

TO GO OR TO STAY? THE MOTIVATION BEHIND IMMOBILITY IN A HUNGARIAN MICRO-REGION

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Abstract: While the motivations behind rural mobility have been extensively studied, the factors determining immobility are less discussed. In this study, we applied a quantitative and qualitative methodology built on a theoretical framework based on the literature to analyse primary and secondary data to answer the following question: What factors play a primary role in someone from a relatively disadvantaged rural area deciding in favour of immobility? Our results showed that those who remained in the region surveyed had the resources to build a life elsewhere, but family ties, property, or the fact that the way of life they desired in the city could not be realised bound them to their homeland.

Keywords: rural immobility, social network, quantitative and qualitative (mixed) research methods, Hungary

Absztrakt: Míg a vidéki mobilitás motivációit széles körben tanulmányozták a szakirodalomban, az immobilitást meghatározó tényezőkről kevesebb szó esik. Ebben a tanulmányban a szakirodalom alapján kidolgozott elméleti keretre épülő kvantitatív és kvalitatív módszertant alkalmaztunk az elsődleges és másodlagos adatok elemzésére, hogy választ adjunk a következő kérdésre: Milyen tényezők játszanak elsődleges szerepet abban, hogy valaki egy viszonylag hátrányos helyzetű vidéki térségből az immobilitás mellett dönt? Eredményeink azt mutatták, hogy azok, akik a vizsgált régióban maradtak, rendelkeztek azokkal az erőforrásokkal, amelyekkel máshol is építhettek volna életet, de a családi kötelek, a meglévő tulajdon, vagy az a tény, hogy a városban nem valósulhatott meg az általuk vágyott életforma, a szülőföldjükhöz kötötte őket.

Kulcsszavak: vidéki immobilitás, közösségi háló, kvantitatív és kvalitatív (kevert) kutatási módszerek, Magyarország

Highlights

- Types of immobility and the macro- and micro-factors affecting immobility were reviewed.
 - The weights of the motivations behind immobility in a specific geographical space were examined using a complex methodology.
 - The family was the most important factor of voluntary immobility.
 - Advantages of rural life (landscape and farming) also proved to be important for staying in place.
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1. Introduction

Migration from economically disadvantaged areas with fewer services, and countries towards more favorable areas is a common topic in national and international research (Anghel 2008; Engbersen et al. 2017). In these studies, the concept of selective migration is frequently encountered (Hoogerbrugge – Burger 2021), which implies that the most talented, ambitious, and educated residents leave these regions. Implicit in this concept is the notion that those who remain do so because they are somehow unable to participate in migration. In this context, immobility is perceived as a form of passivity or inability, without delving into the underlying reasons. However, an increasing number of studies are highlighting that immobility should not necessarily be seen as a residual state of mobility, but rather as an active decision-making process (Erickson et al., 2018; Stockdale et al., 2018).

The factors affecting immobility are just as nuanced as the causes that trigger migration (Transiskus – Bazarbash, 2024). The level of development, inherent resources, and the quality of services of a given area must be taken into account as they influence the motivation to stay in the place as much as they affect the desire to emigrate. However, in addition to understanding spatial inequalities, it is important

to learn about individuals' competencies and opportunities, all the more since all mobility comes with additional costs, e.g., loss of relationships, gaps in knowledge about the host culture's social transactions, etc., and causes many difficulties both at the individual and the social level, such as the loss of human resources in the region of origin and problems of integration into the host region (Lami et al. 2022).

According to functionalist theories, society is made up of social institutions that fulfil different functions. Such institutions include the family, the economy, school, and religion, which help to maintain order and promote productivity. By choosing immobility, the family can maintain close relationships between members which allow them to rely on each other for help and even economic support; this is why the presence of the family ensures financial security as well as family caregiving for the elderly. Thus, functionalism does not support social changes as it does not encourage individuals to change their place of residence (Recchi – Flipo, 2019). The difference in perception between the global world order and the nation state is also evident in the different paradigms. In the individualistic, globalist, capitalist world order, the free flow of labour is not favoured by the immobility perceived by the functionalist concept as normality and the emphasis on the costs of mobility. At the same time, the new mobility paradigm (Sheller – Urry 2006; Nugin, – Kasemets, 2021) suggests that the social sciences should go beyond the fact that staying in one place is the normal phenomenon and that migration and placelessness are deviations from the normal. The mobility paradigm has faced substantial criticism for neglecting the non-moving population. However, as mobility and immobility are increasingly viewed as outcomes of the same decision-making process, understanding the factors driving immobility provides significant added value (Gruber 2021, Sheller 2014). Since mobility and immobility are considered two ends of the same spectrum, they are often referred to as im/mobility or (im)mobility (Bélanger – Silvey, 2020). Carling and Schewel, in their researches (Carling 2002; Carling – Schewel 2018; Schewel 2015; 2019), emphasize that staying in place is as much an active decision-making process as migration. The authors frame the individual decisions underlying im/mobility within the aspirations and capabilities framework in their theoretical approach.

Hungary, like other post-socialist countries in the European Union, has been significantly affected as a source country by short-term and long-term migration for employment and educational purposes, particularly following the accession period. However, the extent of this migration is not as pronounced as in Romania or Bulgaria, but rather similar in magnitude to that observed in Slovakia and Poland (Fassman et al. 2018; Schneider 2022). According to the analysis by the Hungarian Central Statistical Office, when examining internal migration trends by type of settlement and county, the following picture emerges. From 1994 to 2006, Budapest experienced outmigration due to suburbanization processes. The economic crisis led to a decline in permanent relocations, as fewer people moved from Budapest to the surrounding suburbs. However, 2013 marked a turning point, as migration patterns between Budapest and its agglomeration began to recover, resulting in a rapid increase in permanent relocations. Consequently, by 2015, 255,000 people had changed their permanent residence, and by 2018, nearly 280,000. Over the past three decades, Pest county's migration balance has been outstanding compared to other counties. Győr-Moson-Sopron, Fejér, Komárom-Esztergom, Vas, and Csongrád-Csanád counties also had positive balances. From a migration perspective, the majority of counties can be considered source areas, with the eastern, economically less developed counties (Borsod-Abaúj-Zemplén, Szabolcs-Szatmár-Bereg, Békés, and Nógrád) having the weakest population retention capacity (HCSO).

The objective of this study is to contribute to the understanding of immobility (Carling – Schewel, 2018). Therefore, we take a neutral position that favours neither mobility nor immobility. The greatest strength of our study is the complex methodology we used to seek an answer to the question of whether essential differences could be demonstrated along various group-forming factors (e.g., social class, type of settlement) in the motivations for immobility in the sample area. This research does not fully utilize the capabilities/opportunities framework developed by Carling and Schewel (2018), yet it builds upon it in numerous aspects. Our goal with this research was to address the question of whether in disadvantaged areas there a resigned immobility is predominantly or if voluntary immobility based on active decision-making processes can also be observed. In this study, migration is defined as a change in permanent residence, which at the time of inquiry does not assume a return (thus excluding daily, weekly, or monthly

commuting, as well as educational migration). The aim of this study is not to address the topic of migration decisions from the perspective of varying life stages, as this would require further research.

We first reviewed the literature to develop the main theoretical framework of our research and to identify the differences between micro- and macro-factors affecting individual decisions. From the point of view of the individual, we present four 'selectable' mobility options that determine the realisation of the individual's possibilities and desires. In our empirical research, we used questionnaires and in-depth interviews to understand the power of the individual's relationships, social class, the level of development of the settlement and the advantages of living in the countryside to induce them to stay in place. The results of our research would contribute to the literature on im/mobility by examining im/mobility in local space using a complex method that examines the environment, motivations, and attitudes of immobile people.

The study was conducted in Nógrádkövesd and its surrounding five settlements (Becske, Bercel, Galgaguta, Szécsénke, and Acsa) in February and March 2021 using a questionnaire and semi-structured exploratory interviews. The settlements examined are in the county of Nógrád, except for Acsa, which is located in the county of Pest. Nógrád county has the lowest GDP per capita and the lowest-performing county in most welfare indicators in Hungary.

The structure of the study is as follows. In the second part of the study, we describe the results of our review of the literature to identify types of immobility and the determining factors for developing our research methodology. In the third part, we describe our research methodology and hypotheses. In the fourth part, we present the area serving as the geographical framework of the research. In the fifth part, we describe the results of our empirical research. Finally, in the sixth part, we summarise the research results.

2. Theoretical background

In most previous research, the immobile are treated only as a control group of comparators of the mobile, rather than being the focus of the investigation (Zickgraf, 2019). As Jónsson (2011, p.4.) stated, 'Very little research analyses how people experience and make sense of their existence as non-migrants, and how these aspects relate to a greater socio-cultural matrix of values and expectations informing (im)mobility.'

It is a common belief that those who cannot afford to emigrate will stay. However, do only those who are unable to emigrate stay in place? The lessons learned from the literature review suggest that the picture is not so simple (Carling – Schewel, 2018; Hofstede et al., 2023).

According to Carling's (2002) theory, the pursuit of im/mobility can be divided into macro- and micro-levels (Table 1). At the macro-level, the aspiration to move primarily concerns the emigration environment, which includes social, economic, and political factors. The value of individual areas is increasingly determined by the quality of life, in which 'soft factors' play an important role. We consider the natural and built environment itself, the image of the landscape, the arts, culture and the mental state of the population to be such 'soft factors' (Erdősi, 2002). The geographical location and the level of development of the infrastructure can be strong arguments in favour of staying in place (hard factors). The level of development of the transport network has a strong bearing on the economic and social levels achieved since ease of access to the centre or sub-centres of the region determines the quality of life. Good public roads and a highly developed transport network may be factors that induce residents to stay, as they create the possibility of daily commuting.

At the micro-level, the question is mostly about who wants to go and who wants to stay. At this level, many individual characteristics, such as gender, family, social status, and education, determine the answer. Siskáné Szilasi et al. (2017) suggest that, among other things, the individual's subjective factors, such as the closeness of various family and kinship ties, the reliability of the local workplace and the extent of workplace relationships, also affect mobility. However, individual factors must be interpreted in the light of the social context.

Tab 1. Factors affecting mobility at the macro- and micro-level. Source: own compilation based on Carling (2002); Erdősi (2002); Horváth (2001); Vág (2010); Siskáné Szilasi et al. (2017); Schewel (2015)

Macro-level	Micro-level
Emigration environment	Individual subjective factors
Quality of the environment	Sex
Quality of life	Closeness of family and kinship ties
Geographical location	Education
Economic factors	Social status
Level of infrastructure development	Degree of extension of relationships
Political factors	Local workplace reliability
Municipal services	Power of local community
Policy measures	Welfare

While micro- and macro-level migration theories have been developed based on rational decisions (Massey et al. 2002; van Houtem – van der Velde 2004; Schewel 2015), Carling's theory uses the aspiration and ability model to explain im/mobility; that is, it examines whether the desire for mobility and the ability to be im/mobile meet. Carling's (2002) model has three categories: (1) mobility, when the desire, skills, and opportunities converge for someone to decide to emigrate; (2) involuntary immobility, when the desire is expressed but the individual's abilities and possibilities cannot fulfil it; and (3) voluntary immobility, when the individual is able to move but does not desire to do so. However, Schewel (2015) also formulates a fourth category, acquiescent immobility, when neither their desire nor their abilities are sufficient for someone to decide to emigrate. The combination of Carling's (2002) and Schewel's (2019) categories gives a more accurate picture of the concordance between the individual's possibilities and abilities.

However, Carling's (2002) categories cannot be interpreted by themselves, since many factors, other than desires and abilities, influence whether someone decides to stay in one place, either willingly or unwillingly. Social class is a significant determinant of an individual's opportunities, since the factors that make up social class (level of education, financial situation, number of languages spoken and even the possession of cultural assets) themselves influence the abilities, resources and goods necessary for an individual's mobility. Cultural capital is of particular importance in research on the topic of immobility.

Bourdieu (1999) divides cultural capital into three categories: (1) acquired knowledge or personal qualities; (2) materialised tangible cultural assets that position the individual in their social class; and (3) the capital appearing in an institutionalised form, such as the individual's level of education (Kovács – Váradi, 2013; Farkas, 2013). This may be the reason for the correlation between education and the workplace being a factor influencing staying in the settlement (Rácz et al., 2006). A low level of education increases the risk of poverty, and a lack of professional qualifications or skills hinders employment, increasing the chance of being displaced in the labour market (Le-Dai et al., 2023). This risk also highlights the lack of skills and appropriate competencies due to a low level of education; without a sufficient level of education, it is more difficult to prosper beyond the borders of the settlement/region (Váradi, 2015). Those who belong to the poorest group make up the 'mobility poor' stratum, that is, those who do not have adequate material assets and their way of life does not allow for the provision of the right conditions to create a physically and mentally healthy lifestyle tend to be much more immobile and have more limited opportunities (Czibere, 2019; Váradi, 2015).

The younger age group has perhaps the greatest chance to 'break out' (youth migration), if they have the desire to learn, receive sufficient support from their families to achieve their goals, and continue their studies in higher education. Another group of young people in rural areas represents the phenomenon of 'drifting young people'. They are satisfied with secondary education and do not aim for further education or obtaining a diploma, and thus lack the appropriate stepping stones to achieve their goals (Bihari, 2019). In contrast, they take on adult roles, e.g., founding a family, marriage, and employment, much earlier in their lives, thereby setting limits to individual migration decisions (Czibere, 2019). Youth migration

associated with different life stages and thus for different aims is gaining increasing scale and attention in Europe, as highlighted by the research of Fassman et al. (2018), who have studied the phenomenon in detail in the countries of the Danube region. As King et al. (2016) provide a detailed conceptual overview of the characteristics of the most typical migration samples at different life stages.

Social capital is also a decisive influencing factor of im/mobility. Social relationships are crucial in themselves since people can count on not only their immediate relatives and neighbours, but also on the help provided by institutions. These social ties are taken for granted in people's daily lives. However, a deeper consideration of these ties shows that the extent of the network of relationships determines the possibilities of the individual. From the standpoint of our topic, the proximity of family and friends, the strength of the local community or even the level of trust in the municipality, can be decisive in an individuals' decision to stay.

The individual's immediate surroundings (personal relationships) have a role in social integration and mobility since the mobilisation of relationships is a part of the individual's social embeddedness, which has an important influence on their mobility aspirations (Huszti, 2019). 'The individual network of connections operates at the "meso"-level between the individual and society. This operation is demonstrated in the way the individual accesses various goods, resources, groups, and institutions through his personal network' (Huszti, 2019, p. 24. own translation of the authors). The existence of these assets can reduce the willingness to move since the individual has enough social capital to prosper locally.

Bourdieu approaches social capital from the point of view of the individual, whose personal qualities are what enable them to take advantage of their social relationships (Lengyel – Szántó, 2006) that are essential for achieving goals. Social relationships are highly necessary for the village; the relationships of individuals and families living in the village are based on 'micro-solidarity', according to which the child inherits the parent's relationship system and relationship capital. The closest, most cohesive relationships of young people are homogenous and closed; most of them are characterised by trust, solidarity and reciprocity, and they are primarily family-based. They clearly act as a safety net and are based on emotional attachment (Czibere, 2019). Those with a lower, less valuable network of connections are more likely to choose to migrate. The strength of family ties determines emigration intentions, exemplified by the sentiment, 'I was born here, my parents and relatives live here'. A large network of relationships has a strong influence on staying, as the individual has numerous ties to the place, the giving up of which would be costlier than the move itself (Kerülő, 2019).

The strength of an individual's relationships can be measured on two levels. Strong relationships are the everyday frequent 'intense, intimate relationships' cultivated with the immediate family. Such relationships do not necessarily contribute to 'macro-social integration', which is determined by the individual's own social situation, including education and age. In other words, strong ties do not typically connect different social groups (Huszti, 2019). The family has a significant holding power, which is further strengthened by the parental generation living in the same village (Molnár, 2019). Such close ties inhibit geographic mobility (Czibere – Kovách, 2019). The second level is weak relationships, which are with more distant relatives and looser acquaintances, such as teachers, neighbours, and business partners. These weak ties help the individual to form a so-called 'bridge' to different social groups, which are not bound by strong ties, thus integrating the individual at the macro-social level (Huszti, 2019). When individuals have few weak ties, they are more likely to be forced to stay locally; they remain among their secure family and close friends since they do not have the kind of relational resources with which they could thrive beyond the village.

3. Methodology

Based on the results of the literature review, we considered it important to explore both the macro- and micro-factors influencing migration and immobility in the settlements investigated in this study. While the hard factors influencing migration were explored using two settlement ranking models built with data available from the national statistical office and those collected during our own field surveys, the impact

of hard and soft factors on individual decisions was explored using a questionnaire survey and structured interviews. We describe the details of our quantitative and qualitative (mixed) methodology below.

Migration is closely related to the abundance of functions and the level of development of settlements (Jeney –Varga 2016; Siskáné Szilasi et al 2017; Loncsák 2019; Faluvégi 2020) therefore, we created two complex indicators for the settlements examined. We created two settlement rankings based on the two indicators. The first ranking was based on the number of central functions of the settlement (this is a classic settlement hierarchy ranking), while the second was a ranking based on a complex indicator measuring development (see more later).

The settlement hierarchy was examined based on the presence or absence of a number of central functions, with the indicators of Szilágyi and Gerse (2015) supplemented with our own indicators (Table 2). We examined central functions such as retail services, leisure activities, infrastructure, catering, healthcare, social care, education, culture and emergency services (such as ambulance services and fire brigades). For the analysis, it was important to distinguish between basic functions and central functions since some settlements did not even have the former.

Tab 2. Variables of the settlement hierarchy are formulated based on basic and central settlement functions. Source: Hungarian Central Statistical Office, own observations during a field survey

Function area	Function	Function type	Data Source	Szilágyi – Gerse, 2015
Retail services	Food store	Basic	own field survey	+
	Greengrocer	Central	HCSO	–
	National tobacco shop	Basic	HCSO	–
	DIY and craft store	Central	own field survey	–
	Clothing store	Central	own field survey	–
	Pharmacy	Central	HCSO	+
	Bakery	Central	own field survey	–
	Beauty care facility	Central	own field survey	–
	Fuel filling station	Central	HCSO	–
	Bank	Central	HCSO	–
	ATM	Central	own field survey	–
	Postal service	Basic	HCSO	+
Leisure activities	Playground	Basic	HCSO	–
	Sports hall, sports field	Central	HCSO	–
	Swimming pool	Central	HCSO	–
Infrastructure	Train station	Basic	own field survey	–
	Bus station	Basic	own field survey	–
Hospitality	Restaurant/eating place	Central	own field survey	+
	Pub	Basic	own field survey	–
Healthcare	Dentist	Central	HCSO	–
	Working family doctors and family paediatricians	Basic	HCSO	+
Social care	Working nursery school	Central	HCSO	+
	Care homes	Central	HCSO	–
Education	Primary school	Basic	HCSO	+

Function area	Function	Function type	Data Source	Szilágyi – Gerse, 2015
	Kindergarten	Basic	HCSO	–
Culture	Library	Basic	HCSO	–
	Public cultural facility	Basic	HCSO	–
Emergency services	Ambulance station	Central	HCSO	–
	Fire department	Central	HCSO	–

The complex indicator for determining the settlement hierarchy was created by aggregating dummy variables. If a function was found in the settlement, it was given a score of one, and if it was not found, then a score of zero. The scores for the 29 functions examined were summed for each settlement, and the settlements were ranked by the aggregated results.

The indicators in Table 3 were used to map the socio-economic development of the settlements. The variables of the complex index were classified into two dimensions: economic; and socio-demographic. The complex development indicator was calculated from the simple, unweighted arithmetic mean of the values of the two dimensions (Jeney – Varga, 2016). Data from the year 2018 were used to create the index of development, since all the variables could be accessed at the time of the field research.

Tab 3. Dimensions and variables used to create the complex index of socio-economic development (based on 2018 data).

Dimension	Variables
Economic dimension	<ol style="list-style-type: none"> 1. Annual income per capita (HUF/capita) 2. Local government tax revenue per capita (HUF/capita) 3. Number of registered jobseekers per 1000 active-aged persons (‰) 4. Number of registered enterprises per 1000 people (‰) 5. Proportion of apartments connected to the sewerage system (%)
Socio-demographic dimension	<ol style="list-style-type: none"> 6. Proportion of people of active age compared to the permanent population (%) 7. Number of live births per 1000 people, 5-year average (‰) 8. Number of deaths per 1000 people, 5-year average (‰) 9. Number of permanent emigrants per 1000 people (‰) 10. Number of permanent immigrants per 1000 people (‰)

Before aggregating the variables used to create the index, they were transformed using the min-max normalization method, which resulted in all newly transformed variables being between 0 and 100. The following was the formula used to convert the baseline indicators into scores:

$$\frac{y_i - y_{min}}{(y_{max} - y_{min})} * 100,$$

where y_i was one of the composite index's variables in i village.

The normalized data could not be combined because the high values of some indicators were associated with low settlement development; therefore, a transformation had to be applied, after which the high values indicated higher development. These indicators were the number of registered jobseekers per 1000 active-aged persons, the number of deaths per 1000 people and the number of permanent emigrants per 1000 people. In these cases, we used the following formula:

$$\frac{y_{min} - y_i}{(y_{min} - y_{max})} * 100$$

We used quantitative and qualitative methods to collect primary data in order to shed light on the motivations or constraints that determined the immobility of those who stayed in the region. Huszti's (2019) study was used and supplemented to define the questions in an online questionnaire, which was

published in Google forms format on the settlements' social media pages. The advantage of the online questionnaire method is that respondents can be reached relatively quickly, easily and cost-effectively and the questionnaire can be completed at any time with just a few clicks. In addition, anonymity encourages the subjects to be honest; therefore, we were able to ask them questions to which we might not have received honest answers had they been posed face-to-face. However, there were some drawbacks. The questionnaires were filled out by some people who did not necessarily come from the specified settlement, so the data cleaning took more time. In addition, there was a risk of people providing false information since it was not possible to trace the identity of the person completing the questionnaire. Furthermore, respondents were filtered voluntarily, as only people active on social media completed the questionnaire. One of the biggest disadvantages was the reduced representativeness of the results, as the number of respondents from one or two settlements was much higher (Table 4). Our sample consisted of 122 people, 2.4% of the total population of 5098 people.

Tab 4. The rate of return of the questionnaire for each village in the study. Source: own research

	Acsa	Becske	Bercel	Galgaguta	Nógrádkövesd	Szécsénke
Distribution of the sample	14.7%	3.2%	14.7%	17.2%	41.8%	8.1%
Settlement population as a proportion of the total population of all settlements	26.9%	10.9%	33.5%	11.9%	12.7%	3.9%
The proportion of the settlement population completing the questionnaire	1.3%	0.7%	1.0%	3.4%	7.8%	5%

The questionnaire was structured to start with demographic questions, and the other questions were grouped according to three determining factors (Figure 1). The first group of questions (Demography) were about the effect of social status on immobility³. Information about the financial situation and earnings of the individuals was not directly sought; instead, this topic was approached with questions such as the number of cars owned, the level of education, and the number of languages spoken.

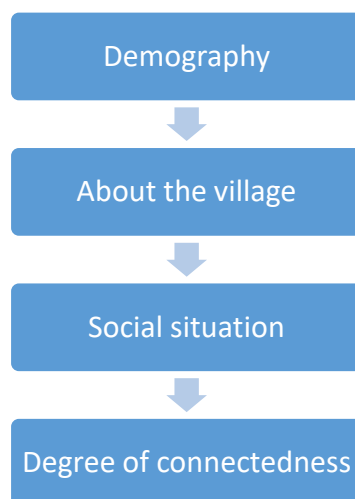


Fig 1. The main dimensions of the questions and their order in the questionnaire. Source: own research

The second dimension was the village's situation, how the respondents perceived the level of development of their settlement, the extent to which various services were available in the settlement, and the level of development of the infrastructure. In addition, there were questions to understand the extent to which the rural idyll – silence, tranquillity and proximity to nature – influenced staying in place. The third category was social status, which included questions on wealth and education. The last

³ In the questionnaire, we considered immobile those people who left their settlement only for study purposes or moved to a neighbouring settlement for marriage purposes.

section was the degree of connectedness that considered how the embeddedness of relationships, proximity to family and friends, the level of trust shown to the local government and the mayor, the extension of relationships and the degree of reciprocity in relationships influenced staying in place.

To obtain individuals' opinions, the questionnaire included a survey of their attitudes. The quality of services and opinions about the environment and development were measured using a five-point Likert scale, with the option of neutrality. The data were analysed using a cross-tabulation method. The variables measured with the 5-point attitude scale, with 1 indicating low satisfaction and 5 indicating high satisfaction, were grouped into two categories for cross-tabulation analysis. Those who chose 1–3 on the scale were placed in the 'not satisfied' category, and those who chose 4–5 were placed in the 'satisfied' category. However, in cases where we considered the order of importance, we used the full five grades for averaging.

We also conducted interviews in order to gain a deeper understanding of the underlying reasons for the factors that emerged in the questionnaire survey and played a role in the decision to stay. In the research, on the one hand, we wanted to address local stakeholders who, because of their position, have a broad insight into the processes in the municipalities. On the other hand, we also wanted to interview local residents who had decided to stay. The interviews were informal conversations, but were guided to touch on the main motivating factors (Appendix 1). The interviewees (n=4) were thus specifically selected and our main consideration was that they came from different settlements. The interviews were anonymised during the analysis (their names are not their own in the study). The first interviewee was Mayor, the mayor of one of the villages. We discussed with the interviewee about how she saw the situation in the village, what she thought were the factors that kept the population in the village, how she could contribute, as the mayor, to the residents staying in place, and which rural development projects implemented in the village could help prevent emigration. The second interviewee was Anna. She trained as a kindergarten teacher and worked in the local kindergarten. The third interviewee, Rebeka, 20 years old, currently worked part-time as a cleaner, but was also studying. The fourth interviewee was the director of the school in one of the settlements; he has lived in the village since birth. He discussed how he saw the fate of the school and how local education correlated with staying in place.

The questionnaire survey took place between 17 February and 2 March 2021. The interviews took place after the questionnaires were closed. We formulated several hypotheses related to the research questions, which we intended to test with the help of the settlement rankings developed based on the questionnaire survey and secondary data. The main research question was whether essential differences could be demonstrated along various group-forming factors (e.g., social class, type of settlement) in the motivations of the rural population to stay in place based on the case study of the Nógrádkövesd area.

Sub-questions – expanding on the main question – were posed as follows. What form do social and spatial inequalities that block migration routes take in the settlements investigated? How does the importance of social capital – the depth of an individual's embeddedness in society – correlate with staying in place? What is the nature of the social and economic organization and development of this neighbourhood that provides the resources to encourage the population to remain in their settlements?

The first hypothesis, focusing on the main research question, was that the presence of the family strongly influenced remaining in the settlement. More specifically, parents living in the same village (H1) hindered mobility, as the parent–child relationship was mutually beneficial (by providing economic and emotional support and care). Additional hypotheses were formulated regarding economic development. Settlements that were more economically developed or had more central functions, which provided residents with the necessary services were less affected by emigration. At the same time, the villages located at the bottom of the settlement hierarchy lacked certain central functions and, therefore, the degree of interdependence and the resulting trust increased the feeling of community belonging, which had a positive effect on the willingness to stay (H2). A measure of economic development is the quality of the infrastructure, but we assumed that the poor quality of the public transport network did not influence the abandonment of the settlement, as a whole, since the majority of the population owned a car (H3).

The idyllic life in the countryside is primarily associated with agriculture and proximity to nature (van Dame et al., 2002; Koreman, 2023). According to our assumption, the power and proximity of nature and the agricultural activities (H4) were also important contributors to individuals' intentions to stay, as the proportion of agricultural land is very high in each village (Table 6) and the associated agricultural traditions. Finally, according to the hypothesis formulated based on the influence of the social situation, a low level of education (H5) and the lack of knowledge of and inability to speak other languages (H6), which cannot bring prosperity elsewhere where this knowledge is needed, hindered the possibility of mobility.

4. Main characteristics of the geographical framework

Our research area included some settlements in – Nógrádkövesd and its neighbouring villages within a radius of 5–10 km. The settlements surveyed were Nógrádkövesd, Becske, Bercel, Galgaguta, Szécsénke in Nógrád county, and Acsa in Pest county. The county of Nógrád is one of the poorest and least developed regions in Hungary. The research area is approximately 25 km from the Slovakian border and the settlements are approximately 60–65 km from Budapest. Two district centres, Balassagyarmat and Vác, are also nearby (Figure 2).

Nógrádkövesd is adjacent to all settlements except Acsa, so most settlements can be reached directly from Nógrádkövesd. The approach to Bercel is also favourable, with direct road connections to Becske, Galgaguta and Nógrádkövesd. Galgaguta borders Nógrádkövesd and Bercel as well as Acsa. Becske is geographically directly connected to Nógrádkövesd and Bercel by road. The situation of Szécsénke is the worst, it being the most inaccessible settlement. It has no road connections to the other settlements, except for Nógrádkövesd.

The villages vary in the size of their resident populations. Bercel has the highest population and Szécsénke the lowest. The migration balance is positive for three of the settlements; Nógrádkövesd is in the most favourable position, while Becske is in the worst (Table 5).

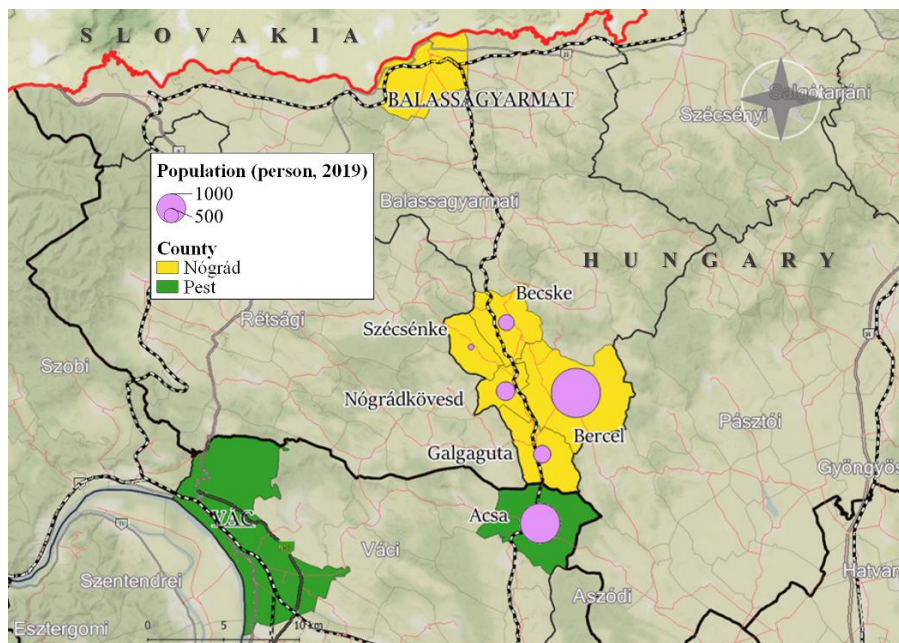


Fig 2. The location of our research area. Source: own research

Tab 5. The distribution of the permanent population (2019) and migration balance (five-year average between 2014 and 2019) of each settlement. Source: Hungarian Central Statistical Office

	Acsa	Becske	Bercel	Galgaguta	Nógrádkövesd	Szécsénke
Permanent residents (person)	1374	558	1708	608	650	200
Migration balance (person)	2.19	-19.92	2.19	-1.02	4.55	-1.91

Tab 6. Proportion of agricultural areas determined by cultivation type. Source: Takarnet – database of the Hungarian land administration

Cultivated area (hectares)	Acsa	Becske	Bercel	Galgaguta	Nógrádkövesd	Szécsénke
Forest	1002.2	512.9	991.4	369.6	177.4	193.8
Forested area	2.4	10.2	2.7	2.0	1.6	0.7
Orchard	0.3	19.4	22.3	18.0	0.4	0.6
Kitchen garden	8.3			4.5		2.2
Pasture	202.3	225.1	708.7	210.7	113.6	170.7
Meadow	58.2	33.4	69.3	5.9	47.9	16.8
Arable land	1046.2	625.0	1390.3	820.8	364.3	518.6
Vineyard	24.2	1.2	3.4	12.3	0.1	3.4
Total land area	2344.0	1427.2	3188.1	1443.7	705.4	906.8
Agricultural area (%)	87.0	91.1	88.8	92.2	78.5	92.7

Acsa and Bercel were at the top of the settlement hierarchy since they had several unique central functions compared to the surrounding settlements, while Szécsénke, with only five functions, did not even have some basic functions (Figure 3).

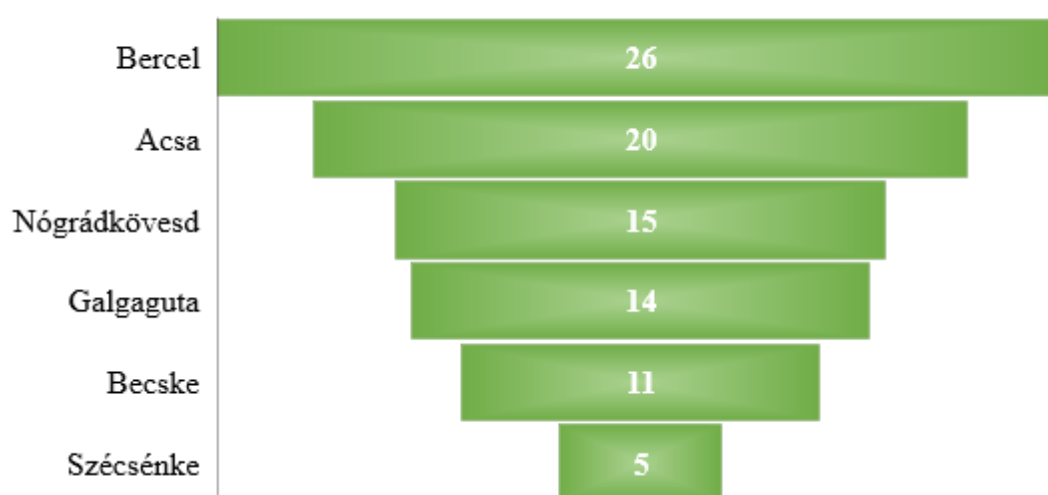


Fig 3. Settlement hierarchy according to settlement functions (the number of functions). Source: Hungarian Central Statistical Office and own observation during a field survey

The two settlements with the largest population function as a kind of micro-regional centre, were well characterized due to their territories having 3 grocery stores each and 3–4 beauty care facilities, and several pubs. Acsa had five pubs, which is not necessarily justified by its population size. This is important because in Hungary, more and more small settlements are closing down the pub as the last social place. In addition, Bercel offered a wide range of services: an ATM, a bank branch, a clothing store, three social care homes, a nursery school, an ambulance station and a fire station. Appendix 2 shows that the central functions were not only concentrated in Bercel and Acsa since there was a fuel filling station in Galgaguta. The five functions that could be found in every settlement were the playground, bus station, family doctor, library and public cultural institution (see Appendix 2 for more details).

Based on the complex indicator for development, the villages examined could be grouped into two categories (Figure 4): those indicating 60% development and those indicating 30% development. Based on the complex index, Acsa was ranked first and Szécsénke ranked last.

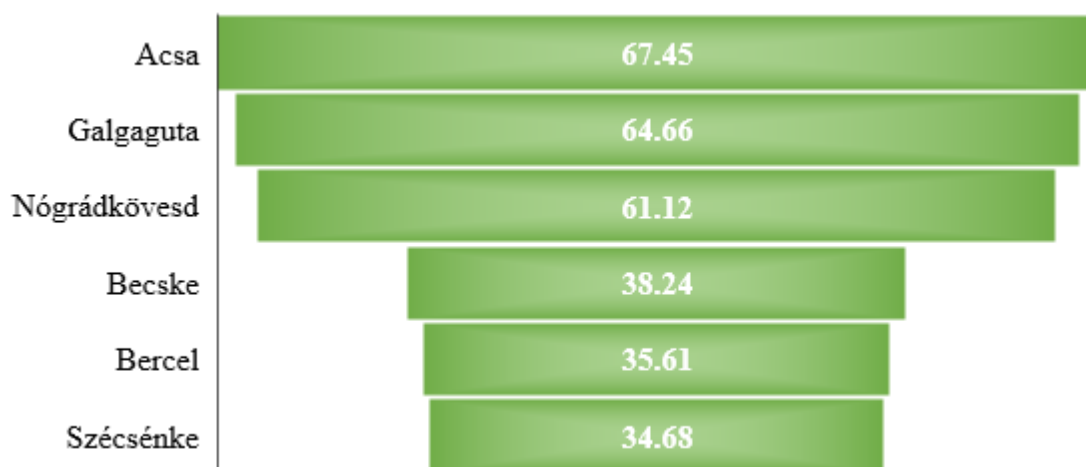


Fig 4. Settlement ranking based on the complex index for development (2018; minimum score = 0; maximum score = 100).
Source: own research

Szécsénke was in the last position in both the socio-demographic dimension and the economic dimension. Its annual income per capita was the second lowest (1 027 342 HUF/capita, approx. 2700 euro/capita). However, in the socio-demographic dimension, the lag was even more significant. Compared to the permanent population, the proportion of active-aged people was the lowest in Szécsénke (61.72%) and, in parallel, the number of registered job seekers per 1000 active-aged people was also high (85.27%). Szécsénke was at the bottom of both models (the settlement hierarchy and the development hierarchy based on complex indices).

It is interesting to note that while Bercel was at the top of the settlement hierarchy based on functions, it was at the bottom of the hierarchy based on the complex index of development. A closer look at the individual variables of the complex index shows that for Bercel, there was a significant difference between the economic and socio-demographic dimensions. Although its local government tax income per person (89,386.45 HUF/capita, approx. 235.23 euro/capita) was the highest and the number of registered businesses per 1000 people was outstanding (43.82 per 1000 person), it was ranked lowest in the social dimension. The number of registered jobseekers per 1000 active-aged people (112.9‰), the number of deaths per 1000 people (24.7‰), and the number of permanent emigrants per 1000 people (39.16‰) were the highest in this settlement. However, the number of permanent immigrants per 1000 people was also the lowest (19.24‰) for Bercel. Overall, its unfavourable position in the social dimension may result in a significant difference between its positions in the two settlement ranking models.

Acsa was ranked at the top of both the functions ranking and the development ranking. It had the best ranking for each of the following indicators: the number of registered businesses per 1000 people (45.92 per 1000 people), the proportion of apartments connected to the sewerage system (86.25%), the proportion of people of active age compared to the permanent population (67.57%), and the number of deaths per 1000 people (14.14‰).

Nógrádkövesd's favourable situation was probably since its annual income per capita (1,486,025.40 HUF/capita, approx. 3911 euro/capita) was the highest and that both the proportion of apartments connected to the sewerage system and the income from local government tax per capita were ranked the second highest among the settlements investigated. Some of the social dimension indicators stood out: the number of registered jobseekers per 1000 people of active age and the number of permanent emigrants per 1000 people were the lowest for Nógrádkövesd. In addition, compared to the permanent population, the proportion of people of active age was high (65%).

Overall, Acsa, Galgaguta and Nógrádkövesd were in the 60% development category within the district, while Becske, Bercel and Szécsénke were among the 30% development category. It is interesting to note that the two settlement ranking models, created based on basic and central functions and the complex index for development, differ significantly from each other. The unfavourable position of Bercel in the social dimension may lead to a significant difference between its positions in the two settlement ranking models.

5. Results

5.1 The importance of some types of social capital for population retention power of the region surveyed

In this section, we present the results of the analysis of the questionnaire and interview data and discuss how some types of social capital, the social class of the individual, the development of the settlement, and the settlement's environment and accessibility influence the choice between mobility and immobility in the settlements surveyed.

The investigation of the importance of types of social capital shows that the role of the family is crucial for the population retention power of the region (Figure 5). For those who live in the same village as their parents, family influence was 9.5 percentage points higher than for those who did not live in the same settlement. This was also supported by the fact that 97.5% of the respondents felt responsible for their parents. Rebeka, an interviewee, said that her parents did not move from Szécsénke because they felt responsible for her grandmother. This kind of attitude was also shown by Anna, who did not want to move out of the area because then she would have to spend more time commuting every day to help her parents.

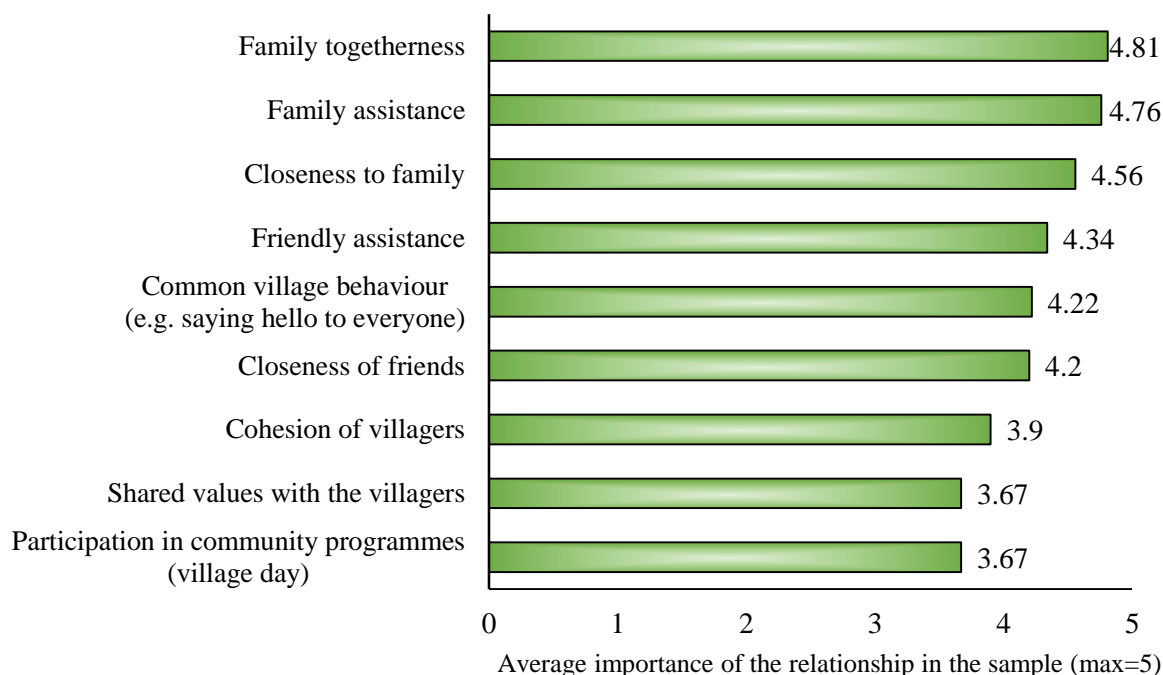


Fig 5. Average order of importance of individual forms of social capital. Source: own questionnaire survey

At the same time, 42.6% of the respondents did not move away from home⁴; the proportion of people living at home was largest for the group aged 19–25 years, while this proportion was also high for the over 45 years age group. Among those who left home, 40.5% lived in the same settlement as their parents. The largest proportion of these people settled only a few streets away from the family home, but some

⁴ In the research, home means the parent's house, where the respondent lives with their parents and does not have their own (owned or rented) home.

moved into the neighbouring house. In addition, 43.47% of those who left home moved to a nearby settlement. The interviewee Anna moved from Galgaguta to Nógrádkövesd, her parents-in-law's village. The couple settled in Nógrádkövesd primarily because of the proximity to the family, although Anna's husband said that his parents did not force him to make this move, yet the close relationship with his parents and family cohesion influenced their decision. Overall, the proportion of those who lived close to their parents is remarkable. This high rate may be associated with the fact that 27% of the respondents lived in their parent's house and 17% had an inherited house, a retaining force for someone already owning their own property locally. Rebeka confirmed that her parents did not move from Szécsénke because they inherited a house. In fact, 51% of those who completed the questionnaire had a significant motivation to stay – they already owned a house locally.

We used cross-tabulation analysis to examine whether someone was able to arrange certain things (e.g., local exchange trading system, reliable supply channels) through their parents' connections if they lived in the same settlement as their parents. The proportion of individuals who could manage certain things through their parents' relationships was much higher among those who lived in the same village as their parents (56.3%) than among those who did not. The Pearson's chi-square test yielded statistically significant results at the 0.01% level, which means that the relationship observed between the two variables was most likely not due to chance. The influence that parents' relationships exert can be passed on to the individual; this is also a retaining force with some social capital (H1).

Job satisfaction and the relational capital formed in the workplace may also influence the individual's motivation to stay. Feeling respected in the workplace can be another important deterrent to moving. Among the respondents, 85.26% felt that they were valued in their workplace. Using cross-tabulation analysis, we examined the influence of the perception of respect at work on individuals' willingness to move. Among those who felt that they were valued in their workplace, the proportion of individuals who said they had tried to move was 3.9 percentage points lower.

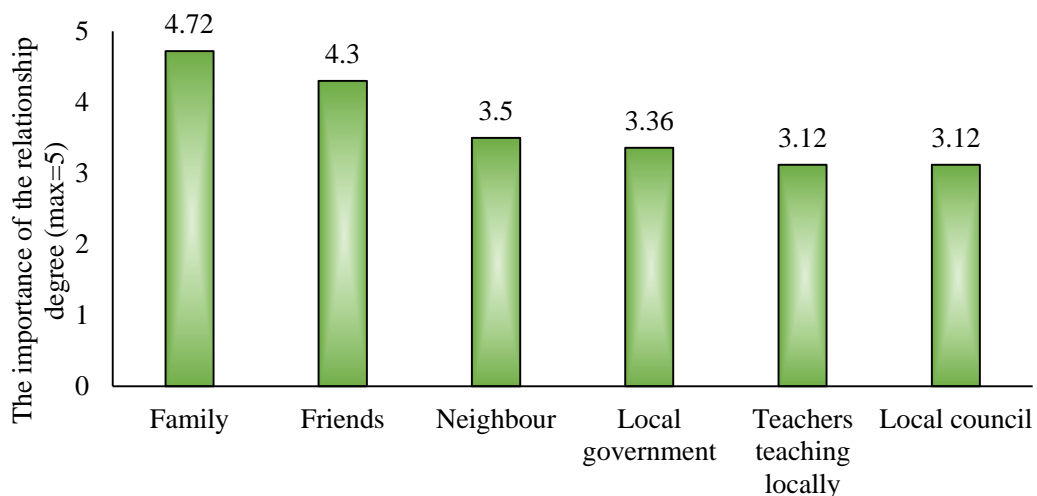


Fig 6. On average, how much can the respondents count on the people around them? Source: own questionnaire survey

Reliance on family predominated, closely followed by reliance on friends (Figure 6). These results are supported by the fact that 95% of the respondents said that they and their relatives and friends helped one another. Figure 7 shows the reciprocal relationships that the respondents had with the people around them. Small and large jobs at home were singled out by the largest proportion of respondents, followed by administration and emotional support. Interestingly, elderly care was not mentioned by many people, which may be related to the fact that only half of the respondents (50.81%) had elderly dependents in the family.

Based on the reciprocal relationships, we assumed that the villages located at the bottom of the central hierarchy would have a greater proportion of people who felt that they could count on each other. We assumed that some functions were missing from these settlements, so that there was a greater need for

cohesion and assistance among the residents. Cross-tabulation analysis of the influence of the village's place on the settlement hierarchy showed that this hypothesis was only partially confirmed (H2). The influence of family and friends contributed less to the villages located at the bottom of the settlement hierarchy compared to the villages located at the top. In contrast, the level of consideration for neighbours, the local government and the local representative body was higher for villages located at the bottom of the settlement hierarchy than for the villages located at the top. This may be explained by the fact that the villages at the bottom of the settlement hierarchy were smaller, and it is conceivable that family ties were no longer strong and the residents could only rely on the municipality. However, it may also be assumed that the settlement hierarchy and trust in local government depend on whether the respondent is satisfied with the local government administration.

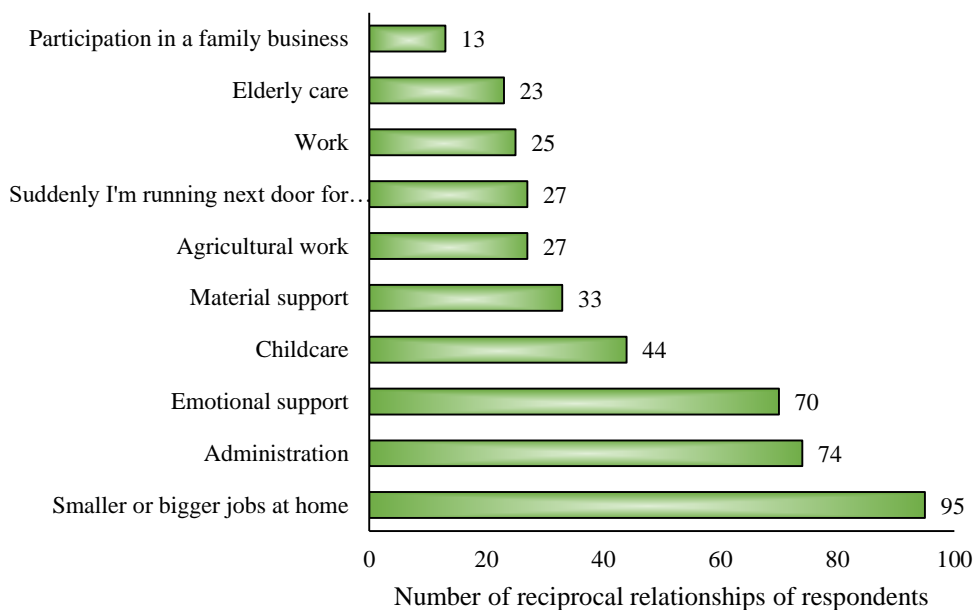


Fig 7. Main areas of reciprocal relations. Source: own questionnaire survey

We used a three-dimensional cross-tabulation analysis to examine the assumption that villages at the bottom of the settlement hierarchy were generally more satisfied with local government administration than villages at the top of the hierarchy (H2). We found that there were usually more opportunities for local government employees to pay attention to individual people in smaller settlements than in larger settlements where there were more tasks.

Thus, the level of trust in public institutions was higher in smaller settlements. Supporting our assumption, among those satisfied with the administration, 20.7% more people in the villages at the bottom of the hierarchy felt that they could count on the municipality compared to people in villages at the top of the hierarchy. Satisfaction with municipalities may not be independent of the satisfaction with the local mayor. Overall, 68.68% of the respondents were satisfied with the mayor. Similar to the extent of satisfaction with municipalities, the proportion of residents satisfied with the mayor was higher for the settlements at the bottom of the settlement hierarchy (88%) than for the settlements at the top of the hierarchy (60.2%). Pearson's chi-square test yielded statistically significant results at the 0.016% level, which means that the relationship observed between the two variables was most likely not due to chance.

We used the interview with the mayor to consider how a mayor could influence the mobility intentions of residents. The mayor stated that the extent to which a mayor makes use of various village development projects affects the attractiveness of a particular settlement. The mayor tries to develop every area a little, rather than concentrating exclusively on one major area. Road development tenders play the biggest role. Three factors can contribute to non-migration. The first is the existence of a suitable workplace. The mayor added that one person in the village was self-employed and everyone else had a job. The second factor is various social benefits (e.g., schooling allowance, social firewood). The third possible

retaining force that a mayor can strengthen is the various community-building events, which also promote the connection between generations. The village caretaker service, which performs diverse tasks such as delivery of lunch and medicine to the elderly or transport of children to kindergarten, is a combination of a community programme and social benefit. Its primary purpose is to compensate for what is missing. The most used support from the state to help young people stay in the area, the Village Home Building Allowance (a loan-based subsidy granted by the Hungarian State to families for housing construction and purchase), is a retaining force because residents can buy both land and house at a cheaper price. This fact was also confirmed by Anna since she and her husband managed to buy a house at a very good price, which was a top priority when looking for a house.

The high level of trust and satisfaction in the local administration has staying power. This was confirmed by our interviewee, Rebeka, who stated that one of the mayor's main goals was to have community-building programmes and for residents to get together. He brought different programmes to the life of the village, such as a pumpkin carving evening and Easter egg painting, activities suitable for all ages. These programmes strengthened the sense of togetherness of the village inhabitants. This is confirmed by the fact that 74% of the respondents participated in most community programmes, such as the village day and vintage parade, and 79% felt that they had a positive experience connected to the village.

Based on the literature, we were also interested in understanding how much the loss of local advantages and resources held the population back from moving. Surprising results were obtained.

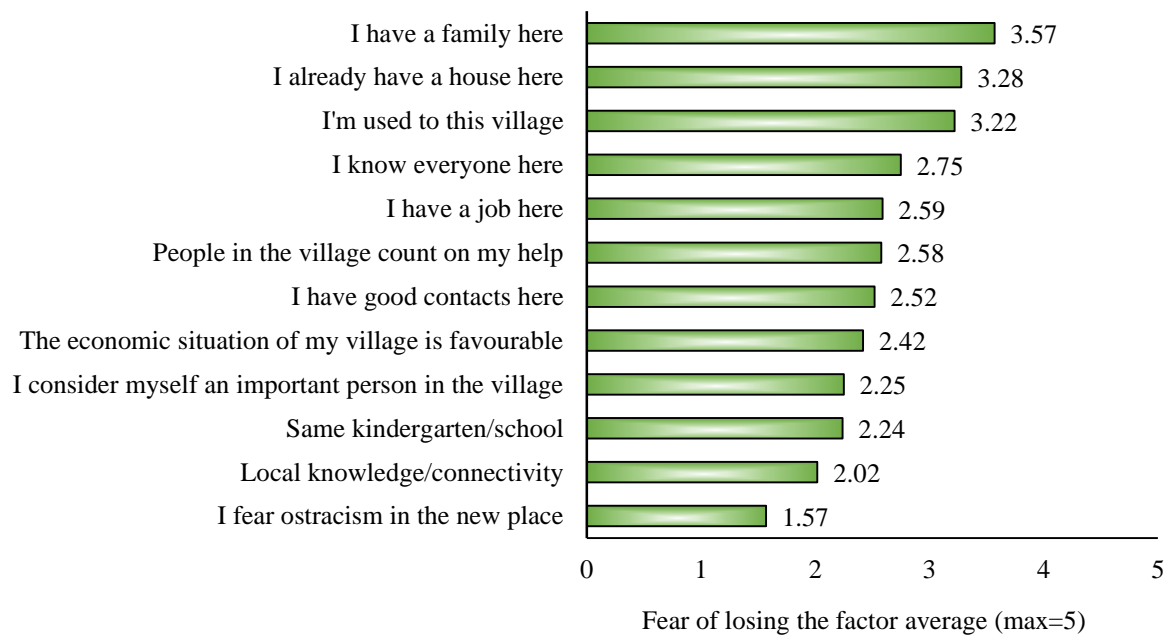


Fig 8. The influence of factors related to the fear of losing (averaged values) on the willingness to move. Source: own questionnaire survey

In contrast to the findings in the literature (Carling, 2002), the sample examined did not demonstrate that tacit local knowledge, the loss of local relationships, or the fear of ostracism strongly influenced the willingness to move. However, having a local family and owning a house and getting used to it were sustaining forces.

The strength of an individual's relationships is primarily rooted in family ties. The family has the greatest influence on the motivation to move. However, the closeness of friends and communal cohesion within the village were also positively correlated with staying in place.

5.2 Social class as an explanatory variable

Based on the theoretical background, we were interested in understanding how individuals' intention to stay was influenced by their social situation. How does 'involuntary immobility' or 'voluntary immobility' appear, and which category is stronger in a given neighbourhood (Carling, 2002)? We first assessed the factors influencing the respondents' social status, which are decisive in mobility: the level of education, the number and level of languages learned, and categories related to material possessions. The proportion of people with no more than a primary school education was low (3%); in contrast, the proportion with a university or college degree was notably high (43%). A large proportion of people had at least a high school diploma (34%). Among the questionnaire respondents, the proportion with a vocational qualification or vocational secondary school education (36%) was high enough not to be neglected. In addition, 60.6% had a diploma in some profession. Overall, a high proportion of respondents had at least a high school diploma. These results indicate that they did not decide to stay due to a lack of education (H5).

The inability to speak other languages is also a potential deterrent. Second language skills are not required locally, so emigrants would not thrive in larger cities, where knowledge of foreign languages is already expected (H6). However, there was a discrepancy between speaking other languages and passing a language test. Fifty-four percent of the questionnaire respondents stated that they spoke a foreign language. However, it is notable that few language examinations were available, except for tests for English. The higher level of proficiency in English is also because children learn English from kindergarten and it is taught in mainstream schools. Thus, school is the only possibility for developing language competencies, which was confirmed by the school director. In addition, local governments provide various free English language courses for adults. However, the percentage of those who speak the language is still low, which is due to students' lack of interest, as there are no specific opportunities to practice and use the language locally. Thus, investing in language learning is not worth it since this knowledge does not pay off locally. For the French, Italian, Spanish, Russian and German languages, the highest level of learning was a secondary language examination, which 1.63% of the sample had taken. However, 2% had a higher-level language examination certificate in the Slovak language.

To map the social situation, the questionnaire asked about the following factors: credit; social benefits; the number of family cars; the amount of monthly savings set aside; the annual number of domestic/foreign holidays; hobbies; and visits to the theatre/cinema. Eighty-two percent of the respondents did not have a home mortgage. This may be related to the fact that a significant proportion of the respondents had not yet moved away from home. We used the cross-tabulation method to determine whether the low proportion of people with loans in the sample was related to the fact that some respondents were still living at home. The proportion without credit was higher among individuals who had not yet moved away from home (94.1%) than among those who had already moved (72.7%). Our hypothesis was confirmed, as Pearson's chi-square test yielded statistically significant results at the 0.003% level, which means that the relationship observed between the two variables was most likely not due to chance. In addition, we examined the influence of inheriting a house on having a loan. The proportion without credit was higher among the individuals who inherited a house (91.3%) than among those who did not (79.8%). Therefore, credit had a level of holding power. However, the majority of respondents did not have a loan, because they had not yet moved from home (43%) or they had inherited a house, and this is what tied them to a place. The proportion of people who took part in various social benefits was also low (only 24%).

The amount of savings also has an impact on how (well) someone got on locally. Thirty-seven percent of the respondents could put aside 25–130 euros (10,000–50,000 HUF) per month, while 24% were able to save between 130–260 euros (50,000–100,000 HUF). A smaller proportion (14%) were able to save an amount below 25 euros (10,000 HUF) and only 9% did not have the opportunity to put aside any funds. Their monthly savings show that the respondents were doing well financially in their settlement. However, it is possible that the proportion of savings was higher in the more economically developed settlements. We examined the influence of economic development on the amount of monthly savings using cross-tabulation analysis. The results contradicted our assumption; the proportion of savings was higher by

3 percentage points in economically less developed settlements. In addition, the respondents who could save were nearly three times as satisfied with their life as those who were unable to make any monthly savings.

In the case of car ownership, which describes the financial situation, only 4% of the respondents did not own a car. Most families (95%) had at least one car, but on average the highest ratio was 2 cars/household (40%). It is noteworthy that 14.6% owned more than three cars. Sixty-eight percent of respondents could afford a domestic vacation once or twice a year, while 61% had a regular hobby (Figure 9).

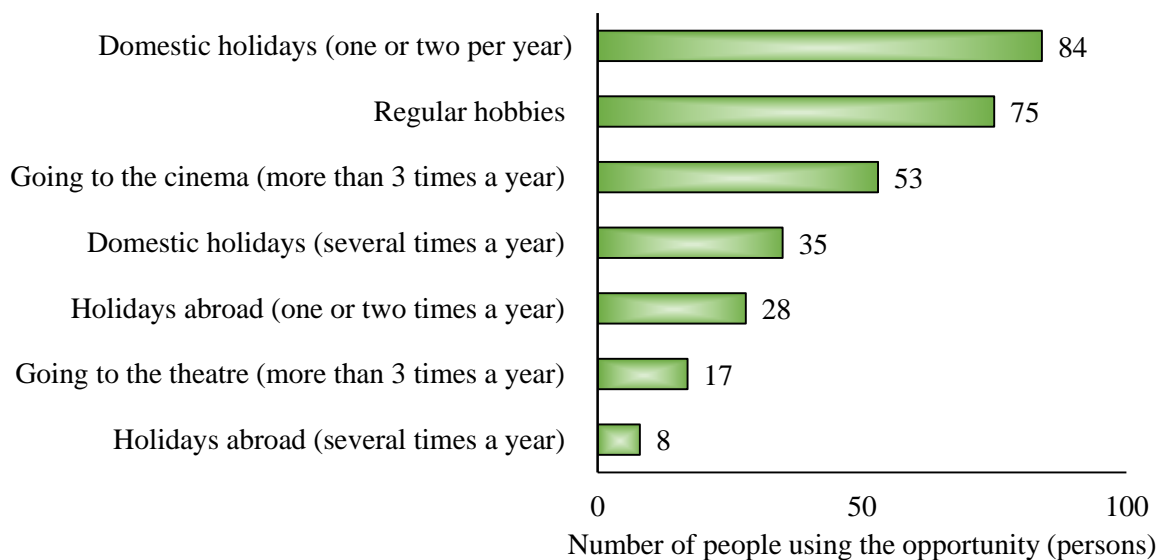


Fig 9. Options for spending free time (n = 122). Source: own questionnaire survey

Based on the social status investigation, we conclude that the people living in the region had sufficient financial assets to move. Thus, other factors were more important in staying in place. The respondents mostly fell into the 'voluntary immobility' category, according to which they had the opportunity to move, but did not wish to. Anna stated that they voluntarily decided to start a family in the countryside when they were young: 'To this day, we are aware that it would be more worthwhile if we were in the city, but I'm not saying that we wouldn't be able to fit in, but it would be strange because we are used to spinning, we go to the animals in the morning, we go to the animals in the afternoon. You're going to Budapest, what are you doing there?'

5.3 Correlations between the village's place in the settlement hierarchy and the population's mobility-related attitudes

The willingness to stay is determined by the level of development of the settlement. An indicator of development is the quality and quantity of services. However, the degree of satisfaction of the residents with the services was related to the place the given settlement occupied on the various development rankings. When characterizing the geographic framework of the research, we compared the results of the two settlement ranking models and the responses of the respondents, based on whether the differences in development, i.e., differences in provision of functions, determined the willingness to be mobile.

We obtained the following results for the test of our hypothesis that people living in settlements with better economic conditions or provision of functions were more satisfied with the services of the settlement. Surprisingly, when asked how satisfied the respondents were with services in the villages, they indicated a low level of satisfaction with almost all services (Figure 10).

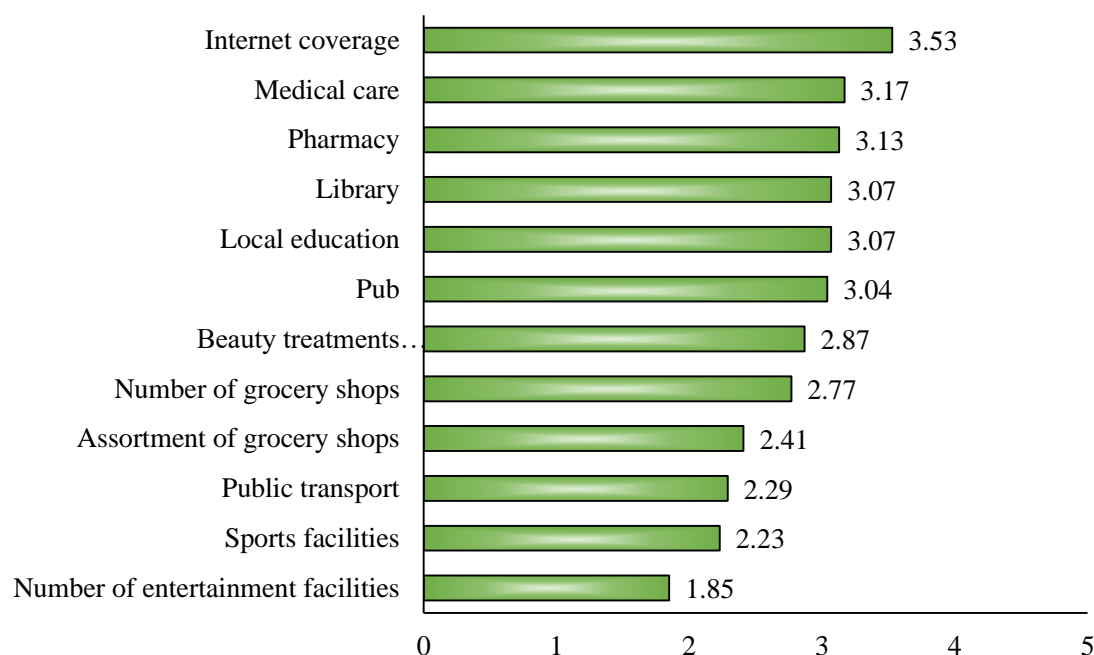


Fig 10. Average satisfaction with services (maximum score = 5). Source: own questionnaire survey

In the case of the settlement ranking based on central functions, satisfaction with services was higher among respondents from the villages at the top of the settlement hierarchy. However, satisfaction with the assortment of grocery stores and internet coverage was higher among respondents from the villages at the bottom of the settlement hierarchy. Surprisingly, the expected results based on complex indicators were not apparent in the ranking of economic development. For most categories, satisfaction was higher precisely in cases where the value of the complex indicator was low. However, the level of satisfaction with the pharmacy, public transport, pub and local education was higher in cases where the value of the complex indicator was high, indicating that they were in settlements with a more favourable economic situation. This contradiction may be explained by the situation of Bercel. The number of central functions was extremely high in this settlement, while the value of the complex indicator was nearly the lowest.

Finally, we examined the quality of the infrastructure as an indicator of economic development. The level of development of the infrastructure, the quality of the roads and the public transport network may determine the willingness to leave the settlement. Due to the lack of a public transport system, residents do not have the opportunity to get from point A to point B, which makes running errands significantly more difficult.

Tab 5. The number of buses and trains with a daily direct line on weekdays. Source: www.menetrendek.hu (download: 03.03.2021)

Destination	Public transport type	Acsa	Becske	Bercel	Galgaguta	Nógrádkövesd	Szécsénke
Balassagyarmat (district centre)	bus	1	13	12	8	6	0
	train	9	0	0	9	9	0
Vác (district centre)	bus	11	0	3	5	0	0
	train	0	0	0	0	0	0
Budapest (capital)	bus	4	0	4	1	1	0
	train	0	0	0	0	0	0

The availability of public transport in the villages was variable. One of the reasons for the discrepancy was that not all settlements had both a train station and a bus station (see Appendix 2). The case of Szécsénke

was exceptional; it was not possible to travel from the settlement to the capital and the two district centres without a transfer. However, even if a settlement had both a bus station and a train station, if there was no fixed-line transport to Vác and Budapest, they could only be reached by bus. This was also supported by the result that the bus had an advantage over the train among those who regularly used public transport. Eighty-three percent of the respondents did not use public transport. The reasons for dissatisfaction are summarised in Figure 11.

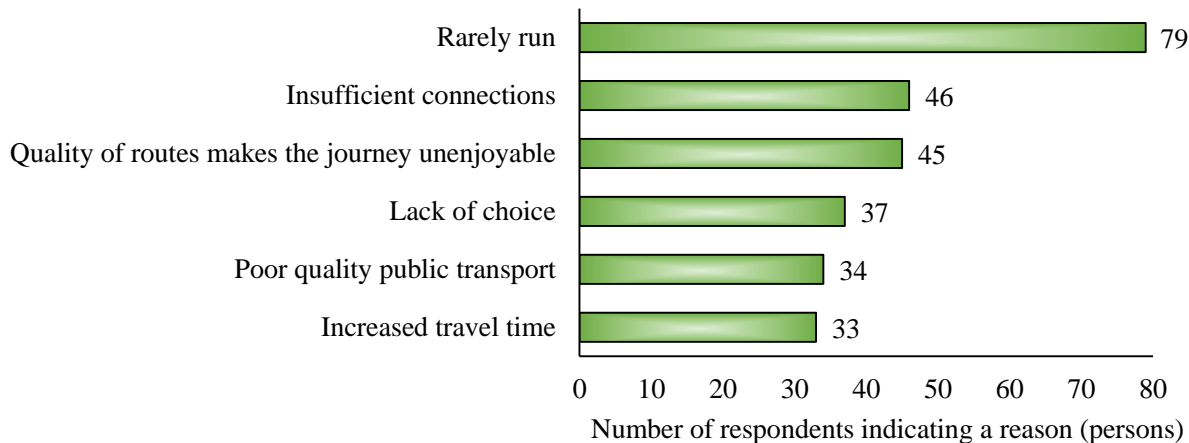


Fig 11. The reasons for dissatisfaction with public transport. Source: own questionnaire survey

The purposes of using public transport varied; most people used them for running errands (28%), while only 12% indicated daily commuting for work. It is important to note that the question of the extent to which the quality of public transport affected the frequency of travel from one's place of residence (on a five-level attitude scale) received an average score of 2.17, indicating that the quality of public transport did not influence how often the respondents left their settlement. However, among those who regularly used public transport, quality influenced their willingness to leave the settlement by more than 28.4 percentage points.

Overall, economic development strongly influenced the respondents' motivation to stay in their settlements in the area surveyed. However, a large proportion of the respondents were dissatisfied with the quality of services and infrastructure in their settlements (H2).

5.3 The role of the idyllic rural life

Village life is often associated with proximity to nature, the presence of beautiful scenery and clean air. Are these qualities alone sufficient to induce people to stay? Security was one of the most important factors for the respondents, with 89% feeling that their residence was safe. Approximately 91% of the respondents stated that their settlement had clean air, silence and tranquillity. The beautiful landscape and proximity to nature yielded exceptionally high results, with 120 and 121 people (out of a sample of 122 people) claiming that their village had them. The idyllic nature of their settlements was also confirmed by the interview subjects. Rebeka appreciated the environment and proximity to nature of her village, Szécsénke, the most: 'I am a person who is very used to living in a village, I don't think I could live in a city'.

The role of agriculture was significant in the villages. Anna claimed that everyone in the area loved agriculture and that the people had substantial landholdings, just like her family. Her husband regularly used a tractor and they cultivated their own land. They were also engaged in animal husbandry; they kept pigs, horses and bees. Almost all (95%) houses in the area had a home garden. Thus, backyard farming was the major agricultural activity, which can be explained by the adequate quality of the farmland. A 7% higher proportion of those keeping a smallholding believed that their settlement had good-quality farmland. This was also confirmed by Rebeka; her dream was to have an orchard in her garden, which

could only be realised in the countryside, as the local environment was suitable for farming. Her family produced seasonal vegetables and fruits for their own use in the family garden. While animal husbandry was not a priority for them, they kept hens and in winter, they also slaughtered pigs to ensure the annual amount of pork, just like Anna, for whom the garden and farming were part of everyday life.

We used cross-tabulation analysis to examine how agricultural activity affected the willingness to move (H4). The proportion of respondents who had already tried to move was much lower among those engaged in agricultural activities (19.8%) than among those who did not (33.3%). The odds ratio calculated for agricultural activity indicate that the chance of being willing to move was about twice higher for those who did not engage in agricultural activity than for those who did. At the same time, the ownership of agricultural land can also influence the willingness to move. We used cross-tabulation analysis to examine how owning land in addition to a home garden affected the willingness to move. The results are shown in Table 6. The proportion of respondents who tried to move was higher among those who did not own agricultural land (25.3%) than among those who did (20.5%).

Tab 6. Respondents' willingness to move based on their ownership of agricultural land in addition to a home garden. Source: own questionnaire survey

		Do you own agricultural land (forest, pasture, arable land) in addition to your home garden?		Total
		Yes	No	
Have you ever tried to move out of your settlement?	Yes	20.5%	25.3%	23.8%
	No	79.5%	74.7%	76.2%
Total		100%	100%	100%
		n = 39	n = 83	n = 122

Overall, land ownership and agricultural activities appear to be forces retaining respondents in their settlements. In addition, the benefits associated with living in the countryside, such as beautiful scenery, proximity to nature, and the availability of clean air, were all highly important to the respondents.

6. Discussion and conclusion

The results of our study in line with the findings of the literature (Erickson et al. 2018), conducted in Nógrádkövesd and its surroundings, on the factors influencing immobility indicate that the role of the family was an important motive for staying in one's place. There is no doubt that the family was one of the main supports and sustaining forces in the settlements investigated. Our hypothesis (H1) that living in the same village as one's parents hinder mobility, due to the mutually beneficial parent-child relationship (in terms of economic and emotional support and caregiving), was confirmed. However, the role of the community should not be forgotten, nor the sustaining power of common village norms.

A higher degree of economic development of settlements reduces spatial inequality. Our hypothesis (H3) that the poor quality of the public transport network did not affect the intention to leave the settlement since most of the respondents owned a car, was confirmed. In the more economically developed villages, the level of satisfaction with the services was higher, but overall, the respondents' satisfaction was low (H2). In contrast, the importance of being close to nature, beautiful scenery, and clean air was clearly apparent and the impact of agricultural activities was strong. Thus, it may be said that the force of nature bound the respondents to the countryside (H4).

Social status did not determine the migration possibilities of the individual in the sample of people surveyed. The hypothesis (H5) that a low level of education hindered an individual's opportunities was not confirmed, but the lack of language skills might have been a potential obstacle (H6). Based on their

material assets, the respondents' social position is favourable for moving, and it is not the lack of this that makes it impossible to move. The results of our study are similar to the results of Matysiak (2023) in Poland or Thomassen (2022) in the Netherlands. Thus, our sample indicates that the respondents possess the capability to move (primarily within the country due to the lack of language skills), but they lack the aspiration to do so. This lack of aspiration is partly due to factors that are uniquely available locally (land, rural lifestyle, family) and partly due to a sense of responsibility toward their families (Stockdale et al. 2018).

The main limitation of this research is that the questionnaire was completed only by those who remained in place, meaning we do not know the driving factors for those who decided to leave. Sometimes, the same factors can act as push factors as well (e.g., proximity to family, if family relations are poor). Thus, we could only examine how the respondents who had considered moving viewed the questions posed in the questionnaire.

Carling's (2002) mobility category, 'voluntary immobility', prevailed in the settlements investigated. Although individuals had the opportunity to move, it was simply the lack of desire to do so that prevented them. Overall, there was indeed a difference in the motivational factors in the settlements investigated. The family took the first place as a restraining force, followed by the role of the village, in terms of its economic, social and natural assets. Carling's theory (2002) was not confirmed for the sample of people in this study, for whom location-specific advantages that would be lost with migration became a restraining force. It is possible that this is only a peculiarity of the sample in this study; therefore, it would be worthwhile to further investigate the reasons for this with a larger and more representative sample. We believe that the comprehensive methodological approach and conceptual framework of this study can serve as a good basis for larger-scale research on rural mobility and immobility. Our results can contribute to the work of local leaders to promote staying in place in rural areas.

Based on the findings of our study conducted in Nógrádkövesd and its surroundings, several policy recommendations can be made to address the factors influencing immobility and promote the development of small settlements.

We suggest that strengthening family and community ties could be achieved through various family support programmes that promote mutually beneficial parent-child relationships, such as care support and economic incentives for families to stay together in a settlement. In addition, to support community engagement, promote community events and initiatives that reinforce village norms and foster a sense of belonging among residents.

Improving local services and infrastructure would also be important. Improving the accessibility and quality of local services such as health, education and leisure facilities to increase the overall satisfaction of residents.

Although car ownership is high, efforts should be made to improve the public transport network to provide alternative transport options and reduce dependence on private cars.

Economic development and increased local employment opportunities would require, on the one hand, the development and promotion of local businesses and agricultural activities to create more employment opportunities within the village, reducing the need for residents to seek employment elsewhere.

Supporting small-scale modern facilities: Investing in modern facilities such as community gyms and teleworking facilities that can improve the quality of life and make the village more attractive.

Investing in projects that improve the natural and living environment to enhance the natural beauty of the village, such as maintaining clean air, preserving scenic landscapes and promoting green spaces. Promote sustainable agricultural practices that not only provide economic benefits but also help preserve the natural environment.

Develop partnerships between local governments to assess and address the specific employment and service needs of communities. In addition, local policies that support homeownership and sustainable development would benefit from being developed to ensure residents have access to affordable housing

and the opportunity to engage in sustainable agricultural practices. Encourage lifelong learning initiatives to ensure that residents of all ages have access to educational opportunities.

In summary, the most important strategy for retaining the population would be to leverage local advantages. Key factors include promoting those unique local benefits that tie residents to their villages, such as the rural lifestyle and family connections. These recommendations aim to create a supportive environment that encourages residents to remain in their villages by leveraging local strengths and addressing the key challenges identified in the research.

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Appendix

Questions in the semi-structured interviews:

1. Why did you choose this particular settlement?
2. What do you like most about it?
3. What do you miss most about it?
4. What do you think of the services available locally? Are you satisfied with them? If so, why? If not, why not?
5. What do you think is attractive about the village?
6. Are you engaged in agricultural activities and animal husbandry? If so, what are your activities? If not, why not?
7. How important is proximity to nature for you? Please tell me a little more about this.
8. What do you think about local public transport?
9. Have you ever moved away from home? If so, how far? If not, why not?
10. How is your relationship with your parents? Please tell me a little more about this.
11. Do you feel responsible for your parents? If so, how does this manifest as? If not, why not?
12. What reciprocal relationships do you have?
13. If you were to move, are you afraid of losing certain local benefits? If so, what are they? If not, why not?
14. What are your future plans (for the next five years) here in the village?