning the differences in objective cultural capital, in spite of the fact that in the younger generation, modern gender roles are more popular (but rather in words than in deeds).

Overall, we can state that in the examined region, there is a disadvantage of boys in higher education concerning several aspects. Vertical segregation at the two stages of tertiary training can not be detected, as the advantage of girls is even larger in Master's training than in Bachelor's training. The other advantage of girls is that their social mobility is higher at both stages of the training (but in Master's training their advantage is a little bit smaller). Our third conclusion is that the acquired cultural capital for girls is bigger than for boys, in accordance with the literature (but boys are in the lead in new types of cultural consumption).

Concerning the regional feature of our samples, it might be suggested that our results can not be generalized to the whole of Hungary, because the higher education institutions in the "Partium" region represent lower status, and here the gender differences in education are different compared to the whole country. It might be supposed for example, that the rate of boys in Master's training in the region is even smaller because talented boys went to study to other (more prestigious) universities and colleges in Hungary (for example to Budapest), especially in the "masculine" fields of higher education training. This can be partly true, so when we compared the rate of boys in the

two stages of the training, we should take into account this aspect in our explanation as well. But we have to mention, that if we look at the detailed data, in Bachelor's training 53,5%, and in Master's training 77,3% of the students come from the University of Debrecen, which is the second largest university in Hungary (based on the number of students), and considered as a high prestige university. The university won the research-university status in 2009. In order of rank of the HVG weekly paper ("Diploma 2011" special issue) this university is the 5th best university of Hungary. In terms of the quality of the lecturers it is the 3rd, and in terms of the quality of the students it is the 10th.[21] The rank of students' quality is worse than that of the lecturers, because the students of Debrecen University are in a more disadvantaged situation. The region is less developed than other regions of Hungary, and the social background of the students is worse in general compared to the whole of Hungary (Pusztai 2009, 2011). The quality of lecturers is very good, only the lecturers of Corvinus University and Eötvös Lóránd University are considered to be more qualified.

Furthermore, in Bachelor's training the higher education institution representing the second largest student population (20,6%) in the sample is Nyíregyháza College, which is also considered a relatively good institution among Bachelor's trainings. In the HVG order of rank the Nyíregyháza College is the 4th among Hungarian colleges, and among all higher education institutions of Hungary it is in the middle (22nd). As at Debrecen University, at Nyíregyháza College also the quality of lecturers is better (the rank is 12th), and the quality of students is worse (the rank is 36th) compared to the general rank, which can be due to the same factors mentioned above. So all in all, our results concerning the rate of boys and girls in Bachelor's and Master's training can be partly relevant in the whole of Hungary, and not only in low prestige universities and colleges.

21 The quality of lecturers was calculated based on the number of students per qualified lecturers, the percentage of lecturers with PhD degree and with "doctor of Hungarian Academy of Science" degree. The quality of students was calculated based on the quality of secondary schools, they were coming from (general rank, the number of place winners in students competitions), the number of students coming from the best Hungarian secondary schools, the number of the applicants (only the first place applicants), the percentage of admitted students, the average scores of the admitted students, the percentage of the admitted students with language exam certificate, the percentage of place winner students in students competitions (at the university), the number of PhD students and the number of students acquired PhD degree at the examined university.

The other problem is that concerning social mobility, it can be raised that especially boys with poor social background went to study somewhere else, so the advantage of girls in social mobility can be true only in this region. These claims were controlled in our previous research in 2006. We included in our samples a branch of other universities not in the "Partium" region (University of Miskolc, Engineering Faculty: 68 students, 80% of them were boys), because in the examined ("Partium") region there is no Technical University, only a college faculty in engineering, and we supposed that boys with poor social background went to study to the University of Miskolc to the Engineering Faculty. But our results showed, that the social background of boys at this faculty was also better than that of girls, despite the fact that they were in majority, and when we completed our samples with these students, the advantage of boys in social background was still detectable. So the boys with poor social background study rather in vocational schools than in the engineering university trainings in other regions of Hungary, and our results concerning the social background of boys and girls might be partly generalized to the whole country.

These results imply a challenging policy question: how boys with poor social backgrounds can be motivated to be involved in more cultural activities and to study in higher education (especially in Master's training) to a larger extent.

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APPENDIX

Table 1 *Standard of living: worse/same/better than 10 years before according to the opinion of students' parents in Bachelor's and Master's training by gender, percentages*

	Bachelor's training		Master's training	
	Boys	Girls	Boys	Girls
Worse	38.4	42.6	34.2	44
Same	23.2	27.2	36.9	28.6
Better	32.6	26.1	23.5	21.6
I do not know	5.8	4.1	5.4	5.7
N	380	885	149	402
Chi-square	*		NS	

Table 2 *Frequency of financial problems emerging in students' families in Bachelor's and Master's training by gender, percentages*

	Bachelor's training		Master's training	
	Boys	Girls	Boys	Girls
Yes, regularly	13.7	19.5	20.7	26.8
Yes, rarely	48.9	51.5	41.4	46.5
No	37.4	29	37.9	26.8
N	372	870	145	400
Chi-square	**		*	

Table 3 *Average number of siblings of boys and girls in Bachelor's and Master's training*

	Bachelor's training	N	Master's training	N
Boys	1.27	390	1.24	120
Girls	1.27	920	1.45	339
Anova	NS		*	

Table 4 *Regularity of reading of e-books in Master's training by gender*

	In Hungarian		In foreign language	
	Boys	Girls	Boys	Girls
Daily or weekly	54.1	41.4	27.2	12.7
Monthly, annually or never	45.9	58.9	72.8	87.3
N	157	414	147	401
Chi-square	**		***	

Table 5 *The regularity of reading on the internet in Master's training by gender*

	Papers, articles		Blogs		Forums		Special literature		Popular literature	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Daily or weekly	81.5	55.7	42	20.6	64.7	39	65	49.9	37.7	28.8
Monthly, annually or never	18.5	44.3	58	79.4	35.3	61	35	50.1	62.3	71.2
N	157	431	157	428	156	431	157	433	154	430
Chi-square	***		***		***		**		*	

Table 6 *The number of books students has, by gender in Bachelor's training, percentages*

	Boys	Girls
0-20	35.5	22.9
21-100	44.9	52.5
101-300	14.4	18.6
Above 300	5.2	6
N	383	894
Chi-square	***	