

# Language Acquisition by Roma-Slovak Bilingual Children over Time and by Three Types of Roma Communities

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**Abstract.** This research aims to determine the significance of the progress in the first and second language acquisition by Roma-Slovak bilingual children in their first year of schooling, differentiated by three types of Roma communities (type 1, type 2 and type 3) at the beginning of the school year (test) and the end of the school year (post-test). The partial aim is to analyze the context and relationships of the progress in the first and second language acquisition by Roma children, determined by the type of Roma community in which individual children live. The research set as a whole (n = 68) consists of Roma-Slovak bilingual children with Romani as their native language and Slovak as their second language in their first year of schooling. Subsequently, the research set is differentiated into three groups by the type of Roma community in which the children live, namely: type 1 – municipal and urban concentrations (n = 22); type 2 – settlements located on the outskirts of a city or municipality (n = 23); and type 3 – settlements spatially remote or separated by a natural or artificial barrier (n = 23). We used a standardized research tool, OOS Test – image-vocabulary test (Kondáš, 2010). We conducted the research in two phases, at the beginning of the school year (test) and the end of the school year (post-test). To analyze the data statistically, we used the SPSS 20.0 statistical program. As one of the important findings, this study has shown statistically significant differences between Roma-Slovak bilingual children from type 1, type 2 and type 3 Roma communities in L1 and L2 at the beginning and the end of the school year. Moreover, the research has shown statistically significant differences in the acquisition progress in L1 and L2 between children from the type 1, type 2 and type 3 communities at the given time. The main research problem arising from the findings is that the progress in the first and second language acquisition by Roma-Slovak bilingual children is determined by the type of Roma community in which the Roma children live. Furthermore, the findings show a relationship and connection between the first and second language acquisition development and the type of Roma community in which the children live.

**Keywords:** *Roma, Roma community type, bilingualism, acquisition, Romani, Slovak.*

**Самко Мілан, Росінські Растислав. Оволодіння мовою у часовому розрізі ромсько-словацькими дітьми-білінгвами з трьох ромських спільнот.**

**Анотація.** Метою цього дослідження є визначення значущості прогресу в оволодінні першою та другою мовами ромсько-словацькими двомовними дітьми протягом першого року навчання, диференційованого за трьома типами ромських громад (тип 1, тип 2 та тип 3)

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на початку навчального року (тест) та наприкінці навчального року (пост-тест). Частковою метою є аналіз контексту та взаємозв'язку прогресу в оволодінні ромськими дітьми першою та другою мовами залежно від типу ромської громади, в якій проживають окремі діти. Досліджувана сукупність загалом ( $n = 68$ ) складається з ромсько-словацьких двомовних дітей, для яких ромська мова є рідною, а словацька – другою мовою в перший рік навчання в школі. Згодом досліджувана сукупність була диференційована на три групи за типом ромської громади, в якій проживають діти, а саме: тип 1 – муніципальні та міські поселення ( $n = 22$ ); тип 2 – поселення, розташовані на околиці міста або муніципалітету ( $n = 23$ ); і тип 3 – поселення, просторово віддалені або відокремлені природним або штучним бар'єром ( $n = 23$ ). Ми використовували стандартизований дослідницький інструмент OOS Test – образно-словесний тест (Kondáš, 2010). Дослідження проводилося у два етапи: на початку навчального року (тест) та наприкінці навчального року (пост-тест). Для статистичного аналізу даних ми використовували статистичну програму SPSS 20.0. Одним із важливих результатів дослідження є те, що воно показало статистично значущі відмінності між ромсько-словацькими двомовними дітьми з ромських громад типу 1, типу 2 і типу 3 в мовах L1 і L2 на початку і наприкінці навчального року. Крім того, дослідження показало статистично значущі відмінності в прогресі засвоєння мови на рівнях L1 і L2 між дітьми з громад типу 1, типу 2 і типу 3 на певний момент часу. Основна дослідницька проблема, що впливає з отриманих результатів, полягає в тому, що прогрес в оволодінні першою та другою мовами ромсько-словацькими двомовними дітьми визначається типом ромської громади, в якій проживають ромські діти. Крім того, результати показують взаємозв'язок між розвитком засвоєння першої та другої мов і типом ромської громади, в якій живуть діти.

**Ключові слова:** *роми, тип ромської громади, двомовність, оволодіння, ромська мова, словацька мова.*

## Introduction

Linguistic and non-linguistic factors influence the processes taking place in individual speakers in the community, but also among Roma communities of various types. Communities of the same type are also diverse and differ in many ways. Comparisons between different types of communities and individual language development within one type of community may differ from each other. For example, the volume, intensity and extent of contact with L2 forms one of the factors of contact-induced changes in the bilingual Roma community. Hence, the language situation in Roma communities also varies and requires different ways of research: “Multilingual situations differ in so many ways that each researcher has to decide for himself/herself how to best systematize or organize many obvious differences” (Fishman, 2004, p. 114). From the spatial point of view, this study is based on three types of Roma communities<sup>1</sup> as language communities, with the strategic goal of

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<sup>1</sup> In the 2011 population and housing census in the Slovak Republic, 105,738 inhabitants officially declared their Roma nationality (Stat. Office., Tab. 115). However, unofficial estimates of the number of Roma in Slovakia are significantly higher, for example, based on sociographic mapping and a qualified estimate, the 2013 Atlas of Roma Communities states that there are 402,840 Roma living in Slovakia (Mušinka et al., 2014). 122,518 inhabitants officially declared the Romani language as their native language (Stat. Office., Tab. 156). This means that 19,780 more inhabitants declared the Romani as their native language compared to the inhabitants who declared to be of Roma nationality. There is a total of 803 settlements in cities and municipalities in Slovakia, including 324 settlements on the outskirts of municipalities, 246 settlements inside municipalities and 233 segregated settlements. 95,020 Roma live in settlements

their linguistic characteristics. These communities include: 1. communities concentrated in a municipality [Roma inhabitants living within a municipality but only concentrated in part thereof], 2. communities concentrated on the outskirts of a municipality [Roma inhabitants living concentrated in the outskirts of a municipality] and 3. communities concentrated outside a municipality [Roma inhabitants living in a settlement remote or separated from a municipality by some kind of a barrier]. One of the characteristics of Roma settlements and poverty is the link with social exclusion, including its spatial expression, where part of the Roma living in segregated communities is considered to be the most endangered by poverty and social exclusion (Rusnáková & Rochovská, 2016). Sociocultural and socioeconomic factors with their influence on the acquisition of both languages represent another characteristic of Roma communities. Collins, Toppelberg examined sociocultural and socioeconomic factors as predictors of Spanish and English language skills in Spanish-English bilingual children who speak primarily Spanish at home and are exposed to varying amounts of English. They found that sociocultural variables assumed proficiency in Spanish and socioeconomic variables assumed low to zero knowledge of English (Collins & Toppelberg, 2020). González critically evaluated the literature on sociocultural and socioeconomic factors influencing development in children of linguistic minorities and proposed recommendations to broaden the current understanding of the interaction effects of these factors (González, 2001). Our broadened approach to research into the acquisition of Roma languages in different types of Roma communities can demonstrate different language processes, while contributing to their greater understanding of the subject matter. Although Roma are bilingual in all the countries in which they live, research on bilingualism in the context of SLA (Second Language Acquisition) in language pairs, which include L1–Romani and L2–various languages, is rather rare (Hancock, 2006; 2012). Kyuchukov deals with this issue on an international scale, namely focusing on the linguistic, sociolinguistic, but mainly psycholinguistic aspects of Roma bilingualism (Kyuchukov 2000; 2005; 2014, but also his other works). SLA theories based primarily on behaviorism, language interaction, error analysis between languages, and cognitive perspectives demonstrate that SLA as a complex process is influenced by many social, intercultural, linguistic, and psycholinguistic factors (Song, 2018). In international linguistics, we know a number of first and second language researches with a wider variability of SLA theories, standardized research tools and diverse research methodology with regard to SLA. Long analyzed the methodological problems of SLA research, the role of modified input, and interaction in second language acquisition. Long in this analysis, he perceives input as the language forms used, and interaction as a functions of forms. He perceives this distinction as important on a theoretical level in relation to SLA processes but also on a practical level in relation to efficiency in second language acquisition (Long, 1981).

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on the outskirts of municipalities, 73,920 in segregated settlements and 46,496 in settlements inside municipalities. 187,305 Roma live dispersed among the majority population (Mušinka et al., 2014).

Subsequently, Block critically examined the assumptions underlying the input-action-output model in second language acquisition, and proposed an interdisciplinary approach to SLA research. He argues that the input-action-output approach does not take sociolinguistic considerations into account, and that a sociohistorical and sociolinguistic approach to language is necessary in SLA research, suggesting that the approach to language acquisition needs to be expanded (Block, 2003). Pica analyzed the classroom as a social and linguistic environment in language acquisition and argues that the element of assistance with comprehension is important in language acquisition and its absence reflects the unequal relationship of the participants in the interaction (Pica, 1987). It is clear that there may be significant differences among speakers from these Roma communities in their first year of schooling. These differences in psycholinguistic research provide a source of evidence related to major problems in language acquisition and processing theories and language system architecture (Kidd, 2018).

## Methods

This study theoretically and methodologically applies a sociolinguistic and psycholinguistic approach to research into the acquisition of Roma languages in the context of Roma communities, time and schooling. This research aims to determine the significance of the progress in the first and second language acquisition by Roma-Slovak bilingual children in their first year of schooling, differentiated by three types of Roma communities (type 1, type 2, and type 3) at the beginning of the school year (test) and at the end of the school year (post-test). The partial aim is to analyze the context and relationships of the progress in the first and second language acquisition by Roma children, as determined by the type of Roma community in which individual children live. The research tests the following research question: (RQ) What is the acquisition progress in L1 and L2 in Roma children in their first year of schooling, differentiated by three types of Roma communities (type 1, type 2 and type 3) at the beginning of the school year (Test) and at the end of the school year (Post -test).

## Participants

The research group as a whole ( $n = 68$ ) consists of Roma children with L1 - Romani and L2 - Slovak in their first year of schooling. Subsequently, the research set is differentiated into three groups by the type of Roma settlement in which they live: type 1 – municipal and urban concentrations ( $n = 22$ ); type 2 – settlements located on the outskirts of a city or municipality ( $n = 23$ ); and type 3 – settlements spatially remote or separated by a natural or artificial barrier ( $n = 23$ ).

## **Research Tool**

In the research, we made use of a standardized research tool, the OOS Test - image-vocabulary test (Kondáš, 2010). The OSS test determines children's vocabulary and verbal readiness. The OOS test - image-vocabulary test is one of the psychological tools to examine certain dimension of the child's readiness for school. For our purposes, the test was modified and culturally adapted for Roma children, pairing the Romani–Slovak languages.

## **Test Completion and Scoring**

The standardized O-S-S tool is structured to include 30 colorful images illustrating common or less common objects, animals and activities, which are presented to children on an individual basis. Each child is shown an image and asked a related question: "What is it?" In images 16-21, which illustrate activities, each child is also given an instruction: "Now, tell me what the boy is doing?" Each correct answer is scored with 1 point. Half-point values (.5) can only be assigned in six cases. The maximum score is 30 points. We carried out the testing in the school premises in the presence of a teacher's assistant and recorded it with the informed consent of parents.

## **Statistical Data Analysis**

To analyze the data statistically, we made use of the SPSS 20.0 statistical program. Due to non-standard distribution of the data, we made use of the Wilcoxon test, a nonparametric version of the t-test for two dependent selections, the Mann-Whitney test and the Kruskal-Wallis test. We accepted a standard significance level of  $\alpha \leq .05$ .

## **Research Implementation Schedule**

### **The First Phase of Research: Test**

We carried out the first phase of the research in September, at the beginning of the school year. We first tested Roma pupils in L2 (Slovak language) with 68 tests. Subsequently, after two weeks, we tested Roma pupils in L1 (Romani language) with 68 tests. In the first phase of the research, we carried out a total of 136 tests.

### **The Second Phase of Research: Post-Test**

We carried out the second phase of the research in June, at the end of the school year. We first tested Roma pupils in L2 (Slovak language) with 68 tests. Subsequently, after two weeks, we tested Roma pupils in L1 (Romani language) with

68 tests. In the second phase of the research, we carried out a total of 136 tests. In both phases of the research, we carried out a total of 272 tests.

## Results

Table 1

*Progress in Noun and Verb Acquisition in Romani L1 and Slovak L2, Type 1*

	Roma children, community 1					
	N	M	SD	SEM	Z	p
Test_L1_Nouns	22	16.41	2.88	.62	-.689	.491
Post-test_L1_Nouns	22	16.64	2.98	.64		
Test_L1_Verbs	22	5.05	.89	.20	-2.460	.014
Post-test_L1_Verbs	22	5.45	.73	.16		
Test_L2_Nouns	22	12.18	4.01	.86	-3.024	.002
Post-test_L2_Nouns	22	13.25	3.59	.77		
Test_L2_Verbs	22	3.55	1.65	.35	-2.032	.042
Post-test_L2_Verbs	22	4.09	1.71	.37		

When comparing the language skills of Roma children in the type 1 community achieved in the September test and the June post-test, we found a statistically significant progress in correctly marked verbs in Romani ( $Z = -2.460$ ;  $p = .014$ ) and in Slovak ( $Z = -2.032$ ;  $p = .042$ ), nouns in the Slovak ( $Z = -3.024$ ;  $p = .002$ ). In Romani, the difference represented 0.4 points for verbs and .23 points for nouns. In Slovak, the difference represented 1.07 points for nouns and .54 points for verbs. Children from the Roma community type 1 achieved higher success in L1 than in L2 in both the first and the second measurement. At the same time, children from Roma community type 1 achieved lower success in both L1 and L2 in verbs than in nouns. In nouns, they made higher acquisition progress in L2 than in L1.

Table 2

*Progress in Noun and Verb Acquisition in Romani L1 and Slovak L2, Type 2*

	Roma children, community 2					
	N	M	SD	SEM	Z	p
Test_L1_Nouns	23	12.52	3.24	.68	-3.157	.002
Post-test_L1_Nouns	23	14.41	3.62	.76		
Test_L1_Verbs	23	3.61	1.70	.35	-2.862	.004
Post-test_L1_Verbs	23	4.74	1.45	.30		
Test_L2_Nouns	23	7.13	2.39	.50	-3.233	.001
Post-test_L2_Nouns	23	9.02	2.94	.61		
Test_L2_Verbs	23	.96	1.46	.31	-3.188	.001
Post-test_L2_Verbs	23	2.70	2.03	.42		

When comparing the language skills of Roma children in the type 2 community achieved in the September test and the June post-test, we found a statistically significant progress in correctly marked nouns and verbs in both Slovak and Romani languages. The Wilcoxon test values ranged from -2.862 to -3.233. The significance of differences ranged from 0.004 to 0.001. In Romani, the difference represented 1.13 points for verbs and 1.89 points for nouns. In Slovak, the difference represented 1.89 points for nouns and 1.74 points for verbs. Children from the Roma community of type 2 scored higher in L1 than in L2 in both the first and second measurements. At the same time, children from the Roma community of type 2 achieved lower success in both L1 and L2 in verbs than in nouns. In nouns, they made higher acquisition progress in L2 than in L1.

Table 3

*Progress in Noun and Verb Acquisition in Romani L1 and Slovak L2, Type 3*

	<i>Roma Children, Community 3</i>					
	N	M	SD	SEM	Z	p
<i>Test_L1_Nouns</i>	23	10.89	1.69	.35	-2.059	.039
<i>Post-test_L1_Nouns</i>	23	11.50	2.18	.45		
<i>Test_L1_Verbs</i>	23	3.04	1.22	.26	-2.914	.004
<i>Post-test_L1_Verbs</i>	23	3.96	1.67	.35		
<i>Test_L2_Nouns</i>	23	2.98	2.66	.55	-3.462	.001
<i>Post-test_L2_Nouns</i>	23	4.67	2.15	.45		
<i>Test_L2_Verbs</i>	23	.13	.34	.07	-2.694	.007
<i>Post-test_L2_Verbs</i>	23	.91	1.16	.24		

When comparing the language skills of Roma children in the type 3 community achieved in the September test and the June post-test, we found a statistically significant progress in correctly marked nouns in both Slovak and Romani languages. The Wilcoxon test values ranged from -2.059 to -3.462. The significance of differences ranged from 0.039 to 0.001. In Romani, the difference represented 0.92 points for verbs and 0.61 points for nouns. In Slovak, the difference represented 1.69 points for nouns and 0.78 points for verbs. Children from the Roma community of type 3 scored higher in L1 than in L2 in both the first and the second measurement. At the same time, children from Roma community type 3 achieved lower success in both L1 and L2 in verbs than in nouns. In nouns, they made higher acquisition progress in L2 than in L1.

Table 4

*Progress in Noun and Verb Acquisition in Romani L1 and Slovak L2, Summary for Type 1, Type 2, and Type 3*

	Roma children, community 1, 2, 3				Z	p
	N	M	SD	SEM		
Test_L1_Nouns	68	13.23	3.51	.43	-3.799	<.001
Post-test_L1_Nouns	68	14.15	3.62	.44		
Test_L1_Verbs	68	3.88	1.55	.19	-4.650	<.001
Post-test_L1_Verbs	68	4.71	1.47	.18		
Test_L2_Nouns	68	7.36	4.85	.59	-5.516	<.001
Post-test_L2_Nouns	68	8.92	4.56	.55		
Test_L2_Verbs	68	1.51	1.93	.23	-4.555	<.001
Post-test_L2_Verbs	68	2.54	2.11	.26		

When comparing the language skills of Roma children achieved in the September test and the June post-test, we found a statistically significant increase in correctly marked nouns and verbs in both Slovak and Romani languages. The Wilcoxon test values ranged from -3.799 to -5.516. The significance of differences was at the level of  $\alpha \leq .001$ . In Romani, the difference represented .83 points for verbs and .92 points for nouns. In Slovak, the difference represented 1.56 points for nouns and 1.03 points for verbs. In summary, the progress is shown in Fig. 1.

**Figure 1**

*Progress in the Noun and Verb Acquisition by Roma Children, by Community Type*

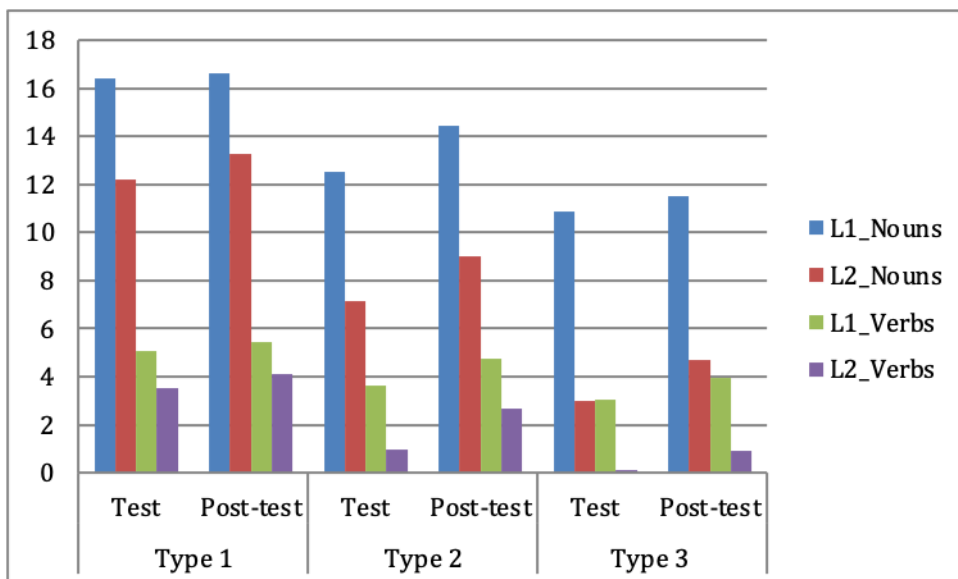




Figure 1 shows statistically significant differences between Roma-Slovak bilingual children from the first, second and third type of Roma communities. This is shown in Graph 1 at L1 and L2 at the beginning of the school year and at the end of the school year. It also shows statistically significant differences in both L1 and L2 acquisition progress between children from Type 1, Type 2 and Type 3 communities at the same time. According to the success rate in the first measurement (test), the second measurement (post-test) in both L1 and L2 for both verbs and nouns, the highest success rate was achieved by children from community type 1, followed by children from community type 2, and the lowest success rate was achieved by children from community type 3.

## Discussion

This research aimed to determine the significance of the progress in the first and second language acquisition by Roma-Slovak bilingual children in their first year of schooling, differentiated by three types of Roma communities (type 1, type 2 and type 3) at the beginning of the school year (test) and at the end of the school year (post-test). The partial aim was to analyze the context and relationships of the progress in the first and second language acquisition by Roma children, as determined by the type of Roma community in which individual children live. It is generally assumed that in the linguistic communication environment in which Roma children from type 1, type 2 and type 3 Roma communities live, Romani language is functionally dominant and used in a wide generational and linguistic contact circle in the given community. At the same time, it is assumed that Romani children from these types of communities primarily speak in Romani language at home and are secondarily exposed to Slovak language input. In the context of the study objectives and the research question, this research showed statistically significant differences between Roma-Slovak bilingual children from the first, second and third types of Roma communities in L1 and L2 in their first year of schooling both at the beginning and at the end of the school year. At the same time, we found statistically significant differences in the L1 and L2 acquisition progress between children from type 1, type 2 and type 3 communities. The findings suggest that the progress in the L1 and L2 acquisition is determined by the type of Roma community in which the children live. These findings can be explained in accordance with the suggestion of this research that children from different types of Roma communities are exposed to different amounts of Romani and Slovak language input. These are verbal manifestations affecting Roma children in both languages, mothers' language oriented at Roma children, direct and indirect language input in the second language acquisition by Roma children, which does not only affect preschool-aged children. Sorenson revealed a complex relationship between the level of education the child's mother achieved, the language in which that education took place, and the language input she provides to her children. With this complexity, she emphasized that monolingual studies on the linguistic input of bilingual children may not offer a sufficiently

different perspective to take into account a higher degree of variability in bilingual situations (Sorenson, 2020). Of course, not only language input plays an important role in the language acquisition (Clark, 2009), but also the language ideologies, approach and attitudes of Roma mothers, families and Roma communities towards languages. This attitude has an impact on the command and use of languages, or the development of Roma - Slovak bilingualism in a Roma child in both home and Roma community environments. Another significant finding of the study is the fact that according to the success rate in the first test at the beginning of the school year (test) and the second test at the end of the school year (post-test) in L1 and L2 in both verbs and nouns, the highest success rate was achieved by children from type 1 community, followed by children from type 2 community and the lowest success rate was achieved by children from type 3 community. At the same time, children from all three communities achieved a higher success rate in L1 than in L2 in both the first and second tests. This finding can possibly be explained by the diversity of Roma communities in the use of the Romani language according to communication situations in terms of the scope and reach of the Romani language network, its limitation to space or use in frequent social spaces according to the child's reach. According to Fishman, language situations differ in many ways, and there are many descriptive and analytical variables that can explain language selection in different situations. "However, it turned out that the usual choice of language is not at all random determined by the current disposition [...], certain communicating classes choose only one language from several theoretically possible languages on certain occasions" (Fishman, 2004, p. 114). Furthermore, the findings show that children from all three communities achieved lower success rate in verbs in both L1 and L2 than in nouns. In the case of nouns, we saw higher acquisition progress in L2 than in L1 in all three types of communities. However, in the case of verbs, we saw a higher acquisition progress in L2 than in L1 in type 1 and type 2 communities, while we saw a higher acquisition progress in L1 than in L2 in type 3 community. This finding can be explained by the influence of school language input in L2 and the language competence of Roma children in both languages, which we do consider as a whole composed of two mono-linguists. "An ideal bi-linguist, but also an ideal a native speaker, whose command of his or her mother tongue is perfect and absolute, is in a way a myth, [...]. Therefore, we should not expect something from bilinguals that does not even exist at the level of mastering a single system" (Štefánik, 2005, p. 103). Subsequently, idiolect as the language of one speaker, individual language competence in Romani and Slovak, which in the analysis can show the context in L1 and L2 language acquisition and processes that may not be strikingly visible in the analysis of a larger language corpus in the context of communities. "An analysis of the development of two linguistic competencies in one person may help us understand to what extent the depth logic of development is determined by the specific grammatical system or the specific way of processing the human language, rather than by the characteristics of the individual or the communicative situation"(Meisel, 2004, p. 260).

## Conclusion

This research aimed to analyze the language acquisition by Roma-Slovak bilingual children with Romani as their native language and Slovak as their second language in their first year of schooling, differentiated by three types of Roma communities at the beginning of the school year (test) and at the end of the school year (post-test). The partial aim of the study was to analyze the context and relationships of the progress in the first and second language acquisition by children, as determined by the type of community in which individual children live. The results of this research provide mainly knowledge about the progress in the language acquisition and their differences determined by three types of Roma communities. As one of the important findings, this study has shown statistically significant differences in L1 and L2 between Roma-Slovak bilingual children from type 1, type 2 and type 3 Roma communities and, at the same time, between the beginning and the end of the school year. Moreover, the research has shown statistically significant differences in the acquisition progress in L1 and L2 between children from the type 1, type 2 and type 3 communities at the given time. According to the success rate in the first test at the beginning of the school year (test) and the second test at the end of the school year (post-test) in L1 and L2 in both verbs and nouns, the highest success rate was achieved by children from type 1 community, followed by children from type 2 community and the lowest success rate was achieved by children from type 3 community. At the same time, children from all three communities achieved a higher success rate in L1 than in L2 in both the first and second tests. Furthermore, the findings show that children from all three communities achieved lower success rate in verbs than in nouns in both L1 and L2. In the case of nouns, we saw higher acquisition progress in L2 than in L1 in all three types of communities. However, in the case of verbs, we saw a higher acquisition progress in L2 than in L1 in type 1 and type 2 communities, while we saw a higher acquisition progress in L1 than in L2 in type 3 community. These findings also indicate that children from different types of Roma communities are exposed to different amounts of Romani and Slovak language input. The findings clearly show that children from different types of Roma communities need different support and different approach to acquire competences in both languages. The main research problem arising from the findings is that the progress in the first and second language acquisition by Roma-Slovak bilingual children is determined by the type of Roma community in which the Roma children live. At the same time, it is a research problem of the relationships and connections between the progress in the first and second language acquisition and the type of Roma community. This study is mainly limited by the non-existence of a standardized research tool to evaluate Roma-Slovak bilingualism and by the fact that the research set is only limited to Roma community types in the region around Spišská Nová Ves. Therefore, the results of this research cannot be considered to apply throughout the entire Roma language community, or to apply for sets of individual types of Roma community. This research primarily raises questions about

the direction of further language research differentiated by the types of Roma communities. These are mainly questions concerning the diversity of factors and predictors in the context of the extent and scope of their fundamental influence on the first and second language acquisition differentiated by the type of Roma communities.

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## Disclosure Statement

No potential conflict of interest was reported by the authors.

## References

- Block, D. (2003). *The social turn in second language acquisition*. Edinburgh University Press.
- Clark, E. V. (2009). *First language acquisition*. Cambridge University Press.
- Collins, B., & Toppelberg, C. (2020). The role of socioeconomic and sociocultural predictors of Spanish and English proficiencies of young Latino children of immigrants. *Journal of Child Language*, 1-28. <https://doi.org/10.1017/S0305000920000203>
- Fishman – Joshua, A. (2004). Kto rozpráva akým jazykom, s kým a kedy? In J. Štefánik (Ed.), *Antológia bilingvizmu* (pp. 114-128). Academic Electronic Press.
- Gonzáles, V. (2001). The role of socioeconomic and sociocultural factors in language minority children's development: An ecological research view. *Bilingual Research Journal*, 25(1-2), 1–30. <https://doi.org/10.1080/15235882.2001.10162782>
- Hancock, I. (2006). On Romani origins and identity. In A. Marsh & E. Strand (Eds.), *Gypsies and the problem of identities: contextual, constructed and contested* (pp. 69-92). Swedish Research Institute.
- Hancock, I. (2012). Roma education in America. In M. Miskovic (Ed.), *Roma education in Europe* (pp. 87-99). Palgrave.
- Kidd, E., Donnelly, S., & Christiansen, M. (2018). Individual Differences in Language Acquisition and Processing. *Trends in Cognitive Sciences*, 22(2), 154-169. <https://doi.org/10.1016/j.tics.2017.11.006>
- Kondáš, O. (2010). *Obrázkovo-slovníková skúška*. Psychodiagnostika.
- Kyuchukov, H. (2000). Introducing referents in Turkish children's narratives. *Psychology of Language and Communication*, 4(1), 65-74.

- Kyuchukov, H. (2005). Anaphora in Roma children's narratives. In B. Bokus (Ed.), *Studies in the psychology of child language* (pp. 365-382). Matrix.
- Kyuchukov, H. (2014). Acquisition of Romani in a Bilingual Context. *Psychology of Language and Communication*, 18(3), 211-225. <https://doi.org/10.2478/plc-2014-0015>
- Long, M. H. (1981). Input, interaction, and second-language acquisition. *Annals of the New York Academy of Sciences*, 379, 259-278. <https://doi.org/10.1111/j.1749-6632.1981.tb42014.x>
- Meisel-Jürgen, M. (2004). Raná diferenciácia jazykov u bilingválnych detí. In J. Štefánik (Ed.), *Antológia bilingvizmu* (pp. 260-282). Academic Electronic Press.
- Mušinka, A., Škobla, D., Hurrle, J., Matlovičová, K., & Kling, J. (2014). *Atlas rómskych komúnit na Slovensku 2013*. UNDP.
- Pica, T. (1987). Second-Language Acquisition, Social Interaction, and the Classroom. *Applied Linguistics*, 8(1), 3-21. <https://doi.org/10.1093/applin/8.1.3>
- Rusnáková, J., & Rochovská, A. (2016). Sociálne vylúčenie, segregácia a životné stratégie obyvateľov rómskych komúnit z pohľadu teórie zdrojov. *Geografický Časopis/ Geographical Journal*, 68(3), 245-260.
- Song S. (2018). Second Language Acquisition Theories. *Second language acquisition as a mode-switching process*. Palgrave Pivot.
- Sorenson, D., Duncan, T., & Paradis, J. (2020). How does maternal education influence the linguistic environment supporting bilingual language development in child second language learners of English? *International Journal of Bilingualism*, 24(1), 46-61. <https://doi.org/10.1177/1367006918768366>
- Štefánik, J. (2005). Ideálni monolingvisti a neúplní bilingvisti. J. Štefánik (Ed.), *Individuálny a spoločenský bilingvizmus* (pp. 95-104). Univerzita Komenského.

## Sources

- Tab. 115 Obyvateľstvo podľa pohlavia a národnosti (20.12.2022). <https://census2011.statistics.sk/tabulky.html>
- Tab. 156 Obyvateľstvo podľa pohlavia a materinského jazyka (20.12.2022). <https://census2011.statistics.sk/tabulky.html>