

Higher Education and Ethnic Minority in an Ethnically Diverse Town

Survey Results on Education, Personal Network and Mobility in Komárno

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Abstract

This paper focuses on university graduates and non-graduates in the southern Slovakian town Komárno using the results of a recent survey conducted in 2021. Komárno is not only a university town for the Hungarian minority but also an ethnically diverse place. This paper aims to describe the characteristics of the inhabitants of Komárno from the perspective of education, personal networks, and mobility based on the survey results. The number of university graduates has increased over the past decade, especially among the young Hungarians minority in Komárno. In addition, despite their population mobility, the personal networks of inhabitants beyond ethnicity reflect the characteristics of multi-ethnic towns.

Keywords: Hungarian minority; Slovakia; higher education; language; personal network; quantitative survey

Subject-Affiliation in New CEEOL: Social Sciences – Education – History of Education

DOI: 10.36007/eruedu.2022.2.003-018 (re-edited version)

1. Introduction

Since the Treaty of Trianon, Slovakia has had Hungarian minorities living in the southern part of the national territory near the Hungarian border. In terms of studies on the Hungarian minority in Slovakia, sociological surveys have been conducted by many scholars (e.g., Krivý 2006; Lampl 2008, 2013; Machacek 2011; Šutaj 2012; Veres 2015). The present study focuses on the difference between university graduates and non-graduates according to ethnic groups in Komárno, a university town for Hungarian minorities in Slovakia, using the results of the survey conducted in 2021. This paper also reports the preliminary survey results on the education, personal networks, and mobility of inhabitants in Komárno.

This paper aims to describe the characteristics of the current inhabitants of Komárno in terms of their higher educational background. Komárno is not only a university town for the Hungarian minority, but it is also an ethnically diverse town. The town is located in the Slovak-Hungarian borderland along the River Danube. According to the Slovak national census data, while Komárno is one of the towns with the largest population of ethnic Hungarians in Slovakia, more than 30% of the total population is Slovaks¹. Komárno is also the central town of the ethnically diverse Komárno district, where the ethnic Hungarian population accounts for 63.8% of the total residents (Benža et al. 2015:54). Until the 2000s, a low proportion of

¹ Details of the population is explained in the next section.

university graduates from ethnic Hungarians was viewed as a serious problem in the long run (Gabzdilová 1993; Gyurgyik 2008; László 2008)². In 2004, the Slovak government established the J. Selye University in Komárno (the first state university that teaches in Hungarian) to address this issue for the Hungarian minority. This university has provided more opportunities to study higher education for the Hungarian minority in Slovakia. As seen in chapter 3, the percentage of university graduates from ethnic Hungarians has increased in Komárno.

2. Research method and general characteristics of Komárno

The survey was conducted with the inhabitants of Komárno from the 3rd until the 29th of August 2021. The data³ used in this study were collected by FOCUS, a Slovak opinion poll agency specialising in sociological surveys. The survey was conducted with the interviewees' consent to answer a questionnaire. In total, 510 people participated in the survey. Prior to conducting the survey, the researchers passed the ethical review and treated all survey data carefully using the General Data Protection Rules of the European Union. The survey was conducted using quota sampling. The sample was representative of the residents of Komárno in terms of gender, age group, and ethnicity, based on the Slovak national census data of 2011. According to census data from 2011, the population of Komárno was approximately 34,000. The number of ethnic Hungarians was around 18,000 (54%). The Slovak population was 11,000 (34%). When the survey was conducted in 2021, Komárno had 33,282 residents.⁴ The Slovak national census counts respondents' ethnicity using their own statements. Therefore, it is estimated that some 'Slovaks' might have family members who are ethnically Hungarian. Indeed, there are some 'Slovaks' whose first language is Hungarian because past census data reported that more people than the total number of ethnic Hungarians named their mother tongue Hungarian.⁵ Concerning the tendency of town inhabitants, university graduates from both ethnicities were analysed.

In addition, Komárno has been characterised as one of the most aged societies compared to other towns in Slovakia⁶. In Figure 1, the left side of the graph shows the population pyramid of Komárno in 2020, and the right side illustrates the situation in the Slovak Republic in 2020. As shown in Figure 1, a lower proportion of the younger generation is notable.

² Not only ethnic Hungarians in Slovakia but also Hungarians in Romania, Ukraine, and Serbia show a lower proportion of higher education graduates than that of each national average (Papp 2011: 484).

³ The Software used for the calculations was SPSS 27 and R 4.1.1 on Windows10.

⁴ Based on the data of July 2021 by the Statistical Office of the Slovak Republic. <https://slovak.statistics.sk> (accessed on 14 January 2022)

⁵ In Komárno, around 59% of the residents' first language is Hungarian (2011). This number is higher than the number of ethnic Hungarian. Not only Komárno but also other towns in southern Slovakia have higher percentage of Hungarian as first language than that of ethnic Hungarian (e.g., Dunajská Streda, Nové Zámky, Štúrovo, Rimavská Sobota, Rožňava)

⁶ Based on the statistical data at the district (okres) level, H. Yamaguchi conducted a factorial ecology analysis (a combination of principal component analysis and cluster analysis) and attempted to categorise all districts of Slovakia. Through this analysis, the data of the various districts of Slovakia allowed us to extract four characteristics of the country: (1) the urban area character, (2) the character related to the residence of ethnic Hungarians, (3) the character related to peripheralization in a country, and (4) the character related to ageing and population decline. Komárno ranks 1st for characteristic (2) and 10th for characteristic (4) of all Slovakia districts (Yamaguchi 2020).

The decline in the number of children is increasing the problem – especially for the Hungarian minority – of maintaining their education in the Hungarian language (Morvai and Szarka 2013).⁷ The number of Hungarian primary schools has decreased since the 1960s, despite the recent increase in the share of children attending primary school teaching in Hungarian (Filep 2017: 43-44)⁸. Komárno still has enough children to maintain its education; however, this town is also facing a serious population aging.

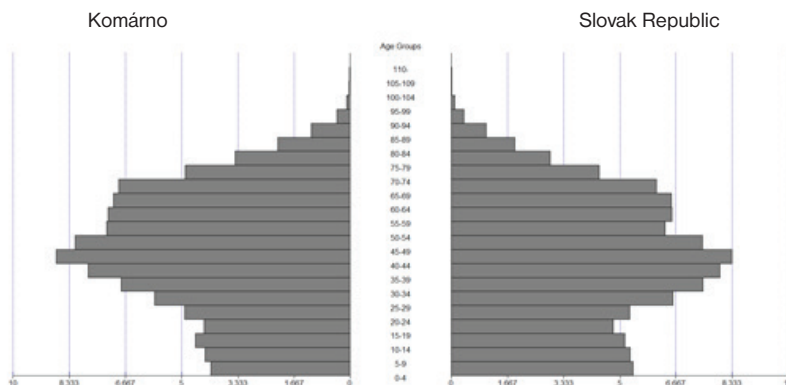


Figure 1: Population pyramid of Komárno (left) and the Slovakia Republic (right) (%)

Generally, the youth population ratio depends on educational and employment opportunities. J. Selye University has provided an additional educational opportunity for local youth since 2004. This paper does not aim to investigate the university's impact on the demographics of Komárno but can provide some insights into university graduates' current conditions of community life in a multi-ethnic provincial town.

3. Higher education and Hungarian minority

This section examines the actual data on higher education in Komárno. According to the survey data for 2021, university graduates accounted for 22.9% of the total (N=510).⁹ 28.9% of Slovaks (N=57/197) and 19.0% of Hungarians (N=58/306) had university degrees. Compared to the latest tertiary graduation rate of Slovakia (2019) of 27.6%¹⁰, the Hungarians' rate is still lower. However, a different trend is notable when analysing the data on university graduates by age and ethnicity (Table 1). The overall rate of university graduates increased

⁷ According to Morvai and Szarka (2013), it is difficult for Hungarian schools in small villages to gather enough pupils and parents to consider children's school choice from the point of teaching language and education quality of very small schools.

⁸ The number of children attending the school teaching in Slovak was increasing until the 1990s'; later, the share decreased in southern Slovakia (Filep 2017: 43-44).

⁹ The entire survey covered Roma people and people other than Slovaks, Hungarians and Roma. Since this paper aims to compare Slovaks and Hungarians, the following section will compare these two ethnic groups.

¹⁰ Tertiary graduation rate is cited from OECD Data <https://data.oecd.org/students/tertiary-graduation-rate.htm> (accessed on 27 January 2022)

in the group of people in their 40s in 2021.¹¹ While Slovaks exceed the overall higher education completion rate in their 40s and 50s, Hungarians exceed that level in their 30s. Among the younger generation, the percentage of Hungarian university graduates is higher than that of Slovaks living in Komárno.¹² Regarding the age group 20-29, the percentage of university graduates is relatively low because this group includes students. 3.5% of the respondents were students.

Table 1: Percentage of university graduates by age and ethnicity (%)

	20-29	30-39	40-49	50-59	60-69	70-79	all	N
Hungarian***	22.6	46.5	16.9	11.7	14.9	7.7	19.9	306
Slovak***	12.1	44.4	40.5	23.5	0.0	30.8	28.9	197
Slovak and Hungarian total***	17.2	45.4	26.7	16.0	11.6	13.5	22.9	503

*** p<.001

The results in Table 1 also show the possibility that J. Selye University influences Hungarians' graduate rates in Komárno. According to László (2008) and Papp (2011), who researched higher education for the Hungarian minority in Slovakia, one of the reasons for the lower rate of graduates was the lack of opportunity to access higher education because of their mother language. Opportunities were limited before the establishment of J. Selye University in 2004. Only some educational institutes have mainly trained teachers for elementary or secondary schools speaking Hungarian in Nitra, Bratislava, and other cities. As seen in Table 2, the number of Hungarian students is increasing, similar to the growth in the overall number of students in Slovakia. The rate of ethnic Hungarian students in Slovakia does not increase easily; however, it is supposed that there are more Hungarian students and graduates because Table 2 does not include students from foreign universities. Ethnic Hungarians have more options to study at Slovak universities and foreign countries, including Hungary, and at some branch campuses that Hungarian universities have opened in Slovakia (László 2008, Papp 2011).

Table 2: Number and Percentage of university students from ethnic Hungarian in SR¹³

1990			2002			2012		
HU	all	(%)	HU	all	(%)	HU	all	(%)
2,578	52,669	4.9%	4,480	98,461	4.6%	5,422	121,024	4.5%

To consider higher education for the Hungarian minority, first, it is necessary to examine the language of education. Table 3 shows the percentages of languages of instruction at

¹¹ The percentage of Slovaks of the 60s and 70s with a university degree should be used with caution because it could be caused by sampling biases.

¹² According to Lampl's survey in 2012, more ethnic Hungarian youths hope to continue studying after high school than Slovaks in general southern Slovakia (Lampl 2016: 57).

¹³ Data of 1990 and 2002 cited from László (2008: 249). Data of 2012 is based on Štatistická ročenka školstva 2012/2013 by Slovak Centre of scientific and technical information <https://www.cvtisr.sk/> (accessed on 27 January 2022)

each educational stage by ethnicity and educational background.¹⁴ According to the data, Slovaks tend to choose educational institutions in Slovak, and Hungarians tend to choose Hungarian schools. However, certain ethnic Hungarians, especially university graduates, study in Slovak. Generally, there is no remarkable difference between the first and second levels of primary education. However, the gap in Hungarian language choice has changed slightly from the second level of primary education to secondary education. For example, while the percentage of university graduates from ethnic Hungarians who received their primary education in Slovak was 17.2%, it increased to 22.4% in high school. In the higher education stage, more respondents learn in several languages simultaneously – not only in Slovak or Hungarian but also in other languages. This segment includes those who studied for a diploma abroad as well as those who stayed at universities in another language zone for a short period. It is also important to note that the percentage of Hungarians educated in Slovak and Slovaks educated in Hungarian is increasing at the educational stage, even if only slightly. In addition, it should be noted that a few people, mainly ethnic Hungarians, have completed only primary school.

Table 3: Medium of instruction in educational stages by ethnicity (%)

		Medium of instruction in primary 1st level			Medium of instruction in primary 2nd level		
		SK	HU	O/NA	SK	HU	O/NA
Slovak N:197	NG	85.0	15.0	0.0	85.0	15.7	0.0
	UG	96.5	3.5	0.0	96.5	5.3	0.0
Hungarian N:306	NG	11.3	88.3	0.0	11.3	88.3	0.0
	UG	17.2	82.8	0.0	17.2	82.8	0.0
		Medium of instruction in high school			Medium of instruction in university		
		SK	HU	O/NA	SK	HU	O/NA
Slovak N:197	NG	83.6	17.1	2.1	-	-	100.0
	UG	96.5	7.0	1.8	93.0	8.8	1.8
Hungarian N:306	NG	12.5	78.6	10.5	-	-	100.0
	UG	22.4	81.0	0.0	27.6	74.1	1.7

NG: Non-graduates; UG: University graduates

SK: Slovak; HU: Hungarian; O/NA: other or not attended

Through examining Table 1-3, it is remarkable that there is a relatively higher rate of graduates of younger Hungarians in Komárno (Table 1) and a higher share of ethnic Hungarians pursuing higher education in Hungarian (Table 3), despite the lower share of the Hungarian students in Slovakia (Table 2). Therefore, it is estimated that more have studied abroad. Regarding the Hungarian youth's school choices, Pásztor mentioned that their polarised characteristics and future aspirations influenced the destination to study; only some ambitious

¹⁴ There are some categories where the total percentage exceeds 100% because respondents could choose from several languages.

and excellent students were eager to study in Bratislava or Budapest, while other students tended to choose their school so that they could stay in southern Slovakia (Pásztor 2018: 122-124).¹⁵ Those who have a strong attachment to their hometown tended to choose Slovakian universities teaching in the Hungarian language, like J. Selye University in Komárno, or at some branches of Hungarian universities based in Slovakia. Pásztor surveyed ethnic Hungarian high school youths in southern Slovakia and conducted follow-up interviews after six years. The research was carried out in a small town that has no higher education institutions nearby and is located 200 km from Bratislava, which means that the town is located more towards the east than Komárno (Komárno is 100 km away from Bratislava), and students live in a more provincial condition than in Komárno. Nakazawa's study revealed more details about ethnic Hungarians studying at Slovakian universities whose medium of instruction is Hungarian. Based on a survey of students from the Faculty of Education at J. Selye University, his study mostly discusses students' general character. Almost 80% of them grew up in pure Hungarian families; however, even those with a strong attachment to Hungarian nationality would rather become Hungarian teachers in Slovakia and would not like to work in Hungary (Nakazawa 2018: 72-73).

In the present survey, the target group has already finished their education and continued to live in Komárno or has moved to Komárno after their education. Therefore, the survey results do not directly reflect those who have moved away from Komárno but reflect the actual residents of Komárno. It would be demographically limited but theoretically interesting to understand the current features of a provincial town in southern Slovakia.

4. Education and personal networks beyond ethnicity in Komárno

As mentioned earlier, Komárno has the characteristics of both a multi-ethnic town and a representative Hungarian minority town. Inhabitants of Komárno have sometimes witnessed symbolic conflicts between Slovak and Hungarian politicians and activists at commemorations. However, previous studies have pointed out that there is no severe hostility in the local everyday life, and most inhabitants respect relationships with other ethnic groups in Komárno (Paul 2003, Blaive and Oates-Indruchová 2013, Kambara 2015, 2017, Filep 2017). Ethnic relationships are one of the most interesting and necessary topics in Komárno. This section focuses on personal networks beyond ethnicity, based on the inhabitants' educational background.

The survey examined the friend networks per communication language and area of residence (Figure 2a-2d). We used the number of friend ties to indicate the respondents' networks. First, in general, Slovaks have more friends speaking Slovak than Hungarian, and Hungarians have more friends communicating in Hungarian than in Slovak. However, there are some exceptions: Slovak and Hungarian university graduates have almost the same number of Slovak-communicating friend ties in the 'neighbourhood' and the Komárno district (Figure 2b). There were no statistically significant differences between these categories. This trend was not seen in the Hungarian-communicating friend networks among university

¹⁵ This tendency is not only seen among Hungarian youths, but Slovak students also have same tendency. However, Lamp's survey shows more Hungarian youths have ambitious aspiration for higher education than Slovak youths in southern Slovakia (Lamp 2016: 59).

graduates (Figure 2d). To further investigate these differences, not only the statistical significance was calculated but also the real difference based on the correlation ratio (η). By comparing the correlation ratios, the difference in the number of friend ties by ethnicity is small among university graduates when they communicate in Slovak rather than in Hungarian (η in SK: .102-.267; η in HU: .430-.476). This trend is the opposite among non-graduates; they differ by ethnicity (η in SK: .333-.384; η in HU: .243-.268). Moreover, there was a significant difference in the Hungarian-communicating friend networks among university graduates by ethnic group (η in HU: .430-.476). Generally, among non-graduates, the difference by ethnicity in the number of friends communicating in Slovak is larger than in Hungarian (Figures 2a and 2c). However, compared to non-graduates, the difference was not as large as that among university graduates¹⁶ (Figures 2b and 2d). Table 4 provides a summary of further analyses.

Table 4: Summary: characteristics of the networks in each category

2a: NG in SK	2b: UG in SK	2c: NG in HU	2d: UG in HU
η : .333-.384	η : .102-.267	η : .243-.268	η : .430-.476
A small difference in distance	Increasing the number of friend-ties with distance / Small differences between ethnic groups	Large personal networks in the close spatial proximity	Significant differences between ethnic groups

NG: Non-graduates; UG: University graduates

SK: Slovak; HU: Hungarian (language)

η : Correlation ratio (independent variable: ethnic groups; dependent variable: number of friend ties)

As shown in Figure 2a, it is not surprising that Slovaks have more friends than Hungarians. A small surprise is that the friend networks of both Slovaks and Hungarians are not very different in terms of distance. It can be said that non-graduates have a similar range of friends, both in the neighbourhood and in distant places. Compared with Figure 2c (non-graduates speaking Hungarian), we can see that the number of friends speaking Hungarian depends on the distance from Komárno to some extent. Regarding the number of friend-ties speaking Hungarian, there are more friends in the town and fewer friends residing at a distance. This tendency was similar for both Slovaks and Hungarians. Therefore, it can be pointed out that the number of friends speaking Hungarian tends to decrease concentrically with distance, while friends speaking Slovak are maintained regardless of distance. The spatial characteristics of the two networks are different. Compared with Figure 2b (graduates speaking Slovak), the number of friends communicating in Slovak is generally lower in the neighbourhood but higher among friends residing at a distance among graduates. University graduates seem to continue friendships with their Slovak friends who live in distant places. This means that their typical experience as graduates might also affect the spatial arrangement of the friend network.

¹⁶ Regarding university graduates, we should notice more of them are from a relatively younger generation (Table1). The younger generation was disadvantaged at making a wider personal network.

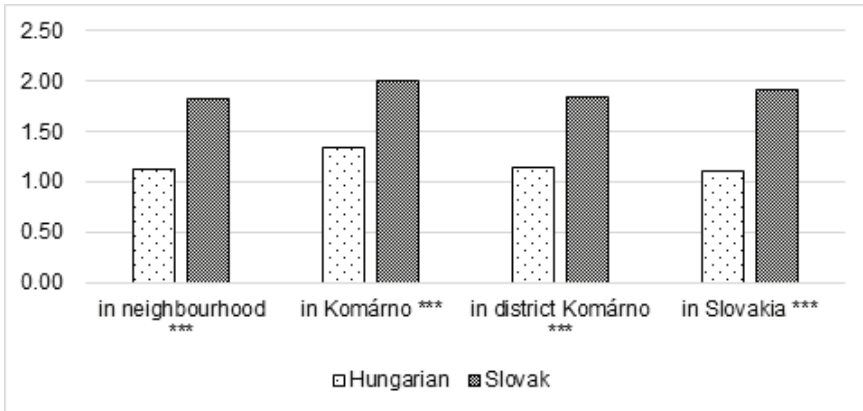


Figure 2a: Friend networks by ethnic groups (non-graduates, speaking Slovak) (Max.3)

How many close friends do you have in your immediate neighbourhood/Komárno/ Komárno district / outside Komárno district with whom you converse in Slovak/ Hungarian? None=0; 1–3=1; 4–9=2,10 or more=3 (** p<.001)

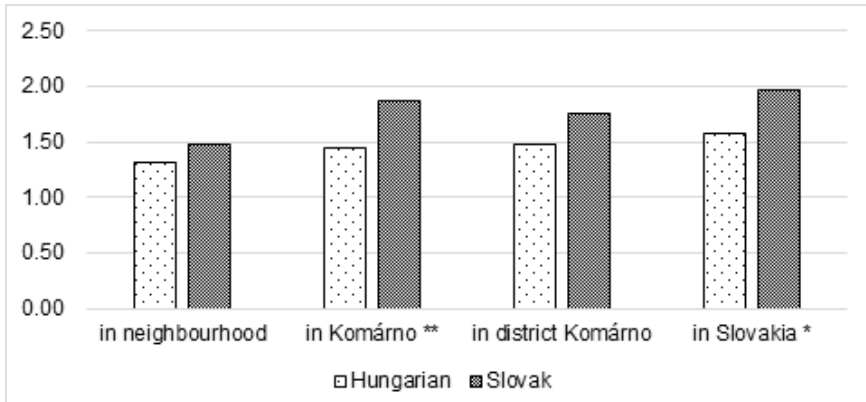


Figure 2b: Friend networks by ethnic groups (graduates, speaking Slovak) (Max.3)

How many close friends do you have in your immediate neighbourhood/Komárno/ Komárno district / outside Komárno district with whom you converse in Slovak/Hungarian? None=0; 1–3=1; 4–9=2,10 or more=3 (* p<.05 ** p<.01)

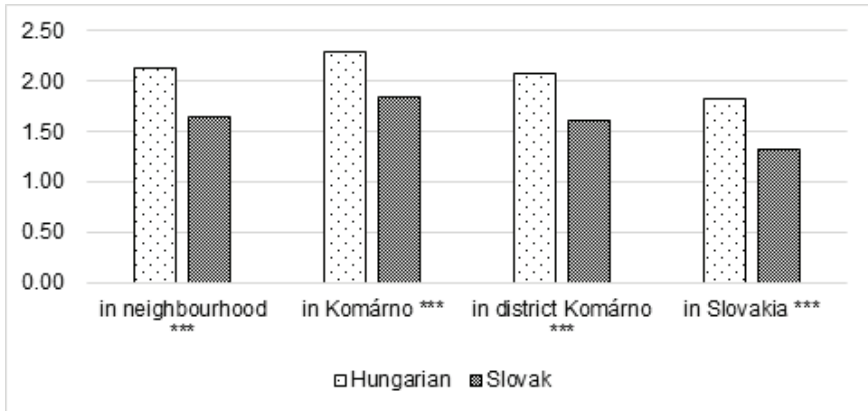


Figure 2c: Friend networks by ethnic groups language use (non-graduates, communicating in Hungarian) (Max.3)

How many close friends do you have in your immediate neighbourhood/Komárno/ Komárno district / outside Komárno district with whom you converse in Slovak/Hungarian? None=0; 1–3=1; 4–9=2,10 or more=3 (***) p<.001)

As mentioned earlier, Figure 2b (university graduates, communicating in Slovak) shows no statistically significant difference between Hungarians and Slovaks in terms of ‘in the neighbourhood’ and ‘in district Komárno.’ As indicated by the correlation ratios, these differences were not as prominent in Figure 2b. Figure 2b does not show a low level of friend network but the small differences by ethnicity in the number of friend-ties. This phenomenon might be because many ethnic Hungarians become proficient in speaking Slovak through education and daily life as it is a state language. Figure 2b confirms that graduates make wider Slovak-speaking friend networks than non-graduates (see Figure 2a), especially among Hungarians. Compared to Figure 2d (university graduates, communicating in Hungarian), the number of friends speaking Slovak is considerably higher than the number of friends speaking Hungarian for Slovaks with a university degree.

As far as Figure 2c (non-graduates speaking Hungarian) is concerned, unlike the previous two Figures (2a and 2b), the number of friend ties of Hungarians exceeds that of friend-ties of Slovaks. In particular, inhabitants’ networks in Komárno are the largest Even Slovaks have a significant number of Hungarian friends. However, the networks of friends of both ethnicities decreased as distance increased. In addition, the number of friend ties was relatively higher among non-graduate Slovaks than among graduates (see Figure 2d).

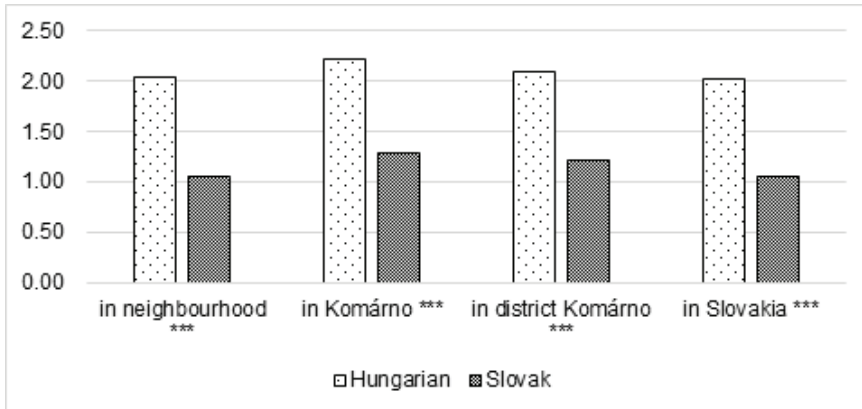


Figure 2d: Friend networks by ethnic groups (graduates, communicating in Hungarian) (Max. 3) How many close friends do you have in your immediate neighbourhood/Komárno/ Komárno district / outside Komárno district with whom you converse in Slovak/ Hungarian? None=0; 1–3=1; 4–9=2,10 or more=3 (***) $p < .001$

The first thing we notice from Figure 2d (university graduates communicating in Hungarian) is the significant difference between ethnic groups. This difference is the largest among the categories thus far ($\eta = .430-.476$; the other categories are 2a: $\eta = .333-.384$, 2b: $\eta = .102-.267$, and 2c: $\eta = .243-.268$). It is also noteworthy that, especially for Hungarians, there is not much difference in the number of friend-ties between proximity and long distances compared to Figure 2c. The difference in network communication in Hungarian could be that Slovaks with a university degree have fewer Hungarian friends. As Table 6 illustrates, this reflects the high percentage of Slovak migrants to Komárno.

Table 5: Ethnic identity and friends communicating in different languages

Slovaks with no friends speaking Hungarian; N:23	Hungarians with no friends speaking Slovak; N:9	Slovaks with friends speaking Hungarian; N:174	Hungarians with friends speaking Slovak; N:297
11.7% of Slovaks (N:197)	2.9% of Hungarians (N:306)	88.3% of Slovaks (N:197)	97.1% of Hungarians (N:306)
4.6% of Total	1.8% of Total	34.6% of Total	59.0% of Total

Figure 2a-2d focused on the average of the indices. Therefore, it is yet impossible to estimate the distribution of the number of friends by ethnicity from the average. Table 5 shows the number of respondents who had no friends speaking their mother language. This is a remarkable result because most Hungarians and a high percentage of Slovaks have friends communicating in other languages. This means that they naturally live in bilingual conditions. According to Lampl's survey, the highest percentage (84%)¹⁷ of Slovaks have some knowledge of the Hungarian language in the Komárno district (Lampl 2008: 93). Table 5

¹⁷ Dolník and Pilecký (2012) also mention similar results; they surveyed mainly students in secondary schools in southern Slovakia, and 76% of Slovak respondents try to talk to Hungarians in Hungarian.

also shows that only 10% of Slovaks do not have any friends communicating in Hungarian. This ratio does not necessarily mean that they have no Hungarian friends. It is unclear how respondents would answer this question if both speakers used their native languages when communicating (Blaive 2011: 194). Some Slovaks understand Hungarians even if they do not speak Hungarian. Such a personal network beyond ethnicity is one of the characteristics of the inhabitants of Komárno.

5. Population mobility in Komárno

The previous section examined the personal networks among the inhabitants of Komárno. However, personal networks also depend on the residents' migration. Those who have lived in Komárno for a long time can find many friends in the town, and those who moved to Komárno from another place should have more friends outside Komárno. Therefore, population mobility is an important factor when considering personal networks. Table 6 demonstrates that more than 50% of respondents are from the town of Komárno; however, the number of people who newly immigrated to Komárno is not small. The present survey data included respondents' place of origin and migration experience to explore interethnic relationships. We operationally define 'the place of origin' as the place where the respondent lived around the time when they completed their elementary schooling.

Table 6 reveals population mobility based on ethnicity and educational background by asking about the place of origin. The percentage of Hungarian university graduates from within the Nitra region (Nitrianský kraj) (A+B+C) was nearly 95%¹⁸, while Slovak university graduates from the Nitra region (A+B+C) did not exceed 70%. Generally, a university diploma triggers widespread migration; there is a clear contrast to the high percentage of non-graduates within the district (A+B). The percentage of Slovaks within the Nitra region is lower than that of Hungarian graduates. However, when we compare the ratio of Slovaks from outside the Nitra region, the percentage of university graduates is higher than that of non-graduates (NUG: UG=17.9%:31.6%). In other words, Slovaks have a higher percentage of 'migrants' from outside the Nitra region coming to Komárno than ethnic Hungarians, and this tendency is more prominent among university graduates.¹⁹ This table also indicates additional features about the population mobility: Slovak university graduates have a lower percentage of people from the town of Komárno (52.6%) than the other categories; the percentage of Hungarian out-of-region graduates is low (1.7%). These findings can be sum-

18 According to Nakazawa, the respondents of his survey in J. Selye University are mainly from Komárno, Dunajská Streda, Nové Zámky, Šahy, Kráľovský Chlmec, Štúrovo and Rimavská Sobota (Nakazawa 2018:70). Komárno, Nové Zámky, Šahy, and Štúrovo belong to the Nitra region. Dunajská Streda is located in the neighbour region but is close enough and can be reached by a one-hour train journey.

19 For Table 6, since the expected frequencies are less than the necessary level, it is imperative to conduct Fisher's exact test instead of the Chi-square test. Fisher's exact test requires an enormous amount of computation, and it was impossible to test Table 6 due to the limitation of the computer performance (the calculation was done by R4.1.1 on Windows 10). We needed to reduce the number of categories for the calculation. Therefore, the category of people from Hungary (E), for which there are no applicable cases of the Slovaks, was excluded from the calculation when conducting the test. In addition, those from Komárno and those from the Komárno district were calculated as a combined category. The results of the test were statistically strongly significant.

marised as follows: Komárno tends to 'attract' people from outside the region for Slovak university graduates and people from within the region for Hungarian university graduates. It should also be noted that a small percentage of Hungary-born people were in the Hungarian group. The commonality of culture and language, as well as human interactions, are the basis for attracting people from Hungary, even though it has a small weight.

Table 6: Population mobility of inhabitants in Komárno by university degree and ethnicity
Where did you live at the age of 15 (around the time when you completed your elementary schooling)?

		A (%)	B (%)	C (%)	D (%)	E (%)	N
Slovak	NG	60.0	12.1	10.0	17.9	0.0	140
	UG	52.6	3.5	12.3	31.6	0.0	57
Hungarian	NG	60.5	26.2	9.3	2.0	2.0	248
	UG	63.8	6.9	24.1	1.7	3.4	58

NG: Non-graduates; UG: University graduates

A: Komárno town; B: Komárno district (outside Komárno town); C: Nitra region (outside Komárno district); D: Slovakia (outside Nitra region); E: Hungary; N: number of cases

Respondents' migration experiences are not only determined by the place of origin because they might experience short-term migration. There are three analytical categories for Table 7: (1) the 'locals' group, which is defined as those who have not lived outside Komárno district (town and Komárno district, the same applies hereinafter) for more than two years,²⁰ (2) the 'returnees' group, which is defined as those whose place of residence at the end of elementary schooling is in Komárno district and who have lived outside Komárno district for more than two years, and (3) the 'migrants' group, which is defined as those whose place of residence at the end of compulsory education is outside Komárno district and who have lived outside the Komárno district for more than two years.

Table 7: Mobility and university graduates

		Locals (%)	Returnees (%)	Migrants (%)	N
Slovak	NG	52.9	20.0	27.1	140
	UG	42.1	15.8	42.1	57
Hungarian	NG	66.1	21.8	12.1	248
	UG	44.8	29.3	25.9	58

NG: non-graduates; UG: university graduates; N: number of cases

p<.001

²⁰ To cover this, we prepared the following question for the survey: 'Have you ever lived for two years or more outside okres Komárno?' to which 43.3% of respondents answered 'yes.'

Table 8: Why did you move to your current place of residence? (%) ²¹

		For work*	To live with my family (including marriage)***
SK	NG	10.7	32.1
	UG	19.3	43.9
HU	NG	17.3	19.8
	UG	12.1	22.4

UG: University graduates; NG: Non-graduates

SK: Slovak; HU: Hungarian

* p<.05 *** p<.001

As shown in Table 7, first, the 'locals' category has the highest percentage of respondents, except for Slovak university graduates. Second, the percentage of people in the 'migrants' category is higher among Slovak university graduates than in other categories. In addition, the percentage of people in the 'returnee' category is higher among Hungarian university graduates than others. Finally, the proportion of the 'locals' category was higher among non-graduates than among graduates, especially among Hungarians. For both ethnic groups, most graduates lived in other regions for two or more years. Most have experienced migration and live in Komárno. The role of a university degree differs by ethnic group. Compared with non-graduates, for more than 50% of Slovaks, a university degree is associated with the opportunity to move to Komárno or return to Komárno. For Hungarian graduates, studying for a university degree means a greater opportunity to live in another area than non-graduates. In short, Komárno is a place to 'go' rather than 'a place to return' for Slovaks with a university degree, and Komárno may be a place to 'return' or 'go' for Hungarians with university degrees.

Table 8 indicates the motivational aspect of moving to Komárno through the question of why the respondents live in their current place. The most frequent answers were related to work or family migration to Komárno. Among both Slovak university graduates and Hungarian non-graduates, a remarkable number of respondents answered 'for work.' In contrast, fewer university graduates migrated to Komárno for work among Hungarians. From this fact, we can suggest that Slovak university graduates tend to move to Komárno for work. In addition, more Slovak university graduates migrated to Komárno for family formation (more than 40%). Slovaks generally migrate to Komárno for family reasons, compared to the Hungarians (only around 20%). There are considerable differences in motivation for migration based on ethnicity and educational background.

Regarding family formation, the possibility of diverse ethnic marriages should be considered. In southern Slovakia, Slovaks have a higher share (39%) of those who have partners from different ethnicities than Hungarians (11%) (Lampel 2013: 64). Indeed, in our survey, we also found the same tendency among migrants to Komárno. For example, 58.1% of Slovak 'migrants' have a partner of Hungarian ethnicity, while only 17.8% of Hungarian 'migrants' have a Slovak partner. This phenomenon makes us understand one of the reasons why Slo-

²¹ The respondents who had not left Komárno for more than two years were initially considered 'not-applicable' respondents. However, these respondents did not move to Komárno for work or family formation. Therefore, researchers assumed that the respondents did not choose these options, and the calculation was made by assigning 1 to those who choose the options and 0 to those who did not choose the options or did not fall into this category.

vaks have personal networks in Komárno, even if they have newly moved there.

Most inhabitants in Komárno are 'locals' or from the same region, both Slovaks and ethnic Hungarians. Graduates tend to experience more movement but still stay in the same region. As mentioned in Chapter 3, Slovak universities teaching in Hungarian gather such ethnic Hungarian students. Some graduates from J. Selye University stay in Komárno as 'locals' or 'migrants', while others move to other places. Table 6-8 shows that Hungarians and many Slovaks have also stayed in Komárno or returned to Komárno.

6. Conclusion

In conclusion, first, it is noteworthy that Komárno has become a successful academic centre for ethnic Hungarians in Slovakia. This is because the tertiary graduate rate has risen drastically over the past decade among the younger Hungarian generation. A Slovakian university teaching in Hungarian provides more opportunities in and around Komárno because more than three-quarters of Hungarian graduates have experienced higher education in Hungarian. However, Komárno is a multi-ethnic town at the same time. The personal networks of inhabitants are beyond ethnicity. Most inhabitants communicate in both languages. As the language of the majority in the town, speaking Hungarian creates a large personal network among ethnic Hungarians, yet many Slovaks also have personal networks through Hungarian. In addition, communication in Slovak is common among both ethnic groups. The distinction for university graduates is the relatively small difference in ethnicity in the personal networks when they communicate in Slovak. University graduates connect more strongly with mobility. Komárno gathers ethnic Hungarians from a nearby place in southern Slovakia and Slovak university graduates from other parts of Slovakia.

However, Komárno is indeed suffering from a decreasing and aging population. We clarified the characteristics of migrants and returners to Komárno, yet we could not capture those who left Komárno. This is a limitation of this study. This paper only explored the education, personal network, and mobility of the current inhabitants of Komárno, who decided to live there. In addition, the differences between graduates and non-graduates were strongly influenced by the generation in this survey. This means that it is difficult to distinguish between the characteristics of youth and graduates among ethnic Hungarians. However, this survey contributes to describing the current condition of inhabitants of the changing town, which has both characteristics of the centre for the ethnic minority and that of multi-ethnicity in Slovakia.

Acknowledgment

We would like to thank Barnabás Vajda, Gabriela Dudeková Kováčová, and Eva Győriová Baková for their comments on our questionnaire. In addition, we appreciate the methodological and technical advice from Zsuzsanna Lampl, Lubomír Falňan, Milan Zeman, and Katarina Strapcová for conducting our survey. People from Komárno also helped us to understand the surroundings of our survey. This research was supported by JSPS KAKENHI Grant Number JP 18H00928.

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