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The Importance of Remedial Activities in the Development of Literacy in Primary School Pupils from Disadvantaged Backgrounds

Abstract

The 2022 PISA results show a high level of functional illiteracy among Romanian students: 42% of Romanian students did not reach the second level in literacy tests. (OECD, 2023) Studies identified in the literature indicate the great importance that emergent literacy skills have on the future acquisitions that students achieve in the educational process, especially for students with low socio-economic status. For a teacher, to facilitate the development of these competences, it is

necessary to apply appropriate methods and strategies adapted to the particularities of the pupils. Given these considerations, we set out in this study to investigate the impact of an intervention aimed at emergent literacy on first grade students from disadvantaged socio-economic backgrounds. The research carried out is a quantitative quasi-experiment. The research sample consisted of 15 first graders from disadvantaged socio-economic backgrounds, some of them bilingual and not enrolled in kindergarten. For data collection, a literacy assessment booklet was used as a literacy assessment instrument, used as a pre-test and post-test. In between the two tests there were didactic activities in which the researchers worked with each participant, on an individualized basis, on all the essential aspects related to emergent literacy. The findings of this study show that the pupils who participated in the remedial activities aimed at emergent literacy showed, at the end of the intervention, an improvement in literacy competence on all the dimensions targeted by the research instrument.

Keywords: literacy, remedial activities, disadvantaged socio-economic backgrounds.

1. Introduction

Communication competence in the mother tongue is one of the eight European key competences underpinning the Romanian education system. Although the majority of the population tends to believe that the development of pupils' literacy skills starts in primary school, we can see that teachers' concern for the development of these skills starts in kindergarten and, according to recent studies, should be even more sustained in order to facilitate the acquisition of literacy in primary school.

Through this research we wanted to find out whether an additional, remedial literacy intervention for children from low socio-economic status backgrounds could lead to higher levels of early literacy achievement than traditional teaching/learning in the preparatory and first classes. We also aim to track the effectiveness of the intervention program for students who do not miss school frequently and do not refuse to participate in remedial activities for various reasons. This investigation is particularly important given that reading performance in primary grades is a strong indicator of reading skills in the long term and therefore may influence children's academic and career trajectories, with possible negative repercussions for those from low socio-economic backgrounds. Although emergent literacy skills are part of the national curriculum, the concept of the word, phonemic awareness and word recognition often do not receive the necessary attention, particularly for children from disadvantaged backgrounds, who often enter school without these skills and who experience delays in learning. The report on the state of pre-university education in Romania 2021/2022 (Ministry of Education, 2023) finds that the dropout rate at primary level remained at 1.3% as in the previous school year. The difference by area of residence remains as high (0.9 percentage points), with rural areas still disadvantaged. Drop-out rates in preparatory and first grade remain at their highest

levels. At the level of the preparatory class, the value of the indicator increased compared to the previous school year by 0.1 p.p., while it remained the same at the level of the first class.

In order to justify the need for an intervention targeting emergent literacy and to outline the literacy problem in Romania, we analyzed the results from the 2022 PISA tests and 42% of Romanian students did not reach the second level in literacy (OECD, 2023), level 2 meaning that students can find the main idea in a medium-length text, can find information in the text based on explicit criteria, and can reflect on the purpose and form of texts when asked to do so. It was noted that the statistically significant results are situated at two extremes: very good results and very poor results, with no significant average scores. Very poor results were mostly obtained by children from disadvantaged socio-economic backgrounds. We believe that these pupils should be supported in their learning in order to reach an average level, which could be made possible through remedial, individualized activities, so that in the next standardized tests the results obtained can be on an upward trend. (Reese, 2008; Dolean et al., 2019) However, studies in which students have benefited from remedial activities to develop literacy skills have shown positive results in relation to the academic progress of these students. (Balea et al., 2023; Dolean et al., 2019; Lonigan et al., 2013; Vellutino et al., 2008; Reese, 2008) Particularly in the early years of primary education, the focus should be on assessing emergent literacy skills and intervening with the aim of remedying identified problems and ensuring optimal progress.

Studies conducted on identifying the effects of these interventions draw attention to the need to place greater emphasis on emergent literacy skills. (Balea et al., 2023; Dolean et al., 2019; Whitehurst & Lonigan, 1998; Apel & Lawrence, 2011; Lonigan et al., 2013; Chambrè et al., 2020; Schmitt & Gregory, 2005; Cunningham & Stanovich, 1997) The earlier the initial assessment and interventions are implemented during the primary school, the greater the progress the student will make. As stated earlier, the effects of early interventions are also observable later in students' school career. (Schmitt & Gregory, 2005; Cunningham & Stanovich, 1997).

The long-term effects of carrying out remedial activities for the development of literacy skills cover several aspects. These may include lowering the level of functional illiteracy in Romania, reducing school drop-out and absenteeism, better results in national assessments and increasing educational equity. At the same time, the educational ideal may be associated with more graduates prepared to integrate socially and in the labor market, as it is known from long-term research that literacy influences the social and professional success of individuals.

2. Other theoretical background

The study conducted by Balea et al. (2023), entitled *Kick-start literacy for all. Comparative results from romanian preparatory grade classrooms*, published in the *Journal of Pedagogy*, aimed to investigate whether there is a difference between the literacy skills of students from disadvantaged backgrounds who have benefited from remedial activities and the literacy skills of students who do not come from disadvantaged backgrounds. This study involved 300 pupils in preparatory classes. Of these, 260 benefited from remedial activities.

The research questions of the study asked whether pupils involved in literacy activities to develop emergent literacy skills performed better at the end of the preparatory class than their peers in relation to emergent literacy skills and whether pupils who performed poorly on the baseline literacy assessment but received remedial activities would perform better than their peers in the control group and with similar baseline test scores.

The results of the study show that the target group scored on average 56 points higher at the final assessment than at baseline and 17 points higher than the control group. Thus, the research questions posed at the beginning of the study were affirmative. However, the alphabet recognition component did not show significantly different scores between the two groups.

The researchers of the study suggest that teachers of preparatory classes should introduce more instructional activities in their lessons that focus on developing the concept of print, phoneme segmentation, word concept and word recognition.

Another study, entitled *Contribution of family risk, emergent literacy and environmental protective factors in children's reading difficulties at the end of second-grade*, published in 2019, by Zahra Esmaeeli, Fiona E. Kyle and Kjersti Lundetrae, investigated the role of family risk in predicting children's reading difficulties at the end of second grade, considering a multifactorial model including emergent literacy and environmental factors. Emergent literacy, which includes skills such as letter knowledge, phonemic awareness and vocabulary, was identified as a strong predictor of later reading difficulties. Reading difficulties have also been shown to be inherited in the family, and children with a familial risk of reading difficulties showed delays in emergent literacy and a less favorable home reading environment. The results of this study offer practical implications for parents and teachers, highlighting the importance of promoting rich reading environments at home and supporting the development of emergent literacy skills.

3. Definition of concepts

The main concepts addressed throughout this research are: emergent literacy, phonemic awareness, morphological awareness, vocabulary, fluency, comprehension, remedial activities and socio-economic status.

Emergent literacy is defined by Whitehurst and Lonigan (1998) as the set of literacy skills that a child forms before entering primary school. In particular, emergent literacy is considered to be acquired before learning to read and write. So emergent literacy is the early and fundamental stage in the development of literacy skills in children, preparing them to become competent readers and writers in later stages of formal education. This stage encompasses a range of complex issues, integrating verbal, cognitive and social skills, contributing to the foundation of written language learning. Emergent literacy includes aspects such as pre-literacy, awareness of letters and sounds, familiarization with books and written words, vocabulary and language development, and interest in reading and writing. Thus, while literacy refers to the ability to read and write in general, emergent literacy focuses on the initial stage of the development of reading and writing skills in young children.

Phonemic awareness refers to the ability to distinguish, separate and manipulate phonemes within the pronunciation of words. (Ehri, 2022) In relation to this, Høien et al. (1995) define morphological awareness as the ability to abstract and manipulate segments of spoken language. According to Ehri (2022) and Duke et al. (2021), decoding involves transforming graphemes into phonemes and combining them to generate word pronunciation. Phonics refers to a form of instruction that teaches students the main grapheme-phoneme relationships and their use to decode and write words. A beginning reader must at some point discover the alphabetic principle: that letter units match sound units. (Stanovich, 2009) However, students may have difficulty naming letters or making phoneme-grapheme correspondence. (Dodd & Carr, 2003).

Vocabulary is the totality of words actually used by someone in expression and which vary from one category of speakers to another. In a school context, related to the development of literacy competence, vocabulary involves recognizing words in written form and understanding them in the context of communication. (Duke et al., 2021) Depending on the amount of vocabulary acquired during preschool, Kargin et al. (2023) emphasize that reading comprehension skills can be determined. A rich vocabulary is associated with easier decoding and pronunciation of words. (Duke et al., 2021; Kargin et al., 2023) At the same time, an important theoretical idea emphasizes that readers construct mental representations of the information they read during reading. (*National Reading Panel*, 2000) Thus, it is necessary for complex mental representations that the

number of words in a person's vocabulary is rich. Research has shown that vocabulary is a key predictor of literacy proficiency.

Morphological awareness is a linguistic skill through which a child makes connections between words, starting from their smallest units of meaning (Apel & Lawrence, 2011; Duke & Cartwright, 2021) For example, if a child has developed morphological awareness competence, he or she can make connections between a derived word and its root or determine the meaning of prefixes or suffixes (Duke et al, 2021; Apel & Lawrence, 2011; Duke & Cartwright, 2021) Duke et al. (2021) state that reading skills are influenced by morphological awareness.

Fluency is the ability to combine the accuracy, automaticity, and prosody of oral reading, which together facilitate the reader's construction of meaning. (Kuhn et al., 2010) It is demonstrated during oral reading by the ease of recognizing words, appropriate rhythm, phrasing and intonation. Fluency is also a factor in both oral and silent reading that can limit or support comprehension. (Kuhn et al. 2010) Accuracy, automaticity, and act prosody manifested in the reading process are also characteristics of fluency mentioned in the studies of Duke et al. (2021), Duke and Cartwright (2021), and Kim et al. (2013).

Comprehension is the ability to understand information heard or read by a person. (Duke & Cartwright 2021; Dooley & Matthews 2009) In terms of emergent comprehension, Dooley and Matthews (2009) find that children in the pre-school period confer meanings on components of the external environment, meanings that they transfer further into their reading.

Remedial activities refer to additional educational actions and interventions that are designed to help students overcome difficulties and improve their performance in specific areas of learning. These activities are planned and implemented to provide additional support to pupils who are experiencing difficulties or who need a different approach to achieve their educational goals.

Socio-economic status represents the totality of factors such as education, occupation and income in the family environment. (Baker, 2014) Based on it, one can identify those at risk, in terms of poverty. In the case of children from low socio-economic status families, the literature states that emergent literacy skills and literacy rates are low. (Lonigan et al., 2013; Dolean et al., 2021) Also, Dolean et al. (2021) in their research states that even the absenteeism rate in these students is high. Therefore, there is a need to organize intervention plans for these students.

4. Methodology

The present study aims to investigate the impact of remedial activities with first grade students from disadvantaged backgrounds who have difficulties in

emergent literacy on the development of literacy and writing-reading skills. In carrying out the research, several practical aspects will be pursued. First, it will aim to identify, following the pre-test, the areas of emergent literacy in which pupils have difficulties. Secondly, the post-test will be used to track the progress of students' emergent literacy activities.

4.1. Research hypothesis

The general hypothesis of the research states that the implementation of remedial activities individualized to the needs of students with low socio-economic status, with the aim of developing emergent literacy proficiency, results in a significant change in their scores on emergent literacy assessments.

4.2. Research design

The present research is a quantitative, quasi-experimental design. The mode of data collection is pre-test – post-test. The research does not have a control group because the purpose of the study is focused on identifying the impact of implementing emergent literacy activities with first graders who have difficulties in this area, the results obtained relate strictly to the particular situation of the students participating in the study. The research design also implies the realization of the interventions with the experimental group.

Therefore, the variables followed in this study are: emergent literacy proficiency, emergent literacy development activities and the socio-economic status of the participants.

4.3. Participants

The present study involved first grade students. The sample consisted of 15 first graders from a primary school in Timisoara, Romania. Of the participants, 5 were female and the remaining 10 were male (N=15). The ages of the participants ranged from 6 to 9 years old, although they were all enrolled in the same class, which is usually made up of children aged 7 to 8 years old. Their background is urban. In terms of socio-economic status, parents' low level of schooling, lack of employment, very low incomes and mainly single-parent families.

Table 1 contains the demographics data of the study participants, and Table 2 contains information on socio-economic status variables for each participant.

Table 1
Participants' socio-demographic data (N=15)

<i>Characteristics</i>	<i>N</i>	<i>%</i>
Gender		
Female	5	33,33
Male	10	66,66
Age		
6 years	1	6,66
7 years	7	46,66
8 years	6	40
9 years	1	6,66
Environment		
Urban	15	100
Bilingual		
Yes	9	60
No	6	40

Table 2
Socio-economic status of participants (N=15)

<i>Characteristics</i>	<i>N</i>	<i>%</i>
Revenues		
Low	10	66,66
Medium	5	33,33
Parents' schooling level		
Primary school	10	66,66
Secondary school	4	26,66
High school	1	6,66
Family type		
Single-parent	10	60
Nuclear family	5	40

4.4. Research instrument used for data collection

For the assessment of emergent literacy competence we used *The Emerging Literacy Assessment Workbook* written by Prof. Dr. Charles Temple and Prof. Dr. Codruța Temple and published in 2023. The tool contains items for the assessment of emergent literacy, divided into the following categories: notions of printed text (NPT), recognizing and reproducing the alphabet (RRA), notion of word (NW), phonemic segmentation (PS), recognizing words (RW), and writing

words (WW). Each section contains a number of assessment items to which the corresponding score is assigned. In addition, for each assessment item, instructions are given on how to explain the item to the assessor and how the assessor should solve the item. *The Emerging Literacy Assessment Workbook* contains support materials, such as alphabet charts, to make the assessment process simpler. At the end of the instrument, there is the summative score sheet, with which we can use to realize the total score.

Notions of printed text (NPT) is the first dimension of the research instrument. In the assessment, six items belong to this dimension. Among the knowledge and skills targeted within this dimension are: knowledge of how to hold a book, understanding that one reads the text, not the pictures, orientation on the printed page, understanding the concept of a word, understanding the concept of a letter, and understanding that a letter can be large or small. It can also be seen that there is a stepwise transition from simple to more complex items.

Recognizing and reproducing the alphabet (RRA) is the second dimension of the instrument. In the assessment, three items belong to this dimension. The main knowledge and skills that the RRA targets are: naming the phoneme of each grapheme, phonemic hearing and writing each letter after dictation. The tool assesses the RRA for print letters.

Notion of the word (NW) is the third dimension of the instrument. In the assessment, two items belong to this dimension. The main knowledge and skills targeted by the NW are: awareness of the separation of words in writing by a space, the indication of words in a text, and approximating the position of a word in a text without knowing how to read it, but only by hearing the text beforehand.

Phoneme segmentation (PS) is the fourth dimension of the instrument. In the assessment, one item is assigned to this dimension. It contains 22 words that the child has to segment by letters. It can also be observed with this item that, as the child moves on to the next words, the segmentation becomes increasingly difficult. For example, the first words in the item have a simple CV/VC form. The following words contain more letters, oscillating, and the word form becomes one in which two consonants of the form CVCC/CCVC are joined.

Word recognition (WR) is the fifth dimension of the instrument. In the assessment, one item is given for WR. Students will have to read each word in turn. This is a practical test to check whether they have mastered the alphabet and can mentally realize phonemic blending. Although there are not many words in this assessment item, the level of concentration is high for the student.

Writing the words (WW) is the sixth dimension of the instrument. One item is allocated for this dimension. The student will be given words to write on a sheet of paper. In order to avoid confusion about the word the assessor says, the assessor formulates a sentence that includes the corresponding word. This

is the most difficult item in the instrument as it involves a variety of knowledge about the alphabet, phoneme-grapheme correspondence and the blending of several phonemes in a word.

The activity guide *Literacy Labs* was used to carry out the emergent literacy development activities. Methods and techniques realized by the New Horizons Foundation within the project *Schools with glitter* (<https://scolicusclipici.noi-orienturi.ro/>). The activities proposed in this guide are directly related to the evaluation tool used. These two tools were developed within the same project, aiming to develop emergent literacy skills for pupils who have difficulties in this area.

The guide contains activities divided into five major areas of reading literacy pursued in primary grades. These are: phonological and phonemic awareness, phoneme-grapheme correspondence, vocabulary, fluency and comprehension. The guide also contains explanations and videos of the activities. This proved to be extremely helpful in the process of designing the activities. In addition, the Schools with glitter project website provided story books and worksheets based on them which we used in the realization of the activities both as stand-alone teaching materials and as inspiration for the realization of other teaching materials.

4.5. Research procedure

This research involved several stages covering the period from October 2023 to April 2024. In the first phase, a school was identified in which primary school pupils face academic and socio-economic difficulties. Then followed the selection of the pupils, which was made on the basis of the recommendations of the class teacher, referring to the pupils' school results recorded in the preparatory class. This was followed by the submission of the informed consent form for completion by the parents of the participants.

This was followed by a period of about a week during which we administered the pre-test to the students. On average, each participant was allocated over an hour to administer the instrument. For all students, two meetings were necessary to complete the pre-test. After completing the pre-test, we centralized the results in a database and began designing remedial activities.

For several months, we carried out weekly activities with the students. Activities were conducted in small groups, and in situations where differentiated activities were needed, we designed personalized requirements. For each activity we chose, with the help of the guide, the major areas we wanted to develop. After the realization of each activity, observations were noted on the way the activity was carried out, the progress made by each participant where appropriate, the level of achievement of the operational objectives and disruptive factors of the activity where they appeared.

After completion of the months allocated to the intervention, post-testing was started. The time allocated for the post-test was one week. During the post-test, there was a higher rate of completion of items by pupils. They were able to complete the post-test in less than an hour, compared to the pre-test, which required 2 meetings with each student. Once the assessment process was completed, the data were recorded in the database and analyzed in order to confirm or not the research hypothesis.

4.6. Results

PRESENTATION OF DESCRIPTIVE DATA

Table 3

Descriptive results obtained by participants at pre-test and post-test (N=15)

DI \ P	NPT1	RRA1	NW1	PS1	WR1	WW1	T1	NPT2	RRA2	NW2	PS2	WR2	WW2	T2
1	4.5	50.5	1	13.12	10.98	2.33	82.43	6	87	12	21.75	12	5	143.75
2	5	50	1	12.25	9.14	2.33	79.72	6	80.5	12	18.1	12	5	133.6
3	5	9	0	2.38	0.5	0	16.88	5.5	27.5	9.5	0.55	6	0	49.05
4	5.5	9.5	1	16.71	2.66	0	35.37	6	32.5	9	19.5	8.25	3.5	78.75
5	5	7.5	2	11	3.16	0	28.66	6	25	8	10.5	7.8	1.5	58.8
6	4	25.5	0	5.97	5.12	0	40.59	6	52.5	7	13.78	12	4.5	95.78
7	5	8	5	2	0	0	20	6	25	8	5	1	1	46
8	4	6	4	0	0	0	14	6	42	9	8	1	0	66
9	6	59	6	10	9	4	94	6	79	12	22	11	5	135
10	5	47	4	4	3	0	63	6	90	12	17	11	4	140
11	6	44	8	1	1	3	63	6	72	11	10	7	3	109
12	4	21	1	2	0	0	28	5	70	6	5	7	3	96
13	2	9	0	0	0	0	11	5	51	4	1	0	0	61
14	5	24	0	5	1	1	36	6	73	10	13	10	3	115
15	5	46	3	11	6	2	73	6	88	12	19	12	5	142

Note: P= participants; DI= instrument dimensions; T1= pre-test; T2=post-test; NPT1= Notions of printed text, pre-test; NPT2= Notions of printed text, post-test; RRA1= Recognizing and reproducing the alphabet, pre-test; RRA2= Recognizing and reproducing the alphabet, post-test; NW1= Notion of the word, pre-test; NW2= Notion of the word, post-test; PS1= Phoneme segmentation, pre-test; PS2= Phoneme segmentation, post-test; WR1= Word recognition, pre-test; WR2= Word recognition, post-test; WW1= Writing the words, pre-test; WW2= Writing the words, post-test.

As a result of the descriptive analysis of the data, it can be observed that the literacy level before the intervention is very low, on a scale from 0 to 150, where 0 represents the minimum score and 150 the maximum score. In the pre-test, the lowest score achieved by participants was 11 points and the highest score was 94 points. We notice a large difference between the 2 extreme scores. We also note that on several dimensions there were students who scored 0 points, with word writing being the dimension to which most null scores were assigned. In the pre-test, on the first two dimensions, no student scored zero, which indicates that they have knowledge of printed text and recognize and reproduce the alphabet to a greater or lesser extent. In the post-test, we observe that the scores increased, the lowest score being 46 points, the highest being 143.75 points, very close to the maximum score of the test. We notice that writing words was the variable for which three students scored zero in the post-test as well, indicating that they have not yet mastered this literacy skill, remaining constant compared to the pre-test.

For statistical representativeness, paired t-tests for dependent variables were used to analyze the data. In Table 4 we have recorded the effect sizes for each dimension of emergent literacy. This technique was used to test whether there were statistically significant differences in the level of emergent literacy in the pre-test relative to the post-test on all dimensions.

Table 4

Comparative analysis of the total results obtained on the Pre-test and Post-test and the 6 dimensions of emergent literacy (paired t-tests)

			<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
<i>(n = 15)</i>						
	<i>M</i>	<i>SD</i>				
<i>T1 – T2</i>	52.272	16.433	12.319	14	.000	1.62
<i>NPT1- NPT2</i>	1.100	.783	5.436	14	.006	1.50
<i>RRA1 – RRA2</i>	31.933	11.404	10.844	14	.000	1.44
<i>NW1-NW2</i>	7.033	2.728	9.983	14	.135	2.81
<i>PS1 – PS2</i>	5.850	4.413	5.133	14	.000	0.91
<i>WR1 – WR2</i>	4.432	2.889	5.942	14	.001	1.10
<i>WW1 – WW2</i>	1.922	1.548	4.810	14	.016	1.57

Note: significant * $p < .001$.

Note: n = number of participants; M= mean; SD= standard deviation; T1= pre-test; T2= post-test; NPT1= Notions of printed text, pre-test; NPT2= Notions of printed text, post-test; RRA1= Recognizing and reproducing the alphabet, pre-test; RRA2= Recognizing and reproducing the alphabet, post-test; NW1= Notion of the word, pre-test; NW2= Notion of the word, post-test; PS1= Phoneme segmentation, pre-test; PS2= Phoneme segmentation, post-test; WR1= Word recognition, pre-test; WR2= Word recognition, post-test; WW1= Writing the words, pre-test; WW2= Writing the words, post-test.

The effect size for the whole intervention, $d=1.62$, is statistically significant. Thus, we can state that the intervention played an important role in the students' progress in developing emergent literacy skills. The effect size with the highest value, $d=2.81$, is recorded in the case of the dimension Notion of the word. Therefore, the intervention had a statistically significant effect in the development of this dimension among the students. The effect size with the smallest value, $d=0.91$, is recorded for the Phonemic Segmentation dimension. We can state that, in relation to this result, the intervention implemented had a small impact on the evolution of students' ability to phonemically segment words. The second smallest effect size, $d=1.10$, was recorded in the case of the Word Recognition dimension. Compared to the other dimensions, the impact of the intervention on this dimension is small. However, we can state that all the six dimensions of emergent literacy were developed in the students following the intervention.

The results of the t-test, $t(14) = 12.319$, $p = 0.000$, show that t is significant. The effect size is of high intensity, $d=1.62$. The results show that the difference between the pre-test results and the post-test results is statistically large. We can state that after analyzing the results, the hypothesis of the study is valid. We can also see that the participants have made significant progress overall as a result of the activities carried out with them.

5. Conclusions

The research results record statistically significant progress in the emergent literacy skills of first graders. This result was also recorded in the study conducted by Balea et al. (2023) on a sample of preparatory grade students. Although the sample in the two studies was different, the age difference between the two samples is small and the dimensions developed in the research are identical. The study conducted by Balea et al. (2023) states that the results of students who received interventions to develop the dimensions of emergent literacy were higher than the results recorded by the control group and than the results recorded by their peers with similar results in the control group.

In our research, participants have low socio-economic status. This is associated with, among other things, low income and single parent families. (Reese, 2008) Research indicates that, in addition to the characteristics associated with low socio-economic status, high school absenteeism affects the development of emergent literacy skills of students. (Dolean et al., 2019) Also in our study, school absenteeism was a factor that had a negative influence on the results recorded by the students.

In the case of the 5 students who did not register even 50% of the maximum score, we estimate, based on the literature, a slow progress and the accumulation of a growing gap with the class average, which could lead to dropout. Therefore, we recommend to continue remedial interventions by supplementing human (involving psychologists and other specialists) and material resources to ensure their access to quality education and better socio-economic status.

The conclusions of this study are that interventions specifically designed to develop emergent literacy skills are effective for first graders from low socio-economic status and urban communities. However, despite notable progress, on average, the level of emergent reading literacy proficiency of several students in our study is below that required for first grade, making it necessary to continue targeted remedial activities.

Although all the six skills are included in the school curriculum, word concept, phonemic segmentation and word recognition do not receive sufficient attention, neither at school entry nor during the schooling. In order to close the achievement gap between pupils with low socio-economic status and those from advantaged backgrounds, and to ensure equal opportunities for social progress, more time and interventions should be provided for the former. According to Dodd & Carr (2003) socio-economic status should be an important factor in the design of the teacher intervention strategy.

References

- Apel, K., Lawrence, J. (2011). Contributions of morphological awareness skills to Word-Level Reading and Spelling in First-Grade children with and without Speech Sound Disorder. *Journal of Speech, Language, and Hearing Research*, 54(5), 1312–1327. [https://doi.org/10.1044/1092-4388\(2011/10-0115](https://doi.org/10.1044/1092-4388(2011/10-0115).
- Baker, E.H. (2014). Socioeconomic status, definition. *The Wiley Blackwell Encyclopedia of Health, Illness, Behavior, and Society*, 2210–2214. <https://doi.org/10.1002/9781118410868.wbehibs395>.
- Balea, B., Kovacs, M., Temple, C. (2023). Kick-Start Literacy for All. Comparative Results from Romanian Preparatory Grade Classrooms. *Revista de Pedagogie [Journal of Pedagogy]*, 71(1), 149–169. <https://doi.org/10.26755/revped/2023.1/149>.
- Chambrè, S.J., Ehri, L.C., Ness, M. (2019). Phonological decoding enhances orthographic facilitation of vocabulary learning in first graders. *Reading & Writing*, 33(5), 1133–1162. <https://doi.org/10.1007/s11145-019-09997-w>.
- Cunningham, A.E., Stanovich, K.E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology*, 33(6), 934–945. <https://doi.org/10.1037/0012-1649.33.6.934>.

- Dodd, B., Carr, A. (2003). Young Children's Letter-Sound knowledge. *Language, Speech & Hearing Services in Schools, 34*(2), 128–137. [https://doi.org/10.1044/0161-1461\(2003/011](https://doi.org/10.1044/0161-1461(2003/011).
- Dooley, C.M., Matthews, M.W. (2009). Emergent comprehension: Understanding comprehension development among young literacy learners. *Journal of Early Childhood Literacy, 9*(3), 269–294. <https://doi.org/10.1177/1468798409345110>.
- Dolean, D.D., Lervåg, A., Visu-Petra, L., Melby-Lervåg, M. (2021). Language skills, and not executive functions, predict the development of reading comprehension of early readers: evidence from an orthographically transparent language. *Reading & Writing, 34*(6), 1491–1512. <https://doi.org/10.1007/s11145-020-10107-4>.
- Dolean, D., Melby-Lervåg, M., Tincas, I., Damsa, C., Lervåg, A. (2019). Achievement gap: Socioeconomic status affects reading development beyond language and cognition in children facing poverty. *Learning and Instruction, 63*, 101218. <https://doi.org/10.1016/j.learninstruc.2019.101218>.
- Duke, N.K., Cartwright, K.B. (2021). The science of reading progresses: communicating advances beyond the simple view of reading. *Reading Research Quarterly, 56*(S1). <https://doi.org/10.1002/rrq.411>.
- Duke, N.K., Ward, A.E., Pearson, P.D. (2021). The science of reading comprehension instruction. *The Reading Teacher, 74*(6), 663–672. <https://doi.org/10.1002/trtr.1993>.
- Ehri, L.C. (2020). The Science of Learning to Read Words: A case for Systematic Phonics instruction. *Reading Research Quarterly, 55*(S1). <https://doi.org/10.1002/rrq.334>.
- Ehri, L.C. (2022). What teachers need to know and do to teach letter-sounds, phonemic awareness, word reading, and phonics. *The Reading Teacher, 76*(1), 53–61. <https://doi.org/10.1002/trtr.2095>.
- Esmaeeli, Z., Kyle, F.E., & Lundetræ, K. (2019). Contribution of family risk, emergent literacy and environmental protective factors in children's reading difficulties at the end of second-grade. *Reading and Writing, 32*(9), 2375-2399. <https://doi.org/10.1007/s11145-019-09948-5>.
- Høien, T., Lundberg, I., Stanovich, K.E., Bjaalid, I.K. (1995). Components of phonological awareness. *Reading & writing, 7*(2), 171–188. <https://doi.org/10.1007/bf01027184>.
- Kargin, T., Güldenoğlu, B., Gengeç, H. (2023). The Role of Early Literacy Skills in Beginning to Read in Turkish: Longitudinal Findings from First Graders. *Participatory Educational Research, 10*(2), 26–42. <https://doi.org/10.17275/per.23.27.10.2>.

- Kim, Y., Park, C.H., Wagner, R.K. (2013). Is oral/text reading fluency a "bridge" to reading comprehension? *Reading & Writing*, 27(1), 79–99. <https://doi.org/10.1007/s11145-013-9434-7>.
- Kuhn, M.R., Schwanenflugel, P.J., Meisinger, E.B. (2010). Aligning Theory and assessment of reading fluency: automaticity, prosody, and Definitions of fluency. *Reading Research Quarterly*, 45(2), 230–251. <https://doi.org/10.1598/rrq.45.2.4>.
- Lonigan, C.J., Purpura, D.J., Wilson, S.B., Walker, P.M., Clancy-Menchetti, J. (2013). Evaluating the components of an emergent literacy intervention for preschool children at risk for reading difficulties. *Journal of Experimental Child Psychology*, 114(1), 111–130. <https://doi.org/10.1016/j.jecp.2012.08.010>.
- National Reading Panel (US), National Institute of Child Health, Human Development (US). (2000). *Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the sub-groups*. National Institute of Child Health and Human Development, National Institutes of Health.
- Reese, K. (2008). *The effects of instruction and discourse combining Shared Book and Language Experience approaches with at-risk first graders*. Oakland University.
- Schmitt, M.C., Gregory, A.E. (2005). The Impact of an Early Literacy Intervention: Where Are the Children Now?. *Literacy Teaching and Learning*, 10(1), 1–20.
- Stanovich, K.E. (2009). Matthew Effects in Reading: Some consequences of individual differences in the acquisition of literacy. *Journal of Education*, 189 (1–2), 23–55. <https://doi.org/10.1177/0022057409189001-204>.
- Temple, Ch., Temple, C. (2023). *Caiet de evaluare a literației emergente* [Emerging literacy assessment workbook].
- Vellutino, F.R., Scanlon, D.M., Zhang, H., Schatschneider, C. (2007). Using response to kindergarten and first grade intervention to identify children at risk for long-term reading difficulties. *Reading & Writing*, 21(4), 437–480. <https://doi.org/10.1007/s11145-007-9098-2>.
- Whitehurst, G.J., Lonigan, C.J. (1998). Child Development and emergent Literacy. *Child Development*, 69(3), 848–872. <https://doi.org/10.1111/j.1467-8624.1998.tb06247.x>.
- Wilson, K.M., Trainin, G. (2007). First-Grade students' motivation and achievement for reading, writing, and spelling. *Reading Psychology*, 28(3), 257–282. <https://doi.org/10.1080/02702710601186464>.
- OECD. (2023). *PISA 2022 Results: Factsheets*. Retrieved from <https://www.oecd.org/publication/pisa-2022-results/country-notes/romania-cfe329e8/>.

Znaczenie zajęć wyrównawczych w rozwoju umiejętności czytania i pisania u uczniów szkół podstawowych ze środowisk defaworyzowanych

Streszczenie

Wyniki badania PISA z 2022 r. wskazują na wysoki poziom analfabetyzmu funkcjonalnego wśród rumuńskich uczniów: 42% rumuńskich uczniów nie osiągnęło drugiego poziomu umiejętności czytania i pisania w testach umiejętności czytania i pisania (OECD, 2023). Badania zidentyfikowane w literaturze wskazują na ogromne znaczenie pojawiających się umiejętności czytania i pisania dla przyszłych osiągnięć uczniów w procesie edukacyjnym, zwłaszcza dla uczniów o niskim statusie społeczno-ekonomicznym. Aby nauczyciel mógł ułatwić rozwój tych kompetencji, konieczne jest zastosowanie odpowiednich metod i strategii dostosowanych do specyfiki uczniów. Biorąc pod uwagę powyższe rozważania, w niniejszym badaniu postanowiliśmy zbadać wpływ interwencji ukierunkowanej na rozwijające się umiejętności czytania i pisania u uczniów pierwszej klasy pochodzących ze środowisk defaworyzowanych pod względem społeczno-ekonomicznym. Badanie ma charakter ilościowego quasi-eksperymentu. Próba badawcza składała się z 15 pierwszoklasistów z defaworyzowanych środowisk społeczno-ekonomicznych, z których część była dwujęzyczna i nie uczęszczała do przedszkola. Broszura oceny umiejętności czytania i pisania została wykorzystana jako instrument do gromadzenia danych, wykorzystany jako test wstępny i test końcowy. Pomiedzy dwoma testami odbywały się zajęcia dydaktyczne, podczas których badacze pracowali z każdym uczestnikiem, w sposób zindywidualizowany, nad wszystkimi kluczowymi aspektami pojawiających się umiejętności czytania i pisania. Wyniki tego badania pokazują, że uczniowie, którzy uczestniczyli w zajęciach wyrównawczych mających na celu kształtowanie umiejętności czytania i pisania, wykazali pod koniec interwencji poprawę kompetencji w zakresie czytania i pisania we wszystkich wymiarach określonych w zastosowanym narzędziu.

Słowa kluczowe: umiejętność czytania i pisania, działania naprawcze, defaworyzowane środowiska społeczno-ekonomiczne.