

PERCEPTIONS OF ELEMENTARY SCHOOL AND PRESCHOOL TEACHERS REGARDING CHILDREN'S PRE-READING SKILLS

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Abstract. This study examines differences in the perceptions of preschool and school teachers regarding the development of grapheme awareness, symbol recognition, reading and comprehension of short stories, verbal fluency, and the memorization of short poems. The sample consisted of 72 participants (preschool and school teachers) employed in preschools and elementary schools in northern Kosovo and Metohija. Data were collected using a questionnaire specifically designed for the purposes of this study. The data obtained through the questionnaire were analyzed using SPSS software, applying descriptive and inferential statistical methods, specifically the t-test, MANOVA, and Pearson's correlation analysis. The results of this study demonstrated, with statistical significance, that elementary school teachers assessed children's development of grapheme awareness significantly higher than preschool teachers ($p = 0.024$), while no differences were found in the recognition of symbols. Years of service did not show a significant correlation with the assessment of reading and comprehension of short stories ($p = 0.054$), although a slight downward trend in evaluations was observed with increasing years of service. Age of participants did not influence the assessment of children's verbal fluency or memorization of poems at the preschool and early school age levels.

Keywords: grapheme awareness; pre-reading skills; school and preschool teachers' perceptions

Introduction

The development of pre-reading skills in children represents a foundational step in acquiring functional literacy and enhancing academic achievement in early education. These skills do not only include technical text decoding, but also encompass complex cognitive, linguistic, and metalinguistic processes that emerge as early as the preschool period. During this stage, essential components such as phonological and grapheme awareness, decoding abilities, and verbal fluency begin to form, thereby establishing the groundwork for subsequent mastery of reading and writing.

Phonological awareness, understood as the ability to identify and manipulate sounds within words, has been recognized as one of the key indicators of reading success (Blachman, 2000). Research findings¹ suggest that children who develop strong phonological awareness during the preschool years are more likely to achieve proficiency in reading and spelling in the early grades. A meta-analysis encompassing 235 studies (Hulme & Snowling, 2013) further confirms that phonological awareness is the most significant single predictor of early reading achievement, particularly among children learning to read in transparent orthographies. In transparent orthographies, such as Serbian, the relationship between phonemes and graphemes is clear, which facilitates the development of decoding skills, while the recognition of phonemes and their correspondence to letters enables automated reading (Caravolas et al., 2013). In addition, the development of reading skills is significantly supported by the ability to link graphemes to phonemes and by understanding that written symbols convey specific meaning.

Previous studies indicate that these skills are interrelated, but they can be distinguished across specific factors such as phonological manipulation, phoneme discrimination, grapheme–phoneme conversion, and verbal fluency. Verbal fluency refers to the ability to produce speech quickly and smoothly, engaging both working memory and lexical accessibility. It affects decoding, as it enables the rapid association of phonological and orthographic units (Wolf & Bowers, 1999; Swanson et al., 2003).

The process of reading develops through several stages – from the visual recognition of words to the automatized connection of phonological and graphemic symbols (Ehri, 2005). In the Serbian language in particular, due to the high degree of matching between graphemes and phonemes (Nikolić, 1999), the timely identification of underdeveloped components of pre-reading skills is of critical importance. It has been noticed that children between the ages of five and seven most often experience difficulties with tasks that require identifying final phonemes or omitting and substituting initial sounds (Golubović et al., 2019a; 2019b), which highlights the necessity of targeted stimulation of these specific aspects within the educational process.

In educational practice, preschool teachers and elementary school teachers are among the most important actors in the early identification and stimulation of early pre-reading skills in children. Their assessments and observations from everyday pedagogical work can significantly contribute to the adaptation of instructional content and methods, as well as to the timely referral of children for additional support. In this regard, it is essential to examine how these professionals perceive the development of phonological and graphemic awareness, decoding abilities, and verbal fluency in children, and whether they identify differences in these skills with respect to gender, age, and other relevant demographic characteristics.

In the Serbian context, one of the most widely used instruments for the formal assessment of phonological awareness is the FONT test (Subotić, 2011), which includes tasks such as rhyme recognition and production, phoneme segmentation and blending, as well as sound substitution and elimination. Test results are often analyzed using factor analysis in order to identify the key components that constitute pre-reading skills as distinct, yet interrelated, cognitive domains.

Although existing international studies have suggested that younger teachers tend to place greater emphasis on children's readiness for reading (Giles & Tunks, 2015), while others have found no significant differences in attitudes with respect to years of service or educational level (Selçuk et al., 2024), systematic examination of preschool and elementary school teachers' perspectives remains lacking in the domestic context. Accordingly, this research seeks to address this gap and contribute to a deeper understanding of practitioners' perceptions regarding the development of specific components of pre-reading skills.

Research methodology

Research Problem

The problem addressed in this study arises from the need to systematically examine and assess the extent to which preschool and early elementary school teachers recognize and monitor the development of pre-reading skills in children, as well as how these assessments reflect the structure of pre-reading competencies themselves. Although the literature has adequately confirmed the role of grapheme and phonological awareness, decoding skills, and verbal fluency as key indicators of early literacy, there is insufficient research on how elementary school teachers and preschool teachers evaluate these domains, and whether patterns exist in their assessments that indicate a clear factor structure. Additionally, it remains an open question whether these assessments are influenced by individual characteristics of the respondents, such as work experience, level of education, or the type of institution in which they are employed.

Research objective

The aim of this study is to examine the perceptions of preschool and school teachers regarding the development of key pre-reading skills in children, with a focus on grapheme awareness, phonological manipulation and memory, decoding and comprehension of written words, verbal fluency, and text understanding. Additionally, the study seeks to determine the extent to which these perceptions vary according to sociodemographic characteristics of the respondents, such as type of institution they are employed in (preschool or school), gender, level of education, age, and years of service. The research is based on the assumption that statistically significant differences exist in respondents' perceptions in relation to these variables, and that these perceptions can be reliably classified within four latent dimensions representing the factor structure of pre-reading skills.

Research sample

The study included 72 participants, 71 of whom were female and 1 male, employed in preschools and elementary schools in the northern region of Kosovo and Metohija – Leposavić, Zubin Potok, Kosovska Mitrovica, and Zvečan. The largest proportion of participants were aged between 35 and 45 years (49.3%), while the smallest group consisted of those over 55 years old (5.8%). It is also noteworthy that participants employed in preschools were slightly more represented (51.2%) compared to those working in elementary schools (47.9%). Regarding level of education, the majority of participants had completed postgraduate studies of any level (specialist studies, master's programs, or doctoral studies) (46.5%), whereas the smallest proportion held an advanced vocational qualification (11.3%) (Table 1).

Table 1. Overview of demographic variables

	Φ	%
Age of the participants		
Up to 35 years	15	21,1
From 36 to 45 years	35	49,3
From 46 to 55 years	15	21,1
Over 55 years	6	8,5
Years of service		
Up to 10 years	35	49,3
From 11 to 20 years	22	31,0
Over 20 years	14	19,7
Education level		
Higher vocational education	8	11,3
Bachelor's degree	30	42,3
Postgraduate studies	33	46,5

Research Hypotheses

H1: There is a statistically significant difference in the perception of children's graphemic awareness and symbol recognition depending on the participants' occupational role.¹⁰

H2: Participants with more years of professional experience show a statistically significant correlation with higher assessments of children's abilities in reading and comprehension of short stories.

H3: There is a statistically significant difference in the assessment of verbal fluency and the memorization of short poems in relation to the age of the participants.

Research Procedure

The research was conducted between May and July 2024 in preschool institutions and elementary schools in northern Kosovo and Metohija, including Leposavić, Zubin Potok, Kosovska Mitrovica, and Zvečan. Data were collected using a questionnaire designed specifically for the purposes of this study by Perišić and Minić (2025), and administered online through Google Forms. Participants were informed that completing the questionnaire would take no longer than 15 minutes, that participation was voluntary, and that their responses would remain anonymous. It was further emphasized that the data would be used solely for academic purposes. This study utilized statements from a questionnaire designed to examine how preschool and elementary school teachers perceive the pre-reading skills of children in preschool and first grade. The questionnaire contained a total of twenty-eight items, sixteen of which, focusing on preschool and school teachers' views of children's pre-reading abilities, are presented in this paper. Respondents indicated their answers by selecting one of the options on a five-point Likert scale, which reflected the level of development of specific aspects of phonological awareness (1 – not developed at all, 2 – poorly developed, 3 – unsure, 4 – fairly developed, 5 – fully developed).

Statistical data analysis

In order to analyze the hypotheses formulated in this study, it was necessary to apply statistical tests that would extract the research results. For this purpose, the SPSS statistical software was used. The analyses included both descriptive and inferential statistical procedures, specifically the t-test, Pearson's correlation, and analysis of variance (ANOVA).

Results

H1 – There is a statistically significant difference in the perception of children's graphemic awareness and symbol recognition depending on the participants' occupational role.

Table 2. Descriptive statistics

	Job position	Number of respondents	M	SD
Children have developed grapheme awareness.	School teacher	38	3,95	0,957
	Preschool teacher	34	3,41	1,019
Children recognize symbols.	School teacher	38	3,79	1,094
	Preschool teacher	34	3,97	0,937

M – mean value; SD – standard deviation

Table 3. T-test

		Levene's test for equality of variances				
		Φ	p	t	Degrees of freedom	p
Children have developed grapheme awareness.	Equal variances assumed	1,27	0,263	2,300	70	0,024
	Equal variances not assumed			2,292	67,93	0,025
Children recognize symbols.	Equal variances assumed	2,18	0,144	-0,750	70	0,456
	Equal variances not assumed			-0,756	69,87	0,452

Based on the results presented in Tables 2 and 3, which aimed to examine whether there is a statistically significant difference in the perception of grapheme awareness development and symbol recognition in children in relation to the respondents' job positions, it can be concluded that statistically significant differences exist between the perceptions of preschool teachers and elementary school teachers. Specifically, school teachers ($M = 3.95$) rated children's grapheme awareness development significantly higher compared to preschool teachers ($M = 3.41$), with a significance level of $p = 0.024$. On the other hand, when considering the analysis of symbol recognition perception, no statistically significant difference was observed between school teachers ($M = 3.79$) and preschool teachers ($M = 3.97$). Therefore, this hypothesis can be partially accepted, as it is confirmed only in part. Overall, these findings suggest that the respondents' job position influences the perception of children's grapheme awareness development but does not significantly affect the assessment of symbol recognition.

H2- Participants with more years of professional experience show a statistically significant correlation with higher assessments of children's abilities in reading and comprehension of short stories.

Table 4. Correlation analysis

		Children's skills in reading and comprehending short stories
Years of work experience	Pearson's correlation coefficient	-0,228
	Significance level	0,054
	Number of respondents	72

With regard to the second variable, where the aim was to examine whether respondents with longer work experience are significantly correlated with higher

levels of children's abilities in reading and understanding short stories, the results presented in Table 4 indicate that no statistically significant correlation was found, although the significance level was very close to the threshold. This suggests that it cannot be reliably claimed that such a relationship exists in the wider population. However, the trend observed a slight decrease in children's reading and comprehension abilities with an increase in preschool and school teachers' years of service, which may be a topic for further investigation. Although a statistically significant result was not obtained, the hypothesis should be rejected based on these findings, with the note that the result lies at the level of a tendency and that an effect might emerge with a larger sample or a more precise measure.

H3- There is a statistically significant difference in the assessment of verbal fluency and the memorization of short poems in relation to the age of the participants.

Table 5. Overview of the variable Age

		Categories	Number of respondents
Years of age	1	Up to 25 years	2
	2	25 to 35 years	13
	3	35 to 45 years	36
	4	45 to 55 years	15
	5	Over 55 years	6

Table 6. Descriptive statistics

	Years of age	AC	CD	Number
Phonological working memory and phonological awareness	Up to 25 years	2,50	0,71	2
	25 to 35 years	3,08	0,95	13
	35 to 45 years	2,86	0,96	36
	45 to 55 years	2,60	1,18	15
	Over 55 years	2,67	0,82	6
	Total	2,82	0,98	72
Decoding and lexical recognition	Up to 25 years	4,00	0,00	2
	25 to 35 years	3,00	1,08	13
	35 to 45 years	3,14	1,05	36
	45 to 55 years	3,27	0,88	15
	Over 55 years	3,33	1,21	6
	Total	3,18	1,01	72

Table 7. Multivariate tests

		Value	Φ	Degrees of freedom for the hypothesis	Degrees of freedom for error	p	Partial η^2
Model constant	Pillai's Trace	0,85	182,96	2,0	66,0	0,000	0,847
	Wilks' Lambda	0,15	182,96	2,0	66,0	0,000	0,847
	Hotelling's Trace	5,54	182,96	2,0	66,0	0,000	0,847
	Roy's Largest Root	5,54	182,96	2,0	66,0	0,000	0,847
Age	Pillai's Trace	0,10	0,85	8,0	134,0	0,557	0,049
	Wilks' Lambda	0,90	0,86	8,0	132,0	0,552	0,050
	Hotelling's Trace	0,10	0,87	8,0	130,0	0,547	0,051
	Roy's Largest Root	0,10	1,72	4,0	67,0	0,157	0,093

Table 8. Test of between-subjects effects

		Sum of squares (Type III)	Degrees of freedom	Mean square	Φ	p	Partial η^2
Correlated model	Phonological working memory and phonological awareness	1,99	4	0,50	0,50	0,736	0,029
	Decoding and lexical recognition	2,08	4	0,52	0,49	0,740	0,029
Model constant	Phonological working memory and phonological awareness	224,12	1	224,12	225,25	0,000	0,771
	Decoding and lexical recognition	334,34	1	334,34	317,42	0,000	0,826

Age	Phonological working memory and phonological awareness	1,99	4	0,50	0,50	0,736	0,029
	Decoding and lexical recognition	2,08	4	0,52	0,49	0,740	0,029
Error	Phonological working memory and phonological awareness	66,66	67	0,99			
	Decoding and lexical recognition	70,57	67	1,05			
Total	Phonological working memory and phonological awareness	641,00	72				
	Decoding and lexical recognition	801,00	72				
Total corrected	Phonological working memory and phonological awareness	68,65	71				
	Decoding and lexical recognition	72,65	71				

Based on the application of the MANOVA statistical test and the results presented in Tables 5, 6, 7, and 8, it can be concluded that there is no statistically significant difference in the evaluation of children's verbal fluency and memory for short poems between preschool and elementary school teachers with respect to their age. This indicates that, regardless of the teachers' age, the assessment of verbal fluency and memory for short poems does not differ significantly. These findings are further supported by the multivariate tests, which show that the age of the respondents does not have a significant effect on the combined set of analyzed dependent variables.

Regarding the analysis of individual dependent variables (phonological working memory and phonological awareness; decoding and lexical recognition), the

results of the between-groups tests indicate that differences in the mean scores for pseudoword repetition and the ability to convert graphemes into phonemes while recognizing word meanings are not statistically significant. These findings suggest that, within this sample, the age of the respondents does not represent a significant factor in the assessment of phonological working memory and phonological awareness, nor in decoding and lexical recognition in younger school-aged children.

Discussion and conclusion

The results of this study provide insight into preschool and elementary school teachers' perceptions of the development of phonological and grapheme awareness, decoding abilities, and verbal fluency in children of preschool and early school age. The findings confirm that statistically significant differences exist in these assessments depending on job position, whereas other examined variables, such as years of work experience, do not have a statistically significant impact.

The first hypothesis is partially confirmed – school teachers were found to be more accurate evaluators of children's grapheme awareness development compared to preschool teachers, whereas no major differences were observed in the assessment of symbol recognition abilities. This can be explained by the differing focus in pedagogical practice: school teachers are directly involved in the formal literacy process and therefore have more opportunities to notice nuances in the development of grapheme awareness, whereas preschool teachers work within the broader context of cognitive and socio-emotional development. These findings are consistent with the results of Perišić and Minić (2025), who also emphasize that specific aspects of pre-reading skills may be more sensitive to the educational context than to general demographic factors.

Regarding the second hypothesis, no statistically significant correlation was found between years of work experience and the assessment of children's reading and comprehension of short stories, although a trend was observed indicating a slight decrease in evaluations with increasing experience. Therefore, the hypothesis was not confirmed. Similar findings were reported by Perišić and Minić (2025), who note that while school and preschool teachers' experience may have some influence on their assessments, this effect is not always statistically significant, likely due to differences in methodology, pedagogical approaches, and evaluation criteria.

The third hypothesis was also not confirmed – age did not have a significant effect on the assessment of verbal fluency and memory for short rhymes. These findings are consistent with those of Perišić and Minić (2025), who suggest that such assessments are more likely influenced by professional context and training than by demographic characteristics.

By linking the findings of this study with the results of a research conducted by Perišić and Minić (2025), it can be concluded that both domestic and international data (Giles & Tunks, 2015) support the importance of professional perception

in identifying and fostering pre-reading skills. At the same time, these studies emphasize the need for the standardization of assessment criteria. In both cases, the results indicate that factors such as institutional context and pedagogical strategies may have a greater impact on the assessment of individual skills, for example, grapheme awareness, than demographic variables such as age or years of experience. In summary, the findings of this study confirm that the enhancement of pre-reading skills requires an integrated approach that includes collaboration between preschool and school institutions, as well as the ongoing professional development of school and preschool teachers in the assessment and promotion of these skills.

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NOTES

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