Social Inclusion
2026 • Volume 14 • Article 12079
https://doi.org/10.17645/si.12079

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Open Access Journal

Transnational Ties and Ukrainian Students' Social Inclusion in Slovakia

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Submitted: 31 January 2026 **Accepted:** 11 May 2026 **Published:** 3 June 2026

Issue: This article is part of the issue "Mobility and Relationships in Digitally Saturated Social Worlds" edited by Aija Lulle (University of Eastern Finland) and Ieva Puzo (Riga Stradins University), fully open access at https://doi.org/10.17645/si.i536

Abstract

Social ties play an important role in migration and everyday life, while digital media have reshaped their form and reach. This article examines how digital networks and social ties shape the social inclusion of Ukrainian students in Slovakia in the context of post-2022 war-related mobility. The analysis is based on an exploratory pilot questionnaire survey conducted in 2025 among 85 Ukrainian students enrolled as full-time international students at the Faculty of Management, Comenius University Bratislava. The findings show that students maintain frequent transnational contact with family and friends in Ukraine and rely heavily on digital communication, especially Telegram groups, to sustain these ties and access practical information about life and study in Slovakia. At the same time, local social ties in Slovakia are more limited and are formed predominantly within co-national circles rather than with members of the host society. Most respondents report moderate to relatively strong social inclusion, although many remain uncertain about their long-term future in Slovakia. The findings show the ambivalent role of digital networks in the social inclusion process. They reduce isolation, support everyday functioning, and sustain transnational continuity, but they do not necessarily foster deeper local belonging or the formation of bridging ties with members of the host society. The study contributes to research on international student mobility, digital migration, and social inclusion by showing how digitally sustained transnational ties can support everyday adaptation, while also limiting the development of deeper host-society embeddedness among students whose mobility is shaped by conflict.

Keywords

digital networks; international student mobility; Slovakia; social inclusion; transnational ties; Ukrainian students

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1. Introduction

International student mobility (ISM) has become a central feature of contemporary migration processes, with important implications for both host societies and migrants themselves (Beech, 2015). Beyond their role as temporary participants in higher education systems, international students represent a potential future workforce and contribute to the social and economic development of receiving countries. A key dimension shaping these trajectories is social inclusion, understood as the extent to which individuals feel accepted, supported, and able to participate in the social life of the host society (Coombs et al., 2013; Cordier et al., 2017).

In the case of Ukrainian students, mobility acquired a distinct character after the outbreak of the war in Ukraine in 2022. Studying abroad became not only a strategy of educational advancement but also a response to insecurity and disruption. Slovakia emerged as a significant destination due to its geographical proximity, linguistic similarity, and relatively accessible higher education system (Pílová & Bahna, 2025).

Within this context, social ties shape both mobility decisions and everyday experiences in the host country (Beech, 2015). These ties are increasingly mediated by digital platforms, which enable cross-border communication and create transnational social spaces (Thinyane et al., 2023). Digital networks can reduce isolation, sustain emotional continuity, and provide practical information, yet their role in fostering deeper local belonging remains ambiguous.

Existing research has extensively examined ISM and the importance of social networks in migration processes. However, less is known about how digitally mediated social ties shape the subjective experience of social inclusion, particularly among students whose mobility is influenced by conflict. More empirical attention is needed to understand how digitally sustained transnational ties relate to the formation, limitation, or selective development of local social ties in the host society.

Recent scholarship has also emphasised that ISM should not be understood as a single, uniform category, but rather as a differentiated field shaped by unequal conditions of mobility, institutional structures, and social positioning (Brooks, 2022). This perspective is particularly important in contexts shaped by war and displacement, where student mobility may combine educational aspirations with protection-seeking motives and forms of forced or constrained movement (Olumba, 2025). Examining Ukrainian students in Slovakia through this lens makes it possible to understand social inclusion not simply as a matter of institutional participation in higher education, but as a process shaped by the interaction between conflict-related mobility, transnational attachments, digitally mediated communication, and local relationship-building.

This article examines how digital networks and social ties shape the social inclusion of Ukrainian students in Slovakia, with particular attention to the relationship between digitally mediated transnational connections and the formation of local ties in the host society. It argues that digital networks function as an important infrastructure of transnational continuity and everyday adaptation, but do not automatically foster bridging ties or deeper local belonging. The study contributes to debates on migration, digitalisation, and the social inclusion of international students by showing that social inclusion may be present at the level of everyday functioning while remaining more limited at the level of host-society embeddedness.

2. Theoretical Framework

2.1. Social Inclusion and ISM

Social inclusion has increasingly been conceptualised as a multidimensional and subjective process that reflects individuals' ability to participate fully in social, economic, and community life (Coombs et al., 2013; Cordier et al., 2017). In the context of ISM, social inclusion extends beyond formal access to education and includes everyday experiences of belonging, recognition, and social support within the host society.

ISM has often been examined as a form of highly skilled migration, with students understood as both temporary migrants and potential long-term members of host societies (Beech, 2015). Recent research also stresses that ISM is internally differentiated and shaped by broader inequalities, geopolitical conditions, and different meanings of mobility (Brooks, 2022). Student migration should therefore be understood as a socially embedded form of mobility in which integration depends not only on institutional access to education, but also on the quality of social relationships developed in the host country.

From this perspective, social inclusion is closely linked to the structure and quality of social ties. Meaningful relationships within the host society are associated with stronger wellbeing, attachment, and potential long-term settlement. At the same time, transnational and local ties may shape inclusion differently: transnational ties provide continuity, emotional security, and practical support, while local ties are more directly related to host-society embeddedness and longer-term belonging. This distinction is particularly important for students whose mobility is shaped by conflict and displacement.

2.2. Social Ties: Strong and Weak Connections

The importance of social ties in migration processes is well established, particularly through Granovetter's (1973) theory of strong and weak ties. Strong ties, such as family and close friends, provide emotional support, stability, and security, while weak ties bridge new social circles and provide access to information, opportunities, and resources.

In ISM, both types of ties play complementary roles. Strong ties are often maintained transnationally and connect students with their country of origin, while weak ties are more commonly formed in the host society and support access to local social and professional networks (Beech, 2015).

However, the balance between these ties is not always stable. Strong reliance on transnational ties may provide emotional comfort and continuity, but it may also reduce opportunities or incentives to develop wider local connections. Transnational ties may therefore coexist with more limited local embeddedness in the host society.

2.3. Digital Networks and Transnational Social Spaces

Recent research highlights the growing importance of digital technologies in migration experiences. Digital platforms enable migrants to maintain cross-border contact with family and friends and create transnational social spaces (Thinyane et al., 2023). Research on transnational families shows that digital media help sustain

emotional closeness, everyday presence, and connection across distance (Madianou, 2019; Wilding et al., 2020). Digital communication, therefore, functions as both a technical infrastructure and a social and affective resource for sustaining transnational relationships.

For contemporary students, particularly Generation Z, digital communication is central to everyday life. Social media and messaging platforms help maintain relationships and provide practical information on academic guidance, housing, administration, and employment. These functions are especially relevant for international students, for whom digital platforms may reduce uncertainty during adaptation to a new institutional and social environment.

Research on transnational youth has also shown that young people's mobility, attachment, and cross-border sociality cannot be reduced to a simple opposition between origin and destination countries. Rather, these processes involve more fluid and relational patterns of belonging and movement (Mazzucato & Haagsman, 2022). Digital ties may therefore play an important role in shaping how young people negotiate identity, belonging, and social relations across borders.

2.4. Digital Ties and Social Inclusion: An Ambivalent Relationship

Digital networks clearly support the maintenance of transnational ties, but their role in fostering local social inclusion is more ambiguous. On the one hand, digital platforms can reduce feelings of isolation, provide access to resources, and facilitate initial contact with new social groups. They may also reinforce existing social circles, particularly co-national communities, and reduce incentives to engage with the host society.

This ambivalence reflects a broader tension between bonding and bridging social capital. Digitally mediated communication tends to strengthen bonding ties within familiar groups, including family members, friends, and co-national communities. By contrast, the formation of bridging ties with members of the host society often requires sustained interaction across linguistic, institutional, and social boundaries, and may therefore depend more strongly on face-to-face contact and structured institutional support. This distinction is important because digital networks may support social inclusion in some respects, especially by reducing isolation and providing practical information, while doing less to foster broader host-society embeddedness.

Digital networks can function as a resource for adaptation, while also supporting transnational continuity more strongly than deeper local embeddedness. Understanding this dual role is particularly important in the case of students whose mobility is shaped by conflict, as their reliance on transnational ties may be especially strong.

Building on these theoretical considerations, this article examines how digital networks and social ties shape the social inclusion of Ukrainian students in Slovakia, with particular attention to the relationship between transnational continuity and selective development of local ties. This framework makes it possible to distinguish analytically between the maintenance of bonding ties across borders and the more uncertain development of bridging ties in the host society, and to examine how both relate to subjective experiences of social inclusion.

3. Methodology

The methodology was designed to capture the relationship between digital communication, social ties, and subjective social inclusion within a clearly defined institutional setting. Given the exploratory character of the study, the aim was not to produce representative estimates for all Ukrainian students in Slovakia, but to identify key patterns that can clarify how transnational and local ties are experienced in one specific university context.

3.1. Research Design and Aim

This study adopts a quantitative questionnaire-based design. As a pilot study, it is exploratory rather than explanatory: It does not aim to test causal relationships or produce statistically generalisable conclusions about all Ukrainian students in Slovakia. Instead, it identifies empirically grounded patterns in the relationship between digitally mediated transnational ties, local social relations, and subjective social inclusion.

3.2. Sample and Data Collection

The research sample consisted of 85 respondents. A respondent was defined as a student from Ukraine who, at the time of data collection, was enrolled as a full-time international student at the Faculty of Management, Comenius University Bratislava. The core group of respondents consisted of students in the second year of a bachelor's degree programme, although the final sample also included students enrolled at other stages of study. In the Slovak higher education context, bachelor's studies normally last three years. This was considered important because second-year students had already spent a substantial period in the host-country study environment and were therefore more likely to have developed at least initial patterns of adaptation, communication, and social relations in Slovakia.

Data collection was conducted at a single institution, namely the Faculty of Management, Comenius University Bratislava. The questionnaire was administered online using Microsoft Forms and distributed through students' university email accounts. Participation was voluntary and anonymous. Before participation, respondents were informed about the academic purpose of the study, the anonymous nature of participation, and the confidential treatment of the data. Participation had no consequences for students' study obligations or academic evaluation. No personally identifiable information was collected or used in the analysis.

The recruitment combined the initial distribution of the questionnaire within the target student group and subsequent snowball sampling. Respondents who completed the questionnaire were invited to share it further with other eligible students at the same institution who met the study criteria. Data collection took place over a period of 52 days in 2025.

According to the institutional framework under which the study was conducted, formal ethics approval was not required for this type of anonymous questionnaire research.

Because the study focused on a specific institutional environment, the sample was intentionally relatively homogeneous. This homogeneity was not intended to represent the diversity of all Ukrainian students in

Slovakia, but to provide a more coherent basis for examining how students in a shared institutional setting experience digital communication, social ties, and social inclusion. Respondents were exposed to broadly similar academic structures, administrative procedures, and institutional conditions, which makes it possible to interpret differences in social ties and inclusion within a more clearly delimited context. At the same time, this design limits the external validity of the findings. The results should therefore be interpreted as exploratory evidence from one institutional case rather than as representative findings for the broader population of Ukrainian or international students in Slovakia.

3.3. Questionnaire Design

The questionnaire consisted of 37 items divided into seven thematic sections: socio-demographic characteristics, motivations for studying in Slovakia, social ties before and after migration, digital platforms and communication, employment and job search, life plans and social inclusion, and one final open-ended question. The items captured respondents' mobility trajectories, transnational and local relationships, digital communication practices, employment strategies, perceived inclusion, and future orientation. Closed-ended items included categorical, frequency, and five-point Likert-scale questions, complemented by open-ended responses on studying and living in Slovakia.

The questionnaire was created in Microsoft Forms and administered in Slovak. Since the respondents were enrolled in Slovak higher education, they were expected to possess sufficient knowledge of the Slovak language to complete the survey. At the same time, minor language-related misunderstandings cannot be entirely ruled out and should be considered when interpreting the findings, especially in relation to more abstract items concerning belonging and social inclusion.

3.4. Measurement of Social Inclusion

The subjective experience of social inclusion was measured using the Experiences of Social Inclusion Scale (ESIS), a standardised instrument developed by the Finnish Institute for Health and Welfare (n.d.; see also Leemann et al., 2022; Nousiainen & Leemann, 2024).

The ESIS was selected because the study focuses on subjective social inclusion rather than only on formal indicators of integration, such as enrolment, employment, or administrative status. This was important for the present research, as the article examines how students perceive belonging, support, agency, and participation in everyday life in Slovakia.

The scale consists of 10 items rated on a five-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). It captures multiple dimensions of social inclusion, including perceived meaning in life, agency, social belonging, and perceived support.

The ESIS score was calculated according to the recommended procedure (Finnish Institute for Health and Welfare, n.d.): The sum of all item scores (range 10–50) was adjusted by subtracting 10 and multiplying the result by 2.5, resulting in a final score ranging from 0 to 100. Higher values indicate a stronger sense of social inclusion.

3.5. Data Analysis

The analysis was primarily descriptive and aimed at identifying patterns in respondents' answers. Given the pilot nature of the study, the analytical strategy focused on identifying key tendencies and relationships rather than on testing causal hypotheses. This approach was chosen because the sample size and recruitment strategy do not support causal inference or population-level generalisation. Instead, the analysis uses descriptive statistics to examine how different forms of social ties, digital communication, and perceived inclusion are distributed within the sample and how these patterns relate to the main research aim. Descriptive statistics included arithmetic means, minimum and maximum values, and percentage distributions.

For selected thematic areas, composite indicators were constructed by averaging multiple related items. These indicators were used to compare the relative importance of different factors, such as the use of digital platforms or perceived social support.

To assess the reliability and structure of the ESIS scale, additional statistical analyses were conducted. Because the ESIS score serves in this study as the main summary indicator of subjective social inclusion, a brief assessment of its internal consistency and dimensional coherence in this pilot sample was considered methodologically necessary. This psychometric assessment was not intended to shift the study toward explanatory modelling, but to verify whether the scale could be used as a coherent descriptive indicator in this specific empirical context. Internal consistency was evaluated using Cronbach's alpha. Relationships between items were examined using Spearman's rank correlations, reflecting the ordinal nature of the data.

An exploratory factor analysis using principal axis factoring was performed to examine the latent structure of the scale. The suitability of the data for factor analysis was assessed using the Kaiser–Meyer–Olkin (KMO) measure and Bartlett's test of sphericity.

Open-ended responses were reviewed inductively and grouped into recurring themes in order to provide limited qualitative context for the interpretation of the survey findings. These responses were not treated as a separate qualitative dataset, but were used to clarify how respondents described issues such as safety, acceptance, discrimination, everyday well-being, and adaptation in their own words.

3.6. Limitations

This study has several limitations. First, the sample size is relatively small and was drawn from a single faculty at one university, which limits the generalisability of the findings. In addition, the institutional and programme-specific focus of the sample means that the results reflect the experiences of a specific student subgroup rather than the full diversity of Ukrainian students in Slovak higher education.

Second, the cross-sectional design captures respondents' experiences at a single point in time and does not allow for the analysis of changes over time.

Third, the use of a self-reported questionnaire may introduce response bias, particularly in relation to subjective assessments of belonging, support, and future plans. The recruitment procedure may also have introduced selection bias, as students with stronger peer networks or greater willingness to share their

experiences may have been more likely to participate. Finally, although the questionnaire was administered in Slovak, which corresponds to the respondents' study environment, potential language-related misunderstandings cannot be entirely ruled out. This is particularly relevant for more abstract items concerning social inclusion, belonging, and perceived acceptance in the host society.

Despite these limitations, the pilot nature of the study provides valuable initial insights into the role of digital networks and social ties in shaping the social inclusion of Ukrainian students in Slovakia and offers a basis for more extensive future research.

4. Results and Analysis

The results first describe the sample characteristics and then examine respondents' social ties, use of digital platforms, perceived social inclusion, and ESIS results.

4.1. Sample Characteristics

The sample consisted of 85 Ukrainian students enrolled as full-time international students at the Faculty of Management, Comenius University Bratislava. The average age of respondents was 19.96 years, and the sample included both male and female students in relatively balanced proportions (see Table 1).

Table 1. Socio-demographic data of respondents.

Gender/Age	18	19	20	21	22	23	24	Total
Male	1	17	16	3	0	1	1	39 (45.9%)
Female	1	15	15	8	4	2	0	45 (52.9%)
Other	0	0	0	1	0	0	0	1 (1.2%)
Total	2	32	31	12	4	3	1	85 (100%)

Note: Author's own processing based on questionnaire survey data (2025).

The respondents were drawn from a shared institutional environment. Of the 85 respondents, 75 were enrolled in bachelor's degree programmes and 10 in master's degree programmes. This relatively homogeneous institutional profile is important for interpreting the findings, as it situates students within the same university setting, even though they were enrolled at different stages of study.

A key characteristic of the sample is its transnational family structure: Most respondents reported that their close family members remained in Ukraine, while only a minority lived with their family in Slovakia. This is important for the interpretation of the subsequent findings, as it suggests that students' everyday social worlds were structured across national borders from the outset. The continuing presence of family members in Ukraine helps explain why transnational communication and digitally mediated contact occupy such a central place in respondents' everyday lives.

Migration-related motivations also provide important context for the sample. The most highly rated reasons for choosing Slovakia were the security situation, lower costs of education, and linguistic proximity (see Table 2). These findings suggest that studying in Slovakia was shaped not only by educational considerations, but also by the search for stability and safety. This supports the interpretation of respondents' mobility as

partly conflict-shaped: Educational aspirations were present, but they were embedded in a broader context of insecurity, proximity to Ukraine, and the practical need to establish a manageable everyday life in the host country.

Table 2. Motives for migration to Slovakia.

Motives for migration to Slovakia	Mean of Likert scale (1–5)	Ranking
Security situation	4.24	1
Lower cost of education	4.13	2
Linguistic proximity	3.84	3
Employment opportunities during studies	3.55	4
Geographic closeness to Ukraine	3.41	5
Lower living costs	3.14	6
Recommendations of family and friends	3.08	7
Online information about studying in Slovakia	3.00	8

Note: Author's own processing based on questionnaire survey data (2025).

4.2. Structure of Social Ties

The results show that Ukrainian students maintain strong transnational ties with their country of origin. Communication with family members in Ukraine is particularly frequent, with daily contact representing the dominant pattern. Contact with friends in Ukraine is also common, although less frequent than communication with family (see Table 3).

At the same time, respondents reported forming social connections in Slovakia. However, these ties are predominantly oriented toward other Ukrainians rather than Slovaks. Only a small number of respondents indicated that they had found close Slovak friends, while some had not yet formed close friendships in Slovakia at all.

Perceived social support reflects this same pattern. Support from family in Ukraine received the highest ratings, whereas support from family in Slovakia was much lower (see Table 4). Support from friends in Slovakia was evaluated more positively than support from family in Slovakia, suggesting that peer relationships may partly compensate for the absence of close family members in the host country.

Overall, the findings indicate that respondents rely primarily on strong transnational ties, while local support networks in Slovakia remain more limited, more selective, and less embedded in the host society beyond co-national circles. The open-ended responses were broadly consistent with these patterns and most often referred to safety, proximity to Ukraine, and the presence of existing contacts that could facilitate adaptation in Slovakia. The recurring themes in the open-ended responses suggest that transnational and pre-existing contacts were valued not only emotionally, but also pragmatically, as resources that reduced uncertainty and facilitated adaptation after arrival.

This pattern is important for interpreting social inclusion in the sample. Respondents were not socially isolated, but their embeddedness was structured mainly through transnational and co-national relationships. They had access to meaningful support, yet this support was not necessarily located within broader

host-society networks. This helps explain why relatively positive everyday adaptation may coexist with limited local belonging or bridging ties in Slovakia.

Table 3. Frequency of communication with family and friends in Ukraine.

Typology of responses	Family	Friends
Every day	51 (60%)	29 (34.1%)
Several times per week (2–3x)	20 (23.5%)	20 (23.5%)
At least once per week	13 (15.3%)	9 (10.6%)
At least once per month	0 (0%)	12 (14.1%)
Less frequently	1 (1.2%)	15 (17.6%)
Total	85 (100%)	85 (100%)

Note: Author's own processing based on questionnaire survey data (2025).

Most respondents reported having friends in Slovakia, although these were predominantly other Ukrainian students. Five respondents found close friends among Slovaks, eight respondents found good friends of a nationality other than Ukrainian and Slovak, and five respondents have not yet found good friends in Slovakia. In Table 4, students rated different sources of perceived social support on a Likert scale from 1 to 5.

Table 4. Assessment of social support in Slovakia.

Social support	Mean score on a 1 to 5 Likert Scale
From family in Ukraine	4.07
From friends in Slovakia	3.36
From friends in Ukraine	3.22
From family in Slovakia	2.19

Note: Author's own processing based on questionnaire survey data (2025).

One illustrative response captures this connection between safety, proximity, and pre-existing contacts:

> The main reason for my decision was my parents' concern for my safety. I chose Slovakia because it is close to Ukraine and my parents have friends here, having lived here for several years in the past. This made it easier for me to adapt, and Slovakia was the best choice for living and studying. (respondent 69, female, 20 years old)

The structure of respondents' social ties, therefore, points to the importance of both proximity and distance. Family and pre-existing contacts remained important sources of emotional security and practical support, even when they were located outside Slovakia. This makes the role of digital platforms especially relevant, as they provide the means through which many of these transnational and co-national connections were maintained in everyday life.

4.3. Use of Digital Platforms

Digital platforms play a central role in maintaining social ties and managing everyday life. As shown in Table 5, Telegram clearly dominated as the primary communication tool both before and after migration to Slovakia.

WhatsApp increased in importance after arrival, while the use of Viber declined. Instagram also remained an important communication platform in both periods.

The results further show that digital platforms are used primarily to maintain contact with family and friends in Ukraine and to obtain information about studies and everyday life in Slovakia (see Table 6). By contrast, their role in making new friends is less pronounced.

The widespread use of online groups, especially on Telegram, suggests the existence of digitally mediated communities that connect Ukrainian students and facilitate the exchange of practical information. In this sense, digital platforms function not only as communication tools but also as infrastructures of transnational support and orientation.

This pattern points to the ambivalent role of digital networks in students' everyday lives. Digital platforms helped students reduce uncertainty, access information, and maintain emotional contact, but their main functions remained oriented toward transnational and co-national ties rather than new bridging ties with members of the host society. They therefore supported inclusion mainly through everyday coping and practical orientation, while their contribution to deeper local embeddedness remained limited.

Table 5. Use of digital platforms before and after migration.

Digital Platform	Present (living in Slovakia)	Before arriving in Slovakia	Difference
Telegram	4.82	4.71	0.11
Instagram	3.48	3.56	−0.08
TikTok	2.32	2.24	0.08
WhatsApp	2.07	0.99	1.08
Email	1.11	0.76	0.35
Viber	1.52	2.28	−0.76
Messenger	0.86	0.42	0.44

Note: Author's own processing based on questionnaire survey data (2025).

Telegram remained the dominant communication platform both before and after migration (see Table 5), and the majority of respondents also reported participating in online groups, particularly on Telegram. This reinforces the interpretation that Telegram functions not only as an interpersonal communication tool but also as a shared information space for Ukrainian students in Slovakia.

Students primarily use digital platforms to maintain contact with family and friends in Ukraine and to obtain information about studying and living in Slovakia. By contrast, using digital platforms to make new friends or find employment is less important (see Table 6).

Employment-related uses of digital platforms were present, but clearly secondary to communication and information-seeking. In this respect, digital media appear to function less as tools for building new local networks and more as mechanisms that sustain existing transnational and co-national ties.

Table 6. Use of digital platforms and their functions.

Use of digital platforms	Mean score on a 1 to 5 Likert Scale	Ranking
Maintain contact with family in Ukraine	4.53	1.
Maintain contacts in general	4.46	2.
Obtain information about studies	4.25	3.
Maintain contact with friends in Ukraine	4.18	4.
Obtain information about life in Slovakia	3.92	5.
Finding a job	3.55	6.
Making new friends	3.36	7.

Note: Author's own processing based on questionnaire survey data (2025).

This pattern is directly relevant to understanding respondents' social inclusion. Digital platforms helped students remain connected, informed, and oriented in everyday life, but they did not substantially expand local social networks beyond familiar or co-national circles.

4.4. Social Inclusion

The overall level of perceived social inclusion among respondents can be described as moderate to relatively strong. On average, students reported a moderately positive sense of social inclusion in Slovak society, although this sense of inclusion was not equally reflected across all dimensions of their everyday lives.

This result should be interpreted carefully. A moderate to relatively strong sense of inclusion does not necessarily mean that respondents were deeply embedded in Slovak society. Rather, it suggests that many students were able to manage everyday life, access support, and feel a certain degree of acceptance in the host environment. At the same time, the more limited formation of local bridging ties indicates that subjective inclusion may coexist with relatively narrow social networks and uncertain long-term belonging.

At the same time, many respondents remained uncertain about their long-term future in Slovakia. This uncertainty is important because it suggests that social inclusion is not necessarily experienced as a stable long-term orientation toward the host society. Instead, it appears to be shaped more strongly by students' ability to manage everyday life, maintain support networks, and navigate study and practical conditions in the present.

Among the factors influencing life in Slovakia, respondents rated housing, social connections, and language as the most important (see Table 7). These findings indicate that inclusion is shaped not only by formal participation in education, but also by everyday living conditions and the quality of interpersonal relations. This suggests that social inclusion is experienced unevenly across different dimensions of students' lives.

Open-ended responses clustered mainly around themes of safety, acceptance by the host society, discrimination, and opportunities for leisure. References to safety were generally framed positively, with respondents emphasising the importance of living and studying in a more secure environment than the one they had left. Comments on acceptance and discrimination were more ambivalent: Several respondents described Slovakia as a generally manageable and welcoming environment, while also noting occasional

experiences of being judged through the lens of nationality or origin. References to leisure and everyday life pointed to the importance of having opportunities for normal social routines outside the university setting. Together, these responses indicate that social inclusion is experienced in a broader sense, extending beyond academic adaptation to encompass everyday well-being, recognition, and the relative absence of exclusion in daily life.

Table 7. Factors influencing life in Slovakia.

Factors influencing life in Slovakia	Mean score on a 1 to 5 Likert Scale	Ranking
Housing	4.08	1.
Social connections	3.92	2.
Language	3.85	3.
Administration and bureaucracy	3.62	4.
Seeking employment	3.58	5.

Note: Author's own processing based on questionnaire survey data (2025).

One illustrative quotation is presented below:

> I evaluate studying in Slovakia positively and it has personally brought me great benefits. I especially appreciate that, in most cases, effort, results, and personal approach were valued more than nationality or origin. At the same time, however, there are still individuals who judge a person first by their background and only afterwards by their abilities and qualities. (respondent 74, female, 23 years)

Overall, these findings indicate that respondents' social inclusion is experienced more strongly through everyday coping, functional adaptation, and perceived acceptance than through stable local belonging or long-term settlement. This reinforces the broader pattern identified in the previous sections: Students are not socially disconnected, but their inclusion is supported mainly by transnational, co-national, and practical forms of support rather than by deeper embeddedness in host-society networks.

4.5. ESIS Results

The ESIS results provide a more focused view of respondents' subjective social inclusion and complement the preceding analysis of social ties, digital communication, and everyday adaptation. As the ESIS score serves here as the main summary indicator of subjective social inclusion, this section reports both its substantive results and its reliability in this pilot sample.

The ESIS results support the overall pattern of moderate to relatively strong social inclusion. Respondents reported the highest agreement with agency-related items, while lower scores appeared for belonging and being needed by others. This suggests that many students felt capable of managing everyday life in Slovakia, but that functional adaptation did not necessarily translate into deeper relational embeddedness. The scale showed high internal consistency (Cronbach's alpha = 0.883), and exploratory factor analysis supported the use of a predominantly one-dimensional composite score. Taken together, these findings suggest that the ESIS provided a reliable overall indicator of subjective social inclusion in this pilot sample.

Overall, the ESIS results are consistent with the broader analysis presented above. They show that respondents generally reported a positive or moderately positive sense of inclusion, but that this inclusion was stronger in relation to agency and everyday functioning than in relation to belonging and being needed by others. This pattern supports the interpretation that social inclusion in the sample is present, but unevenly developed across different dimensions of students' lives.

5. Discussion

This study examined how digital networks and social ties shape the social inclusion of Ukrainian students in Slovakia. The findings point to a specific configuration of transnational, co-national, and local relationships in which digital technologies play a central mediating role. Digital platforms appeared particularly important for sustaining transnational continuity, maintaining co-national support, and supporting everyday adaptation, while their role in fostering new bridging ties with members of the host society appeared more limited.

This configuration is central to the article's argument. Social inclusion in this context cannot be understood simply as either successful or unsuccessful integration. Rather, it appears as a partial and uneven process in which students may develop functional adaptation, access to support, and a sense of everyday security while still having limited bridging ties and weaker local embeddedness. Digital networks are therefore not external to the inclusion process; they actively shape the form that inclusion takes.

First, the results indicate that student mobility in this context was strongly shaped by external conditions, especially the security situation in the country of origin. The high importance assigned to safety, lower education costs, and linguistic proximity suggests that migration to Slovakia combined educational aspirations with protective, stabilising, and practical motivations. This supports recent findings arguing that ISM should not be treated as a uniform category, but as a differentiated field shaped by unequal geopolitical, social, and institutional conditions.

The study, therefore, adds to the research on ISM by highlighting a case in which educational mobility is closely entangled with war-related insecurity. Ukrainian students in Slovakia cannot be considered only as conventional international students pursuing educational or career opportunities abroad, nor only as displaced young people seeking safety. Their mobility combines both dimensions, and this hybrid position has implications for social inclusion. Students' orientations toward the host society are shaped simultaneously by academic participation, transnational family ties, uncertainty about return or onward mobility, and the need for everyday stability.

Second, the findings suggest that students' social ties remain strongly transnational. Frequent communication with family members in Ukraine and the high perceived level of support derived from these ties indicate the continuing importance of strong ties across borders. At the same time, local ties in Slovakia appear more limited and selective, with social relations often concentrated within co-national circles rather than extending more broadly into the host society. This pattern can be interpreted through Granovetter's (1973) distinction between strong and weak ties: Strong ties provide emotional security and continuity, while the development of wider weak ties in the host society appears more constrained.

This distinction also helps clarify why the presence of social support should not be interpreted as equivalent to full local inclusion. Respondents clearly had access to meaningful relationships, but these relationships

were often located either across borders or within familiar linguistic and national communities. Such ties can provide stability and reduce the emotional costs of mobility, but they do not necessarily create access to wider host-society networks. The key issue is therefore not the absence of social ties, but their uneven distribution across transnational, co-national, and host-society contexts.

Third, the findings suggest that digital platforms function as key infrastructures through which transnational and co-national ties are maintained. Consistent with previous research (Beech, 2015; Thinyane et al., 2023), digital communication enables students to remain continuously connected to their country of origin, while also navigating everyday life in the host country. However, the findings also point to a more ambivalent role of digital networks. While they reduce isolation and support practical adaptation, they appear less effective in generating new local relationships with members of the host society.

This ambivalence shifts the interpretation of digital media from access and frequency of use to social effect. The key question is not only whether students use digital platforms, but what kinds of ties these platforms sustain or create. In this study, digital networks mainly supported continuity with existing relationships and practical orientation within Ukrainian and co-national information spaces. Their role in expanding students' networks beyond these circles was more limited. The main contribution of the study is therefore to show that, in this conflict-shaped mobility context, digital platforms primarily supported bonding rather than bridging social capital. They strengthened emotional security and practical adaptation, but did not substantially widen students' local social networks. This interpretation is consistent with research showing that digital communication can strengthen emotional connectedness and everyday presence across borders without necessarily improving offline local integration (Madianou, 2019; Mazzucato & Haagsman, 2022; Wilding et al., 2020).

Fourth, the findings indicate that social inclusion is experienced as a multidimensional and uneven process. Although most respondents reported moderate to relatively strong levels of subjective inclusion, the ESIS results suggest that this inclusion is stronger in relation to agency and everyday functioning than in relation to belonging and being needed by others. Students' uncertainty regarding their future in Slovakia further indicates that subjective inclusion should not be equated too quickly with deeper social embeddedness or long-term orientation toward the host society.

The findings also highlight the importance of everyday conditions such as housing, language, and social relationships in shaping experiences of inclusion. These factors were among the most important issues influencing respondents' lives in Slovakia and point to the practical dimension of social inclusion. Inclusion is therefore not determined solely by formal institutional access to higher education, but also by the ability to secure stable living conditions, communicate effectively, and build supportive relationships in everyday life.

Overall, the study shows that digital networks operate as a transnational social infrastructure that supports continuity, emotional security, and practical orientation. However, this infrastructure was more effective in sustaining existing transnational and co-national ties than in generating wider bridging ties in the host society. The study, therefore, specifies how digital media matter in a conflict-shaped mobility context.

These findings also have implications for higher education institutions. Since digital and co-national networks already provide practical and emotional support, university-based inclusion measures should focus on creating

opportunities for bridging interaction between Ukrainian and Slovak students, for example, through mixed study groups, peer mentoring, language support, and structured social activities.

6. Conclusion

This article has shown that digital networks and social ties play a central role in the shaping of social inclusion of Ukrainian students in Slovakia. Digitally mediated transnational ties are central to students' everyday lives: They support communication with family and friends in Ukraine, provide access to practical information, and help reduce feelings of isolation after migration.

At the same time, the findings point to a clear limitation of these digital networks. While they facilitate adaptation and everyday functioning, they do not automatically lead to the formation of stronger local ties. In this sample, students' social networks were concentrated primarily within transnational and co-national circles, while connections with the host society appeared to develop more slowly and selectively.

The central conclusion is therefore not that Ukrainian students are excluded from Slovak society, but that their inclusion takes a specific and uneven form. Respondents were able to study, communicate, access support, and manage everyday life in Slovakia, yet this inclusion was often sustained by transnational and co-national networks rather than by deeper embeddedness in Slovak social networks. Social inclusion was thus more closely linked to everyday functioning and coping than to stable local belonging or long-term settlement intentions.

From a practical perspective, the findings suggest that support for international students should go beyond academic and administrative integration and include active fostering of mixed social networks between domestic and international students. Universities can play an important role in this process by supporting structured opportunities for interaction, language development, peer mentoring, and access to stable everyday conditions such as housing and student support services.

Given the pilot nature of the study, the relatively small sample, and its focus on one institutional setting, the findings cannot be generalised to all international students in Slovakia. Even so, the study provides important initial insights into the relationship between digital networks, transnational ties, and social inclusion in a conflict-shaped mobility context. Future research should examine these processes using larger and more diverse samples across several universities and regions. Longitudinal research would also be particularly valuable, as it could show whether students' reliance on transnational and co-national ties decreases, remains stable, or transforms into stronger local bridging ties over time. Comparative research with other groups of international or displaced students could further clarify the patterns that are specific to Ukrainian students in Slovakia and the patterns that reflect broader dynamics of conflict-shaped student mobility.

The article contributes to debates on ISM, digital migration, and social inclusion by showing that, under conflict-shaped conditions, inclusion depends not only on formal participation in higher education, but also on how digitally sustained transnational ties interact with uneven local relationship-building. Digital connectivity should therefore be understood not simply as a tool of communication, but as a condition of adaptation whose strengths may also coincide with limitations in generating deeper social belonging.

Funding

This research was funded by the EU NextGenerationEU through the Recovery and Resilience Plan for Slovakia under the Smart Transformation and Innovation Consortium Slovakia (STICS) project no. 09I0203V0100011, by VEGA project no. 1/0551/24 (Basic Research Into New Paradigms of Social Marketing in the Context of Post-Pandemic Restructuring of Societal Values), and by the Slovak Research and Development Agency (SRDA), grant no. APVV-24-0607 (Development of Multi-dimensional Models for Assessing Corporate AI Readiness and Adoption Related to the Digital Transformation Strategy of Slovakia 2030).

Conflict of Interests

The authors declare no conflict of interests.

Data Availability

The data associated with this article are available upon request from the authors.

LLMs Disclosure

The authors used a large language model (ChatGPT by OpenAI) for language editing, stylistic refinement, and improvement of structural clarity in the manuscript. The tool was used to improve clarity, grammar, coherence, and overall readability of the text. No data analysis, statistical processing, or interpretation of results was conducted using the LLM. The authors reviewed all suggested edits and take full responsibility for the content of the manuscript.

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