■ MINORITIES IN THE DIGITAL SPACE: VOJVODINA HUNGARIANS' DIGITAL PRESENCE, LANGUAGE CHOICES, AND LANGUAGE USE ONLINE

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U radu se istražuje upotreba digitalnih medija i tendencije koje se tiču upotrebe jezika kod mađarske manjine u Vojvodini, što pruža uvid u njihovo učešće u digitalnim prostorima, u njihove jezičke preferencije i faktore koji utiču na njihov izbor jezika kako „onlajn" tako i „oflajn". Kroz niz istraživačkih pitanja, rad ima za cilj da identifikuje obim digitalne uključenosti i angažovanja vojvođanskih Mađara, kako koriste svoje jezike u onlajn i oflajn okruženju, kao i ulogu koju digitalni prostori imaju za njih kao manjinu. Rezultati ukazuju na to da, premda vojvođanski Mađari redovno konzumiraju digitalne medije i razne sadržaje na internetu na mađarskom, srpskom i engleskom jeziku, oni nisu preterano aktivni u kreiranju onlajn sadržaja. Dok mađarski ostaje dominantan u komunikaciji licem u lice, engleski neznatno nadmašuje mađarski u konzumiranju onlajn sadržaja. Pored toga, mlađi učesnici su pokazali jače digitalno prisustvo i skloniji su višejezičnom mešanju jezika. Uprkos izazovima, učesnici izražavaju podršku višejezičnosti i prepoznaju njegove prednosti u snalaženju u ličnom i profesionalnom kontekstu.

Ključne reči: upotreba digitalnog jezika, manjine u digitalnom prostoru, digitalne navike, višejezično okruženje, onlajn prostori u kojima dominira engleski jezik, mađarska manjina, izbor jezika, višejezičnost, vojvođanski Mađari.

1. INTRODUCTION

Over the past 20–25 years a digital world has emerged and become populated in ways we could not have imagined before. This predominantly English medium (Lee 2016) with new communicative properties has had a great impact not only on our daily tasks and habits but also profoundly influenced our language use (Prensky 2001; Lee 2014; Darvin 2016). Given digitization's deep and ongoing impact on languages, it is increasingly important to examine its effects on minority languages due to the fact that speakers of minority and majority languages experience the digital space in various ways (Kelly-Holmes 2004; Lee 2014; Lynn *et al.* 2015; Jongbloed-Faber *et al.* 2016). Minorities are

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often in disadvantaged positions in the physical world as they and their native language coexist with another, more dominant language and community in a country where the official language of the state is not theirs. Their minority position can often prevent the use of their native language in a number of private and public domains, which tends to bring about unfortunate situations that leave them at a disadvantage. The pressure to assimilate causes further disposition, which has been found to permeate online spaces too (Durham 2007; Lee 2014; Lackaff/Moner 2016; Cunliffe 2019). Considering the lack of studies on digital media consumption, language choices, and general language use in the largest minority Hungarian communities, in countries neighbouring Hungary, the present study is part of a larger project that seeks to map out, in detail, the Vojvodina Hungarian minority's digital media practices and language use tendencies. In order to describe Vojvodina Hungarians' digital presence, language knowledge, language use, and language choices in both digital and face-to-face situations, the present study seeks to find answers to the following research questions:

1. To what extent are the Vojvodina Hungarians involved in digital spaces and digital content creation and content sharing?
2. How do Vojvodina Hungarians use their languages in digital spaces?
3. To what extent do digital (i.e. online) vs. face-to-face (i.e. offline) language use and language choices differ for Vojvodina Hungarians?
4. What factors affect the language choices of Vojvodina Hungarians in digital spaces?
5. What roles and functions do digital spaces play/have for the Vojvodina Hungarians as a minority?

Section 2 reviews the literature relevant to digital language use, language choices and factors affecting those, as well as minorities in the digital space. Section 3 discusses hypotheses, data collection and analysis, and gives a detailed description of the participants of the present study, which are further analysed in Section 4. Last, a conclusion is drawn in Section 5 along with some of the limitations faced in the study as well as avenues for further research.

2. LITERATURE REVIEW

2.1. CMC, DIGITAL MEDIA, AND LANGUAGE CHOICES

While sociolinguistic studies have traditionally focused primarily on the spoken forms of languages, scholars have also been increasingly interested in researching computer-mediated communication (CMC) within multilingualism research (Danet/Herring 2007; Androutsopoulos 2013, 2015). Multilingualism is the "use and production of texts in any situation where two or more languages are involved [...], regardless of degrees of speakers' proficiency or power relations between the languages concerned" (Lee 2016: 10). In this context, there is "a shift of focus from linguistic systems to multilingual speakers and practices" and a move is made "towards theorising 'fluid' and 'flexible' relations between language, ethnicity and place [...], linguistic practice and the ownership of language," as Androutsopoulos explains (2015: 186). Language choices have a variety of factors affecting them. Like face-to-face situations, online interactions also often require the use of specific languages to perform particular roles, depending on

the communicational or personal-relational goals of the individual. These roles could be influenced by familial relations (where people use the languages they are used to using within closer family), or outside factors, where using English in online forums instead of their native language is preferred to fit in more with international wider audiences and communities (Durham 2007; Lee 2014), or even avoiding the use of English out of fear of receiving judgment from other online users (Lee 2014). In minority communities, some of the same reasons have been found to influence language choices and even language use online (Kelly-Holmes 2004; Durham 2007; Lee 2014; Lackaff/Moner 2016; Lee 2016; Cunliffe 2019). The vast majority of studies in CMC have focused on the digital and digital-linguistic habits of younger groups (Chen 2007; Spilioti 2009; Lee 2016), leaving older individuals under-researched, which, in combination with minority speaker situations, becomes even more intriguing (Lee 2016) for generational, social, cultural, and linguistic reasons. Since more prestigious and widely spoken languages like English, French, and German continue to dominate online platforms, there is a risk that lesser-spoken languages may become further marginalized (Kelly-Holmes 2004). As Lee (2016) further notes, researching multilingual practices online requires the consideration of broader social, financial, and linguistic factors. Additionally, in order to gain better understanding of online linguistic diversity, researchers should also strive to focus on analysing both the resources people use online as well their CMC exchanges across a variety of online platforms (Lee 2016). Previous research shows how extensively social media affects the language use of its users (Merchant 2001; Baron 2008; Tagg 2015; Lee 2016), especially the group that scholars describe as Digital Natives (Prensky 2001; Helsper/Eynon 2010). It has been believed in the past that the concept of Digital Natives is strictly tied to the birthyear of an individual, however, more recent studies suggest that anyone with ample amount of contact and experience with the internet and technology can become a Digital Native (Helsper/Eynon 2010), making them an expert in using technology to their advantage. In contrast, Digital Immigrants do not turn to the internet predominantly when looking up information, or when intending to communicate with others (Prensky 2001).

2.2. MULTILINGUALISM AND CHALLENGES OF DIGITAL MEDIA FROM MINORITY SPEAKERS' PERSPECTIVE

Very often, technology and digital spaces are not equipped with the necessary tools for certain languages and communities around the world, which can result in the lack of "written representation of minority or migrant languages" (Androutsopulous 2015: 188). These shortcomings have been found to weaken the desire for active online participation. In some cases, the internet user might need to resort to using a more dominant and widely spoken language over their own mother tongue (Kelly-Holmes 2014; Lee 2014), or it might even discourage them to create content altogether and, instead, turn them into passive consumers. Androutsopulous (2015) too emphasizes that while digital media does establish an array of new opportunities for minority individuals in documenting their languages, there are still obstacles such as linguistic insecurity and fear of discrimination that may discourage them from using their vernaculars online in writing. As a result, they might opt for communicating in other (often more dominant and widely spoken) languages online, which can especially be true for minorities. While

Cunliffe (2007) argues that minority individuals should not be seen as victims of the digitalized world, very often it is the lack of digital skills, available internet, tools (e.g. keyboards, orthography, and input language), and supportive community that create the obstacles and lead to discouragement from active participation online. Knowing how to navigate the internet and technology in itself can also become frustrating. Fortunately, many new tools and resources keep arising and becoming available that users can repurpose for their own needs. Experienced and well-networked users, who Androutsopulous (2015) refers to as networked actors, can adapt a variety of linguistic, orthographic, and visual features they encounter online to suit their own communication styles or to fit within specific online communities or contexts. These digital tools have also been researched by Vaisman (2011), who uncovered that already around the 2010s, younger generations were making use of any resources (e.g. scripts, punctuation, and anything visual) available to them in order to create personalized and creative pieces of text online. The term 'networked multilingualism' becomes prevalent here, which Androutsopulous defines as follows:

> [a] cover term for multilingual practices that are shaped by two interrelated processes: *being networked*, i.e. digitally connected to other individuals and groups, and *being in the network*, i.e. embedded in the global digital mediascape of the web. Networked multilingualism encompasses everything language users do with the entire range of linguistic resources within three sets of constraints: mediation of written language by keyboard-and-screen technologies [...], access to network resources ('Network resources'), and orientation to networked audiences ('Networked audiences'). (Androutsopulous 2015: 188)

While it does take some time, patience, and practice for older generations and some minorities to adapt to this fast-paced virtual realm, taking advantage of social media (instead of traditional, more static websites, according to Cunliffe 2019) and other platforms like YouTube are essential as they make sharing videos and audio recordings possible to anyone anywhere with established internet connection and access to devices (Tagg 2015). Familiarizing ourselves with digital media and practicing digital skills becomes a very valuable tool in making connections online and becoming networked (Androutsopulous 2015). Multilingualism becomes an asset in the digital world, where using one's known and spoken languages in combination with other languages in creative ways can strengthen and support linguistic diversity and make visible minority languages in the process (Jones/Uribe-Jongbloed 2013; Soria *et al.* 2016). Additionally, with the availability of online translators accessible through the internet, people can also write in languages they may not even speak. Platforms like YouTube that do not necessarily require written text can be very useful as they mainly work on the basis of video and sound. These tools are especially resourceful for minority individuals who might be lacking direct contact with their community, heritage, and mother tongue and wish to maintain or revive it (Galla 2009; Jones/Uribe-Jongbloed 2013; Tagg 2015; Stern 2017; Cunliffe 2019). Although lack of access to devices and the internet is still prevalent in many countries, the idea would be to inspire more and more minorities to begin actively participating, creating material, and connecting with their origins or at least with others

who share similar experiences to establish a support system that they might not have in person (Cunliffe 2007; Cormack 2013; Tagg 2015). Cunliffe (2007: 147) further argues that we should recognize the potential minorities hold in becoming "active shapers" of the internet and technology, who could also potentially repurpose already existing digital tools to fit their own needs locally, culturally, and linguistically, as long as they have the means to do so. While the internet does have its downsides, it nevertheless has provided an array of opportunities, and a limitless platform where minority languages can become more noticeable to the world (Cunliffe/Herring 2005; Danet/Herring 2007; Lee 2016). Efforts of all kinds have been made online from revitalizing endangered languages with the help and creation of online visual and textual resources (like the Yami in Taiwan in Rau/Yang 2009) to individuals from minorities creating their own Facebook groups for communicative and community building purposes (Paricio-Martín/ Martínez-Cortés 2010; Cunliffe 2019). All languages are prone to change upon contact with others one way or another. In some drastic cases, these influences in combination with specific social, sociolinguistic, geographical, and even financial factors could lead to some degree of language shift online (e.g. preference for English language use due to prestige and growing popularity among South African isiXhosa speakers in Deumert/ Masinyana 2008; or in Tanzania in Mafu 2004). However, the growing presence of content in more widely spoken languages (especially English) can simultaneously bring about the opposite effect in the audience, where the sense of national, cultural, local, and linguistic identity becomes more strengthened and could encourage more participation in both local and virtual settings (Bornman 2003; Kelly-Holmes 2004; Androutsopulous 2015; Belmar/Glass 2019).

Content creation and active online participation of Vojvodina Hungarians have not been researched much in the past. Vojvodina has a multilingual, multinational, and multiethnic population (Balla *et al.* 2012; Petrovich 2016; Jánk/Rási 2023), and online language practices are yet to be explored in depth. Based on the findings of previous studies, digital media consumption (Székely 2018) takes place on a regular (daily) basis in Vojvodina, especially among younger generations, but older generations have also reported to use mobile phones, laptops, and especially social media like Instagram and TikTok, where they regularly encounter English language media. National identity and belonging have also been approached in order to uncover the viewpoints of minority Hungarians living outside Hungary (Székely 2018; Jánk/Rási 2023), which have turned out to be varying predominantly between neutral and positive. A recent study by Jánk and Rási (2023), on seven Hungarian minority territories neighbouring Hungary, uncovered that the proportion of Hungarian speakers has declined due to assimilationist language policies in the respective countries and minorities are still facing challenges related to negative language attitudes towards non-standard varieties, very often from Hungarians from Hungary. As Jánk and Rási state, the reason behind their disadvantaged position is as follows:

> [a] social structure which is strongly standard-centred and mono-normative, both linguistically and in general, which treats linguistic differences as a fault and as a target of stigmatisation. This attitude, however, is detrimental to the preservation of the language and, in this context, to the survival of the Hungarian minority, since

almost the entire Hungarian minority living beyond the border speaks some kind of non-standard dialect. This means that they are not only confronted with the less supportive or downright repressive language policy of the state in which they live, but also with the exclusionary linguistic attitudes and prejudices of their own Hungarian language community. (Jánk/Rási 2023: 15)

Similar results showed a steady weakening in most areas including Vojvodina and a rather strong tendency to assimilate to the majority language and nation in Slovakia (often due to friendships with the majority). However, the results also uncovered that the regular use of the Hungarian language along with nurturing connections with the Hungarian community do support Hungarian identity (Székely 2018) as well as language use. Overall, the results of previous research suggest that for maintaining good relations with the community (both in terms of the immediate minority and other Hungarians from neighbouring regions) there is need for more support and opportunities that could ensure or at least promote the use of Hungarian both online and offline (Pásztor-Kicsi 2016; Székely 2018). With the help of the internet, various new and free platforms are available for building community, establishing communication, and nurturing national and regional ties (Pásztor-Kicsi 2016; Székely 2018).

3. METHODOLOGY

3.1. HYPOTHESES, DATA COLLECTION, AND DATA ANALYSIS

Based on the findings of previous studies on contact with social media and English dominated online spaces (Durham 2007; Lee 2014; Lackaff/Moner 2016; Cunliffe 2019), the first hypothesis of this study was that those who had frequent contact with the internet would have differing language choices in online spaces as opposed to face-to-face situations, especially when it comes to English in online settings. Additionally, considering that Vojvodina is a vastly multilingual and multiethnic region (Balla *et al.* 2012; Petrovich 2016; Jánk/Rási 2023), language mixing of Hungarian and Serbian in face-to-face (and to some extent online) communication would also be an expected outcome. Finally, the level of experience, extent of interaction, and the nature of online engagement may also indicate an age-based division concerning digital presence (Prensky 2001; Helsper/Eynon 2010), active participation online, the type of digital activities, as well as the preference towards using English in online communication and platforms (Durham 2007; Lee 2014).

The participant selection happened randomly, as the questionnaire was shared on Facebook, where anyone could fill it in, with the only criteria being that the participants' mother tongue was Hungarian and that they were from Vojvodina, Serbia. For a clearer view, the questionnaire (see Appendix) was divided into four sections, each covering a different aspect.

To begin with, section one (Appendix, *A. Background Information*, questions 1–10) covered the basic and necessary background information about the participants (age, gender, educational background, occupation, and place of residence). The second section (Appendix, *B. Language Knowledge and History*, questions 11–28) covered language knowledge and self-reported proficiency in spoken languages, while the third section

(Appendix, *C. Language Use*, questions 29–38) focused on questions about language use in general (in several different domains) and gathered additional information on language use, language choices, and functions, while the last section (Appendix, *D. Internet use and active online language use*, questions 39–45) included questions related to digital media consumption and habits.

The Appendix has been formulated in a way that it both represents the questions used in the data collection process, as well as the general tendencies and results. The results are most often expressed in figures within the Discussion (these include: question 13 – Figure 1, question 18b – Figure 2, question 19 – Figure 3, question 20 – Figure 4, question 21– Figure 5, question 24 – Figure 6, question 29 – Figure 12, question 30 – Figure 13, question 31 – Figure 14, question 40 – Figure 7, question 41 – Figure 8, question 42 – Figure 9, question 43 – Figure 10, and question 44 – Figure 11) as well as in tables under the respective questions within the Appendix for easier management, organization, and representation. The data collection for the present study was done with the help of a Google Forms online questionnaire, while the gathered responses were analysed and summarized with the help of Microsoft Excel.

3.2. PARTICIPANTS

The total number of participants in the present study is 63 (28 male and 35 female), of which 12 (19%) are under 18, 11 (17%) between the ages of 18 and 25, 11 (17%) between the ages of 26 and 35, 15 (24%) between the ages of 36 and 45, 10 (16%) between the ages of 46 and 55, and 4 (6%) participants are over 55. The birthplaces of the participants varied but can be categorized into two geographical regions, Bačka and Banat. A total of 40 (63%) participants claimed to have been born in and currently reside in Bačka (settlements included Novi Sad, Bačka Topola, Subotica, Stara Moravica, Palić, Vrbas, and Čantavir), and 20 (37%) individuals in Banat (settlements included Zrenjanin, Senta, Rabe, and Kikinda). With the exception of 4 (6%) individuals who have moved abroad, to Hungary, and one other person, to Ireland, the rest of the participants still reside in the same settlements they were born in or close to them. Concerning the educational background of the participants, 7 (11%) individuals claimed to have finished only elementary school (with the exception of 1 older individual, the other 6 are currently in high school), 2 (3%) have associate degrees, 12 (19%) hold bachelor's degrees, 27 (43%) high school diplomas, and 15 (24%) postgraduate degrees. Their current employment situation is the following: 5 (8%) are unemployed and looking for a job, 20 (32%) are students, 4 (6%) work remotely, and 34 (54%) go to work every day. More specifically, their areas of work include administration (5 individuals), media (4 individuals), commerce (4 individuals), industry (11 individuals), education (11 individuals), law enforcement (3), and 20 individuals are still in school. As for nationality, 59 (94%) individuals claimed to be Hungarian, 2 (3%) Serbian, and 2 did not wish to answer. When asked which languages they grew up speaking most and considered as their mother tongues, 54 (86%) answered Hungarian, while 9 answered both Hungarian and Serbian. However, answers to question 2 of the questionnaire further uncovered that each participant considered Hungarian to be their mother tongue if they had to choose only one. Of the 63 individuals, 19 have spent over 6 months abroad, predominantly in places like Hungary (10 individuals), Germany (6), Austria (7), England (2), and Denmark (2) for employment related purposes.

In the following section, the results are presented, and areas where there were variations in digital habits, language use, and language preferences based on age, are highlighted.

4. DISCUSSION

4.1. LANGUAGE KNOWLEDGE, PERSONAL HISTORY WITH LANGUAGES, AND GENERAL LANGUAGE USE TENDENCIES

In order to understand the participants' digital habits, language choices, and digital language use, a section in the questionnaire (*B. Language Knowledge and History*, questions 11–28) focused solely on gathering data on their overall language knowledge and their history with languages. Besides Hungarian, Serbian, and English, German (intermediate level) was the most commonly known and spoken additional language, although questions 25 and 26 uncovered that 60% of participants did not know or speak languages other than Hungarian, English, and Serbian. Of the 63 participants, 5 mentioned that they did not know Serbian and 4 mentioned that they did not know English at all. Those participants who denied knowing English belonged to the age group of over 55 and between ages 46–55, while those who denied knowing Serbian were from various age groups, including 26–35, 36–45, and under 18.

To begin with, the participants reported that they learnt the three mentioned languages (Hungarian, Serbian, and English) slightly differently. While Hungarian was most commonly acquired at home, in the family and the neighbourhood at an early age (see question 13 in Appendix and Figure 1 below), Serbian and English were learnt at school and from friends or colleagues mainly. However, for some participants, along with Hungarian, Serbian was also a language they had contact with in their family homes and neighbourhoods from an early age. The most striking difference between these three languages is that English is the only one out of the three that was reported to be learnt and encountered almost exclusively on the internet and in language classes.
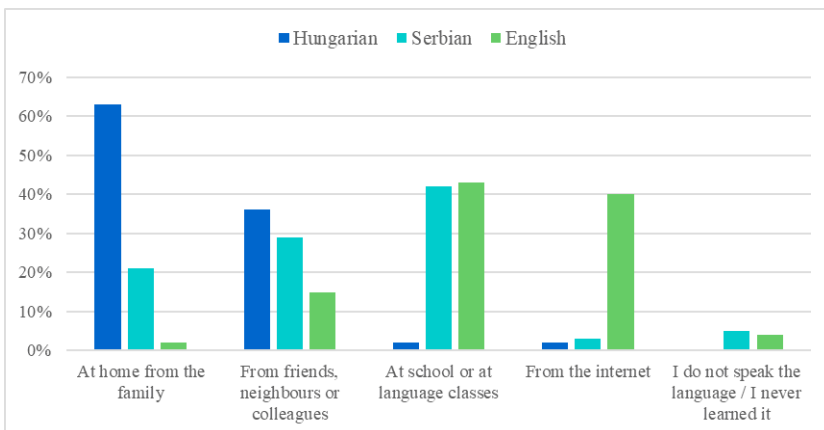

Figure 1. Distribution of the ways participants learnt Hungarian, Serbian, and English growing up

Question 14 uncovered further details on the family language history of the participants. A total of 73% of participants claimed that their grandparents used only Hungarian with them as kids, 21% used both Hungarian and Serbian, and only 2% claimed their grandparents used only Serbian with them when they were young. A decline in these percentages can be seen as nowadays, as 67% participants claimed to use Hungarian with their grandparents, 13% use both Hungarian and Serbian, and 20% of participants reported this question no longer applied to them, indicating they no longer have contact with their grandparents for unspecified reasons. Concerning language use with their mothers and fathers in the past, 84% participants reported that they used Hungarian with their mothers and 82% with their fathers, 8% used both Hungarian and Serbian with their mothers and 7% with their fathers, 7% used only Serbian with their mothers, and 5% with their fathers. In both cases, about 3% of the participants reported that the question did not apply to them. While lately, 82% of the participants use Hungarian with their mothers and 75% with their fathers. The use of both Serbian and Hungarian was reported for 5% of participants with their mothers and 5% with their fathers, while 7% claimed to use only Serbian with mothers and 3% with fathers. The answers show that 15% of the participants no longer have contact with their fathers and 8% with mothers. With the exception of 13% of participants who do not have any siblings, the use of Hungarian with siblings applied to 75% of participants in the past and 70% in the present; the use of both Serbian and Hungarian was reported by 8% (in the past) and 7% (in the present) of participants, while the use of Serbian with siblings rose from 2% to 10%. As for the participants' closest friends, in their childhood, the most common languages used amongst friends were Hungarian (70%), Hungarian and Serbian (18%), and Hungarian and English (7%), while in more recent times the use of Hungarian (68%) fell slightly as the use of all three languages (Hungarian, Serbian, and English) with friends was reported by 20% of participants. Answers to question 15 also revealed that most often the participants' parents used Hungarian among each other (69%), or both Hungarian and Serbian (33%), and the sole use of Serbian occurred in 7% of the answers. Apart from 75% of participants, those who have children also shared that the most common languages they heard their children speaking was Hungarian (mentioned by 14 participants), English (mentioned by 12), Serbian (mentioned by 9), and German (mentioned by 3 participants).

Speaking multiple languages in a multilingual environment has also shown to produce conversations where language mixing and code-switching occurs on a regular basis (Lee 2014; Lynn *et al.* 2015; Jongbloed-Faber *et al.* 2016). In my data, those who claimed that they mixed languages in conversation seem to be rather open to it and supportive of the practice, seeing it as a special part of their local identity. Mixing languages in conversations (questions 22 and 23, Appendix) has also proven to be familiar and broadly accepted among participants as 90% of them do not mind when their conversation partners switch between languages during conversations, especially if they are proficient in the other language(s). However, regarding the mixing of those languages that the participants do not speak or are not as proficient in, 41% expressed that they found it distressing.

When it comes to outside factors on language preferences, the participants shared that they almost never experienced someone else trying to discourage them or

their parents from using, teaching or exposing their children to Serbian or English (at most 3% of participants), but experienced it a lot more often with Hungarian (24%). A similar distribution can be observed in the answers to question 18, however, here the encouragement for the use, exposure, and teaching of Serbian was experienced by over half of participants (52%), while with Hungarian and English, encouragement was experienced at a much lower rate (35% in both cases). Answers to question 18b (see Figure 2 below) additionally revealed that those participants who have children do support all three languages and encourage their children to use them. Interestingly, 70% of those who did not have children at the time of filling in the questionnaire answered that they would encourage their future children to learn and speak Serbian and English, while only 40% of these participants would encourage them to learn and speak Hungarian.
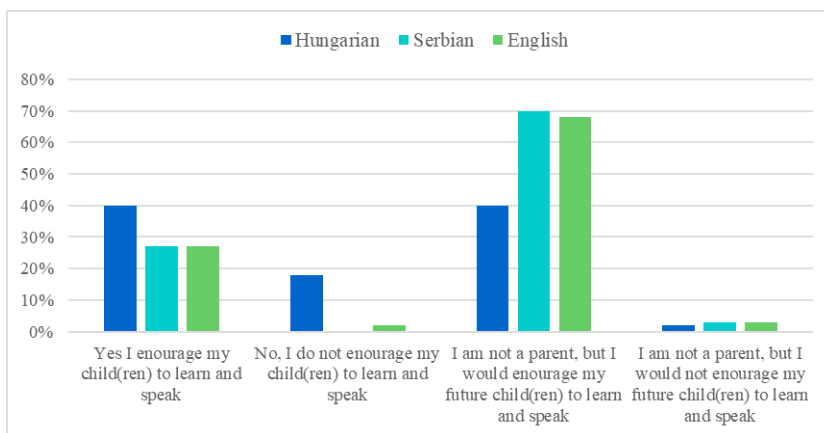

Figure 2. Results to question 18b: Do you try to encourage your child(ren) to (learn and) use the following languages?

On average, the participants were most confident in their Hungarian language skills from all four aspects (speaking, reading, listening, and writing) listed in question 19 (see Appendix and Figure 3), followed by English language skills (Figure 5), while Serbian language skills (Figure 4) were reported to be the least confident among the participants, which are all portrayed in detail in Figures 3–5 below. Despite more participants reporting not knowing or speaking English at all (7% vs. 3% in the case of Serbian), they still seemed to be less confident in their Serbian language skills compared to English. This could be connected with difficulties that native Hungarians might face during schooling, such as learning and reading the Cyrillic alphabet and maintaining that knowledge long term.
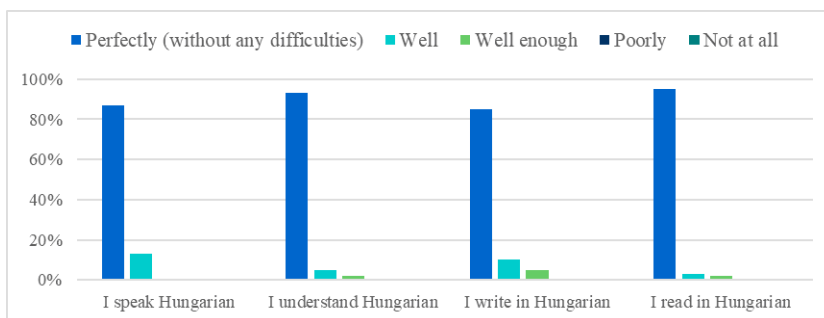
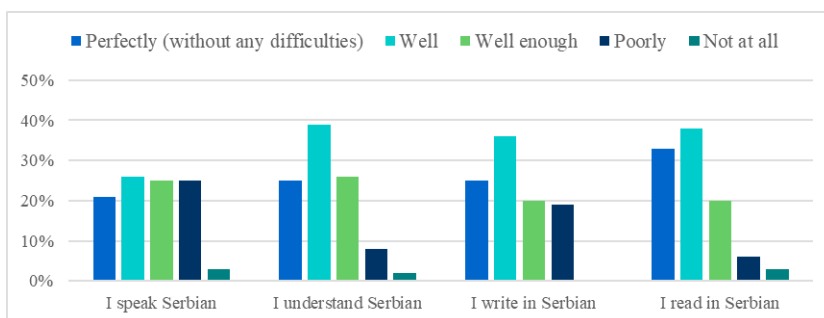**Figure 3.** The participants' confidence in their Hungarian language skills

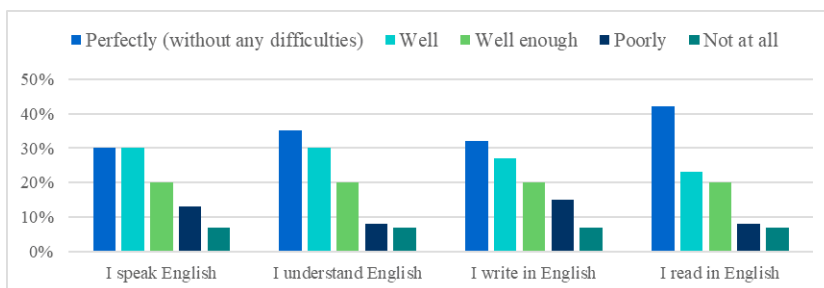**Figure 4.** The participants' confidence in their Serbian language skills

Figure 5. The participants' confidence in their English language skills

Taking these results into consideration, the results of question 24 (see Figure 6 below) have further supported the same distribution we could see in questions 19–21, as their confidence and bravery are highest when speaking Hungarian (92% face-to-face, 95% online), followed by English (52% face-to-face, 68% online), and lastly by Serbian (46% face-to-face, 44% online). Finally, when comparing language choices in online spaces and in face-to-face situations (questions 27 and 28), the answers provided by the participants show a drastic divide: the bulk of online communication for the participants takes place in English (52% of the time) and Hungarian (43% of the time), and least frequently in Serbian (5% of the time). While in face-to-face communication, Hungarian is predominantly the chosen language (87% of the time) as opposed to both Serbian (6%) or English (6%).
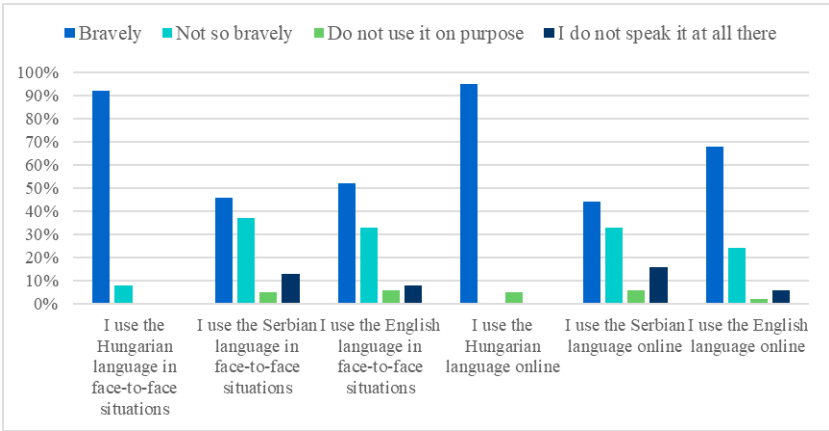
Figure 6. Distribution of how bravely/boldly participants use Hungarian, Serbian, and English offline and online

4.2. DIGITAL HABITS, CONTENT CREATION, AND LANGUAGE CHOICES ONLINE

The very last section of the questionnaire focused on digital language use and online activity of the participants (*D. Internet use and active online language use*, questions 39–45). The participants unanimously agreed that they all had access to a variety of internet content (including websites, newspaper articles, news portals, blogs, etc.) in Hungarian, Serbian, and English as well (question 39). Despite having access to all three language websites, the answers to question 40 (see Figure 7 below) revealed that participants most regularly visited Hungarian websites (65%), followed by English websites (58%), and lastly Serbian websites (25%). Question 41 (see Figure 8 below for detailed results) asked the participants about their social media activity rate, and their answers revealed that the most frequently visited platforms were TikTok (65%), Instagram (64%), YouTube (58%), and Facebook (55%). Among the least visited websites were Reddit (65%), Twitter
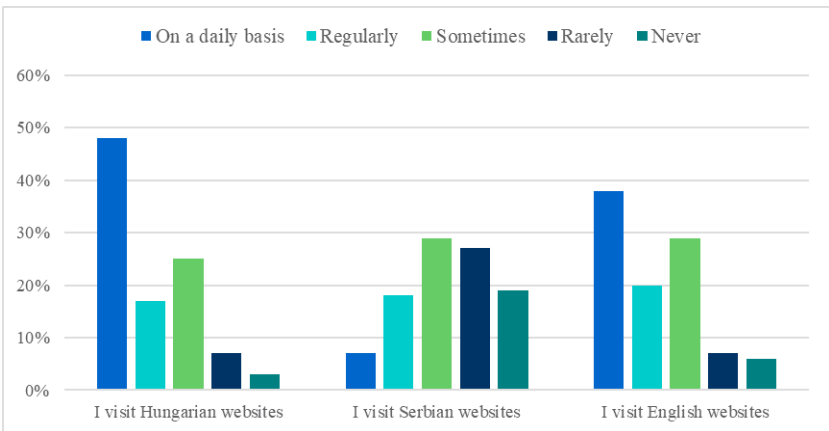

Figure 7. The participants' access to Hungarian, Serbian, and English websites

(55%). These percentages have been calculated by adding up the percentages in two columns ('on a daily basis' and 'regularly'), which both indicated a rather intense contact with the platforms/websites. Although the overall findings indicated that the majority of the participants used TikTok, Instagram, YouTube, and Facebook, a closer look at the results revealed much more.
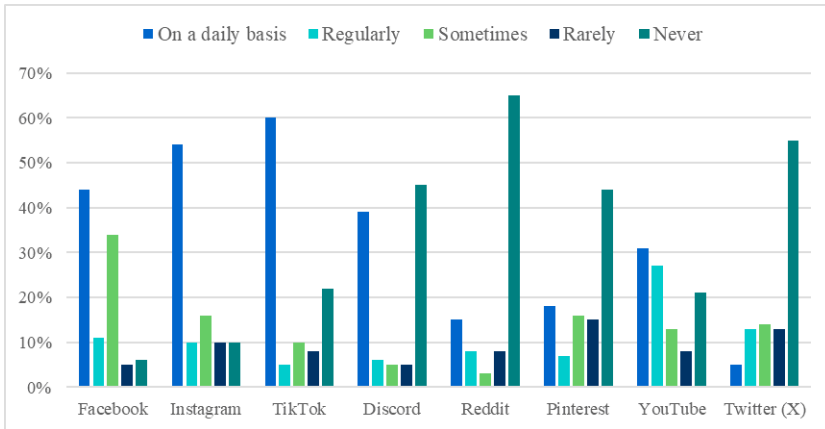

Figure 8. The participants' social media activity rate

While the percentages in the case of Instagram and TikTok were mostly comprised of participants aged under 18 up to those aged 26–35, the age groups of 36–45, 46–55, and over 55 made up the majority of the percentages in the case of Facebook. Finally, questions 42 and 43 (see Figure 9 and 10 below) asked the participants about their digital practices and their language choices when participating in a variety of online activities, which included social media engagement, commenting, sharing videos, text, and photos, writing blogs, playing video games, and creating videos. Based on the results, the majority of participants usually engage in activities such as commenting and chatting on social media (73% do it on a daily basis), as well as sharing pictures on Instagram (68% on a daily basis), while 50% of participants also share memes with their friends on a daily basis. On the other hand, the results also showed that 86% never create and share their own videos, 83% never make TikTok videos, and 93% never write blog posts. However, those instances of social media activity that require active content creation (such as making and editing videos, blogging, etc., which was characteristic of 14% of participants) were almost exclusively more frequent for participants below the 36–45 group, while commenting and chatting on Facebook were more evenly distributed among all age groups. Figure 9 below displays the averages based on all the answers provided by participants.
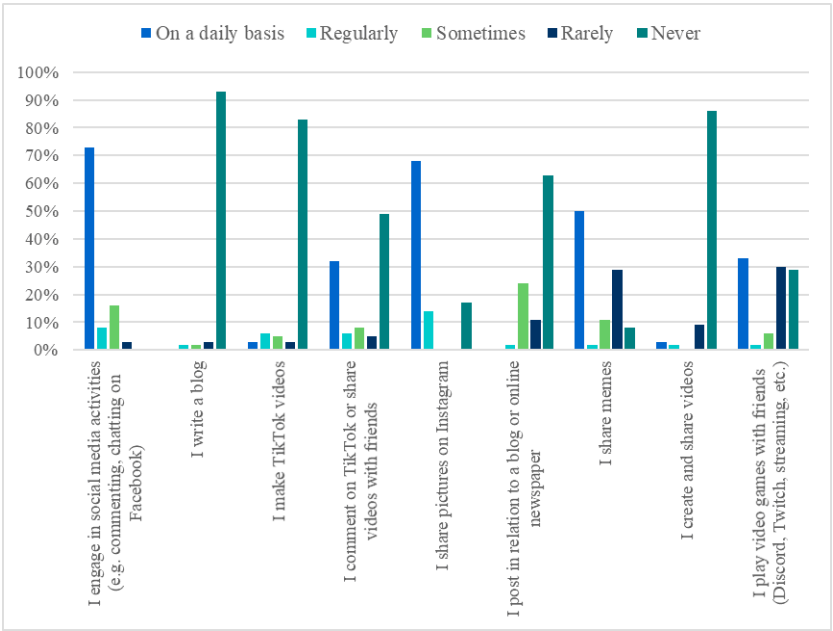
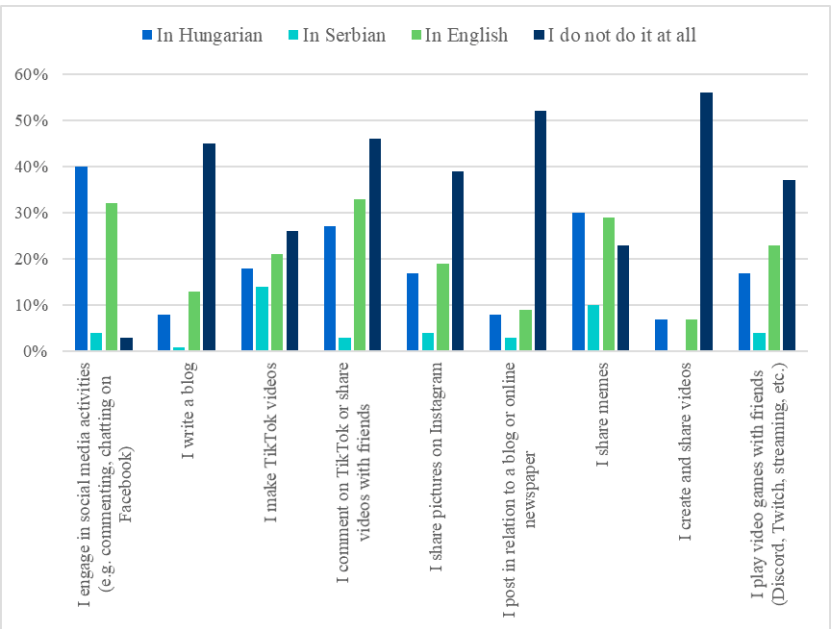**Figure 9.** The participants' digital practices and their rate

Figure 10. The participants' language choices in a variety of online activities

The numbers above indicate that the participants do not usually engage in online activities that involve creating materials and sharing them with others publicly, while they do engage in more traditional activities like chatting and uploading photos to Facebook and Instagram. According to the answers to question 43 (where the numbers in the table indicate the number of times participants chose the given language), with the exception of those who did indicate that they shared videos and other interactive types of content, the participants turned out to be passive observers on the internet rather than active creators. What is also interesting is that these types of activities are a lot more common among those aged under 18 and between 18–25 than those over 35. While 45% of participants (cf. question 43) do not engage in any of the listed activities online, the rest who do often prefer the use of English (25%) and Hungarian (24%), and Serbian is only occasionally chosen for these activities (6%). When it comes to Googling as an activity of the participants on a daily basis, the results showed that they have a habit of Googling topics (question 44, Figure 11 below) they are interested in most often in English (62%) and Hungarian (52%), but not so much in Serbian (9%). These results above can be interpreted in light of the very last question, question 45, of the questionnaire, answers to which revealed that most frequently the language choices participants made when contributing to online discussions heavily relied on the language of comments on the respective websites (75%), the subject of comments or content (55%), and their own mother tongue (44%), while the language they speak best (24%) and their own cultural background (13%) were less influential in these preferences.
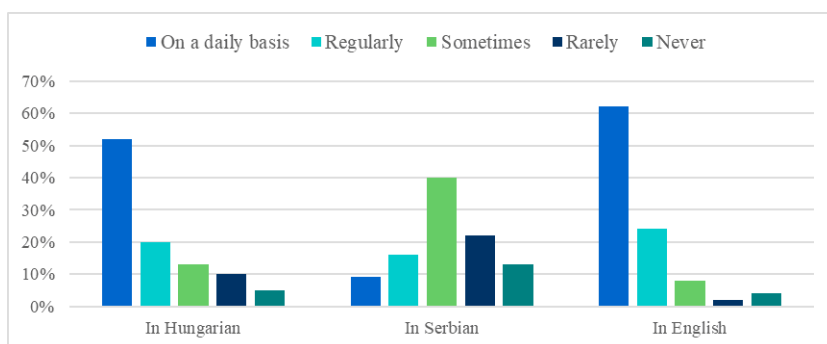
Figure 11. The participants' language choices when Googling

4.3. LANGUAGE USE AND ONLINE COMMUNITIES: PREFERENCES AND FUNCTIONS

The third section of the questionnaire (*C. Language Use*, questions 29–38) focused on the general tendencies regarding the Vojvodina Hungarian participants' language use and language choices. Of the 63 participants, 5 mentioned that they did not know Serbian, and 4 mentioned that they did not know English at all. When we observe the results to questions 29 (see Figure 13 below for detailed results), 30 (see Figure 14 below), and 31 (see Figure 15 below), we can see how frequently the participants use Hungarian, Serbian, and English in a variety of settings for specific purposes. Figure 12 below portrays the general tendencies regarding the participants' language choices and the frequency of these, while Figures 13, 14, and 15 show the distribution in more detail.
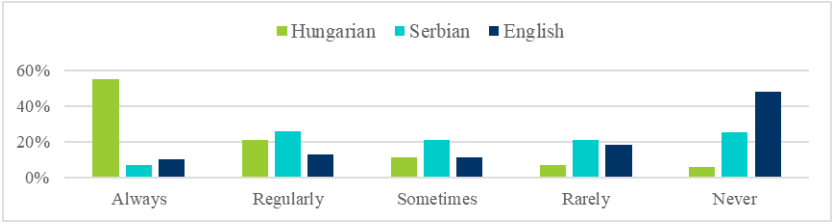
Figure 12. Distribution of how frequently participants use Hungarian, Serbian, and English in a variety of offline settings

Figure 12 suggests that Hungarian is the most frequently chosen language on a daily basis in a variety of offline contexts (see more detail in Figure 13), while English and Serbian are chosen a lot less and on particular occasions.
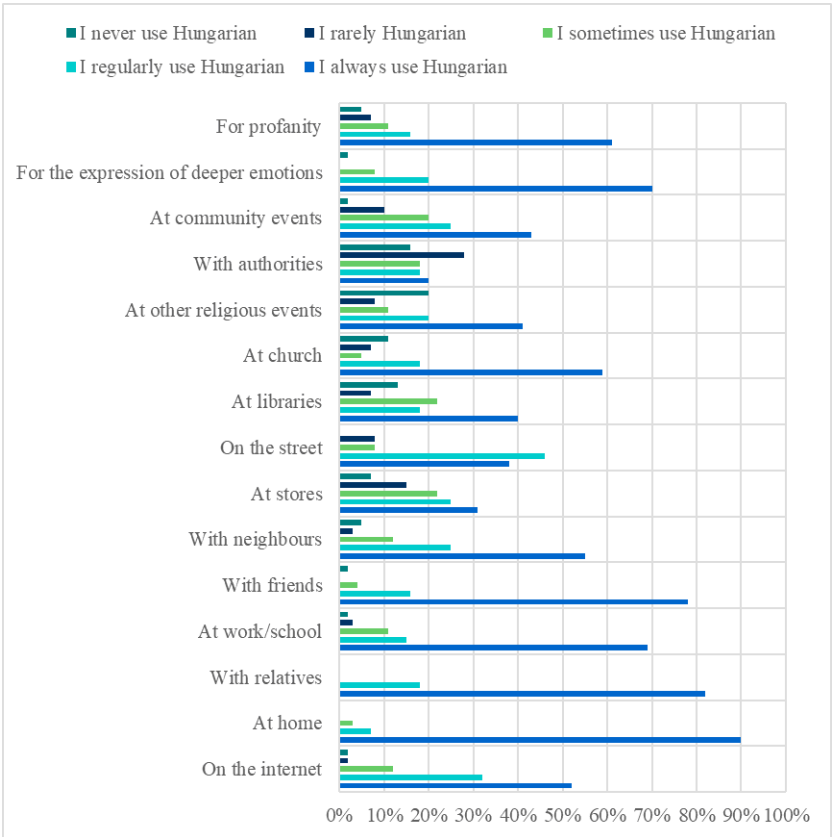
Figure 13. Settings where participants use Hungarian and their frequency

The answers in Figure 13 above indicate that the participants use Hungarian on a regular basis in settings such as the home, work or school, with their friends and relatives and also when they wish to express their deeper emotions. When compared to Figure

14 below, we can see how drastically these percentages differ, indicating that they use Serbian for these same purposes a lot less than Hungarian. With the exception of stores and conversations with authorities, the use of the Serbian language is not as prevalent in the lives of the participants as Hungarian is. Serbian language use on a regular basis was most frequent in settings such as stores, the streets, and with neighbours and authorities, which are all cases where the use of English was a lot less frequent.
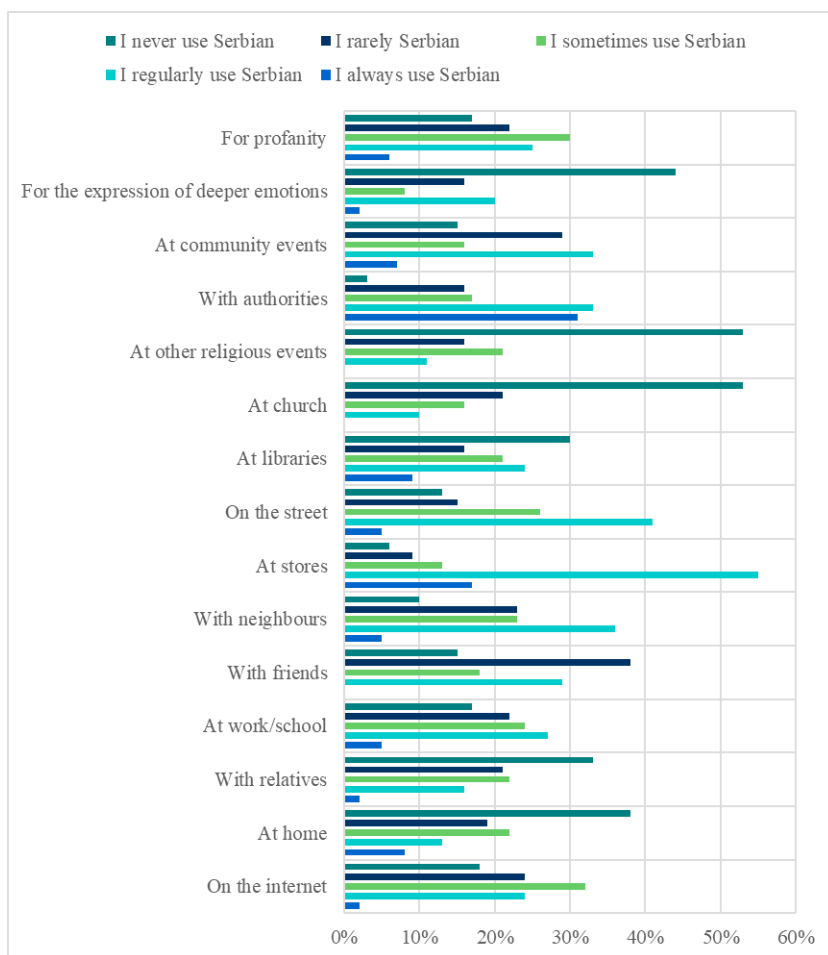
Figure 14. Settings where participants use Serbian and their frequency

Interestingly, answers to question 31 (see also Figure 15) have also revealed that the use of English on the internet and for expressing profanity is more common than the use of Serbian. While there were some settings (i.e. conversing with relatives, neighbours, authorities, and at places like stores, the streets, libraries, and also the church) where a vast majority of participants claimed to not use English at all, there were still some instances (i.e. for the expression of deeper emotions, profanity, and in settings such as work or school, and on the internet) where the use of English was more favoured than Serbian.
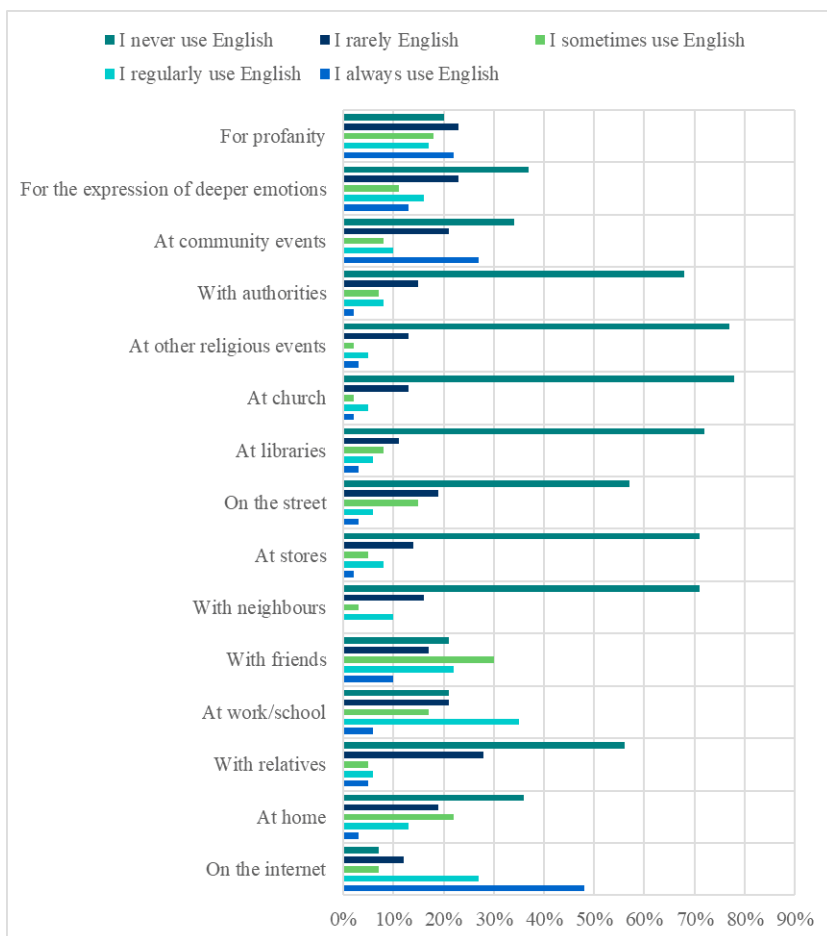
Figure 15. Settings where participants use English and their frequency

Overall, the participants find that the Hungarian language does receive support from institutions within Serbia (question 36), and the availability of printed media (question 37) is almost equally available in both Hungarian (90%) and Serbian (100%), but not so much in English (62%). Connecting question 38 to language preferences, when asked which newspaper they would take off the shelf in the store if it was available in three languages (Hungarian, English, Serbian), 69% of the participants said they would choose Hungarian, 21% would choose English, and only 10% of participants would choose the newspaper in Serbian.

These language preferences are further inquired about in question 32, where participants were asked to choose only one language out of Hungarian, Serbian, and English, while also providing an explanation on why they would make that particular choice. The results to question 32 revealed that 44% of participants would choose Hungarian, 37% would choose English, and only 19% would choose Serbian. The distribution of these results shows similarities to the results above in questions 29–31,

where Hungarian is most favoured and is followed by English, while Serbian seems to be the least favoured. Some of their explanations to their chosen language are listed below.

Those in support of English mentioned the following reasons: "English offers more communicative and other types of opportunities, which I could never imagine with Hungarian or Serbian" (aged 18–25); "considering that I plan on working abroad, English would me the most useful one for me, and I also find it to be likable, accepted, and people look up to it a lot more than Serbian or Hungarian" (aged under 18); "English, because I am able to reach a lot more materials online as opposed to Hungarian" (aged 26–35).

Those who chose Serbian mentioned its usefulness in connection with living in Serbia and seeking job opportunities: "For me, knowing Serbian in Serbia is almost indispensable if I want to work here and find a solid job" (aged 26–35); "I think knowing Serbian is like a gateway into knowing or just being able to understand parts of other Slavic languages, which is important to me as I have a lot of friends from those countries" (aged 36–45).

Lastly, those who chose Hungarian took a more personal approach to the topic: "I would choose Hungarian considering it is my mother tongue and I grew up in a small village around people speaking it the most, which makes it a very important part of my identity" (aged 46–55); "I use Hungarian most frequently and I wish to study in Hungary in a few years" (aged under 18); "Since Hungarian is my first language, it is the one I am most confident in. When I want to express myself, I do it best when speaking Hungarian, and it also holds an important place in my heart because of my family" (aged 26–35).

While 22% mentioned that they did not find online communities and groups overly important, their reasoning was usually that they converse with and meet fellow Vojvodina Hungarians on a daily basis, and that was enough contact for them. However, the other 80% of participants agreed that there are online communities (question 33), especially on Facebook, where they can converse, debate, and reminisce about shared histories and relevant topics close to them. The answers to question 34 also revealed that a similar percentage of participants (78%) have expressed rather positive opinions regarding the usefulness and necessity of such online communities. Those who found these online groups useful mentioned their ease of use, the practicality of online communication, and that these kinds of communities provide a good basis for quick and efficient communication, especially in times of emergency (i.e. missing persons, pets, and objects). These online communities are also important to the participants for purposes like maintaining and strengthening relationships, preserving traditions, the occasional commerce, and especially for discussing problems as "there are things that only they [Vojvodina Hungarians] can empathize with, as you know, in unity there is strength, we are similar at the end of the day." Their answers to question 34 were the following:

(1) *"I think it's important for a particular community to stick together, especially when it comes to a minority community, because this way the bonds remain. The disappearance of the given community either gets delayed a bit or doesn't even occur as a result of this"* (aged 36–45);

(2) *"It's important to know about each other, to be informed about current issues, and to stand up for each other and for common causes"* (aged 26–35);

(3) *"I think personal connections are more important; that's where people can truly communicate with each other. If there's no other option, an online community is better than nothing"* (aged 46–55).

Typically, the participants are members of groups (question 35) that revolve around cultural and public affairs (these are often named after the settlements that the members live in, e.g. *Szabadka a mi városunk* "Subotica is our city" or *HORGOS – a mi falunk* "Horgos – our village"), humour (e.g. *University of Bótelőtt*, literal translation: "University of the corner store"), workplace, buying and selling goods in Vojvodina (e.g. *Szabadkai Piac 2023* "Subotica market 2023" for the flea market), sports groups, groups for status updating related to border crossing between Hungary and Serbia (*Határfigyelők – Horgos, Gyála, Királyhalom / Röszke, Tiszasziget, Ásotthalom* "Border watchers – Horgoš, Đala, Bački Vinogradi / Röszke, Tiszasziget, Ásotthalom"), charity auctions, and students are also frequently visiting the 'Vojvodina Hungarian students studying in Hungary' (*Magyarországon tanuló vajdasági diákok* "Vojvodina Hungarian students studying in Hungary") group.

5. RESULTS

To begin with, what the results discussed in detail in section 4.1 tell us is that there are various linguistic, generational, and socio-cultural factors influencing their language choices, confidence in language skills, and their general views on these three languages. While Hungarian remains deeply rooted in familial and social contexts, Serbian and English are predominantly learnt and acquired either through formal education or private language classes, and in the case of English, heavily through online interactions and online presence. Answers to the questions that covered family language practices show that Hungarian is most commonly used within the family, followed by the use of both Hungarian and Serbian, while Serbian is rarely the only language being used. English is used only among friends, especially in more recent times as opposed to the participants' past.

The participants experience language mixing quite frequently and are used to it, perhaps largely due to their multilingual environment and upbringing, and only occasionally find it stressful or irritating when they encounter unfamiliar languages, which is in line with the hypothesis above in section 3.1 on language mixing in multilingual environments.

Regarding the encouragement and discouragement of language use, the participants see that with Serbian and English, they face a lot less discouragement from others, than they do with Hungarian growing up. Interestingly, when it came to encouragement, 52% of participants reported that they experienced it with Serbian, but almost never with English or Hungarian. Despite this, they generally support the idea of multilingualism and those who have children actively encourage them to embrace and learn as many languages as possible and consider it to be an advantage rather than a disadvantage.

Their confidence in their own language skills varies, with Hungarian being the most confident and rather closely followed by English, while they are least confident in their Serbian language skills. Furthermore, to answer the 3rd research question, language choices seem to be quite different depending on the environment, as the choice to use

English in online contexts is slightly more frequent than Hungarian, but especially frequent in the case of content consumption. As opposed to this, in face-to-face communication Hungarian almost entirely dominates, while Serbian and English are rarely chosen. This division is especially interesting as the preference for using English in online spaces was predominantly reported by those under 36, who also reported using social media and digital devices more intensively than those over 45.

To answer the 1st, 2nd, and 4th research questions, section 4.2 on participants' digital habits and language choices in digital spaces revealed that the use of technology and digital media are deeply embedded in the participants' daily lives and routines, just like previous findings in the region show (Székely 2018), but their presence is rather characteristic of passive observation and sharing already existing materials rather than active and new content creation. Despite having access to internet content in Hungarian, Serbian, and English more or less equally, the majority of participants tend to visit Hungarian websites most frequently. Like Hungarian websites, English ones are also regularly visited by the participants, whereas Serbian websites are rarely visited. Social media activity is especially apparent in the case of TikTok, Instagram, YouTube, and Facebook. Upon further analysis (see Figure 16 below), an age-based division was found across these with Facebook being visited by almost all age groups, while sites like TikTok have turned out to be more visited by younger audiences under the age of 35 (over 60% of those who mentioned that they visited TikTok). Traditional activities like commenting and chatting are common, but at the same time, active content creation is less prevalent, especially among older participants.

What we can see regarding language choices, the participants predominantly favour English and Hungarian over Serbian. As expected, younger age groups display higher engagement in active content creation activities (such as creating, editing, and sharing videos, photos, and posts) compared to age groups over 45. Interestingly, as opposed to the findings of Jánk and Rási (2023), my results did not indicate any assimilatory tendencies to Serbian, however, they did to English in online settings where the most common factor influencing the participants' language choices were the language they encountered on websites, while personal (linguistic, and cultural) background proved to be much less of a decisive factor.
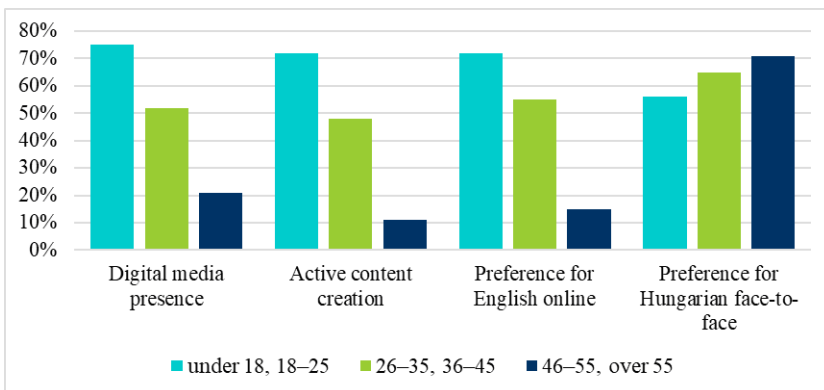

Figure 16. Age-based distribution of online presence, content creation, and language preferences

Finally, section 4.3 gave additional insight and more detailed answers to the 3rd and 5th research questions. As is evident from the results in 4.3, the participants predominantly use Hungarian in various settings such as the home all the way to community events, which simultaneously indicate a strong preference for their mother tongue. While Serbian is also used in the listed contexts (see questions 29–31), it did not prove to be as prevalent as Hungarian or even English. English was especially preferred for online communication, content consumption, and for expressing emotions, which surpassed Serbian in some instances (such as in the case of the internet and the use of profanity). Participants also favoured Hungarian materials and expressed deeply personal connections to their language choices. From their quotes, it is clear that they find that online communities, particularly on Facebook, play a significant role in maintaining their cultural and local ties, where a variety of topics, including cultural, humorous, professional, and practical matters can be discussed, reflecting the diverse but localized interests and needs of the participants. These results are in line with previous findings that advocated for the usefulness of online groups and communities for a variety of purposes mentioned above, especially in the case of minorities (Cunliffe/Herring 2005; Danet/Herring 2007; Paricio-Martín/Martínez-Cortés 2010; Lee 2016; Cunliffe 2019).

6. CONCLUSION

The present study has focused on Vojvodina Hungarians' digital presence, language use tendencies, and language choices both in online and offline settings. The Vojvodina Hungarian participants frequently visit digital spaces, with the majority having access to a variety of internet content in all three languages, Hungarian, Serbian, and English. They show a tendency to consume more than they create, with traditional activities like chatting and uploading photos being more common than active, new content creation (texts, videos, blogs, websites, etc.).

Having looked at their linguistic background, generational language use and preferences, confidence in language skills, and language preferences in a variety of settings, the results revealed that Hungarian and English are often preferred over Serbian. While English was barely present in the upbringing of the participants, in digital spaces, the use of English slightly outweighs Hungarian, particularly in content consumption, while Hungarian dominates in face-to-face communication in the present as it did in the past. This dichotomy is even more apparent among younger participants, who claim to be more digitally engaged. The participants are used to and practice language mixing that tends to include Serbian too, which reflects their multilingual environment. Despite occasional encounters with unfamiliar languages, participants generally support multilingualism and encourage additional language learning, which they understand to be an advantage in navigating professional and personal situations alike. Their lack of preference for using Serbian could be connected to their lack of confidence in their Serbian language skills, which needs to be researched more to uncover the underlying reasons. Their higher confidence in English has also shown that they are less afraid to use it in a variety of settings online and even offline. What we can tell from the results is that age and exposure can impact the language choices and type of online participation people take part in. Additionally, the importance and necessity for online communities, having access to online resources and a platform for Vojvodina Hungarians to connect,

communicate, discuss shared histories and traditions, and maintain cultural ties, was also expressed by the vast majority of the participants.

Considering the size of the sample, one of the limitations to the study is its lack of broader generalizability. In the future, it would be important to investigate the characteristics of language use in the Facebook groups mentioned in 4.3 to gain a better understanding of the actual language practices of Vojvodina Hungarians online. Potential variables such as gender and occupation of participants should also be investigated, which might yield further valuable results. In combination with interviews and a corpus analysis of online communicative practices in communities (e.g. on Facebook), further data could be gathered and contextualized. Additionally, the use of techno-biographical interviews, which tell one's "life story in relation to technologies" (Lee 2014: 94) could also further our understanding of the roles digital devices and media play in the lives of Vojvodina Hungarians as well as how their digital habits changed over time, which would have made the present study richer in context.

REFERENCES

Androutsopoulos, J. 2013. Code-switching in computer-mediated communication. In S. Herring, D. Stein and T. Virtanen (eds.) *Pragmatics of computer-mediated communication*. Berlin and New York: Mouton de Gruyter, 659–686.

Androutsopoulos, J. 2015. Networked multilingualism: Some language practices on Facebook and their implications. *International Journal of Bilingualism 19(2)*, 185–205.

Balla, M., S. Buljanović and M. Ilić. 2012. Domains of Hungarian language use in Belgrade. *Jezikoslovlje 13(2)*, 565–583.

Baron, N. S. 2008. *Always on: Language in an online and mobile world*. Oxford: Oxford University Press.

Belmar, G. and M. Glass. 2019. Virtual communities as breathing spaces for minority languages: Re-framing minority language use in social media. *Adeptus 14*, 1–24.

Bornman, E. 2003. Struggles of identity in the age of globalisation. *Communicatio: South African Journal for Communication Theory and Research 29(1–2)*, 24–47. https://doi.org/10.1080/02500160308538019

Chen, S. R. 2007. Code-switching between English and Mandarin Chinese on postings in the college-affiliated bulletin board system in Taiwan: A functional approach. *Lancaster University Postgraduate Conference in Linguistics & Language Teaching 1*, 16–32.

Cormack, M. 2013. Concluding remarks: Towards an understanding of media impact on minority language use. In E. H. G. Jones and E. Uribe-Jongbloed (eds.) *Social media and minority languages: Convergence and the creative industries*. Bristol: Multilingual Matters, 255–265.

Cunliffe, D. and S. C. Herring. 2005. Introduction to minority languages, multimedia and the web. *New Review of Hypermedia and Multimedia 11(2)*, 131–137.

Cunliffe, D. 2007. Minority languages and the internet: New threats, new opportunities. In M. Cormack and N. Hourigan (eds.) *Minority Language Media: concepts, critiques and case studies*. Clevedon: Multilingual Matters, 133–150.

Cunliffe, D. 2019. Minority languages and social media. In G. Hogan-Brun and B. O'Rourke (eds.) *The Palgrave handbook of minority languages and communities*. London: Palgrave Macmillan, 451–480.

Danet, B. and S. C. Herring (eds.) 2007. *The multilingual internet. Language, culture and communication online*. Oxford: Oxford University Press.

Darvin, R. 2016. Language and identity in the digital age. In S. Preece (ed.) *The Routledge Handbook of Language and Identity*. Abingdon: Routledge, 523–540.

Deumert, A. and S. O. Masinyana. 2008. Mobile language choices – The use of English and isiXhosa in text messages (SMS) Evidence from a bilingual South African sample. *English World-Wide 29(2)*, 117–147.

Durham, M. 2007. Language choice on a Swiss mailing list. In: B. Danet and S. C. Herring (eds.) *The multilingual internet: Language, culture, and communication online*. Oxford: Oxford University Press, 319–339.

Galla, C. 2009. Indigenous language revitalization and technology from traditional to contemporary domains. In J. Reyhner and L. Lockard (eds.) *Indigenous language revitalization: Encouragement, guidance & lessons learned*. Flagstaff, Arizona: Northern Arizona University, 167–182.

Helsper, E. J. and R. Eynon. 2010. Digital natives: Where is the evidence?. *British Educational Research Journal 36(3)*, 503–520.

Jánk, I. and Sz. Rási. 2013. Hungarian as a minority and majority language in different language policy contexts. *Current Issues in Language Planning*, 1–18.

Jones, E. H. G. and E. Uribe-Jongbloed (eds.) 2013. *Social media and minority languages: Convergence and the creative industries*. Bristol: Multilingual Matters.

Jongbloed-Faber, L. *et al*. 2016. Language use of Frisian bilingual teenagers on social media. *Treballs de Sociolingüística Catalana* 26, 27–54.

Kelly-Holmes, H. 2004. An analysis of the language repertoires of students in higher education and their language choices on the Internet (Ukraine, Poland, Macedonia, Italy, France, Tanzania, Oman and Indonesia). *International Journal of Multicultural Societies 6(1)*, 29–52.

Lackaff, D. and W. Moner. 2016. Local languages, global networks: Mobile design for minority language users. *SIGDOC'16 Proceedings of the 34th ACM International Conference on the Design of Communication*. Silver Spring, Maryland, 1–9.

Lee, C. 2014. Language choice and self-presentation in social media: The case of university students in Hong Kong. In P. Seargeant and C. Tagg (eds.) *The language of social media: Identity and community on the Internet*. London: Palgrave Macmillan, 91–111.

Lee, C. 2016. *Multilingualism Online*. First Edition. London: Routledge.

Lynn, T., K. Scannell and E. Maguire. 2015. Minority language Twitter: Part-of-speech tagging and analysis of Irish tweets. *Proceedings of the ACL 2015 workshop in noisy user-generated text.* Beijing, 1–8.

Mafu, S. 2004. From the oral tradition to the information era: The case of Tanzania. *International Journal on Multicultural Societies 6(1)*, 53–78.

Merchant, G. 2001. Teenagers in cyberspace: an investigation of language use and language change in internet chatrooms. *Journal of research in reading 24(3)*, 293–306.

Paricio-Martín, S. J. and J. P. Martínez Cortés. 2010. New ways to revitalise minority languages: The repercussions of the internet in the case of Aragonese. *Digithum 12*, 1–11.

Pásztor-Kicsi, M. 2016. Regionality–Language–Internet. *Acta Universitatis Sapientiae, Philologica 8(2)*, 35–47.

Petrovich, P. G. 2016. Hungarian-Slavic bilingualism in Transcarpathia, Vojvodina and Prekmurje. *Ежегодник финно-угорских исследований (4)*, 20–30.

Prensky, M. 2001. Digital natives, digital immigrants. *On the Horizon: The International Journal of Learning Futures 9(5)*, 1–6.

Rau, D. V. and M. Yang. 2009. Digital transmission of language and culture. In M. Florey (ed.) *Language endangerment and maintenance in the Austronesian region.* Oxford: Oxford University Press, 207–224.

Soria, C. *et al.* 2016. Fostering digital representation of EU regional and minority languages: The digital language diversity project. *Proceedings of the tenth international conference on language resources and evaluation.* Portorož, 3256–3260.

Spilioti, T. 2009. Graphemic representation of text-messaging: Alphabet-choice and codeswitches in Greek SMS. *Pragmatics 19(3)*, 393–412.

Stern, A. 2017. How Facebook can revitalise local languages: Lessons from Bali. *Journal of Multilingual and Multicultural Development 38(9)*, 788–796.

Székely, L. 2018. Nyelvében él? Külhoni magyar fiatalok nemzeti kötődése. *Kisebbségi Szemle 3(3)*, 75–99.

Tagg, C. (ed). 2015. *Exploring digital communication: Language in action.* London: Routledge.

Vaisman, C. 2011. Performing girlhood through typographic play in Hebrew blogs. In C. Thurlow and K. Mroczek (eds.) *Digital discourse: Language in new media.* Oxford: Oxford University Press, 177–196.

SUMMARY

MINORITIES IN THE DIGITAL SPACE: VOJVODINA HUNGARIANS' DIGITAL PRESENCE, LANGUAGE CHOICES, AND LANGUAGE USE ONLINE

The present study explores the digital media practices and language use tendencies of the Vojvodina Hungarian minority, shedding light on their participation in digital spaces, language preferences, and factors influencing their language choices both online and offline. Through a series of research questions, the study aims to identify the extent of the Vojvodina Hungarians' digital involvement and engagement, how they use their languages in online and offline settings, and the roles digital spaces have for them as a minority. The findings revealed that although Vojvodina Hungarians regularly consume digital media and a variety of internet content in Hungarian, Serbian, and English, they are not overly active in online content creation. While Hungarian remains dominant in face-to-face communication, English slightly outweighs Hungarian in online content consumption. Additionally, younger participants displayed a stronger digital presence and are more inclined towards multilingual language mixing. Despite challenges, participants express support for multilingualism and recognize its advantages in navigating personal and professional contexts.

KEYWORDS: digital language use, minorities in the digital space, digital habits, multilingual environment, English-dominated online spaces, Hungarian minority, language choices, multilingualism, Vojvodina Hungarians.

APPENDIX
Questionnaire

A. Background information (1–10)

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. Place of birth (settlement): _____

4. Current place of residence (settlement): _____

5. 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)

6. 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: _____

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

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

9. Have you stayed in another country for at least 6 months? Yes, No

10. If you have stayed in another country for at least 6 months, which country was it and what was the purpose of travel? ____

B. Language Knowledge and History (11–28)

If any of the questions below do not apply to you *(for example, if you never have contact with relatives or grandparents, or if they are no longer alive or you do not speak a particular language),* circle "This question does not apply to me."

11. *Which language(s) do you consider* your mother tongue *(the language(s) you first learnt)*?* Hungarian, Serbian, Other: _____

12. *If you have more than one mother tongue, which one would you say as your primary mother tongue/first language?* This question does not apply to me, Hungarian, Serbian, Other: _____

13. *How did you learn the following languages?** (You can mark multiple replies per line.)**

	Hungarian	Serbian	English
At home from the family	63	21	2
From friends, neighbours or colleagues	36	29	15
At school or at language classes	2	42	43
From the internet	2	3	40
I do not speak the language / I never learnt it	-	5	4
	34%	32%	34%

Table 1. Results to question 13

14. *If applicable to you, what language(s) did your family and closest friends usually use with you in the past and now? ** (You can mark multiple replies per line.)

	Hungarian	Serbian	English	This question does not apply to me
As a child, your grandparents spoke with you				
As a child, your mother spoke with you				
As a child, your father spoke with you				
As a child, your siblings spoke with you				
As a child, your closest friends spoke with you				
Currently, your grandparents speak with you				
Currently, your mother speaks with you				
Currently, your father speaks with you				
Currently, your siblings speak with you				
Currently, your closest friends speak with you				

15. *What language (did) your parents use among themselves?** (Multiple answers can be marked.) This question does not apply to me, Hungarian, Serbian, Other: _____

16. *What language(s) do(es) your children speak?** (Multiple answers can be marked.) This question does not apply to me, Hungarian, Serbian, English, Other: _____

17. *Have you ever experienced someone else trying to prevent your parents from using certain languages with you? If so, which language(s)?** (Multiple answers can be marked.) Hungarian, Serbian, English, Other: _____

18. *Have you ever had your parents encouraged by someone else to use certain languages with you? If so, which language(s)?** (Multiple answers can be marked.) Hungarian, Serbian, English, Other: _____

18b. *Do you try to encourage your child(ren) to (learn and) use the following languages?** (Cricle the one(s) you do/would encourage them to use and learn.)

	Hungarian	Serbian	English
Yes I encourage my child(ren) to learn and speak	40%	27%	27%
No, I do not encourage my child(ren) to learn and speak	18%	-	2%
I am not a parent, but I **would** encourage my future child(ren) to learn and speak	40%	70%	68%
I am not a parent, but I **would not** encourage my future child(ren) to learn and speak	2%	3%	3%

Table 2. Results to question 18b

19. *How would you rate your own language skills in Hungarian?*

	Perfectly (without any difficulties)	Well	Well enough	Poorly	Not at all
I speak Hungarian	87%	13%	-	-	-
I understand Hungarian	93%	5%	2%	-	-
I write in Hungarian	85%	10%	5%	-	-
I read in Hungarian	95%	3%	2%	-	-

Table 3. Results to question 19

20. *How would you rate your own language skills in Serbian?*

	Perfectly (without any difficulties)	Well	Well enough	Poorly	Not at all
I speak Serbian	21%	26%	25%	25%	3%
I understand Serbian	25%	39%	26%	8%	2%
I write in Serbian	25%	36%	20%	19%	-
I read in Serbian	33%	38%	20%	6%	3%

Table 4. Results to question 20

21. *How would you rate your own language skills in English?*

	Perfectly (without any difficulties)	Well	Well enough	Poorly	Not at all
I speak English	30%	30%	20%	13%	7%
I understand English	35%	30%	20%	8%	7%
I write in English	32%	27%	20%	15%	7%
I read in English	42%	23%	20%	8%	7%

Table 5. Results to question 21

22. *If you speak more than one language, do you mix your spoken languages when talking to other Vojvodina Hungarians?* (For example: You are talking with a Hungarian acquaintance in Hungarian and you are switching the language of conversation from Hungarian to Serbian back and forth. Language alternation can apply to words alone or to entire sentences.) Yes, No

23. *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**

24. *How bravely/boldly do you use the following languages live and online?*

	Bravely	Not so bravely	Do not use it on purpose	I do not speak it at all there
I use the Hungarian language in face-to-face situations	92%	8%	-	-
I use the Serbian language in face-to-face situations	46%	37%	5%	13%
I use the English language in face-to-face situations	52%	33%	6%	8%
I use the Hungarian language online	95%	-	5%	-
I use the Serbian language online	44%	33%	6%	16%
I use the English language online	68%	24%	2%	6%

Table 6. Results to question 24

25. *Do you speak any other foreign language(s)?* Yes, no

26. *If you answered yes to the previous question, which language(s) is it/are they and how would you rate your own language skills?*

Language x: _____: Beginning / Intermediate / Advanced / Native speaker

27. *Which one of the following languages do you use most online?* (Mark only one.) Hungarian, Serbian, English, Other: _____

28. *Which one of the following languages do you use most in face-to-face conversations?* (Mark only one.) Hungarian, Serbian, English, Other: _____

C. Language Use (29–38)

If any of the questions below do not apply to you *(for example, if you never have contact with relatives or grandparents, or if they are no longer alive or you do not speak a particular language),* circle "This question does not apply to me."

29. *Do you use Hungarian in the following situations and how often?*

	I always use Hungarian	I regularly use Hungarian	I sometimes use Hungarian	I rarely Hungarian	I never use Hungarian
On the internet	52%	32%	12%	2%	2%
At home	90%	7%	3%	0%	0%
With relatives	82%	18%	0%	0%	0%
At work/school	69%	15%	11%	3%	2%
With friends	78%	16%	4%	0%	2%
With neighbours	55%	25%	12%	3%	5%
At stores	31%	25%	22%	15%	7%
On the street	38%	46%	8%	8%	0%
At libraries	40%	18%	22%	7%	13%
At church	59%	18%	5%	7%	11%
At other religious events	41%	20%	11%	8%	20%
With authorities	20%	18%	18%	28%	16%
At community events (e.g., cultural events, festivals, etc.)	43%	25%	20%	10%	2%
For the expression of deeper emotions	70%	20%	8%	0%	2%
For profanity	61%	16%	11%	7%	5%
total	*55%*	*21%*	*11%*	*7%*	*6%*

Table 7. Results to question 29

30. *Do you use Serbian in the following situations and how often?*

	I always use Serbian	I regularly use Serbian	I sometimes use Serbian	I rarely Serbian	I never use Serbian
On the internet	2%	24%	32%	24%	18%
At home	8%	13%	22%	19%	38%
With relatives	2%	16%	22%	21%	33%
At work/ school	5%	27%	24%	22%	17%
With friends	0%	29%	18%	38%	15%
With neighbours	5%	36%	23%	23%	10%
At stores	17%	55%	13%	9%	6%
On the street	5%	41%	26%	15%	13%
At libraries	9%	24%	21%	16%	30%
At church	0%	10%	16%	21%	53%
At other religious events	0%	11%	21%	16%	53%
With authorities	31%	33%	17%	16%	3%
At community events (e.g., cultural events, festivals, etc.)	7%	33%	16%	29%	15%
For the expression of deeper emotions	2%	20%	8%	16%	44%
For profanity	6%	25%	30%	22%	17%
total	7%	26%	21%	21%	25%

Table 8. Results to question 30

31. *Do you use English in the following situations and how often?*

	I always use English	I regularly use English	I sometimes use English	I rarely English	I never use English
On the internet	48%	27%	7%	12%	7%
At home	3%	13%	22%	19%	36%
With relatives	5%	6%	5%	28%	56%
At work/school	6%	35%	17%	21%	21%
With friends	10%	22%	30%	17%	21%
With neighbours	0%	10%	3%	16%	71%
At stores	2%	8%	5%	14%	71%
On the street	3%	6%	15%	19%	57%
At libraries	3%	6%	8%	11%	72%
At church	2%	5%	2%	13%	78%
At other religious events	3%	5%	2%	13%	77%
With authorities	2%	8%	7%	15%	68%
At community events (e.g., cultural events, festivals, etc.)	27%	10%	8%	21%	34%
For the expression of deeper emotions	13%	16%	11%	23%	37%
For profanity	22%	17%	18%	23%	20%
total	*10%*	*13%*	*11%*	*18%*	*48%*

Table 9. Results to question 31

32. *If you had to choose between Hungarian, Serbian and English to use only that for the rest of your life, which one would you choose and why?*

33. *Is there any sort of online community (e.g. Facebook group) where you can communicate with other Vojvodina Hungarians?* Yes, No

34. *Do you think there is a need for such online communities where you can communicate with other Vojvodina Hungarians? Why yes/no?*

35. *Are you a member of a Facebook group that includes Vojvodina Hungarians? If so, what is he nature/topic/theme of the group(s)?*

36. *Are there institutions or people who support the Hungarian language in Serbia?* Yes, no

37. *Is there a printed newspaper in the following languages to which you have access?** (Circle the ones that are available to you.) Hungarian, Serbian, English

38. *Which newspaper would you take off the shelf in the store if it was available in three languages (Hungarian, English, Serbian)?* (Circle only one.) Hungarian, Serbian, English

D. Internet use and active online language use (39–45)

39. *Do you have access to internet content (websites, news portals, blogs, etc.) in the following languages?** (Circle all that you have access to.) Hungarian, Serbian, English

40. *How regularly do you read/visit the following websites?* (One can be selected per line. Mark the one that best applies to you.)

	On a daily basis	Regularly	Sometimes	Rarely	Never
I visit Hungarian websites	48%	17%	25%	7%	3%
I visit Serbian websites	7%	18%	29%	27%	19%
I visit English websites	38%	20%	29%	7%	6%

Table 10. Results to question 40

41. *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	44%	11%	34%	5%	6%
Instagram	54%	10%	16%	10%	10%
TikTok	60%	5%	10%	8%	22%
Discord	39%	6%	5%	5%	45%
Reddit	15%	8%	3%	8%	65%
Pinterest	18%	7%	16%	15%	44%
YouTube	31%	27%	13%	8%	21%
Twitter (X)	5%	13%	14%	13%	55%

Table 11. Results to question 41

42. *What online (internet) activities do you participate in and how often?* (One can be selected per line. Mark the one that best applies to you.)

	On a daily basis	Regularly	Sometimes	Rarely	Never
I engage in social media activities (e.g. commenting, chatting on Facebook)	73%	8%	16%	3%	-
I write a blog	-	2%	2%	3%	93%
I make TikTok videos	3%	6%	5%	3%	83%
I comment on TikTok or share videos with friends	32%	6%	8%	5%	49%
I share pictures on Instagram	68%	14%	-	-	17%
I post in relation to a blog or online newspaper	-	2%	24%	11%	63%
I share memes	50%	2%	11%	29%	8%
I create and share videos	3%	2%	-	9%	86%
I play video games with friends (Discord, Twitch, streaming, etc.)	33%	2%	6%	30%	29%

Table 12. Results to question 42

43. *In which language(s) do you participate in the following online activities?** (You can select multiple languages per line!) **

	In Hungarian	In Serbian	In English	I do not do it at all
I engage in social media activities (e.g. commenting, chatting on Facebook)	40	4	32	3
I write a blog	8	1	13	45
I make TikTok videos	18	14	21	26

I comment on TikTok or share videos with friends	27	3	33	46
I share pictures on Instagram	17	4	19	39
I post in relation to a blog or online newspaper	8	3	9	52
I share memes	30	10	29	23
I create and share videos	7	-	7	56
I play video games with friends (Discord, Twitch, streaming, etc.)	17	4	23	37
	24%	*6%*	*25%*	*45%*

Table 13. Results to question 43

44. *When you search for something on the Internet (e.g. in Google), in what language do you type the search term?* (One can be selected per line. Mark the one that best applies to you!)

	On a daily basis	Regularly	Sometimes	Rarely	Never
In Hungarian	52%	20%	13%	10%	5%
In Serbian	9%	16%	40%	22%	13%
In English	62%	24%	8%	2%	4%

Table 14. Results to question 44

45. *What factors influence the language in which you comment online?** (Circle all that applies to you.) Your mother tongue, Language of comments on the website, Subject of comments or content, Your own cultural background, The language you speak best, Other: ____

_____

* Multiple answers can be marked or given.
** The results indicate the number of times participants chose the given language (for the given activity).