



# Socio-demographic Background and Career Consciousness of Students in Agricultural Higher Education in Eastern Hungary

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**Abstract.** In this study, we compare the socio-demographic background of Hungarian higher education students in the field of agriculture with that of students in other fields, and we also examine students' career consciousness based on data from a large-sample survey conducted in Eastern Hungary in 2019. We found that in the field of agriculture 63.6% of the students were male and 64.8% came from smaller settlements, which may be explained by the nature of the agricultural field. Regarding career consciousness, we found that while agricultural students come to higher education with the hope of obtaining a well-paying, high-prestige job, they usually do not engage in career-oriented activities and achievements during their studies.

**Keywords:** agricultural field of study, higher education students, socio-demographic background, career consciousness, quantitative analysis

## Introduction

This study examines the socio-demographic characteristics and career consciousness of students in agricultural higher education as compared to students in other fields, based on data from a large-sample face-to-face survey in Eastern Hungary in 2019. We analyse by field of study the gender composition, the place of residence at age 14, parents' educational attainment, and indicators of the students' and their families' financial situation. We assess students' career consciousness by examining their motivations to enter higher education after secondary school, their achievement indicators, which could have an indirect

effect on their subsequent career, and their paid and voluntary work for the purposes of career advancement. Our research question asks how the field of study influences students' career consciousness after secondary education and during their university years.

The literature does not offer a single standard theoretical framework for students' career consciousness, and there is no generally accepted scale to measure it. Furthermore, most research studies adopt a psychological approach that examines the effects of self-efficacy, coping efficacy, and decisional anxiety on career planning and career choice (Lent et al. 1994, 2016, 2017; Lent–Brown 2013; Adachi 2006; Krieshok et al. 2009). Our research is novel in that it presents a conceptualization and operationalization of career consciousness that differs from the psychological literature.

In this study, we interpret students' career consciousness more broadly than the mere choice of career (which is in the focus of the psychological literature), and we measure not only career-conscious motivations and attitudes towards higher education studies (as Tuchman 1974) but also career-conscious actions and achievements during the years spent at university. Furthermore, we used self-developed tools to measure career consciousness. Of the four indices created, the first comprised indicators of career-conscious higher education entry, while the second measured overperformance in career-related indicators of academic achievement. The third and fourth indices related to students' voluntary and paid work with the goal of career improvement. Our empirical analysis was based on the Hungarian subsample of a large-sample survey conducted in five Central and Eastern European countries (the detailed description of the database can be seen in the methodological part of this study).

## **I. Theoretical Background**

### **I.I. Career Consciousness of Students Entering Higher Education**

Due to the emergence of post-modern forms of work, individuals' conception of their careers is in transformation (Beck 1992, Dahrendorf 1988). Students also expect different things from higher education than before. The focus has shifted from the mere acquisition of knowledge to a utilitarian view of higher education aimed at career development, which endows universities with the additional goal to make their students more employable (Teichler 2011).

As a result of cultural differences and the social and economic underdevelopment in most sectors in the former communist countries of Central and Eastern Europe

relative to Western Europe, the utilitarian and career-oriented approach is particularly strong among students in this region,<sup>1</sup> and especially in Hungary. Another marked difference as regards higher education in the region and in Western Europe concerns students' employability, which only became a priority of the universities after the Bologna process had been launched following the turn of the millennium. Consequently, goals in connection with career planning and development may be more important for students in Central and Eastern Europe compared to other regions, as for universities their students' employability is not so important (Pusztai–Szabó 2018, Kozma et al. 2020).

The narrow definition of career refers to advancement from one position to the next within one employer, but the broad definition includes changes across employers, as well (Arthur et al. 2005). To examine the career orientation of modern employees, the self-directed ('protean') career concept could be useful, as it focuses on individuals' values and the way in which they understand success careers (Hall 1976, 1996, 2002). Tuckman (1974) conceptualized career consciousness as the calculus of the career prospects and earnings that the qualification (degree) in question offers. This takes place at the end of secondary education, when the financial stance and influences from friends, classmates, family, and teachers may also affect career-related decisions (Nimra et al. 2019, Kazi–Akhlaq 2017).

In Pires's (2009) typology, motivations to enter higher education may be internal, external, and derivative. The first relates to professional considerations such as skill development and career orientation, as well as to networking and the enjoyment of and belief in enhancing knowledge. The second, external type of motivations comprises pressure from friends, parents, other family members, or the employer, but it may also reflect economic reasons such as the ability to collect favours that later may be converted into a good job. Those who enter higher education either to avoid working for a while or out of boredom do so out of derivative motivations.

The career-oriented motivation to enter higher education is thus an intrinsic motivation, which Tuckman (1974) argues to be also related to the human capital model (Mincer 1958, Becker 1994, Schultz 1971). This is because the decision to enter higher education is influenced by the wage premium attainable through the given degree compared to secondary education, as well as the social status associated with the subsequent job.

Regression results by Mohácsi–Fényes (2020), who examined career consciousness concerning the decision to enter higher education studies, showed that women who had a highly educated father and a well-off family, those of rural origin, and business and economics students are more career conscious than the other students.

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1 Of course, there could be differences between countries within the region, as well.

## **I.II. Career Consciousness during University Years and Its Determinants**

Students' career consciousness as discussed in the literature (see Tuckman 1974) refers only to the time when they decide to study further in higher education after secondary school, but here we try to measure career consciousness during university years, as well. We have three different indicators. The first one relates to above-average performance in certain areas of academic achievement. In our previous analyses, we used a multidimensional approach to capture students' achievement instead of a unidimensional measure (e.g. academic average) (Fényes 2010, Pusztai 2015). Three main factors were considered: academic achievement (comprising scholarships, conference attendance, academic competitions, publications, and participation in extracurricular activities), international openness (including the experience of studying abroad and obtaining language exam certificates), and further study plans (in particular a further degree or aspirations for PhD). In this paper, we consider that language skills, study trips abroad, participation in academic competitions, conference attendance, and the availability of a CV in Hungarian and foreign languages are all characteristics of a consciously built career, so we decided to include these performance indicators to measure students' career consciousness.

Our previous studies found that a favourable socio-economic status, especially urban origin and the mothers' higher level of education, increased students' achievement (measured by an index adding different elements, listed above) during university years. In addition, older students and women were also found to have higher achievement levels. When each achievement indicator was separately considered, women and well-off students were found to have better language skills on average, with men performing better in scientific and academic areas (Fényes 2010, Pusztai 2015).

The two other indicators of career consciousness during university years show students' paid and voluntary employment for career development purposes. According to Mincer (1958), paid and voluntary employment alongside higher education studies constitutes a human capital investment due to higher productivity and wages attainable later on, potentially also featuring capital conversion in the Bourdieuan sense (1986). In searching for a job following graduation, students can convert into financial benefits the social and knowledge capital (including skills related to the labour market and professional knowledge) that they accumulated during the university years. In our study, we consider as career-oriented those students (in addition to the previous indicators discussed above) who do paid or voluntary work related to the field of study and those who are motivated to work by gaining professional experience, expanding their social networks, improving professionally, and gathering additional items to their CVs.

According to our previous findings, a significant share of students were motivated to undertake paid employment by obtaining work experience as opposed to merely short-term financial considerations. Professional, experience-oriented motivation was increased by more frequent and more complex contacts with parents and external friends (i.e. not from the university), self-funded status, and older age. It was also found that work experience was more important for students than professional knowledge or networking (Fényes 2021, Mohácsi–Fényes 2022).

Previously, we also examined students' motivations for volunteering, and we found mixed motivations in this regard, which included the modern motives of work experience such as networking, knowledge expansion, professional development, and CV improvement, as well as the traditional motive of wanting to help. We identified a greater presence of career-building objectives among students in close contact with their external friends, female students, and those who studied something other than engineering or sciences. Disadvantaged students, those in close contact with lecturers, and teacher education students were more likely to volunteer in a field related to their studies (Fényes–Mohácsi 2022).

## II. Methods

The Persist 2019<sup>2</sup> database consists of the results of a large-sample face-to-face student survey (N = 2,199) conducted in the academic year 2018/19.<sup>3</sup> The survey was carried out in higher education institutions in Eastern Hungary<sup>4</sup> and in four other countries<sup>5</sup> (Slovakia, Romania, Ukraine, Serbia). The Hungarian subsample (N = 961) examined in this paper was collected using quota sampling and is representative with respect to faculty, field of study, and form of funding. The sample consists of full-time bachelor's students in their second year and of second-year or third-year students from undivided (five-year) programmes that offer a master's degree.

Career consciousness is measured by four indices. The index showing *career consciousness at the entry to higher education* is constructed from three binary (0,1) variables for the following motivations for enrolment in a higher education study: finding a job that pays well, having a recognized occupation, and finding

2 The title of the research project was *The Role of Social and Organizational Factors in Student Attrition* in the following PERSIST 2019.

3 Data collection was carried out by the CHERD-Hungary research group, and the authors are the members of this group.

4 The University of Debrecen, the University of Nyíregyháza, Debrecen Reformed Theological University, Saint Athanasius Greek Catholic Theological College.

5 Babeş–Bolyai University (BBU), Emanuel University of Oradea, Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education, Constantine the Philosopher University in Nitra, Mukachevo State University, the University of Oradea, Partium Christian University, Sapientia Hungarian University of Transylvania, J. Selye University, the University of Novi Sad, Uzhhorod National University.

a good job easier. The *higher education achievement index* is constructed from seven binary (0,1) variables corresponding to holding conference presentations, participating in academic competitions, holding intermediate or advanced language certificate, having a Hungarian or foreign-language CV, and participating in study trips abroad. The *career-oriented paid work index* is constructed from three binary (0,1) variables measuring the fit of the work to the field of study and the perceived importance of networking and professional experience acquisition during paid work. Finally, the *career-oriented volunteering index* is constructed from five binary (0,1) variables showing the fit of the voluntary work to the field of study and the existence of motivations in relation to networking, professional experience acquisition, professional and knowledge development, and CV improvement.

The examined social background variables are gender, the number of school years completed by the mother and the father, the type of settlement of the place of residence at age 14, and four indicators assessing the respondent's financial situation. The family's financial situation was measured by the possession of durable consumer goods<sup>6</sup> (objective financial situation index: 0–9) and by a relative financial situation indicator, which compares the family's financial situation to the families of the student's peers (on a 1–5 scale, where 3 is the average situation). To capture the students' individual financial situation objectively, we created a composite index showing the possession of durable goods<sup>7</sup> (0–6) and a subjective indicator of individual financial situation<sup>8</sup> exploring whether the student can afford a significant purchase or is unable to cover even the basic expenses (1–4). Students' fields of study are divided into six categories as follows: 1. agriculture, 2. humanities and social sciences, 3. business and economics, 4. STEM (sciences, computer science, and engineering), 5. other non-classified teacher training, 6. other fields (e.g. law, medicine, health, sports, and arts).

### III. Results

In the following, we present the results of our empirical analysis, which focuses on higher education students in the field of agriculture in Eastern Hungary. We first present the general characteristics (i.e. gender ratio, social background) of

- 6 Components of the index: Does the family possess an apartment or house, a five-year-old car or younger, a flat-screen television, a personal computer or laptop with broadband Internet access at home, a tablet or e-book reader, mobile Internet (on the phone or computer), a dishwasher, an air-conditioner, and a smartphone?
- 7 Components of the index: Does the student possess an apartment or house, a car, an above-average smartphone (e.g. iPhone), an above-average computer or laptop, a tablet or e-book reader, and savings for house purchase?
- 8 1. Often I do not have enough money for basic everyday necessities. 2. Sometimes I do not have enough money for everyday expenditures. 3. I have everything I need but cannot afford larger expenditures. 4. I have everything I need and can also afford larger expenditures.

students studying in this field and then compare the four indicators of career consciousness by field of study.

As we can see in *Table 1*, there are significant differences in the gender ratios by field of study. While the average proportion of women in the sample was around 60%,<sup>9</sup> it was only 36.4%<sup>10</sup> in the agricultural field of study, suggesting that agricultural education is a male-dominated field, with the share of men well above average (63.6%). As expected, men were overrepresented in STEM fields (sciences, engineering, computer science), and women were overrepresented in the fields of humanities and social sciences, business and economics, and teacher education.

**Table 1.** *Gender ratios by field of study in the Eastern Hungarian subsample (chi-squared = 65.859, p = 0.000, N = 937)<sup>11</sup>*

Gender	Humanities and Social Sciences	Business and Economics	STEM	Teacher Education	Agriculture	Other	Total
Female	98 <u>70.5%</u>	86 <u>67.2%</u>	101 42.8%	84 <u>77.8%</u>	24 36.4%	152 58.5%	545 58.2%
Male	41 29.5%	42 32.8%	135 <u>57.2%</u>	24 22.2%	42 <u>63.6%</u>	108 41.5%	392 41.8%
Total	139	128	236	108	66	260	937

*Source: authors' calculations based on the Persist 2019 database*

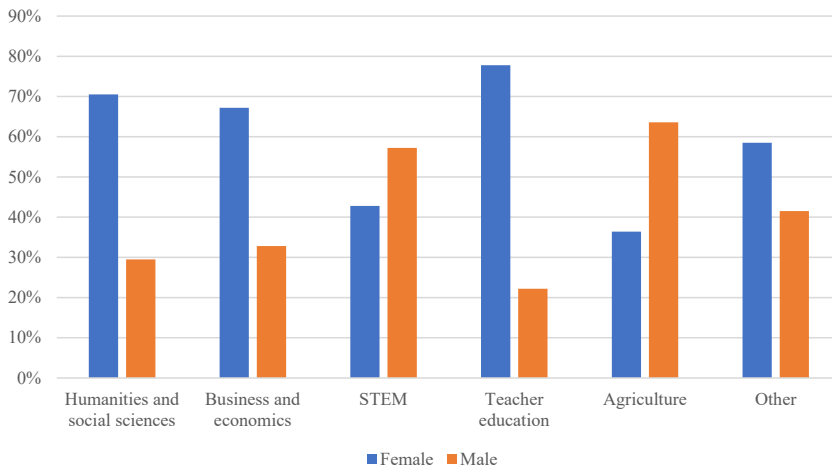
Significant differences were also found in connection with the settlement type of the place residence at age 14 by field of study. While on average 31% of the students came from a county seat, the proportion was only 19.7% for agricultural education. The sample had no agricultural students from the capital, where only around 3% of the total sample was from. Smaller towns (not county seats or the capital) were the most common places of residence in the total sample (40.8%), and even more so for students enrolled in agricultural education (48.5%). The proportion of students from villages was 25% in the total sample and somewhat

9 In the Hungarian higher education system, the proportion of women is around 54% (see KSH 2022), but in our sample it is higher (60%) due to the fact that in Eastern Hungary the composition of the study areas in higher education differs from the country average; for example, there are more students studying pedagogy, which is a female-dominated field of study.

10 In Hungarian higher education, the rate of women in the agricultural field of study is around 48% compared to the average rate, which is 54% (KSH 2022); however, in our sample, this is just 36.4%, so in this region of Hungary the agricultural field of study is more male-dominated than the national average.

11 In *tables 1* and *2*, the adjusted residuals are greater than 2 for the proportions underlined once (meaning more people than expected with a random distribution) and less than -2 for the proportions underlined twice (meaning fewer people than expected with a random distribution) respectively.

higher (31.8%) for agricultural training. Overall, higher education students in agricultural fields were mostly of rural origin, coming from smaller towns or villages, which is consistent with agricultural training, but it reveals a relative social disadvantage in terms of residence (*Table 2*).



Source: authors' calculations based on the Persist 2019 database

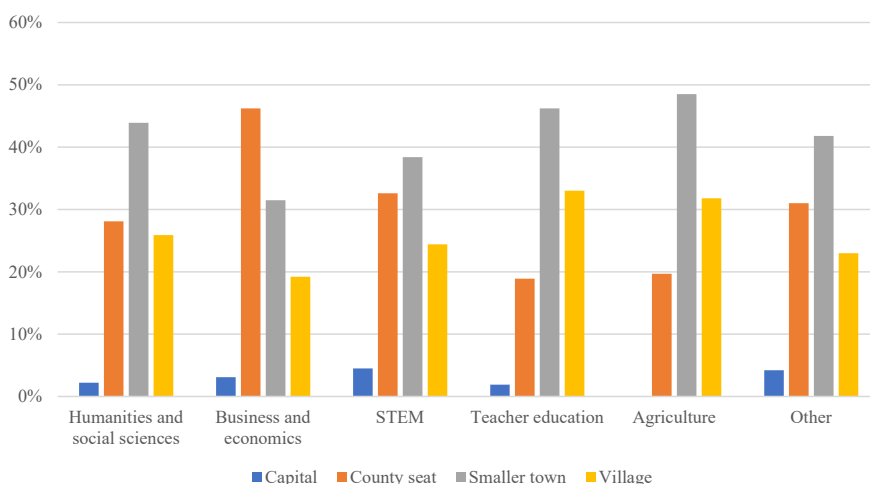
**Figure 1.** Gender ratios by field of study (percentages)

**Table 2.** Place of residence at age 14 by field of study in the Eastern Hungarian subsample (*chi-squared* = 34.593, *p* = 0.003, *N* = 944)

Settlement	Humanities and Social Sciences	Business and Economics	STEM	Teacher Education	Agriculture	Other	Total
Capital	3 2.2%	4 3.1%	11 4.5%	2 1.9%	0 0%	11 4.2%	31 3.3%
County seat	39 28.1%	60 46.2%	79 32.6%	20 <u>18.9%</u>	13 <u>19.7%</u>	81 31%	292 30.9%
Smaller town	61 43.9%	41 <u>31.5%</u>	93 38.4%	49 46.2%	32 48.5%	109 41.8%	385 40.8%
Village	36 25.9%	25 19.2%	59 24.4%	35 <u>33%</u>	21 31.8%	60 23%	236 25%
Total	139	130	242	106	66	261	944

Source: authors' calculations based on the Persist 2019 database





*Source: authors' calculations based on the Persist 2019 database*

**Figure 2.** Place of residence at age 14 by field of study (percentages)

Students' social background was measured by the years of education completed by their mothers and fathers, the objective financial situation of the family (1–9 index based on the possession of consumer goods), the relative financial situation of the family compared to families of the peers (1–5), and, finally, students' subjective (whether they had savings and could afford everyday expenses: 1–4) and objective financial situation (0–6 index). While students' subjective financial situation did not differ across the various fields of study, significant differences were found for all other indicators.

Among students of business, economics, and other fields (e.g. law, medicine, health, sports, arts), all the above-listed indicators were higher than average, suggesting a favourable social background. In contrast, all values were below average for humanities and social sciences, STEM (engineering, computer science, sciences), and teacher education. As for students in agricultural education, their overall social background (i.e. cultural and financial resources) did not stand out from the average. In more detail, agricultural students were above average in terms of the fathers' educational attainment and the family's relative financial situation and below average in terms of the mothers' educational attainment as well as the family's and the student's access to durable consumer goods. Traditional parental roles, with fathers being better educated than mothers, were common among agricultural students, in contrast to other fields, where the opposite was found. This may be explained by the fact that agricultural students were predominantly from small settlements, where parents often work in agriculture and the traditional gender division of labour prevails. It is an interesting finding that students in agricultural higher education perceived their families as better off financially compared to their peers, even

though objective financial indicators for both students and their families showed the opposite. This may be due to the discrepancy between subjective perceptions and the actual situation, which is often found in national surveys, as individuals compare their financial situation to their own (in this case: less developed, rural) immediate community and social groups (*Table 3*).

**Table 3.** Differences in selected social background indicators by field of study in the Eastern Hungarian subsample<sup>12</sup>

Field of Study		Mother's Educational Attainment	Father's Educational Attainment	Family's Objective Financial Situation (0–9)	Family's Relative Financial Situation (1–5)	Individual Objective Financial Situation (0–6)
Humanities and social sciences	Mean	12.96	12.41	6.42	3.15	1.65
	N	137	135	125	137	135
	SD	2.18	2.082	1.42	0.71	1.16
Business and economics	Mean	<u>13.47</u>	<u>13.27</u>	<u>6.71</u>	<u>3.36</u>	<u>1.87</u>
	N	127	126	120	127	125
	SD	2.48	2.63	1.70	0.72	1.59
STEM	Mean	13.31	12.85	6.59	3.23	1.64
	N	239	238	210	242	226
	SD	2.53	2.67	1.57	0.68	1.43
Teacher education	Mean	12.70	11.97	6.23	3.20	1.47
	N	107	107	97	107	102
	SD	2.45	2.17	1.64	0.64	1.29
Agriculture	Mean	12.80	<u>13.27</u>	6.47	<u>3.29</u>	1.59
	N	65	63	55	66	64
	SD	2.20	2.71	1.73	0.72	1.27
Other	Mean	<u>14.30</u>	<u>13.88</u>	<u>6.83</u>	<u>3.36</u>	<u>1.95</u>
	N	260	259	248	262	250
	SD	2.51	2.64	1.64	0.75	1.49
Total	Mean	13.45	13.06	6.60	3.27	1.74
	N	935	928	855	941	902
	SD	2.50	2.60	1.61	0.71	1.42
ANOVA sign.		0.000	0.000	0.028	0.039	0.027

Source: authors' calculations based on the Persist 2019 database

<sup>12</sup> The underlined values are above the mean of the total sample.

Finally, we also examined students' career consciousness by field of study, based on the four indices of career consciousness presented earlier. We identified significant differences across the various study fields. Career consciousness upon entry, measured by career-related motivations for higher education, was below average for students in humanities and social sciences and for teacher education students, whereas it was above average for students of business, economics, STEM fields (engineering, computer science, sciences), other fields, and agriculture.

**Table 4.** *Differences in the four indices of career consciousness by field of study<sup>13</sup>*

↓Field of study		Career- Conscious Higher Education Entry Index (0–3)	Career- Oriented Voluntary Work Index (0–5)	Career- Oriented Paid Work Index (0–3)	Achievement Index (0–7)
Humanities and social sciences	Mean	2.24	<u>1.56</u>	<u>0.84</u>	<u>1.69</u>
	N	140	140	140	140
	SD	0.90	1.96	0.97	1.27
Business and economics	Mean	<u>2.72</u>	0.83	<u>0.85</u>	<u>1.73</u>
	N	130	130	130	130
	SD	0.60	1.46	1.01	1.08
STEM	Mean	<u>2.45</u>	0.75	<u>0.79</u>	1.30
	N	247	247	247	247
	SD	0.82	1.43	0.97	1.24
Teacher education	Mean	1.98	<u>1.66</u>	<u>0.80</u>	1.07
	N	109	109	109	109
	SD	1.02	1.94	1.01	1.14
Agriculture	Mean	<u>2.55</u>	0.82	0.57	1.27
	N	67	67	67	67
	SD	0.84	1.50	0.82	1.07
Other	Mean	2.43	<u>1.19</u>	0.50	<u>1.50</u>
	N	268	268	268	268
	SD	0.91	1.72	0.83	1.17
Total	Mean	2.40	1.11	0.71	1.44
	N	961	961	961	961
	SD	0.88	1.70	0.94	1.20
ANOVA sign.		0.000	0.000	0.000	0.000

*Source: authors' calculations based on the Persist 2019 database*

13 The underlined values are above the mean of the total sample.

In the ranking of fields, agricultural students were directly followed by business and economics students, suggesting that higher education entry in these two fields is predominantly motivated by a well-paid job, a recognized occupation, and an easy job search. In contrast, students in humanities and social sciences performed above average in terms of the other three career consciousness indices (career-oriented paid and voluntary work, high achievement in certain career-related higher education achievement indicators). As for other fields of study, economics and business students were characterized by career-oriented paid work and higher achievement, teacher education students by career-oriented paid work and voluntary work, students in other fields by career-oriented voluntary work and career-related achievement indicators, and STEM students by career-oriented paid work only. In agricultural education, however, neither career-enhancing activities during university years (career-oriented voluntary and paid work) nor career-related achievements (e.g. participation in academic competitions and conferences, intermediate or advanced language qualifications, CV in Hungarian or a foreign language, study trips abroad) were common, i.e. their means were below average (*Table 4*).

## **IV. Summary and Conclusions**

Our study investigated the general characteristics and career consciousness of higher education students in the field of agricultural education as compared to students in other fields of education, based on data from a large-sample survey conducted in Eastern Hungary. In terms of socio-demographic indicators, agricultural education was found to be a male-dominated field, with an above-average proportion of male students (63.6% were male in this field in our sample compared to the average 41.8%), which can be explained probably by the nature of the agricultural jobs. Unsurprisingly, agricultural students' most common places of residence at age 14 were smaller towns (48%) and villages (32%), with only 20% coming from county seats or the capital. Agricultural students' social background was about average, with the fathers better educated than the mothers. This may be related to rural origins, as in small settlements traditional gender roles are still prevalent and women do not have high educational attainment (see Csurgó 2002). In addition, many of those studying in agricultural higher education presumably follow their parents' example in choosing this field. In typical agricultural family businesses in Hungary, it is usually the man who runs the business, while the wife, who often has a lower level of education, helps in other tasks (Csurgó 2005). Our further result is concerning the objective indicators of students' and their families' financial situation, according to which agricultural students possessed fewer durable consumer goods than the average, which may also be explained

by the smaller settlement of origin. However, agricultural students assessed their families' relative financial situation more favourable than their peers in other fields of study. We explained the discrepancy between objective and subjective indicators by the fact that people compare themselves mostly to their immediate environment, and therefore a subjective classification may be more favourable than objective indicators (see Merton's (1968) reference group theory).

In addition, we also examined students' career consciousness using the four indices presented in the theoretical section, which again revealed significant differences across the various fields of study. The situation of students in agricultural education was special because they were the second most career-conscious group after business and economics students upon entering higher education but performed below average in all three indicators related to their university years.

A further research question could be formulated as follows: Why career-conscious attitudes upon entry do not translate into career-conscious actions or achievements during the actual studies among students studying in agricultural education? – a question that can be analysed with the help of qualitative interviews. A deeper analysis could address these issues: (1) whether students in agricultural education are certain that they can achieve their initial career goals (a well-paid and prestigious job and easy access to work) and that is why they do not need to attain extra achievement during their university years; (2) why is career-oriented paid and voluntary work not common among them? (3) why they underperform in terms of career-enhancing achievements.

A limitation of our research is that we used a bivariate analysis to investigate the link between the field of study and career consciousness. In a multivariate model, it would be possible to isolate how agricultural students' career consciousness is affected by their different background characteristics compared to other students (e.g. a higher share of men and rural students). In a sample including five Central and Eastern European countries, regression results by Fényes–Mohácsi–Pusztai (2021) showed higher career consciousness upon entry among rural students and more career-conscious actions and achievement during university years among women and urban students. This may partly explain our finding that students in agricultural education are career conscious upon entering higher education but later in their university years they lag behind in terms of career-conscious actions and achievements, at least according to the indicators we measured.

A further explanation could be that voluntary and paid employment for the purposes of career improvement depends not only on the individual's career consciousness but also on the availability of jobs in the field; and in the field of agriculture such opportunities can be limited.

In our research, we have not yet succeeded in developing a single measure of career consciousness, as we had to adapt to the possibilities of the survey

conducted. However, our study can be seen as a first step towards a more general indicator of career consciousness that takes into account economic aspects related to the labour market as opposed to psychological measurements. In our study, career consciousness captures career decisions of a rational nature, so it would be an interesting further area of research to investigate non-rational attitudes influencing students' career decisions, taking into account the potential impact of other actors (e.g. parents, teachers, peers).

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