■ VOJVODINA HUNGARIANS IN THE DIGITAL AGE: THE OUTCOMES OF MULTILINGUALISM AND DIGITAL NATIVENESS AND THEIR EFFECT ON LINGUISTIC PRACTICES

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U izrazito višejezičnom kontekstu Vojvodine, ova studija ispituje odnos između digitalne nativnosti i transjezičkih praksi, kao i varijacije u jezičkim izborima i stavovima mladih vojvođanskih Mađara u zavisnosti od stepena digitalne nativnosti. Istraživanje je zasnovano na kvantitativnom pristupu, pri čemu je onlajn upitnik distribuiran putem društvenih mreža (*Facebook, Reddit* i *Instagram*). Analiza obuhvata stratifikovani slučajni uzorak od 600 vojvođanskih Mađara, a korišćena je adaptirana verzija testa digitalne nativnosti koji su razvile Helsper i Ejnon (Helsper/Eynon 2010), sa ciljem da se prikupe podaci o digitalnim navikama, medijskoj izloženosti i jezičkim praksama ispitanika. Rezultati pokazuju da različiti nivoi izloženosti tehnologiji, jezicima i medijima značajno utiču na jezičke izbore i stavove prema transjezičkim praksama. Jedan od ključnih nalaza ukazuje na jasan starosni obrazac: samopouzdanje u pogledu digitalnih i internet veština postepeno opada sa godinama. Dok stariji ispitanici u većoj meri dolaze u kontakt sa mađarskim i srpskim jezikom, mlađe generacije pokazuju znatno viši nivo samopouzdanja u digitalnim kompetencijama, kao i intenzivniju izloženost engleskom jeziku u onlajn medijskom prostoru. Kada je reč o kreiranju i konzumiranju sadržaja, uočava se izražen i postepen pad upotrebe srpskog jezika sa porastom digitalnog samopouzdanja, dok se, nasuprot tome, upotreba i deljenje sadržaja na engleskom jeziku povećavaju sa višim nivoima digitalne nativnosti. Razlike u stavovima prema transjezičkim praksama dodatno ukazuju na to da digitalni izvorni govornici pokazuju veću otvorenost i fleksibilnost u odnosu na digitalne imigrante. Ova otvorenost može se povezati sa dinamičnom i višejezičnom prirodom digitalnih platformi koje digitalni izvorni govornici redovno koriste, a na kojima su fluidne jezičke prakse široko rasprostranjene i društveno prihvaćene. Studija ističe ključnu ulogu digitalnih kompetencija u oblikovanju jezičkog repertoara pripadnika manjinskih zajednica i ukazuje na to da prihvatanje transjezičkih praksi u digitalnim prostorima može pozitivno doprineti vidljivosti, prilagodljivosti i dugoročnom očuvanju vojvođanskog mađarskog jezika.

Ključne reči: digitalni izvorni govornici, vojvođanski Mađari, transjezičke prakse, jezički izbor, višejezičnost.

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1. INTRODUCTION

Over the past few years, an increasing number of studies on multilingualism have furthered our understanding of how multilingual speakers navigate and simultaneously negotiate their identities using multiple languages during communication (Spilioti 2019; Darvin 2022; Almashour 2024). The concepts and study of multilingualism and translanguaging arose from the dissatisfaction with terms such as code-switching (Almashour 2024) and speech communities (Jacquemet 2019), which are now considered limiting and outdated, due to their rigid view of languages (Jacquemet 2019; Darvin 2022; Almashour 2024). From this perspective, the terms multilingualism and translanguaging capture this shift away from traditional and separatist views of languages, while also signifying a move towards a much more flexible and open-minded approach and practice. Due to globalization and the widening availability of mobile networks, digital devices, and internet connection, the internet is rapidly becoming a space where multiple languages intersect in various ways. Through these means, it has become much easier to practice translanguaging (either consciously or unconsciously), i.e., a communicative practice that involves a speaker's skilful use of their entire linguistic repertoire for more effective and creative communication (Tankosić/Litzenberg 2021; Darvin 2022; Almashour 2024), but it has also made the researcher's job easier to do research into it. Online platforms are therefore viewed as ideal grounds both for conducting research and practicing translanguaging (Spilioti 2019; Jacquemet 2019). However, studies have found that due to their different goals, values, and interests, there are notable differences in people's use of the internet and communication on the internet. Taking this into account, two crucial notions that need to be considered at this point relate to internet users, which Prensky (2001) introduced in his studies as Digital Natives and Digital Immigrants. As opposed to Digital Immigrants who encountered digital technology and the internet at later points in their lives, Digital Natives are defined as individuals who grew up using and being surrounded by technology. Therefore, Digital Natives are described to be very digitally oriented in various areas of life, including communication, studying, looking up information, and running errands digitally, which all require the frequent use of language(s) online, while Digital Immigrants are described as individuals who tend to prefer more traditional, face-to-face interactions and errands.

Due to these differences, research has taken an interest in looking into various potential connections between Digital Natives and teaching, learning, digital communication, digital literacy, language practices, and even upbringing (cf. Pasfield-Neofitou 2013; Milutinović 2022; Chang/Chang 2023; Reid *et al*. 2023), often with the aim to compare these with the experiences of Digital Immigrants. Compared to initial beliefs on the Digital Native and Digital Immigrant divide, research over the years has shown how crucial it is to not exclude any generation from the possibility of being Digital Natives, as outcomes can depend on a variety of other factors, such as a person's experience, not just one's birthyear (Tapscott 1998; Helsper 2021; Kincl/Štrach 2021). Furthermore, research has also taken a turn towards connecting Digital Natives and minority and endangered languages. Very often, the aim of these studies is to reveal whether Digital Nativeness could strengthen digital communication among minority individuals and heighten the visibility and awareness of minority and endangered languages online (Galácz/Ságvári

2013; Jokinen *et al.* 2017), which could also potentially aid the documenting process of these less visible languages digitally. For these reasons, it is very important to promote and encourage translanguaging among minorities, particularly in digital spaces, as this could give these languages a greater chance at survival by keeping them in use (Kornai 2013). Several studies have explored translanguaging among minority groups in Western Europe (Cenoz/Gorter 2017; Prošić-Santovac/Radović 2018; Ćorković 2019), and while many studies have also looked into Digital Nativeness (Helsper/Eynon 2010; Hargittai 2010; Correa 2016; Helsper 2021; Reid *et al.* 2023) and translanguaging (Tankosić/ Litzenberg 2021; Darvin 2022; Dryden/Izadi 2023; Almashour 2024), the two are usually done separately. Because of this, research that specifically looks into the intersection of these concepts is still scarce, especially in a Vojvodina Hungarian context, where various languages intersect.

In light of the above, the present study seeks to gain insight into the extent to which Vojvodina Hungarians exhibit characteristics of Digital Natives, while also focusing on how language choices and attitudes towards translanguaging may vary according to the extent of one's Digital Nativeness.

2. LITERATURE REVIEW

2.1. DIGITAL NATIVENESS

Initially, Digital Natives were perceived to be primarily determined by birthyear and tied to specific generations who grew up with technology and have grown so close to it that they cannot imagine a world without it. Digital Natives were differentiated from Digital Immigrants, who were usually described as the parents of the generations of Digital Natives. Digital Immigrants were understood to not rely primarily on digital devices for communication, work, or advice (Prensky 2001). The task of looking something up on Google might have been integrated into the daily routine of a Digital Native, while unfamiliar and complicated to a Digital Immigrant. As Prensky (2001: 2) put it, "Digital Immigrants learn – like all immigrants, some better than others – to adapt to their environment, they always retain, to some degree, their 'accent,' that is, their foot in the past", which can explain why they might find adapting to novelties difficult on many occasions.

In recent years more and more studies have focused on Digital Natives but adopting alternate approaches to defining and studying them (Helsper/Eynon 2010; Teo 2013), creating and perfecting tools to assess Digital Nativeness, but with slightly different perspectives. While Teo's (2013) DNAS (Digital Natives Assessment Scale) employs a 7-point Likert-scale questionnaire on a total of 21 situations (the established categories being as follows: growing up with technology, comfortable with multitasking, reliant on graphics for communication, and thriving on instant gratifications and rewards), Helsper and Eynon's (2010) assessment offers a more in-depth and critical perspective. Based on findings, Helsper and Eynon (2010) argue that age is to be considered in combination with the individual's overall experience (i.e. years of contact) with the internet and technology and breadth of use (i.e. how integrated the internet is in one's life, and what activities are done online), while also keeping in mind the potential influence of socioeconomic factors (Tapscott 1998; Helsper 2021; Kincl/Štrach 2021). The results of Helsper and Eynon's

2010 study have further disproved the previously imagined (Prensky 2001; Underwood 2007) unbridgeable gap between Digital Natives and Immigrants, as they revealed that being a Digital Native does not rely solely on one's birthyear (i.e. generational affiliation). It also needs to be highlighted that growing up with technology does not automatically equate to digital competence, and, therefore, Digital Nativeness (Hargittai 2010; Correa 2016; Reid *et al.* 2023), as there might be various underlying factors (socioeconomic status, gender, education, and, importantly, access to digital resources) that could lead to different outcomes (Helsper 2021). Moreover, digital inequalities in the life of all generations, including younger people as well, could also heavily influence their digital skills, digital engagement, as well as overall access to digital media, as was found by Helsper (2021). The original definition of Digital Natives (Prensky 2001) has often been criticized for homogenizing and generalizing a set of behaviours and often strictly tying these to younger generations (born in 1980 and after), overlooking some highly decisive factors such as the level of technological knowledge and experience (Hargittai 2010; Helsper/Eynon 2010; Lee 2014), which anyone might possess, regardless of their birthyear.

Over the decades, Digital Nativeness has become accepted as a rather flexible concept, leaving behind the sole original criterion of strict generational boundaries (Hargittai 2010; Correa 2016; Reid *et al.* 2023), and instead, shifting the focus onto connecting it with an array of socioeconomic and individual (often personal) factors as well as experience with and exposure to technology and the internet (Tapscott 1998; Helsper/Eynon 2010). Although the findings of several studies indicate a higher proficiency among teenagers, university students, and young adults when it comes to digital skills (Helsper/Eynon 2010; Akçayır *et al.* 2016), it also needs to be noted that this is not a universal phenomenon, as digital inequalities exist even among these groups (Helsper 2021). At the same time, others have found that there are many other factors (and their combinations) that also play a vital role in one's Digital Nativeness, mostly individual ones such as personal interests and attitude towards technology and knowledge (Hargittai 2010; Jarrahi/Eshraghi 2019), as well as the level of education and even gender (Helsper/Eynon 2010; Correa 2016). Jarrahi and Eshraghi (2019) also found that Digital Natives and Digital Immigrants approach personal and professional matters quite differently, as Digital Natives easily turn to social networks in both cases, while Digital Immigrants prefer instead more traditional and face-to-face communication and tend to view social networks as professional tools.

2.2. MULTILINGUALISM AND TRANSLANGUAGING ON THE INTERNET

Translanguaging has often been described as a linguistic practice that abandons traditional language boundaries, and instead, brings light to the multiple ways in which multilingual speakers are able to draw on their entire linguistic repertoires, for a variety of reasons, including, often, for the sake of more effective, individual, and also creative communication (Tankosić/Litzenberg 2021; Darvin 2022; Almashour 2024).

One study which captures how translanguaging works and positively affects the actors of a multilingual environment is that of Tankosić and Litzenberg (2021), a linguistic landscape study, in Bosnia and Herzegovina's capital, Sarajevo. This particular study found that, generally, speakers tended to use and come into contact with the

three mutually intelligible languages of Bosnian, Serbian, and Croatian interchangeably. Tankosić and Litzenberg (2021: 23) argue that due to the flexibility of translanguaging, the focus in such a context shifts "from languages as ideological constructs to the negotiating practices of a core in which the three native varieties [Bosnian, Croatian, Serbian] mix and mesh, blurring their differences while simultaneously displaying the true, diverse nature of the region." Their findings not only show that translanguaging is a daily and mundane phenomenon in the region but also help recognize how these practices promote linguistic equality and signify a move towards inclusion.

Moreover, the promotion of translingual practices has been found beneficial for reasons relating to language maintenance as well as language acquisition, especially when it comes to minority and/or multilingual settings (Cenoz/Gorter 2017; Prošić-Santovac/Radović 2018; Ćorković 2019), since translanguaging provides a much more flexible way of communication and makes it easier for people to communicate more effectively. For similar reasons, when it comes to minority languages, it is especially crucial to provide the opportunity for translanguaging, however, as Cenoz and Gorter (2017: 910) argue, it can only be sustainable and successful if the situations where translanguaging takes place and is encouraged are "rooted in the reality of minority languages and [allow] for breathing spaces that create the need to use these languages."

Lately, more and more scholars have been interested in conducting research in the Balkans (Ćorković 2019; Morozova/Rusakov 2021; Tankosić/Litzenberg 2021; Mandić/Rácz 2023), and minority settings such as Vojvodina have also become areas of research often with the aim to bring light to the multilingual situation and the power dynamics among the languages present in the area (Mandić/Rácz 2023; Rácz 2024). Rácz's (2024) study, which focuses on the visual and linguistic aspects of Vojvodina Hungarian (VH) Facebook pages (interactions with the posts and images) revealed that many Vojvodina Hungarians shape and showcase their VH identities online through the use of Vojvodina Hungarian memes that they can relate to, which very frequently include Serbian loanwords and often translanguaging, alongside humour and other recurring themes. Not only do they strengthen their VH identity, but they also simultaneously differentiate themselves from Hungarian communities in Hungary (Rácz 2024), while also reflecting their multilingual and ethnically mixed environments in real life that also extend into the online space. Lastly, in an earlier study, Mandić and Rácz (2023) looked into the optional school subject "Language of Social Environment" (LSE), which was once part of the Yugoslav education system in Vojvodina (1960s through the 1980s) originally for students whose L1 was Serbo-Croatian. By 2012, the reintroduction of the once taught school subject (now as *Hungarian as LSE*) was requested by the City Council of Subotica on multiple occasions but to no avail. During their fieldwork in Debeljača/Torontálvásárhely, Mandić and Rácz (2023) found that the former teachers and students (as well as their families) of the once taught school subject found it very beneficial as it could not only strengthen the children's multilingual competence, but, due to the subject being grounded in the values of societal multilingualism, it also represented and supported multilingualism. These values are especially important to be highlighted when it comes to minority languages and their position within a society, since this "language-as-resource" approach aims to foster tolerance (Mandić/Rácz 2023), which is something all minorities need to exist.

3. METHODOLOGY

3.1. DATA COLLECTION

The present study examined a stratified random sample consisting of 600 Vojvodina Hungarians from a diverse range of age groups, occupational backgrounds, and genders. The 600 participants were selected from the original total of 693 participants due to some questionnaire answers being incomplete. An online Google Forms questionnaire was created and shared on various social media platforms (including Facebook and Messenger, Instagram, and Reddit) in late 2024 and early 2025, which included questions on participants' general backgrounds, experience with technology, linguistic and digital habits, and translanguaging. The questionnaire was comprised of different sections, each focusing on a topic (from the list above). The participants were asked to share their experience with technology, including how frequently and in what ways they used digital devices and virtual platforms to see to what extent participants are involved in these digital activities. The 12 online activities established by Helsper and Eynon (2010) are the following: training/studying, e-government, entertainment, finance/e-banking, fact-checking/looking up information, current affairs/interests, travel, shopping online, social networking, diary functions, person-to-person networking, and civic participation (i.e. online forums, more specifically). Regardless of Helsper and Eynon's 2010 test being originally created over 10 years ago, it can still elicit in-depth data on Digital Nativeness when adapted to current trends in technology and media. The section that particularly focused on the participants' digital habits was a contemporary adaptation of Helsper and Eynon's (2010) Digital Nativeness test (see Appendix for exact questions used), and aimed to provide a clear picture of the frequency and type of digital activity participants usually partook in, how long they have been doing things on the internet, and whether they usually multitasked (e.g. listened to music while messaging friends as well as studying or doing household chores). These questions were simple and aimed to gather data on participants' recent digital activities, the number of regularly used digital devices they owned, and self-report on their confidence regarding digital skills, but they were also asked about their preferences when looking up information and communicating.

Previous studies (Prensky 2001; Helsper/Eynon 2010; Teo 2013; Akçayır *et al*. 2016) have established that there is a combination of factors and activities that are characteristic of Digital Natives. Apart from the birthyear of the individual (1980 or after), Digital Natives process and access information differently, often preferring digital, quick, and visual information as opposed to non-virtual, written, and longer pieces of information. They also engage in multitasking regularly, and "thrive on instant gratification and rewards" (Akçayır *et al*. 2016). While digital skills and new technologies can be learnt and acquired by anyone, even by Digital Immigrants born before a highly digital world, Prensky (2001) argues that the level of knowledge and skills they may acquire could never close the ever-widening gap between Digital Natives and Digital Immigrants due to their social, technological, historical, and cultural backgrounds (Prensky 2001). Therefore, based on these, Helsper and Eynon's (2010) three factors are foregrounded in the present study as the most decisive: that of age (1980 being the dividing birthyear), experience, and breadth of use. The factor of experience is to be portrayed in the number of years and frequency of internet and device use, while the breadth of use is about how integrated

the internet and digital activities are in the lives of participants, including multitasking. Therefore, to give an account of their breadth of use, the study takes into consideration whether participants tend to multitask and how many of Helsper and Eynon's (2010) 12 established activities they engage in in general.

Additionally, participants were asked to answer a range of questions related to their language choices in various contexts, particularly in virtual spaces, and to also provide some general information about their linguistic backgrounds and environment. This approach aimed to capture a broad spectrum of experiences and perspectives, ensuring a rich understanding of their digital and linguistic behaviours.

3.2. PARTICIPANTS

The 600 participants were of various backgrounds and educational history and were selected from a total of 693 participants to ensure equal distribution among age groups as well as genders. In the end, the selected questionnaires were those of 300 male and 300 female individuals. In each established age group, there were 100 participants, 50 males and 50 females. Information on both the place of birth and the participants' current place of residence was collected, which showed that 44% (264 participants) were born in the geographical region of Bačka, and 36% (215 participants) were living in Bačka at the moment of filling in the questionnaire. Regarding the geographical region of Banat, 54% (323 participants) were born there, while 53% (317 participants) were still residing there. A total of 2 participants (0.3%) were born in the geographical region of Srem and 11 participants (2%) were born abroad (mainly in Hungary), while 11.5% (69 participants) currently live abroad. The majority (468 participants, 78%) of the Vojvodina Hungarians see themselves as Hungarian in terms of nationality, some as Serbian and Hungarian (126 participants, 21%), while some selected Yugoslav, Serbian, and even Swiss (1%). Regarding the participants' highest level of education at the time of filling in the questionnaire, of the 600 participants, 42% (249 participants) have a high school diploma, 21% (124 participants) have a bachelor's degree, while 21% (124 participants) have completed elementary school. Another 14% (85 participants) hold a master's degree or higher, and 3% (18 participants) have an associate degree. Additionally, the answers revealed the participants' vocation and their current job status, which had the following results: of the 600 Vojvodina Hungarians, 52% (310 individuals) work a daytime job and regularly go to work, 12% (69 participants) of the participants work from home, 23% (136 participants) are still in school (this category includes the 100 participants from the first age group, i.e. those under the age of 18), 9% (51 participants) are retired, and 6% (34 participants) are unemployed and/or looking for a job. In more detail, those who are working (350 participants) tend to work mainly in business, finances, and sales (34%, 206 participants), and the public sector and services (14%, 83 participants). Another 5% (33 participants) work in health and social care, while the rest are in hospitality and tourism (2%, 12 participants) as well as agriculture (3%, 16 participants).

3.3. DATA ANALYSIS AND RESEARCH QUESTIONS

In order to analyse the collected data, the answers that could be numerically expressed were analysed for correlation analyses, pivot tables, and general summaries. Based on the study of Helsper and Eynon (2010), the significance of age, experience

(years and nature of digital activities), and breadth of use (i.e. the 12 activities listed in 3.1. above) was analysed when it comes to defining and identifying Digital Natives. The breadth of use was determined by analysing the different ways people use the internet (i.e. the 12 activities listed in 3.1. above), where a scale of 1 to 12 was created in order to measure how many of these activities each participant partakes in regularly. It is also necessary to clarify that while the questionnaire was shared on social media platforms, ensuring that all participants who filled it in were users of the internet, this does not mean that they are automatically Digital Natives. The present study aims to answer the following research questions:

> 1. To what extent do various groups of Vojvodina Hungarians exhibit characteristics of Digital Natives?
> 2. In what ways does being a Digital Native impact language choices and attitudes towards translanguaging among Vojvodina Hungarians?

4. DISCUSSION AND RESULTS

4.1. DIGITAL NATIVENESS AND CONTENT CREATION AMONG VOJVODINA HUNGARIANS

To address the first research question, it is necessary to reveal the extent to which the current population of Vojvodina Hungarians exhibit characteristics of Digital Natives. As established previously, when looking at the characteristics of Digital Natives, it is not enough to solely focus on age, but to consider age in combination with other factors as well (Helsper/Eynon 2010; Helsper 2021) to gain a better understanding of the wider context. For this reason, age, gender, employment status, as well as educational background were taken into consideration and checked for correlation and tendencies with a few variables, such as experience with the internet (years of contact, devices used, and general habits), breadth of use (Helsper/Eynon 2010), multitasking tendencies, and also self-reported confidence in internet and digital skills. The second section of the questionnaire specifically focused on raising questions and topics related to digital devices, information seeking tendencies, general questions in connection with the internet (including social media knowledge and use), and the participants' overall digital habits and preferences. Table 1 shows each of the 6 age groups and their averages in a variety of situations, including whether they multitask or not (range: 0 – does not engage in multitasking, 1 – does engage in multitasking), how frequently they use the internet (range: 0 through 4; 0 indicates no use, while 4 indicates daily use), how many digital devices they own, and lastly, the number of places with internet access (the ranges in this and the previous case are not limited). At first glance, the results show that, on average, those in the 18–25 and 26–35 age groups own the most digital devices (the mean average being 2.42 and 2.27, respectively), and also have the most internet access at all times (see Table 1), as opposed to older generations, who score lowest for both among the 6 age groups. Overall, the one aspect that did not seem to play a major role in any case was gender, as not much difference could be observed in internet and device access, nor in terms of information seeking preferences.

Averages of → Age groups ↓	Multitasking (range: 0 – no; 1 –yes)	Frequency of internet use (range: 0 through 4; 0 – never, 4 – daily)	Number of electronic devices	Number of places with internet access
under 18	0.92	3.98	2.04	2.47
18–25	0.90	4.00	2.42	4.91
26–35	0.77	4.00	2.27	3.34
36–45	0.70	4.00	2.02	2.21
46–55	0.53	3.98	1.97	2.28
over 55	0.43	3.98	1.82	1.75
Grand Total	0.70	3.99	2.09	2.82

Table 1. Averages regarding digital devices, frequency of internet use, multitasking, and number of places with internet access based on age groups

When it comes to accessing and looking up information, Table 2 shows rather great differences. Asking AI for information seems to be much more widespread among students as opposed to those who are employed, working from home, or looking for a job, while those who are retired prefer more traditional methods, but they are also quite digital in this sense as they also turn to Google first when seeking information. Additionally, it is important to point out that in Table 2, the majority (67%) of those who only completed elementary school are students currently enrolled in high school, which explains why their first source of information is also AI, followed by Google.

First source of information (range: 0 through 3; 0 – go over to a neighbour to ask in person, 1 – call a friend to ask, 2 – type it into a browser (Google), 3 – ask AI (ChatGPT, Samsung Assistant, or Alexa)		
Employment status	Student	2.64
	Employed	2.08
	Unemployed / looking for a job	2.08
	Work from home	2.01
	Retired	1.94
	Grand Total	**2.19**
Highest level of education	Elementary school	2.54
	Secondary school (gymnasium, vocational school)	2.12
	College – university (bachelor's degree)	2.09
	Postgraduate education (Master's, Doctorate)	2.07
	Associate degree	1.88
	Grand Total	**2.19**

Table 2. First source of information by employment status and educational level

Moving on to one of the most important aspects of Digital Nativeness, Table 3 shows the averages of participants' confidence in their internet and digital skills (ranging from 1 through 5, with 1 indicating lack of confidence and requiring assistance, and 5 indicating independence and highest confidence in one's digital skills), overall frequency of social media use, as well as their breadth of use. In Table 3, we can see a tendency for confidence in internet and digital skills to decrease as age increases, which aligns with the participants' social media use as well as their breadth of use in general. This is

especially clear in the case of younger age groups, particularly those under 18 and those between 18 and 35. The variety of online activities (breadth of use) participants engage in also appears to decrease with age, which suggests that while older individuals may still use the internet for a variety of reasons and tasks, they tend to feel less secure in their digital skills and abilities compared to younger individuals. Although not too prominent, another notable difference can be seen in the averages of breadth of use and frequency of social media use, particularly focusing on the youngest three age groups in the table. As Helsper (2021) pointed out, digital inequalities can and do exist everywhere, which is especially important to bear in mind, as this could not only impact one's digital skills and engagement with social media but also their access to digital media and devices in the first place. If we compare Tables 1 and 3, it can be clearly seen that there are differences among these three age groups in the number of devices they own, along with the number of places they have access to the internet, which all impact how they interact with media and what activities they choose to engage in online. However, despite these results, those under 18 still feel the most confident in their digital skills, which can be explained mainly by them being exposed to technology from a very young age, which is a much different learning curve from the one older generations had gone through, as they were introduced to digital technologies later in their lives.

Averages of → Age groups ↓	Confidence in internet and digital skills (range: 1 through 5; 1 – not at all confident, 5 – entirely confident)	Frequency of social media use (range: 0 through 4; 0 – never, 4 – daily)	Engagement in the 12 activities (breadth of use) in general: (range: 0 through 4; 0 – never, 4 – daily)
under 18	4.51	2.00	2.44
18–25	4.25	2.00	2.80
26–35	4.28	1.83	2.71
36–45	3.67	1.62	2.55
46–55	3.04	1.34	2.46
over 55	2.07	1.33	2.25
Grand Total	**3.63**	**1.68**	**2.54**

Table 3. Averages of confidence in internet and digital skills, frequency of social media use, and breadth of use across age groups

In connection to these results, the data also showed a correlation between the participants' confidence in their internet and digital skills and their engagement in multitasking, how frequently they used social media sites, as well as their content creation in Hungarian, Serbian, and English. Based on the averages calculated in Table 4, the higher their confidence in their digital skills, the more likely they are to engage in multitasking and visit more social media sites. However, when it comes to creating content (sharing posts, photos, and communicating online) in the three languages, a drastic and steady decrease can be seen in the averages of content creation in Serbian as confidence rises. In contrast to Serbian, for content creation in English, as confidence rises, so does the likelihood of sharing English content online. Table 3 also shows that those who are most confident in their digital skills are the youngest (under 18), closely followed by those between 18 and 35 in age, which indicates that those under 18 are the ones who create the most content in English. On the other hand, those over the age of 55

are the least likely to create content in English, however, the table also shows that they are the most likely to create content in Serbian with drastically different averages when compared to the younger age groups.

Averages of → The participants' confidence in their internet and digital skills ↓	Engagement in multitasking (range: 0 through 1; 0 – no, 1 – yes)	Frequency of social media use (range: 0 through 4; 0 – never, 4 – daily)	Content creation in Hungarian (range: 0 through 1; 0 – no, 1 – yes)	Content creation in Serbian (range: 0 through 1; 0 – no, 1 – yes)	Content creation in English (range: 0 through 1; 0 – no, 1 – yes)
1 – not confident at all	0.41	1.34	0.83	0.80	0.36
2	0.41	1.38	0.80	0.51	0.19
3	0.70	1.59	0.89	0.53	0.35
4	0.77	1.75	0.85	0.38	0.52
5 – entirely confident	0.83	1.89	0.80	0.29	0.61
Grand Total	0.70	1.68	0.84	0.43	0.46

Table 4. Averages of multitasking, social media use, and content creation across confidence levels in internet and digital skills

To also give a clearer picture of which social media platforms are visited by the participants and how often, Table 5 shows the averages of social media consumption based on age. The averages range from 0 to 4, indicating how often these sites are visited by the participants (0 – never, 1 – rarely, 2 – sometimes, 3 – regularly, 4 – on a daily basis). As in Table 4, the results in Table 5 also show that as age increases, social media use decreases, as does the variety of visited social media sites. While those under 18 and between the ages of 18 and 35 regularly visit 4–5 social media sites, while those over the age of 36 tend to use and visit 2–3 sites more regularly, with Facebook being among the most popular ones. One notable finding that needs to be highlighted is the case of Facebook, where the averages reveal that it is much less used among those under 18 than the rest of the participants. This might be due to Facebook becoming a much less desirable social media platform for this age group, especially when compared to Instagram and TikTok. Lastly, Discord and Twitter are the two least visited platforms by all age groups when contrasted with Facebook, Instagram, TikTok, YouTube, and Pinterest.

Age groups → Social media use ↓	under 18	18–25	26–35	36–45	46–55	over 55	Grand Total A
	(range: 0 – never, 1 – rarely, 2 – sometimes, 3 – regularly, 4 – on a daily basis)						
Facebook	2.07	3.86	3.92	3.87	3.91	3.82	3.58
Instagram	3.78	3.36	3.00	2.57	2.03	1.78	2.75
TikTok	3.14	3.16	2.17	1.47	0.94	0.67	1.93
Discord	0.96	0.24	0.10	0.08	0.04	0.05	0.25
Reddit	0.12	0.15	0.43	0.27	0.14	0.20	0.22
Pinterest	2.34	1.89	1.43	1.45	0.71	1.03	1.48
YouTube	3.09	2.99	2.94	2.91	2.79	2.84	2.93
Twitter (X)	0.47	0.37	0.64	0.23	0.16	0.24	0.35
Grand Total B	2.00	2.00	1.83	1.61	1.34	1.33	1.69

Table 5. Average social media use frequency by age

Finally, Table 6 shows digital skills and activities based on employment status, specifically the participants' overall digital activities regarding the 12 categories within breadth of use, multitasking, and it also contains information on their social media consumption. As it was established previously, the data here too revealed that, in general, students tend to be the most confident in their internet and digital skills, and they are also most likely to multitask and use social media the most actively. Similarly to Helsper and Eynon's 2010 findings, the results of the current study also show a difference regarding breadth of use among students and those who are employed, as students are less likely to engage in e-banking, e-government, online shopping, and travel related activities, as those are often not yet common activities among young students who do not have a stable income. These varying levels of independence and responsibility are also reflected in Tables 7 and 8, which show in detail who engages in these activities the most vs. the least.

Averages of → Employment status ↓	Confidence in internet and digital skills (range: 1 through 5; 1 – not at all confident, 5 – entirely confident)	Engagement in multitasking (range: 0 through 1; 0 – no, 1 – yes)	Engagement in the 12 activities (breadth of use) in general: (range: 0 through 4; 0 – never, 4 – daily)	Frequency of social media use (range: 0 through 4; 0 – never, 4 – daily)
Student	4.45	0.94	2.57	2.02
Employed	3.64	0.72	2.63	1.61
Unemployed / looking for a job	3.08	0.52	2.28	1.63
Work from home	3.39	0.52	2.44	1.68
Retired	2.09	0.37	2.15	1.28
Grand Total	3.63	0.70	2.54	1.68

Table 6. Activities, multitasking, and digital skills based on employment status

Table 7 summarizes the Vojvodina Hungarian participants' range of online activities in general based on their age in order to compare the groups and see if there are any notable differences in activities. The averages in Table 8 range from 0 to 4 (with 0 – no, 1 – rarely, 2 – sometimes, 3 – regularly, and 4 – daily). To begin with, what we can observe in the bottom row of grand totals in Table 8 is that, overall, the internet is more incorporated into the daily routines of age groups 18–25, 26–35, and 36–45, and it is also noteworthy that the averages slowly decrease as age increases. The most frequent activities among all age groups are entertainment, social networking, person-to-person networking, and fact-checking, while the least popular ones are civic participation and writing a diary. As expected, both e-government and e-finance are noticeably higher among those in the 26–35 age group as opposed to the youngest Vojvodina Hungarians and those over 55, while studying is the most frequently occurring activity among students who are under 18 and 18–25. Overall, internet use is reported to be the highest and most varying in terms of activities among those between 18 and 35, which reflects how different age groups are at different life stages and have differing needs as well as priorities.

Age groups → Digital activities ↓	Under 18	18–25	26–35	36–45	46–55	Over 55	Grand Total
	(range: 0 – never, 1 – rarely, 2 – sometimes, 3 – regularly, 4 – daily)						
1. Training/studying	3.31	3.28	2.58	2.67	2.58	2.20	**2.77**
2. E-government	0.83	1.88	2.23	2.34	2.17	1.66	**1.85**
3. Entertainment	3.89	3.76	3.54	3.27	3.24	3.19	**3.48**
4. Finance/e-banking	0.37	2.29	2.49	2.10	1.76	1.68	**1.78**
5. Fact-checking/looking up information	3.74	3.84	3.69	3.45	3.54	3.41	**3.61**
6. Current affairs/interests	2.24	3.09	3.09	2.92	3.24	3.44	**3.00**
7. Travel	2.13	2.65	2.50	2.57	2.65	1.92	**2.40**
8. Shopping online	1.83	2.51	2.54	2.37	2.02	1.31	**2.09**
9. Social networking	3.86	3.84	3.73	3.59	3.28	2.94	**3.54**
10. Diary functions	1.27	0.89	0.76	0.36	0.29	0.24	**0.63**
11. Person-to-person networking	3.96	3.96	3.84	3.43	3.32	3.61	**3.68**
12. Civic participation: online forums	1.87	1.65	1.47	1.53	1.44	1.45	**1.56**
Grand Total	**2.44**	**2.80**	**2.71**	**2.55**	**2.46**	**2.25**	**2.54**

Table 7. Breadth of use in general based on age

Lastly, contact with the internet expressed in number of years was highest among two age groups: the 36–45 age group with an average of 19.51 years of contact with the internet and the 46–55 age group with an average of 18.41 years, followed by those above the age of 55 with an average of 17.45 years. The two age groups that had the least contact with the internet expressed in years was the 26–35 age group with an average of 17.15 years, while those between 18 and 25 years of age had an average of 12.91 years. Lastly, those under the age of 18 had the smallest average of 7.38 years. Although these numbers do seem to indicate that prolonged contact with the internet would result in higher and more complex internet activities, as well as higher familiarity with internet tools, social media, and digital tasks, based on all of the results so far, in Tables 1–7, it can be established that these averages do not necessarily reflect the reality of how familiar the participants are with the internet, the use of digital devices, and even virtual tools. Despite being users of the internet for nearly 20 years, the results of the above analyses regarding breadth of use, social media habits, and confidence in their internet and digital skills indicate that those above the age of 35 are much less familiar with and involved in digital activities than those below the age of 35, which can especially be observed in detail in Tables 1 and 3.

All in all, the above results show similar outcomes to earlier studies on Digital Natives (Helsper/Eynon 2010; Helsper 2021). The results of the present paper also highlight the importance of looking at multiple factors, but age especially in combination with experience and breadth of use when determining the extent to which an individual can be considered a Digital Native. At the same time, it is also crucial to not exclude any generation from the possibility of being Digital Natives, as studies, including the present one, have shown that Digital Nativeness can depend on a variety of interrelated factors (Tapscott 1998; Helsper 2021; Kincl/Štrach 2021), which explains why it is so important

to provide as much context as possible when doing research on this topic. Based on the results and the comparison of the tables, it is not possible to entirely separate Digital Natives and Digital Immigrants, since various age groups share similar digital habits, especially in the case of the 12 activities (breadth of use), as well as have been in contact with the internet for a prolonged period of time. However, it does need to be addressed that in general, the extent of participation, social media use and preferences, as well as content creation slowly but steadily decrease as age increases, which does indicate that there are some noteworthy differences, especially when comparing the youngest age group to the oldest.

4.2. TRANSLANGUAGING AND LANGUAGE CHOICES AMONG VOJVODINA HUNGARIANS: DOES DIGITAL NATIVENESS IMPACT LANGUAGE CHOICES AND ATTITUDES TOWARDS TRANSLANGUAGING?

To address the second research question, a number of questions in the questionnaire focused on collecting data on what languages participants come into contact with in their daily lives and how often, what their language choices are in a number of online and offline contexts, and whether or not they tend to engage in translanguaging (the answers participants gave were based on examples of translanguaging included in Questions 23 and 24, which is included in the Appendix). Considering that the most prominent differences could be observed in the results of the data based on age in section 4.1 above, this section will also discuss the results of these questions for the sake of comparability to the results discussed in that section.

To begin with, Table 8 shows how intensively participants are in contact with the three languages of Hungarian, Serbian, and English, with 0 indicating never, and 4 indicating daily. Across all age groups, Hungarian is the language that is most regularly present in the lives of the participants with an average of 3.9, followed by Serbian with averages that range from 3.17 to 3.64. However, Serbian seems to be slightly more present in the lives of those over the age 46 as opposed to those under 18. In contrast to Serbian, the results show entirely different trends when it comes to the Vojvodina Hungarians' contact with the English language, as in this case, as age increases, the frequency of contact with English steadily decreases. The presence of English is especially prominent in the lives of those under 18, as it is nearly as frequently encountered by the participants as Hungarian is.

Averages of → Age groups ↓	Frequency of contact with Hungarian	Frequency of contact with Serbian	Frequency of contact with English
	(range: 0 through 4; 0 – never, 4 – daily)		
under 18	3.92	3.17	3.77
18–25	3.98	3.38	3.34
26–35	3.97	3.44	3.11
36–45	3.98	3.29	2.47
46–55	3.99	3.64	2.41
over 55	3.94	3.53	1.88
Grand Total	**3.96**	**3.41**	**2.83**

Table 8. Frequencies of language contact with Hungarian, Serbian, and English

Another set of questions focused on the Vojvodina Hungarians' language choices in a variety of virtual and face-to-face contexts, the results of which are summarized in Table 9. The averages shown in the table are a range from 0 (Serbian) to 2 (English), with 1 representing Hungarian. When looking at the Grand Total row, Hungarian seems to be the most dominant language chosen by the participants in almost all cases, with the exception of situations where they have to communicate with authorities or in official settings. Another setting where Serbian is also quite often present alongside Hungarian is that of the workplace, as can be seen in the averages of those around and over the age of 36. English, however, is only prominent in one situation, which is the internet, and this is only true in the case of two age groups: those under 18 and, to some extent, those between 18 and 25. While the averages for face-to-face situations are quite uniform and show that Hungarian is the most frequently chosen language, the very minimal difference in these numbers may indicate that those under 18 sometimes choose English, while those over 55 choose Serbian as their language of communication occasionally.

Averages of → Age groups ↓	The language they use the most frequently in face-to-face situations	The language they use the most frequently on the internet	The language they use the most frequently at work/school	The language they use the most frequently with authorities and in official settings	The language they most often see on the internet (based on the languages they encounter on the 8 social media sites)	Grand Total A
	(range: 0 through 2; 0 – Serbian, 1 – Hungarian, 2 – English)					
Under 18	1.03	1.81	0.97	0.30	1.82	**1.19**
18–25	1.00	1.45	0.90	0.30	1.70	**1.07**
26–35	1.02	1.12	0.81	0.32	1.52	**0.96**
36–45	1.01	1.08	0.75	0.28	1.25	**0.87**
46–55	1.00	1.02	0.72	0.18	0.99	**0.78**
over 55	0.97	1.03	0.67	0.12	0.95	**0.75**
Grand Total B	**1.01**	**1.25**	**0.80**	**0.25**	**1.37**	**0.94**

Table 9. The Vojvodina Hungarians' language choices
in different online and face-to-face contexts

Lastly, Table 10 shows the averages on three questions relating to Vojvodina Hungarians' translanguaging practices and their attitudes towards the mixing of languages in general. The question which focused on whether participants engaged in translanguaging was accompanied by a linguistic example (see Appendix) along with a short explanation on the phenomenon to ensure that they understood what the question was asking them. The results to the three questions are expressed in Table 10 in averages that range from 0, indicating disagreement, to 1 which indicates agreement with the given questions. Additionally, two more questions followed with specific linguistic examples, asking the participants to share how much their own conversations resembled the ones embedded in the questions, on a scale of 1–5, with 5 indicating a strong resemblance. The two linguistic examples which were included within these two

additional questions on translanguaging were provided by two Vojvodina Hungarians independently of the questionnaire and the participants in the present study: a 36-year-old male participant who was working in business and administration in Novi Sad (Text A), and the other example was given by a 21-year-old female attending university in Novi Sad (Text B). Both examples were taken from their private Messenger conversations with colleagues and friends, who have all given their consent and were ensured the messages and their identities would remain anonymous. The reason why these two examples were included in the questionnaire was not only because they were authentic pieces of conversation that took place among Vojvodina Hungarians online, but also because they included quite different translanguaging practices. While the first example only included Hungarian and Serbian and was a conversation among close colleagues who were around the age of 36 (Text A), the other example (Text B) which was provided by the 21-year-old was a conversation among university friends and included Hungarian, English, and a little Serbian. The responses to these two questions revealed that, in general, the first three age groups (under 18 to 35) found Text B slightly more similar to their own linguistic practices than Text A, which only included Hungarian and Serbian. The situation is entirely reverse regarding the older age groups, where Text B was shown to not resemble their linguistic practices at all, while Text A did to some extent. These results can further be explained when we take into consideration the other three questions on general translanguaging tendencies and their attitudes towards language mixing, as the data shows that the participants' tolerance towards language mixing tends to gradually decrease as age increases, while translanguaging appears to be a more common practice among younger Vojvodina Hungarians, who are also less bothered by language mixing even if they do not understand the language that is being used.

Averages of → *Age groups* ↓	*Engagement in translanguaging* *(range: 0 through 1; 0 – no, 1 – yes)*	*On a scale of 1-5, how much does this type of language use resemble your own?* *Text A (Serbian-Hungarian)* *(range: 1 through 5; 1 – not at all, 5 – very similar)*	*On a scale of 1-5, how much does this type of language use resemble your own?* *Text B (Hungarian-English-Serbian)* *(range: 1 through 5; 1 – not at all, 5 – very similar)*	*Does it bother you when someone you are speaking to switches between languages that you do not speak?* *(range: 0 through 1; 0 – no, 1 – yes)*	*Does it bother you when someone you are speaking to switches between languages that you also speak?* *(range: 0 through 1; 0 – no, 1 – yes)*
under 18	0.88	3.10	3.62	0.24	0.02
18–25	0.81	3.28	3.49	0.42	0.03
26–35	0.77	3.40	3.27	0.40	0.03
36–45	0.52	3.31	2.11	0.61	0.12
46–55	0.52	2.94	1.33	0.61	0.16
over 55	0.55	2.80	1.04	0.81	0.12
Grand Total	**0.67**	**3.14**	**2.48**	**0.51**	**0.08**

Table 10. Attitudes towards translanguaging among Vojvodina Hungarians

4.3. OVERVIEW

Overall, what the above results indicate is that that those who engage in the most digital activities have the highest social media activity and the highest confidence in their own digital and internet skills (see section 4.1 above) among the Vojvodina Hungarians (i.e. those between the ages of 18–25, those under 18, and to some extent those between 25 and 35), have different language choices, and their translanguaging practices also differ from those who are less digitally oriented. Therefore, in the present study there are two age groups: those under 18 and those between 18 and 25, and to some extent a third group – those between 26 and 35 who display the most characteristics of Digital Natives. When comparing the findings elaborated on in section 4.1 with the tables above in 4.2 (Tables 8–10) that summarize the results on the participants' language choices in a variety of settings, frequencies of language contact, and their answers to questions relating to translanguaging, it can be established that Digital Nativeness does seem to have an effect on the language practices and language choices of these three age groups (under 18, 18–25, and 26–35), but also on their openness towards translanguaging. This is especially visible when comparing these younger age groups to the oldest two groups (46–55 and over 55), where the results show that Hungarian is the language the eldest of the participants encounter the most often, followed by Serbian. Furthermore, these two age groups also have the least digital activity, the lowest averages in Tables 4 and 6 on self-reported confidence in their digital and internet skills and are the least likely to multitask despite being exposed to the internet and digital devices for the longest time. This outcome shows us that being around the internet and digital devices for over 20 years does not necessarily have to equal high degrees of use, knowledge of, and engagement with digital technologies, which can often be due to a variety of factors such as access to devices or the nature of their occupation, but it can simply be a matter of personal interest (see also Hargittai 2010; Correa 2016; Jarrahi/Eshraghi 2019; Reid *et al.* 2023). It also should be noted that as times change, people's behaviors and relationship with technology also changes. This could be one of the reasons why so many individuals who would have been labelled Digital Immigrants 20 years ago cannot be unequivocally labelled Digital Immigrants in the present study, as they exhibit quite a few characteristics that are characteristic of Digital Natives.

Due to higher and more frequent exposure to digital media and a more diverse range of social media platforms, younger individuals have also said they encounter much more English language media in addition to Hungarian and Serbian, which could explain their higher tolerance towards language mixing and their higher averages regarding the question on translanguaging, where they had to compare their own linguistic practices to the example provided by the 21-year-old university student. Additionally, their high confidence in their digital skills in combination with the diverse range of platforms they regularly visit could also be behind their higher engagement with translanguaging, and the overall flexibility of their language use, as opposed to the older generations whose results indicate that they do not entirely favour translanguaging. Although English is so dominant in the lives of these individuals, this does not seem to interfere with the use of Hungarian and their desire to choose Hungarian in a variety of settings (including also digital spaces) consciously, which is especially important in minority settings such as Vojvodina. Due to the complexity and lengthiness of the analysis of data in section 4 of

the Discussion, the present study has not had the capacity to explicitly ask participants to share personal experiences of translanguaging and how it affected their day-to-day communication and relationships in more detail. In future studies, this would be an especially important focus to look into building on the findings in the present paper. As mentioned above, in section 2, previous studies have revealed rather positive outcomes of the promotion of translanguaging among minority communities (Cenoz/Gorter 2017; Prošić-Santovac/Radović 2018; Ćorković 2019), which could aid in language maintenance. However, as Cenoz and Gorter (2017: 910) highlighted, this can only be fruitful if translanguaging is happening in contexts that are authentic to the reality of the minority. This way, the encouragement of translanguaging would ideally lead to the speakers realizing that there are a multitude of situations where their own L1 language variety is needed and cannot be left behind.

5. CONCLUSION

The present study has sought to explore the extent of Digital Nativeness among 600 Vojvodina Hungarians with an adapted version of the Digital Native Test developed by Helsper and Eynon (2010). Simultaneously, the study has also aimed to see whether Digital Nativeness influences the participants' language choices and general attitudes towards translanguaging and three languages in general, those of Hungarian, Serbian, and English, which are usually present in the Vojvodina Hungarian setting both online and in face-to-face situations. The overall results have revealed that, in general, there are visible differences in digital activities and confidence in internet and digital skills among the six age groups, which are also shown to have an effect on the participants' openness towards multilingual language practices. Despite the large number of participants in the present study, the above results cannot be generalized for the entirety of Vojvodina Hungarians: previous studies (Hargittai 2010; Helsper/Eynon 2010; Lee 2014; Helsper 2021) have also found that these experiences are very individual and can often be closely tied to personal interests, which in turn also influences these outcomes both in terms of technology and linguistic practices.

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APPENDIX
Questionnaire

Part 1: Background Information

Circle the answer(s) that best apply to you! The questions that have been starred (*) are cases where multiple answers can be given or circled.

1. Gender: Male, Female, I do not wish to answer, Other: _____

2. Age: under 18, 18–25, 26–35, 36–45, 46–55, over 55

3. Current place of residence (settlement): _____

4. Highest level of education: I did not go to school, Elementary school, Secondary school (gymnasium, vocational school), Associate degree, College – university (bachelor's degree), Postgraduate education (Master's, Doctorate)

5. How can you best describe your current situation in terms of work? I work outside my home – I go to work, I work from home (e.g. homemaker, teleworking), I am retired, I am looking for a job – I am unemployed, I am a student, Other: _____

6. If you are working, circle your area: I am unemployed, Education, Administration, Agriculture, Industry, Health, Other: _____

7. Nationality: Hungarian, Serbian, I do not wish to answer, Other: _____

Part 2: Digital Habits

Circle the answer(s) that best apply to you! The questions that have been starred (*) are cases where multiple answers can be given or circled.

8. Do you use the internet? Yes, No

9. For how long have you been using the internet? (number of years) ___

10. How often do you use the internet? On a daily basis, 3–4 times a week, Once a week, Less than one a week

*11. What devices do you generally use to access the internet? * PC, Laptop, Smartphone, Tablet, Other: _____

*12. Where do you usually access the internet? * From home, From work, From school, From the city library, From a café, Other: _____

13. Do you typically do multiple things (multitask) at once on your computer, phone, and tablet? (e.g. listen to music while messaging friends as well as studying or doing household chores) Yes, No

14. If you want to find information about something, how do you do it? What is the first thing that comes to your mind? Type it into a browser (Google), Ask AI (ChatGPT, Samsung Assistant, Alexa), Call a friend to ask, Go over to a neighbor to ask in person

15. On a scale of 1–5, how would you rate your confidence in your internet and digital skills? 1 – "I am not confident in using the internet and often need assistance with basic tasks" 5 – "I use the internet with ease and am able to do a variety of tasks without difficulty" (Some examples for tasks can include: browsing the web, sending messages and emails, editing documents, streaming media, using cloud storage)

16. Do you create online content (post, share images, videos on Facebook, Instagram, or other websites) in the following languages?

	In Hungarian	In Serbian	In English
Yes			
No			

17. *How regularly do you use the following social media sites?* (One can be selected per line. Mark the one that best applies to you.)

	On a daily basis	Regularly	Sometimes	Rarely	Never
Facebook					
Instagram					
TikTok					
Discord					
Reddit					
Pinterest					
YouTube					
Twitter (X)					

18. *Which language do you most often encounter on the following social media sites?* (One can be selected per line. Mark the one that best applies to you. Leave it blank if you do not use the given social media platform at all.)

	Hungarian	Serbian	English
Facebook			
Instagram			
TikTok			
Discord			
Reddit			
Pinterest			
YouTube			
Twitter (X)			

19. *How often do you use the internet for the completion of the following tasks?* (One can be selected per line. Mark the one that best applies to you.)

	On a daily basis	Regularly	Sometimes	Rarely	Never
Training/studying					
E-government					
Entertainment					
Finance/e-banking					
Fact-checking/looking up information					
Current affairs/ interests					
Travel					
Shopping online					
Social networking					
Diary functions					
Person-to-person networking					
Civic participation: online forums					

Part 3: Linguistic habits
20. How often do you encounter the following languages in your daily life? (You can only select one option per row. Please select the option that best applies to you!)

	On a daily basis	Regularly	Sometimes	Rarely	Never
Hungarian					
Serbian					
English					

21. If you speak multiple languages, do you usually mix your spoken languages when talking to people from Vojvodina? (For example: You are talking to a Hungarian friend in Hungarian and they switch the language of the conversation from Hungarian to Serbian and back. The switching of languages can apply only to words, but also to entire sentences.) Yes, No

22. Does it bother you if your interlocutor switches to (an)other language(s) during your conversations? (Circle 1 answer from A and 1 answer from B) **A) If I speak** that other language, it **does not bother me, If I speak** that other language, it **does bother me; B) If I do not speak** that other language, it **does not bother me, If I do not speak** that other language, it **does bother me**

23. You are going to read a short online conversation among good colleagues below who are discussing their summer holidays. Pay close attention to the way they are speaking to each other. On a scale of 1–5, how much does this type of language use resemble your own? (1 – not at all; 5 – "I find it very familiar, and I also often speak like that") Circle the number you find most appropriate: 1 2 3 4 5

Original message (Text A):

Anna: @Éva ti hogy birjátok ezt a hőséget a **kolektivnin** (= Hungarianized version of the Serbian **kolektivni**)?

Éva: **E pa dobro** 😄 hát milyen lenne a tengeren ha nem jó? 😄 😄 Ez a **vikendica** mintha nekünk lett volna kitalálva

Ernő: **Ajde** már, **ne može to** csak úgy 😄 szólhattál volna mentem volna én is

Éva: **Ej majkemi** mondtam, hogy jövünk!

* bolded text is in Serbian

English translation:

Anna: @Éva how are you guys handling this heat on the **collective (annual) leave**?

Éva: **Well, it's great** 😄 how could it not be good by the sea? 😄 😄 This **weekend house** is like it was made for us

Ernő: **Come on** now, you **can't just say that** [out of the blue] 😄 You could have said something, I would've gone too

Éva: **I swear to God**, I told you we were coming here!

* bolded text is in Serbian in the original message above

24. You are going to read a short online conversation among university friends below. Pay close attention to the way they are speaking to each other. On a scale of 1–5, how much does this type of language use resemble your own? (1 – not at all; 5 – "I find it very familiar, and I also often speak like that") Circle the number you find most appropriate: 1 2 3 4 5

Original message (Text B):

Evelin: *gurl* [girl], ugye nem???! ☹

Szofi: hahahahhh **ja NE MOGU**..... de komolyan 🤢

Evelin: de miéért?? hogy nem veszi észre már?? totál *delulu* [delusional] ez a csaj

Szofi: *tell me about it*

Szofi: annyira *sus* [suspicious] hogy már a vak is látja xddd

* bolded text is in Serbian
* italicized text is in English

English translation:

Evelin: *gurl* [girl], no way???! ☹

Szofi: hahahahhh **I CAN'T**..... but seriously 🤢

Evelin: but whyyy?? how does she not notice it by now?? this girl is totally *delulu* [delusional]

Szofi: *tell me about it*

Szofi: it's so *sus* [suspicious] even a blind person could see it xddd

* bolded text is in Serbian in the original message above

 * italicized text is in English in the original message above

25. Which one of the following languages do you use most in face-to-face and online conversations? (Mark only one per line.)

	Hungarian	*Serbian*	*English*
In person			
On the internet			

*26. Please indicate which language you choose to use the most in the following situations by putting **one** X per line!*

	Hungarian	*Serbian*	*English*
On the internet			
At home			
At work/school			
With friends			
With neighbours			
With authorities			

SUMMARY

VOJVODINA HUNGARIANS IN THE DIGITAL AGE: THE OUTCOMES OF MULTILINGUALISM AND DIGITAL NATIVENESS AND THEIR EFFECT ON LINGUISTIC PRACTICES

The study looked at the link between a speaker's Digital Nativeness and their translanguaging practices among the Vojvodina Hungarians in the northernmost region of Serbia. With its main goal, the study aimed to explore to what extent Vojvodina Hungarians of all ages exhibit characteristics of Digital Natives, while also analyzing how an individual's level of digital competence influences and shapes their linguistic practices, mainly their language choices and their overall attitudes towards translanguaging in digital spaces. The study adopted a quantitative approach, and collected data using an online questionnaire shared on social media platforms (including Instagram, Reddit, and Facebook). The final sample consisted of 600 stratified random participants from the Vojvodina Hungarian community out of a total of 693. The extent of one's Digital Nativeness was assessed using an adapted version of Helsper and Eynon's (2010) test, which was built into the questionnaire and aimed to collect data on both linguistic and digital habits. The questions related to Digital Nativeness measured two main components alongside age: the nature of one's experience with technology and the breadth of their online activities across various digital platforms. The results showed that there are notable differences based on age: as participants got older, their self-perceived confidence in digital skills, their ability to multitask, and the variety of online activities and errands all became lower. While younger individuals (under 35) exhibited more characteristics of Digital Natives, they also demonstrated higher flexibility and open-mindedness towards multilingualism, and also translanguaging. The study concludes that higher degrees of Digital Nativeness do have an effect on linguistic practices, linguistic choices, and how translanguaging is perceived among Vojvodina Hungarians. This could be seen in the strong link between digital competence and linguistic habits and choices: as one's confidence in their digital skills increased, they were more likely to share and consume English language media and content alongside Hungarian and Serbian, indicating that the participants are highly exposed to multiple languages online. Consequently, those who exhibited higher degrees of Digital Nativeness were found to display greater open-mindedness and flexibility, resulting in them being more accepting of translanguaging practices. Although the results showed that there is increased presence of English in the lives of Vojvodina Hungarians, their answers also demonstrated that Hungarian remains a crucial aspect of their identity and communicative practices.