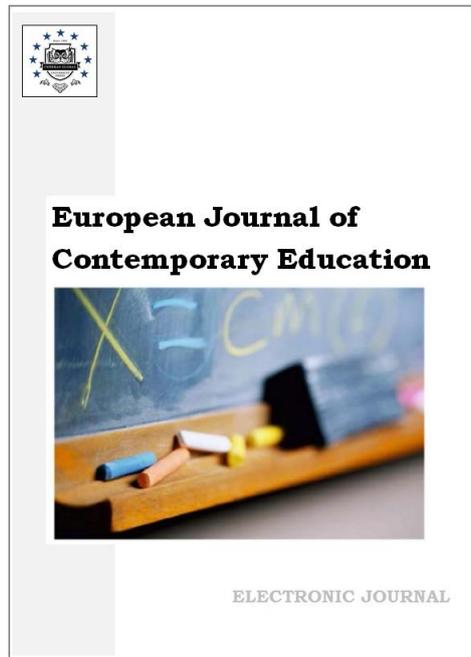




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## **Stratified Student Society in Higher Education Fields. Impact of Expected Earning on Students' Career**

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### **Abstract**

According to the literature, career choice is a decision process influenced by value orientation, motivation and inclination, based on a rational consideration of available resources and the perceived realities of the family and the student. Students' aspirations for further education are a well-researched area. Searching for moratorium, following intergenerational patterns, and the drivers of knowledge and relationship orientation are the focus of empirical studies. The aim of this paper is to explore the recruitment base of higher educational fields with different earnings promises and the impact of expected earnings on higher educational careers. We conducted our analysis using the PERSIST 2019 quantitative research database among students in Hungary, Slovakia, Romania, Ukraine, and Serbia (N = 2199). We used the IBM SPSS Statistics 20 program. Based on expected earnings, we divided respondents into three terciles (below average, average, above average), along which we examined their social and educational background. Our results show that social status and secondary school attainment are associated with students' career choices but that the role of these background factors seems to weaken throughout the higher educational career due to different selection mechanisms in the educational fields. Our findings complement research that interprets commitment to study completion as a complex phenomenon.

**Keywords:** higher education, career choice, moratorium orientation, persistence

### **1. Introduction**

#### **Economics versus the dual value of higher education**

In modernised societies, the educational system is closely linked to other social subsystems, particularly the labour market (Papp, Hajós, 2014). The multifaceted relationship between the two is reflected in the fact that the educational system shapes the skill structure of the emerging

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generations and implements the retraining and upgrading of the available human resources. The demand for higher education supply is fundamentally influenced by labour market developments, including the earnings attainable with each qualification, non-economic benefits, prestige and job opportunities. Therefore, understanding the economic context of education is essential for higher education policy goal setting, planning and implementation (Polónyi, 2004). Dual value economic approaches focus on highly prestigious, marketable careers and offer favourable earnings opportunities. Following this, students who are admitted to and graduate from higher education courses with these characteristics can be considered successful. However, if we regard the value duality of the higher education subsystem as a stand-alone measure, we should focus on the extent of the mismatch between student input and output (Pusztai, 2015a).

An existing organisational strategy is to view the high social prestige of students as a profitable product. Although the expansion of higher education has promoted the development of a complementary institutional system, competition for students and other resources has led to a need to evaluate institutional performance. Given the diversity of economic, pedagogical and academic preferences, ranking criteria may vary. A common weakness of inter-institutional comparisons is that the characteristics of each attractiveness region are less or not taken into account when constructing the indices (Pusztai, 2015a). This is in contrast to research exploring student outcomes in higher education, a distinctive strand of which focuses on students' social background and secondary school careers and seeks to identify the breakpoints between courses of different prestige (Pusztai, 2015a; Hegedűs, Sebestyén, 2019; Kocsis et al., 2022; Pusztai, Szigeti, 2021a; Pusztai, Szigeti, 2021b).

We have already mentioned that sociological studies of education focus on the differential access to higher education and the internal stratification and disadvantage-compensating function of each institution (Godó et al., 2020). Róbert (2003) discusses the issue of self-selection mechanisms as his results show that before the second millennium, the proportion of graduates with parents and students with advantageous cultural and economic capital was dominant among applicants to higher education compared to the group of non-graduates. After two decades, the impact of location in the vertical hierarchy of society on schooling and degree attainment remains at the forefront of research (Pusztai, 2015a). Students are not a homogeneous group at entry (Csók et al., 2019; Kovács et al., 2019), which is based on the fact that they start their tertiary education under unequal conditions. The family and secondary school pathways of disadvantaged students are in many ways inferior to those of their peers in higher status (e.g. financial situation, parents' example, intellectual care, 6-8 grade high school graduation, shadow education), but also sources of resilience such as mother's and student's literacy, parental care, teachers' and parents' advice, friends' example or the driving force of relationship building (Godó et al., 2020). While basic demographic and social status indicators can largely determine career aspirations, the strength of social and cultural capital endowments within the family have also been shown to be explanatory variables of the direction of further education (Pusztai, 2015a).

Recognising the impact of 'soft' factors on school career (Ceglédi et al., 2022), the international literature has placed particular emphasis on the role of parental involvement (Chavkin, Williams, 1989; Desforges, Abouchaar, 2003; Ntekane, 2018; Chee, Ullah, 2020), two main dimensions of which have been identified by researchers: School-based parental involvement and Home-based parental involvement (Sheldon, Epstein, 2005; Green et al., 2007; Epstein et al. 2009; Imre, 2015; Imre 2017). The extent to which parental suggestions are taken into account and family shared decision-making is an important issue for our topic. According to Imre (2017), developing an interest in learning is more important for groups of higher social status, which they consider to be a pillar for further education and a successful school career. Moreover, the contacts of parents with a degree imply a natural flow of information related to the range of higher education courses and job opportunities. In contrast, there is a strong demand from parents with a lower social status for school support in career choices. Overall, it can be seen that communication between family and school is an important driver of successful student progress, as the child develops in the sharp or imperceptible fault line between these two socialisation arenas (Kozma, 2001; Pusztai, Fényes, 2022). It should be noted that the more educational partners are involved in the collaboration, the more characteristic changes in students' academic performance can be observed (Epstein, Sanders, 2006; Pusztai, Fényes, 2022).

## 2. Methodological framework

In our research, we analyse a large sample student database (PERSIST 2019, N = 2199) of the Centre for Higher Education Research and Development (hereinafter: CHERD-Hungary). The data collection for the academic year 2018/19 covered higher educational institutions in the eastern region of Hungary as well as cross-border colleges and universities in Slovakia, Romania, Ukraine and Serbia. The Hungarian subsample (N = 1034) uses quota sampling and is representative of the faculties, the academic area of the courses, and the forms of funding. Respondents from cross-border institutions (N = 1165) were selected using a probability sampling procedure. Students were approached in groups at university and college courses, where we carried out a full survey. The sample included full-time second-year undergraduate and second- and third-year graduate respondents (Pusztai, Szigeti, 2021b).

The CHERD-Hungary research team calculated labour market prospects and expected net starting wages using career tracking data for the field of education (Pusztai, Szigeti, 2021b). Then, based on expected earnings, respondents were divided into three-thirds (bottom: 0-215.00 thousand HUF; middle: 215.01-239.00 thousand HUF; top: 239.01 thousand HUF and above), and respondents who could not be classified were excluded from the sample. Our analyses are conducted along the constructed thirds (N<sub>total</sub> = 2166), which we have named as follows: below-average earners (N = 707), average earners (N = 721) and above-average earners (N = 738). In the present study, we investigate the social background of the respondents, the transition from secondary school to higher education and the student career. After reviewing the literature and research, we formulate three hypotheses, which we test using a quantitative technique by comparing tercile trained based on expected earnings. (1) We hypothesise that children of parents with lower social status have a higher proportion of below-average earners (Róbert, 2010; Godó et al., 2020). (2) We assume that the highest number of children claiming extra points for extra achievement is among those with above-average earnings (Pusztai, Szigeti, 2021a; Pusztai, Szigeti, 2021b). (3) We assume that the most engaged group of students is represented in the lower tercile (Kovács et al., 2019; Pusztai, Szigeti, 2021b). For data processing, we use IBM SPSS Statistics 20, applying the following statistical methods: frequency analysis, cross tab-analyses (chi-square) and analysis of variance (ANOVA). Table 1 shows the operationalisation of the concepts under study.

**Table 1.** Dimensions of the concepts used in the study

Social status	High school over-performance	Commitment
parents' educational attainment	advanced level school-leaving exam	above average persistence
parents' employment	language certificate	average persistence
the objective, subjective and relative financial situation	competition result	below average persistence
the type of settlement of the student's residence at the age of 14	technician qualification/completed training listed on the National Qualifications Register	

Before interpreting the results, it is necessary to introduce the distributions according to the gender and training field. Significant differences can be detected between the groups in terms of gender. On average, females are represented in the sample with 70.9 %, while the adjusted standardised residual in the lower tercile indicates an over-representation (84.0 %). They are followed by female students in the second tercile with 73.0 % and female respondents in the upper tercile with 56.3 %. The educational disadvantage and self-selection of men is a noticeable phenomenon (Liskó, 2003; Fényes, 2009a; Fényes, 2015), although their share in the higher-paid courses is 43.7%, which is 15 percentage points above the average. The earnings groups also show an uneven distribution in the training field. According to the cellular data, teacher candidates (71.6%) and agricultural graduates (16.4 %) are overrepresented among those with below-average earnings. Several studies highlight teachers' unfavourable earnings situation (Polónyi, 2015; Csók,

2021), while the earnings disadvantage of agricultural graduates has been highlighted in recent career tracking studies of recent graduates (Garai, Veroszta, 2011). In the average earning group, the dominance of humanities (30.9 %), medicine and health (28.0 %) and social sciences (25.8 %) is evident. In the top third, economics (37.9 %), engineering (17.1 %) and computer science (15.0 %) are the leading fields (Table 2).

**Table 2.** Dominant training areas along the tercile created based on the expected earnings (in percent)

Below average earners (N = 707)	Average earners (N = 721)	Above-average earners (N = 738)
teacher training (71.6)	humanities (30.9)	economics (37.9)
agricultural (16.4)	medicine and health sciences (28.0)	engineering (17.1)
	social sciences (25.8)	computer science (15.0)

Notes: The values visualised indicate that there are far more people in the given cells in the table than would have been expected in a random ordering (Adj.Resid. > 2.0). Chi-square test,  $p = 0.000$ .

Source: PERSIST 2019

### 3. Results

#### 3.1. Social status of students

One of the most important differences between the groups can be found in their social background. It is a basic tenet of the sociology of education that the educational attainment of students is largely determined by the educational background of their parents (Boudon, 1974; Engler, 2010; Róbert, 2003; Pusztai, 2007; Pusztai, 2015a; Godó et al., 2020). This general correlation is confirmed by our study, as the majority of children of mothers with secondary education (43.7 %) and fathers with primary education (41.4 %) are oriented towards lower-income education. Furthermore, data on parents' combined educational attainment (Róbert, 1986) show an under-representation of children from families with a university degree (25.7 %). The control groups show a more favourable picture, with a higher proportion of parents with a college or university degree (38.1 %) among those with average earnings (Table 3). As an explanation, families who are higher up the income and hierarchy ladder want their children to be able to reproduce at least their social status. Consequently, careers offering lower-income and prestige are less attractive to children of more highly qualified parents (Benkő, 2009; Csók, 2020).

**Table 3.** Parents' educational attainment along terciles based on expected earnings (column percentage)

	Mother highest education			Dad highest education			Parents together education		
	Below average earnings (N = 707)	Average earnings (N = 721)	Above-average earnings (N = 738)	Below average earnings (N = 707)	Average earnings (N = 721)	Above-average earnings (N = 738)	Below average earnings (N = 707)	Average earnings (N = 721)	Above-average earnings (N = 738)
Primary	<u>29.9</u>	23.3	26.0	<u>41.4</u>	28.6	34.5	<u>23.2</u>	15.6	19.0
Secondary	<u>43.7</u>	38.9	38.0	37.5	39.2	37.1	<u>51.1</u>	46.3	46.2
Tertiary	26.4	<u>37.8</u>	36.0	21.1	<u>32.2</u>	28.4	<u>25.7</u>	<u>38.1</u>	34.8
Total	100	100	100	100	100	100	100	100	100

Notes: The underlined values indicate that there are far more people in the given cells in the table than would be expected in a random ordering (Adj.Resid. > 2.0). Mother highest education:

Pearson Chi-Square test,  $\chi^2 = 23.529$ ,  $df = 4$ ,  $p = 0.000$ . Dad highest education: Pearson Chi-Square test,  $\chi^2 = 32.217$ ,  $df = 4$ ,  $p = 0.000$ . Parents together education: Pearson Chi-Square test,  $\chi^2 = 29.740$ ,  $df = 4$ ,  $p = 0.000$ .  
Source: PERSIST 2019

Data on parents' educational attainment suggest a more open nature of the fields of education in the lower tercile (e.g. teacher training, agriculture). In line with our results, Gáti (2010) approximates the intergenerational reproduction of schooling advantages with a traditional indicator: the child of parents with a university degree also obtains a university degree. Her analysis shows that the 'inheritance' of university education is most 'closed' in the legal (31 %) and medical (29 %) fields, complemented by the natural sciences (27 %). However, the least prevalent are in agriculture (14 %) and education (11 %), which can be considered the most "open" fields. Students form a caste social structure, which is also reflected in unequal access to types of education (Róbert et al., 2017). The results of our study confirm the literature, as we found significant differences when we looked at the internal stratification of higher education by field of study. Children of first-generation parents dominate the bottom third, where prospective teachers are over-represented (share of parents with quasi tertiary education: total sample 32.9 %, teacher education 18.1 %). By contrast, the middle tercile shows the strongest selection by social background, which can be explained by the high proportion of students in the medical and health sciences (parents with quasi tertiary degree: 59.7 %). The emphasis on IT, engineering and economics in the top tercile gives the group its more socially heterogeneous character.

We explored whether, in addition to education, there are significant differences in the labour market profile of parents. Our analysis shows that the majority of the students surveyed have parents who are employed. Among those with below-average earnings, 88.6 % of fathers and 86.3 % of mothers are employed, however, community employment is overrepresented in the latter group (16.4 %). The highest proportion of parents without work is found in the middle tercile (father: 12.6 %, mother: 19.9 %) (Table 4), which is typically explained by the death of the father (N = 32) and the role of the mother in the household (N = 59). The data of our empirical study confirm previous research findings that mothers have higher educational attainment in the regions included in the study (Kiss, 2011; Pusztai, Márkus, 2019), but their employment rate is lower than that of fathers due to the high share of mothers in household status (Pusztai, Márkus, 2019). This is particularly characteristic of Hungarian families living beyond the borders, where the traditional role and value orientation are even more pronounced. It is worth noting that some research suggests that mothers who work in the household or who do not work full-time have higher child-rearing efficiency because they invest more time in the child's future (Coleman, 1988; Pusztai, 2007; Pusztai, Márkus, 2019).

**Table 4.** Employment of parents along terciles based on expected earnings (column percentage)

	Mother's labour market situation			Father's labour market situation		
	Below average earners (N = 707)	Average earners (N = 721)	Above-average earners (N = 738)	Below average earners (N = 707)	Average earners (N = 721)	Above-average earners (N = 738)
Not employed	13.7	<b><u>19.9</u></b>	14.1	11.4	<b><u>12.6</u></b>	9.9
Employed as a public worker	<b><u>16.4</u></b>	10.9	7.9	16.5	12.1	7.6
Employed as not a public worker	69.9	69.1	<b><u>78.1</u></b>	72.1	75.3	<b><u>82.5</u></b>
Total	100	100	100	100	100	100

Notes: The underlined values indicate that there are far more people in the given cells in the table than would be expected in a random ordering (Adj.Resid. > 2.0). Mother's labour market situation: Pearson Chi-Square test,  $\chi^2 = 38.976$ ,  $df = 4$ ,  $p = 0.000$ . Father's labour market situation: Pearson Chi-Square test,  $\chi^2 = 29.558$ ,  $df = 4$ ,  $p = 0.000$ .

Source: PERSIST 2019

Hereinafter, the economic resources of the students were examined, as the database provided the opportunity to map the objective, subjective and relative financial situation. However, there are no significant differences in the economic capital of the families, who own six out of nine consumer goods on average. Furthermore, neither the subjective nor the relative indicator shows significant differences on the basis of the dimensions examined. However, differences were observed when measuring the student's own objective financial status along with six items ( $p = 0.017$ ), showing that students in the middle tercile (1.89) are in the most advantaged situation, followed by those in the above-average income group (1.75) and finally those in the lower tercile (1.66). The averages are low for all groups, as young people are less likely to have a house fund (25.5 %), a car (22.2 %) and a property (14.0 %). Furthermore, relatively few people own a tablet or e-book reader (29.7%), but this may be because they do not necessarily need or want one, as around two-fifths of respondents use a more expensive than average phone (43.8 %), laptop or computer (40.8 %). However, to explain the results, we would need to identify students' value systems, their attitudes towards material goods and their consumption habits (Pusztai, Márkus, 2019). Thus, overall, no sharp gaps can be identified in terms of economic capital.

In addition to social stratification, the residential environment's type, size and location also determine academic careers and perceptions of work (Forray, Kozma, 1992; Pusztai, 2007; Pusztai, 2015a; Csók, 2019; Godó et al., 2020). In our study, the proportion of students from villages/towns is high (47.1 %) among students from the lower tercile. In contrast, the smaller town (35.7 %) and the county seat (33.8 %) were the most frequently selected settlements of permanent residence at age 14 in the middle and upper tercile groups, respectively (Table 5). A phenomenon also observed in previous research is that while a strong municipal dominance is observed in the lowest entry average scores (Kiss, 2011), universities offering 'marketable' degrees have a significantly lower proportion of students coming from lower levels of the municipal hierarchy (Róbert, 2003).

**Table 5.** Type of settlement of the student's residence at the age of 14 along terciles based on expected earnings (column percentage)

	<b>Below average earners</b> (N = 707)	<b>Average earners</b> (N = 721)	<b>Above-average earners</b> (N = 738)
Municipality, village	<b><u>47.1</u></b>	35.2	31.2
Smaller town	36.8	35.7	31.8
County seat	14.8	26.0	<b><u>33.8</u></b>
Capital	1.3	3.1	3.2
Total	100	100	100

Notes: The underlined values indicate that there are far more people in the given cells in the table than would be expected in a random ordering (Adj.Resid. > 2.0). Pearson Chi-Square test,  $\chi^2 = 88.172$ ,  $df = 6$ ,  $p = 0.000$ .

Source: PERSIST 2019

Educational research over the past decades has demonstrated the influential role of the social status of the family of origin, as students from different backgrounds receive different levels of parental support in terms of financial, intellectual, aspirational and procedural aspects, which can affect young people's plans for further education and employment (Pusztai, 2015a; Pusztai, Márkus, 2019). At the same time, there is also a consensus among higher education researchers that individuals' career choices can be shaped by other resources, such as social capital within the family (Pusztai, 2005; Pusztai, 2007; Pusztai, Márkus, 2019), which is reflected in the question 'During your higher education years, how typical was it for your parents to...?' (Pusztai, Márkus, 2019). Respondents were asked to rate nine activities on a 5-point Likert scale (1: not at all, 2: not typical, 3: somehow typical, 4: typical, 5: very typical). The mean scores for the frequency of each activity show that families in the lower tercile are significantly more active in organising joint programs. In addition, parents are relatively likely to provide financial support to their children (3.62), ask them about their studies and exams (3.62), talk to them (generally) (3.59), encourage them to continue their studies (3.51) and inform them about their leisure activities (3.36) (Table 6).

So, although parents' educational attainment is lower than the other two groups, they also recognise the value of learning and try to support their children's academic success (Pusztai, Márkus, 2019).

**Table 6.** Students' intra-family social capital along terciles based on expected earnings (averages on a four-point scale)

During your higher education years, how typical was it for your parents...	<b>Below average earners</b> (N = 707)	<b>Average earners</b> (N = 721)	<b>Above-average earners</b> (N = 738)	df	F	Sig.
to have a conversation with you?	3.6	3.6	3.5	2	1.596	0.203
to be informed about how you spend your free time?	3.4	3.3	3.3	2	1.549	0.213
that they asked you about your studies and exams?	3.6	3.6	3.6	2	0.749	0.473
that they have financially supported you?	3.6	3.7	3.6	2	1.276	0.279
that they have organised family activities with you?	3.3	3.2	3.2	2	3.695	0.025
that they talked about dropping out?	2.0	2.0	1.9	2	0.499	0.607
that they approved that you should interrupt your studies?	1.6	1.5	1.5	2	1.796	0.166
that they encouraged you to continue your studies?	3.5	3.6	3.6	2	1.596	0.203
that they organised sporting activities with you?	2.4	2.2	2.2	2	4.860	0.008

Source: PERSIST 2019

### 3.2. The transition from secondary school to higher education

In the following, we focus on the years before entering higher education, as the secondary school period is seen as a double-edged sword that can both mitigate and amplify the spillover effects of background (Godó et al., 2020). The students surveyed typically entered higher education from secondary school (74.0 %), with the average-earners group being the most prominent (80.5 %). However, the number of students who graduated from secondary vocational school and secondary technical school classes in the lower tercile is seven percentage points (32.9 %) above the average of 26.0 %. The enrolment trends show that, on the one hand, fewer vocational school graduates apply to higher education and, on the other hand, a higher proportion of those who continue their studies aim for lower prestige majors compared to those who graduate from upper secondary school (Róbert, 2003; Nagy P., 2010; Fehérvári, 2014). This is also confirmed by our data, as former high school students predominate in the field of medicine and health sciences (89.5 %), while vocational high school students predominate in teacher training (38.7 %) ( $p = 0.000$ ).

The majority of respondents said that applying to higher education was an independent decision (74.7 %). However, a comparison of tercile reveals significant differences between groups in terms of following parental expectations, teachers' advice and the example of friends and classmates. Students in majors promising an average income were most likely to follow the advice of their parents (33.8 %) and teachers (18.0 %) and to follow the advice of friends and classmates (10.5 %). In contrast, students in the bottom third of the sample reported that they were less influenced by the above-mentioned people (Table 7). However, the literature suggests that environmental influences (family, reference groups, culture) are directly or indirectly influential,

regardless of how the student perceives or interprets them (Kotler, 1999; Rámháp et al., 2017; Tóodor, 2022).

**Table 7.** The decision to apply for higher education along terciles based on expected earnings (multiple answers possible, in percent)

	<b>Below average earners</b> (N = 707)	<b>Average earners</b> (N = 721)	<b>Above-average earnings</b> (N = 738)
I followed my parents' expectations and advice**	26.6	<b>33.8</b>	28.7
I followed the advice of my teachers***	10.9	<b>18.0</b>	16.8
I took my own advice	76.1	72.3	75.9
I followed the example of my sibling(s)	3.8	5.4	6.4
I followed the example of my friends and classmates*	6.6	<b>10.5</b>	8.4
With the help of a careers adviser	3.0	3.2	3.0
Other	3.3	3.2	3.0

Notes: The underlined values indicate that there are far more people in the given cells in the table than would be expected in a random ordering (Adj.Resid. > 2.0). Parents: Pearson Chi-Square test,  $\chi^2 = 9.493$ ,  $df = 2$ ,  $p = 0.009$ . Teachers: Pearson Chi-Square test,  $\chi^2 = 15.727$ ,  $df = 2$ ,  $p = 0.000$ . Friends and classmates: Pearson Chi-Square test,  $\chi^2 = 8.761$ ,  $df = 2$ ,  $p = 0.013$ .

Source: PERSIST 2019

Education researchers have found, based on data from quantitative research in the Partium region, that the main motivation for enrolling in higher education is a thirst for knowledge, in addition to the hope of better labour market opportunities (Pusztai et al., 2015; Kovács et al., 2019). In line with this, our analyses found that these more general factors also played a role in further education in student groups, such as gaining knowledge (89.9 %), searching for a career (86.3 %) and the hope of easier employment with a degree (83.6 %). However, in terms of differences between groups, it is worth noting that among students learning in courses promising higher income, the desire for a well-paid (84.5 %), recognised (83.1 %) occupation, relationship orientation (71.2 %), social mobility (55.8 %) and meeting job requirements (29.3 %) were over-represented. In the lower terciles, local attachment, i.e. the influence of proximity to a geographical institution, is significantly higher (65.3 %). When examining career aspirations, it is also worth mentioning gender differences, since while female students dominate in the lower terciles, the proportion of males is prominent in the upper terciles. For this reason, in addition to the motivations for applying, we have also indicated the gender differences in Table 8. Overall, focusing on the three groups, we find that, in line with the previous findings of Fényes (2009b), girls are primarily motivated by learning (91.1 %) and career search (89.0 %), while boys are typically motivated by higher earnings (83.3 %). In addition, the latter were significantly more likely to be motivated to continue their education by the hope of social advancement (58.3 %), the extension of their working life (40.1 %), intergenerational pattern matching (30.9 %) and meeting job requirements (29.9 %).

Two decades ago, Róbert (2003) already pointed to the academic performance of applicants to "marketable" courses, while Kiss (2011) identified a low proportion of high performers in the lowest average scoring bachelor's courses. When examining input performance, we had to bear in mind that the admission system differs between countries (Godó et al., 2020), so for validity, we have excluded the cross-border subsample from the database. Table 9 shows that the middle tercile has a significantly higher proportion of those who have passed the advanced level school-leaving exams (84.5 %), as well as a significantly higher proportion of those who have passed the intermediate (67.5 %) and the advanced (18.9 %) level exams. Although there is no sharp difference between the groups in terms of academic competitions (e.g. OKTV), again, the middle tercile is the

most competitive (4.5 %). Thus, it can be seen that those in the average earning occupations have achieved high levels of secondary school performance in their progression to higher education. Medical students have a significant role in this, as they enter their studies selectively, with high scores and commitment (Pusztai et al., 2022).

**Table 8.** Their motivations for continuing their studies along tercile based on expected earnings (multiple answers possible, in percent)

	<b>Below average earners</b> (N = 707)	<b>Average earners</b> (N = 721)	<b>Above-average earners</b> (N = 738)	Gender difference
To find a well-paying job***	61.8	76.6	<b>84.5</b>	men prefer ( $\chi^2 = 24.061$ , df = 1, p = 0.000)
To have a recognised profession**	76.2	78.6	<b>83.1</b>	ns
Geographical proximity of higher education institution*	65.3	59.2	63.8	ns
To increase my knowledge	88.4	90.4	90.8	women prefer ( $\chi^2 = 6.693$ , df = 1, p = 0.010)
Finding my vocation	88.0	86.0	85.1	women prefer ( $\chi^2 = 26.532$ , df = 1, p = 0.000)
Because it's easier to get a job with a degree	81.9	83.0	86.0	ns
Because I didn't want to work yet	36.3	32.5	36.1	men prefer ( $\chi^2 = 8.532$ , df = 1, p = 0.003)
To develop a wide range of relationships**	62.2	65.2	<b>71.2</b>	ns
I followed a family tradition	26.6	26.6	27.6	men prefer ( $\chi^2 = 8.812$ , df = 1, p = 0.003)
I could afford it financially	53.3	54.1	56.0	ns
No tuition fees had to be paid	57.9	55.4	55.7	ns
Job requirement**	25.3	21.2	<b>29.3</b>	men prefer ( $\chi^2 = 9.732$ , df = 1, p = 0.002)
Hope for social mobility, breakout***	42.6	52.6	<b>55.8</b>	men prefer ( $\chi^2 = 15.652$ , df = 1, p = 0.000)

Notes: The underlined values indicate that there are far more people in the given cells in the table than would be expected in a random ordering (Adj.Resid. > 2.0). Pearson Chi-Square test, ns = not significant, p\* < 0.05, p\*\* < 0.01, p\*\*\* < 0.001.

Source: PERSIST 2019

Even in the above-average income group, more than half of the students have an intermediate complex language certificate (60.7 %) and advanced level school-leaving exam (54.3 %), with those enrolled in economics leading the way in these performance indicators. In addition, this tercile has the highest proportion of students with a higher percentage of points

for having a technician qualification or a qualification listed in the National Qualifications Register (10.5 %), with students in engineering (15.4 %) and computer science (14.3 %) fields standing out. Technician qualifications in these vocational profiles can be a good basis for higher education (Pusztai, Szigeti, 2021b). Career socialisation can serve as a retention force if it has already started before entering higher education, highlighting the important role of the acquired knowledge, career identification and immersion in the profession.

In the lower tercile, most respondents started tertiary education with lower entry attainment compared to the other two groups. This student base is also under-represented in the completion of the advanced level school-leaving exams (41.1 %), intermediate (46.9 %) and advanced (7.7 %) language certificate. The severity of the gap is shown by the fact that more than twice as many people in the middle tercile passed the upper secondary school leaving certificate and the intermediate level language examination as in the below-average group. The question arises as to what extent we can speak of real underachievement and poorer academic performance. According to Kiss (2011), several professions with lower income are also represented among the professions with lower grade point averages (e.g. infant and nursery teacher, kindergarten teacher, primary school teacher, secondary school teacher). In our view, the entry requirements of the desired profession can play an influential role, as applicants know exactly what conditions they need to meet (e.g. advanced level school-leaving exam), what extra points (e.g. intermediate or advanced level language certificate) they need to reach the entry threshold for the given course. It follows that lower entry thresholds and criteria (e.g. no compulsory advanced level school-leaving exam) can have a pull-back effect, in that students do not feel the need to make the extra effort, as they can gain admission to the desired course without it.

**Table 9.** Extra points along terciles based on expected earnings (subsample in Hungary, multiple answers possible, in percent)

	<b>Below average earners</b> (N = 263)	<b>Average earnings</b> (N = 318)	<b>Above average earnings</b> (N = 430)
Due to sport performance	9.2	6.1	8.5
Due to an academic competition	3.3	4.5	3.3
Due to disability	0.7	1.3	1.4
Due to a disadvantaged situation	9.3	9.6	7.8
Due to a technical qualification or a course listed on the National Qualifications Register **	5.2	3.6	<b><u>10.5</u></b>
Due to intermediate complex language exam***	46.9	<b><u>67.5</u></b>	60.7
Due to advanced level complex language exam***	7.7	<b><u>18.9</u></b>	9.6
Due to a cumulative disadvantaged situation	2.9	2.6	2.1
Due to completing an advanced level school-leaving exam ***	41.1	<b><u>84.5</u></b>	54.3
Due to childcare	1.5	0.3	1.4

Notes: The underlined values indicate that there are far more people in the given cells in the table than would be expected in a random ordering (Adj.Resid. > 2.0). Technical qualification or a course listed on the National Qualifications Register: Pearson Chi-Square test,  $\chi^2 = 14.307$ ,  $df = 2$ ,  $p = 0.001$ . Intermediate complex language exam: Pearson Chi-Square test,  $\chi^2 = 24.563$ ,  $df = 2$ ,  $p = 0.000$ . Advanced level complex language exam: Pearson Chi-Square test,  $\chi^2 = 21.016$ ,  $df = 2$ ,  $p = 0.000$ . Advanced level school-leaving exam: Pearson Chi-Square test,  $\chi^2 = 122.869$ ,  $df = 2$ ,  $p = 0.000$ .

Source: PERSIST 2019

### 3.3. Higher education careers

Before examining the progression to higher education of the groups, Table 10 introduces some of the broad characteristics of the chosen pathway, such as the difficulty rating and attractiveness. These data were obtained by the CHERD-Hungary research team from legislative sources (Annex 10 of Government Decree 87/2015 (9.4.2015)) and educational statistics (admission databases) (Pusztai, Szigeti, 2021b). As indicated in the methodological chapter, the group of below-average earners is typically dominated by fields of education that are considered easier from an educational policy perspective (74.7 %) and highly attractive (71.5 %) (e.g. agriculture, teacher training). Similarly, students in the middle tercile are also over-represented in fields rated as "easier" (70.6 %), highlighting the predominance of humanities and social sciences (the difficulty level of medicine and health is distinct in this respect). In contrast, students in the top category tend to study in fields that are considered more difficult (80.9 %) and highly attractive (66.4 %) (e.g. engineering, computer sciences, economics), but they expect to get a return on the time, money and energy invested in their degree (Pusztai, Szigeti, 2021a). The upper tercile is characterised by slower progress than the curriculum and a high risk of dropping out, as predicted by a high pass rate (7.5 %) and a potential risk of over-achievement (21.1 %).

**Table 10.** Characteristics of the chosen pathway along the tercile created by earnings (in percent)

	<b>Below average earners</b> (N = 707)	<b>Average earners</b> (N = 721)	<b>Above-average earners</b> (N = 738)
Difficulty rating***	deemed easier <u>(74.7)</u>	deemed easier <u>(70.6)</u>	deemed more difficult <u>(80.9)</u>
Attractiveness***	highly attractive <u>(71.5)</u>	moderately attractive <u>(84.7)</u>	highly attractive <u>(66.4)</u>
Have at least one passive half-year***	2.2	4.8	<u>7.5</u>
Potential overrunners (students not finishing their studies on time)***	9.5	14.8	<u>21.1</u>

Notes: The underlined values indicate that there are far more people in the given cells in the table than would be expected in a random ordering (Adj.Resid. > 2.0). Difficulty rating: Pearson Chi-Square test,  $\chi^2 = 557.219$ ,  $df = 2$ ,  $p = 0.000$ . Attractiveness: Pearson Chi-Square test,  $\chi^2 = 1250.728$ ,  $df = 4$ ,  $p = 0.000$ . Passive half-year: Pearson Chi-Square test,  $\chi^2 = 22.128$ ,  $df = 2$ ,  $p = 0.000$ . Potential overrunners: Pearson Chi-Square test,  $\chi^2 = 36.091$ ,  $df = 2$ ,  $p = 0.000$ .

Source: PERSIST 2019

The final stage of our research involved examining the relationship between the terciles based on expected earnings and persistence as a commitment to study completion. The CHERD-Hungary research team conducted a principal component analysis based on four indicators of persistence, which are 1) the studies I am pursuing will be useful for me in my professional career, 2) I am very determined to complete my studies, 3) I want to achieve as good academic results as possible, 4) I will do my best to attend lectures, seminars, practical classes (Ceglédi et al., 2022). The results show a significant difference in persistence by earnings terciles. The least persistent students are the members of the upper tercile (below average: 38.2 %), followed by students in the middle group (average: 36.8 %). Respondents from the lower-income tercile are more persistent than the average (34.7 %) (Table 11). This result is partly explained by the fields of study, as students in the theological and teacher training courses, which dominate the below-average-earners group, are above-average in their determination to complete their studies. Furthermore, we have seen above that female students are over-represented among these students. The data suggest that the value of the principal component of persistence is elevated among females, which can be attributed to traditional gender role behaviour, stronger rule-following attitudes, compliance with manifest expectations and diligence of women. In contrast, more dropout risk factors are present for men,

highlighting a lack of interest in the field and learning, financial problems and learning difficulties (Ceglédi et al., 2022).

**Table 11.** Persistence along terciles based on expected earnings (column percentage)

	<b>Below average earners</b> (N = 707)	<b>Average earners</b> (N = 721)	<b>Above-average earnings</b> (N = 738)
Above-average persistent	34.7	32.0	30.7
Persistent on average	34.1	36.8	31.1
Below average persistent	31.2	31.2	<b><u>38.2</u></b>
Total	100	100	100

Notes: The underlined value indicate that there are far more people in the given cells in the table than would be expected in a random ordering (Adj.Resid. > 2.0). Pearson Chi-Square test,  $\chi^2 = 13.745$ ,  $df = 4$ ,  $p = 0.008$ .

Source: PERSIST 2019

#### 4. Conclusion

In the present study, we investigated the social background, secondary school characteristics and progression to higher education of students in five countries (N = 2166) using the PERSIST 2019 database. We formulated three hypotheses based on the literature, which were tested using statistical methods. Our results provide a sense of the specific characteristics of the groups of students (below-average earners, average earners, above-average earners) based on expected earnings.

In the first part of our study, we focused on the so-called 'hard' sociological indicators (parents' educational attainment and employment, financial situation, type of settlement) since, according to the sociology of education, they are stochastically related to school and labour market life course. They are also sources of economic, social and cultural capital and define the main framework of value system characteristics (Godó et al., 2020). We assumed that children of parents with lower social status have a higher proportion of below-average earners. We were able to confirm our first hypothesis, as our analyses revealed significant differences between the groups in terms of parents' educational attainment and labour market status. Children from graduate families were under-represented in the lower-earning education groups, with children of mothers with secondary education and fathers with primary education standing out. An explanation is that the group was dominated by teacher training, which may function as a one-step channel of social mobility (Róbert et al., 2017). Furthermore, in the lower tercile, the majority of parents worked, but women were overrepresented among public workers. Despite this, no sharp differences can be observed regarding material status. On the other hand, there are no differences in the position in the municipal hierarchy, as the students in the bottom tercile were predominantly from villages/villages, while in the other two terciles, there were more urban students.

In addition to the "hard" sociological indicators, we considered it important to look at family social capital, manifested in parental care, which functions as a resource that can be used during the years of higher education (Pusztai, 2007; Pusztai, 2015a; Godó et al., 2020). This is because family dowries can even override social affiliation, highlighting the role of parental attention and contact (Blaskó, 2003; Pusztai, 2007; Pusztai, 2015a; Godó et al., 2020). Our results show that families in the lower tercile were significantly more active in organising joint family and sports activities. In addition, similar to the other students, contact and discussion with parents appeared to be relatively frequent. This implies that students from a less advantaged status receive parental care similar to that of students from a higher status, which may be a driving force in their studies (Godó et al., 2020).

In our second hypothesis, we assumed that the highest number of people claiming extra credit for extra performance is among those with above-average earnings. This hypothesis could not be confirmed, as students in the middle third of the population stood out in terms of A-levels and language proficiency, which can be partly explained by the over-representation of medical

students. This group was followed by the upper tercile, where those studying economics had an outstanding performance, and the large number of IT and engineering students excelled in obtaining technical qualifications (e.g. NQR). Students in lower-paying fields were the front-runners in terms of input performance.

Finally, it was assumed that the most committed group of students to complete their studies is represented in the lower tercile. Our third hypothesis was confirmed because, although students in the upper tercile enter higher education with a strong sense of moratorium-seeking and prestige-seeking orientation, this sense of upward orientation seems to fade in the more selective and rigorous institutional culture surrounding them. And high rates of dropouts and passive semesters can be a breeding ground for disenchantment with education (Kovács et al., 2019; Pusztai, Szigeti, 2021b). In contrast, students in the lower tercile make uninterrupted progress in "easier" courses (Pusztai, Szigeti, 2021b), which, in addition to moderate training requirements, may also be the result of students' strong sense of vocation, based on vocation and spirituality (Pusztai, 2015b).

Overall, we find a characteristic variation along the terciles generated by expected earnings. The generalisability of our results is limited by the dynamic changes in the higher education system and the circumstances of the survey. Our data complement research (Pusztai, Szigeti, 2021b) that interprets the commitment to completing studies as a complex phenomenon in which several "soft" components (e.g. parental caring, vocational awareness, institutional culture) play a role simultaneously. Our aim is to explore the life course of moratorium-oriented students and the challenges they perceive further during their academic progress in higher education in a qualitative research.

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