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RESEARCH ARTICLE

The Effect of Parent-Assisted Reading Intervention Program on Second Grade Students' Fluent Reading and Reading Comprehension Skills

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Abstract
In this study, Parent-Assisted Reading Intervention Program was developed and its effects were examined on students' fluent reading and reading comprehension skills. The research was conducted in the context of the randomized pretest-posttest control group design adapted from one of the true experimental design models. The study group included 16 students from the second grade: eight students in an experimental group and eight in a control group. Criterion sampling and simple random sampling were used to establish the study groups. In the research, curriculum-based measurement, error analysis inventory, prosodic reading scale, and reading comprehension tests were used as data collection tools. In the study, the Mann-Whitney U test, which is one of the nonparametric tests, was used to compare the pretest-posttest scores of the two groups. Further, the Wilcoxon signed-rank test was used to compare the pretest-posttest scores of each group. From the results of this study, it was concluded that the Parent-Assisted Reading Intervention Program was effective in improving the fluent reading and reading comprehension skills of the students involved.

Keywords: Fluent reading, reading comprehension, parent-assisted reading intervention program

Introduction

Reading is a complex process that includes activating background knowledge, phonological awareness, sound-letter matching, vocabulary, and constructing meaning from the text (National Reading Panel [NRP], 2000). According to Akyol (2010, p. 33), reading is an effective process of constructing meaning that requires active communication between the source and the receiver.

From the definitions and emphases made, it can be stated that the common purpose of reading is to construct meaning from the text. If the essential goal of reading is to construct meaning, it is imperative to remove the obstacles to constructing meaning. However, most

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readers cannot overcome these obstacles (Baştuğ & Keskin, 2012). Reading comprehension skill is considered a complex process and there are many factors that affect this skill. Fluent reading is considered as "a bridge between decoding and reading comprehension" (Pkulski ve Chard, 2005, p. 510). Research shows that reading skill increases our knowledge and has a greater meaning than simply sounding out letters. In other words, the vocalization has passed from the purpose to the tool state. It is imperative that individuals gain vital skills such as phonological awareness, word recognition, and fluency to understand what they are reading (NRP, 2000). After the shapes, sounds, and signs in a text are perceived and voiced by the sensory organs, the ability to read fluently in the process of constructing meaning comes to the fore.

Fluent reading has gone through various stages from past to present. Cattel emphasized the importance of automaticity in reading in 1886 (Rasinski et al., 2010, p. 286). Huey (1968) determined that automaticity focuses on the meaning of the text read. (Rasinski et al., 2010, p. 286). In the following years, LaBerge & Samuels (1974) explained how this process occurred with the theory of automaticity. According to the assumptions of this theory, the human mind has a limited capacity to manage complex processes. While reading the text, some of the mental capacity is used for word recognition and awareness of the meaning of words. Better practice reduces the time for word recognition and realizing the meaning of the word. With faster word recognition and realization, readers can then begin to focus on other dimensions of reading. According to this theory, fluent reading is initially evaluated as reading rate and accuracy, and the realization of this skill is a must for reading comprehension.

Although fluent reading is considered in part with reading rate and accuracy and explained with the theory of automaticity; prosody, another component of fluent reading, has not been addressed because of the difficulty of defining verbal elements in the conditions of the period and the linguistic features of spoken language (Dowhower, 1991). In recent years, the prosody component has been focused upon in fluent reading research, as opposed to the concepts of accuracy and automaticity speed. According to Young & Rasinski (2009), accuracy in fluent reading is the correct pronunciation of the word in the text, whereas automaticity refers to the reading of the text accurately and without difficulty by the reader. Prosody, on the other hand, is when the reader voices a text in a way that reflects its meaning in accordance with stress and intonation. As prosody became the center of attention, changes in the definitions of fluent reading began to be observed.

According to Akyol (2015, p. 4), "fluent reading is reading in a spoken way by paying attention to punctuation marks, emphasis and intonations, avoiding return and word repetition, avoiding spelling and unnecessary pauses, paying attention to mean-

ing units." In another definition, Young & Rasinski (2009) expressed fluent reading as "reading that is done like a natural conversation." The scope of definitions has widened as prosody became the center of attention.

In recent years, studies in both national and international literature have emphasized that fluent reading is an indicator of reading comprehension, thus supporting the statements about fluency from the past years (Başaran, 2013; Baştuğ, 2012; Baştuğ & Keskin, 2012; Çayır & Ulusoy, 2014; Stanley et al., 2018; Stevens et al., 2017). Considering this effect of fluent reading on reading comprehension and the effect of reading comprehension on achievement, it can be stated that this skill can affect an individual's academic achievements and their entire lives.

In national literature, the number of studies on fluent reading has increased, with most of the studies focused on improving fluent reading skills (Maden, 2020). Although the number of studies on improving fluent reading continues to increase, no program development study has been encountered except for Çayır (2014) and Varol (2017). Also, none of the studies conducted actively involved families in the process or presented an objective document indicating that the families were actively involved in the process. However, in terms of fluent reading skills, the low-performing students needed more support from their immediate environment. This study is thought to have an important place in terms of showing parents how they can help their children develop fluent reading skills, showing teachers how to improve their students' fluent reading skills in the classroom, and how to involve students' families throughout the process. It is expected that the study will contribute to national literature to help remove reading obstacles and for students to construct meaning from the text they are reading. This study should be performed with second grade students in part with the first literacy period. This study is based on the question, "What is the impact of the Parent-Assisted Reading Intervention Program on students' ability to read and understand fluent reading?" In this framework, the sub-problems are in line with the general purpose. The research topics are listed below.

Sub-Problems

1. Is there a significant difference between the fluent reading and reading comprehension pre-test scores of the experimental and the control group?
2. Is there a significant difference between the pre-test and post-test scores of the experimental group in fluent reading and reading comprehension?
3. Is there a significant difference between the pre-test and post-test scores of the control group for fluent reading and reading comprehension?
4. Is there a significant difference between fluent reading and reading comprehension post-test scores of the experimental group and the control group?

Rationale of the Research

Fluent reading studies in Turkey have increased in recent years (Maden, 2020). However, in national literature, intervention program studies that effectively include parents in the process are limited. Parents have a significant influence on the development of their children's reading skills. Evaluations of the Project of International Reading Language Skills (PIRLS), in which the reading skills of fourth-grade students were evaluated, clearly shows the importance of parents in children's reading development. Students who had more learning resources at home, who carried out more literacy activities with their parents during periods of literacy development, and whose parents liked to read received higher scores (Hooper et al., 2016). In brief, creating an environment that supports literacy is a vital factor that contributes to children's reading skills. The program is based on the social environment of the students and the improvement of their reading skills both at school and at home. In this respect, the goal is to fill the gap in where and how children read literature.

Method

Research Model

In the study, to determine the effect of the Parent-Assisted Reading Intervention Program on students' fluent reading and reading comprehension skills, the randomized pre and post-test control group design was used. The randomized pre and post-test control group is considered among the truest experimental design models. In the randomized pre and post-test control group design, two groups were formed by random assignment from a previously determined sample pool. One group was labeled as the experiment group and the other as the control group. Measures of both groups regarding the dependent variable were taken before the experiment. While the experimental procedure effect was tested and applied to the experimental group, no action was applied to the control group. At the end of the application, the measures of both groups for the dependent variable were taken using the same or equivalent form (Büyüköztürk et al., 2016; Cohen et al., 2007; Creswell, 2016; Karasar, 2010).

Participants

The determination of the participants for the research took place in two stages. In the first stage, criterion sampling was used because there were certain criteria that the study group should meet. In terms of fluent reading and reading comprehension skills of the students, it was a criterion to be inadequate according to the scores to be obtained from the scales. At the first stage, 18 of 89 students met all of the specified criteria. In the second stage, groups of 8 people from each group of 18 students were randomly formed. Using the random sampling method, one of the groups was determined as the experimental and the other as the control group. The simple random sampling method is a method in which all sampling units to be sampled have an equal probability of being selected (Büyüköztürk et al., 2016; Cohen et al., 2007; Kaptan, 1998).

Collection of Data

In the data collection process, in addition to the fluent reading and reading comprehension evaluations made during the determination of the study group, the fluent reading skills of both the experimental group and the control group students were re-evaluated to avoid any errors in the assessment of the students' reading skills. The pre-test process was completed by taking the average of the two evaluations. Pre-test scores were determined with an evaluation on reading comprehension skills. The data was collected in the winter and spring semesters of the 2018–2019 academic year, a total of 48 lesson hours in a 12-week period, 4 days a week and 1 course hour a day (40 minutes). It ended with the post-test application. The fluent reading skills of the students were evaluated twice using different texts and the average of the scores obtained from the two evaluations was used as the post-test score. The evaluation of reading comprehension skills was made with one text.

In the study, program-based measurement was used to determine the reading rate, a subcomponent of fluent reading. The formula used to determine the reading rate was, "total number of words read in one minute minus error equals reading rate" (Deno, 1985; Walpole & McKenna, 2007).

Words read correctly were identified by subtracting words read incorrectly from the total words read. The formula used to identify the basis of reading accuracy, another component of fluent reading, was " total number of correct words divided by the total number of words read multiplied by 100"(Rasinski, 2003). In the study, "additions, omissions, mispronunciations, refusal to attempt a word (teacher pronounces word), reversals, and repetitions" were classified as word recognition errors (Akyol, 2010; Mellard et al., 2011; Rasinski, 2003). In the evaluation of prosody skill, the "Prosodic Reading Scale" developed by Keskin & Baştuğ (2011) was used. In the evaluation of reading comprehension tests, the "Error Analysis Inventory" adapted to Turkish by Akyol (2010) was used.

The texts used in the process of evaluating students' fluent reading and reading comprehension skills were taken from the second grade Turkish textbooks of the previous years, approved by the Ministry of National Education, which the students had not seen beforehand (Coşkun et al., 2006; Palabıyık & Akıncı, 2010a, Palabıyık & Akıncı, 2010b).

Implementation Process of Program

The Program was implemented four days a week (Monday, Tuesday, Wednesday, Thursday) and for one lesson per day; a total of forty eight lessons in twelve weeks. Home application lasted approximately eight hours, four days a week, and ten–fifteen minutes a day. The home implementation of the Program was conducted through a parent guide prepared for parents. The studies conducted at home were checked daily by the researcher via video recording, and feedback was provided to the parents when necessary. Both the classroom and home applications of the Program were applied to the experimental group. The explanations are presented in Table 1.

Table 1.
Explanations Regarding the Program's Classroom and Home Application

	Class Application	**Home Application**
Days/ General Information	The classroom layout had been designed for reading. Students were asked various questions about the subject of the text. Also discussed were keywords or words the students did not know the meaning of. Guesswork had been made about the subject or content of the text. Reading purpose was determined. The teacher demonstrated prosody skills and model readings. Model readings were made several times according to the level of reading skills of the class or student group. In the second reading, the teacher asked the students sentence-by-sentence questions.	Before starting to study with their children, parents created an environment away from noise and free from distracting stimuli (i.e., various materials, toys, mess, television, tablet, phone, etc.). To draw the student's attention to the text, a discussion was initiated about the title of the text, its visuals, and any relevant information. They read the text several times as an example for the student to follow. After the first sample reading, parents asked sentence-by-sentence questions about the text. No standard was sought in the questions. Questions about the sentence were tested as requested.
Monday	**Prosody modeling and choral reading** The whole group participated in choral reading, cumulative choral reading, and line-per-line choral reading.	**Choral reading** **(Approximately 10–15 minutes)** The relevant text was read aloud 3 or 4 times with all family members participating in the reading study until the activity was completed.
Tuesday	**Prosody modeling and paired reading** Students reading at different reading levels were matched together. Students were instructed to read alternately among themselves. **Prosody modeling and buddy reading** Students with similar reading levels were matched together. The students read the relevant text with their group members several times. Tuesday is an evaluation day on the relevant text; therefore, a summarization study or an evaluation study was conducted with questions about understanding the text. Pictures related to what is explained in the text were drawn by students who wanted to. Paired reading and buddy reading alternated on a weekly basis.	**Paired reading** **(Approximately 10–15 minutes)** Parents read the relevant text and the student followed. Then the student read while the parent followed. When a reading error was made, the following peer corrected the reading error. After the student had read the relevant text three or four times, no error was made.
Wednesday	**Prosody modeling and echo reading** The teacher read the text aloud sentence-by-sentence or in small meaningful chunks in a way that students could follow. Then the students read the same reading section aloud. The high achieving student in terms of reading skills read the relevant text aloud by sentences or in small meaningful chunks. The other students would then read the relevant section aloud again.	**Repeated reading** **(Approximately 10–15 minutes)** The reading time for each section of reading was calculated. The student read the relevant text three or four times under parental supervision until the study was completed.
Thursday	**Parental attendance prosody modeling and repeated reading** The students did repeated readings with other parents or peers, starting with their parents. Thursday is the second evaluation day on the relevant text; therefore, a summarization study or an evaluation study was conducted with questions about comprehending the text. Pictures related to the text were drawn by students who wanted to.	**Echo reading** **(Approximately 10–15 minutes)** The parent read the relevant text sentence-by-sentence or in small meaningful chunks. The student repeated the read sentences or sections aloud. The reading study was completed after the relevant text was read three or four times.

The second grade curriculum was applied to the control group by the classroom teachers, and no application was added by the researcher. First, the control group students made guesses on the text based on the visuals and the title of their Turkish lessons. Second, the students read silently. Then, students participated in sequential readings, also known as Round-Robin Reading (RRR). For example, another student would continue to read the text from where the previous student had left off. Following the sequential readings, the control group students were advised to read the text silently and to mark any words if they did not know the definition or meaning. Then, the meanings of the unknown words were discussed as a group. The meaning of a word was found with a dictionary study and sentences related to the word were made. After the vocabulary study, students completed textbook activities related to the text for determination of their comprehension skills. The characters of the text were also discussed. Lastly, a general reading comprehension study and assessment was carried out by the classroom teachers.

Analysis of Data

It is recommended to use nonparametric tests with the assumption that the data collected in accordance with the central limit theorem will deviate from the normal distribution in cases where the sample size is less than 30 (Büyüköztürk, 2020; Can, 2019; Kul, 2014). In this context, the Mann-Whitney U test was used to compare the difference between the pre and post-test scores of the two independent groups. The Wilcoxon Signed-Ranks test was used to compare the pre and post-test scores of the dependent groups. To make a more accurate decision about the results, the effect size was also calculated besides the "p" value. The way of calculating the effect size also varies according to the selected analysis method. Correlation is used in calculating the effect size of the analysis methods used in this study (Büyüköztürk, 2020; Field, 2018; Fritz et al., 2012; JASP Team, 2020). The statistical program used in the study presented the effect size together with the test results; therefore, no separate operation was performed to calculate it. If the calculated effect size value is 0.10 it was considered "small," if it is 0.30, then it was considered "medium" ,and if it was 0.50, then it was considered a "large" effect size (Cohen, 1988). These values were taken as a basis for the interpretation of the effect size. The JASP Version 0.12.0.0 statistics program was used in the statistical analysis of the data.

Results

Findings Regarding the First Sub-Problem

The first sub-problem of the study was expressed as, "Is there a significant difference between the fluent reading and reading comprehension pre-test scores of the ex-

perimental and the control group?'' The Mann-Whitney U test was used to compare the fluent reading and reading comprehension pre-test scores of the experimental group students and the control group students. The results are presented in Table 2.

Table 2.
Mann-Whitney U Test Results for Comparison of Experimental and Control Group Students' Reading Rate, Reading Accuracy, Prosody, and Reading Comprehension Pre-test Scores

	Group	N	M	MDN	SD	SE	U	p
Reading Rate	Experiment	8	22.06	25.00	9.72	3.44	28.00	0.713
	Control	8	24.44	23.75	5.43	1.92		
Reading Accuracy	Experiment	8	73.35	76.53	13.78	4.87	24.00	0.442
	Control	8	78.67	80.86	8.82	3.12		
Prosody	Experiment	8	14.31	16.75	7.45	2.63	34.00	0.874
	Control	8	15.13	17.25	5.00	1.77		
Reading Comprehension	Experiment	8	12.08	13.33	9.07	3.21	22.50	0.336
	Control	8	18.33	18.34	10.20	4.32		

N: sample size; M; mean, MDN; median, SD: standard deviation; SE: standard error of measurement; U: Mann-Whitney U statistic; p: p value

According to Table 2, there is not a significant difference at the 0.05 level between the fluent reading and reading comprehension scores of the experimental and the control group students before the application of the program. According to the results of the Mann-Whitney U test in Table 2, the difference between the reading rate of the experimental group (MDN = 25.00) and the reading rate of the control group (MDN = 23.75) is not statistically significant before the application of the program, U = 28.00, p = 0.713. Similarly, there is no statistically significant difference between the reading accuracy (MDN = 76.53) scores of the experimental group students and the reading accuracy (MDN = 80.86) scores of the control group students before the application of the program, U = 24.00, p = 0.442. Again, there is no statistically significant difference between the prosody (MDN = 16.75) score of the experimental group and the prosody (MDN = 17.25) score of the control group before the application of the program, U = 34.00, p = 0.874. Finally, there is no statistically significant difference between the reading comprehension scores of the experimental group (MDN = 13.33) and the reading comprehension scores of the control group (MDN = 18.34) before the application of the program, U = 22.50, p = 0.336. Considering the data, the fluent reading and reading comprehension skills of the experimental and the control groups were statistically equal before the application of the program.

Findings Regarding the Second Sub-Problem

The second sub-problem of the study was expressed as, "Is there a significant difference between the pre-test and post-test scores of the experimental group in fluent reading and reading comprehension?'' The Wilcoxon Signed-Ranks test, a nonparametric test, was used to compare the fluent reading and reading comprehension pre and post-test scores of the experimental group students. The results are presented in Table 3.

Table 3.
Wilcoxon Signed-Ranks Test Results Regarding the Comparison of Experimental Group Students' Reading Rate, Reading Accuracy, Prosody, and Reading Comprehension Pre and Post-test Scores

	Group	N	M	MDN	SD	SE	W	p	r
Reading Rate	Post-test	8	52.31	53.25	17.19	6.08	36.00	0.008	1.00
	Pre-test	8	22.06	25.00	9.72	3.44			
Reading Accuracy	Post-test	8	86.94	87.67	9.69	3.43	36.00	0.008	1.00
	Pre-test	8	73.35	76.53	13.78	4.87			
Prosody	Post-test	8	26.50	28.25	5.11	1.81	36.00	0.014	1.00
	Pre-test	8	14.31	16.75	7.45	2.63			
Reading	Post-test	8	59.58	55.00	24.06	8.51	36.00	0.014	1.00
Comprehension	Pre-test	8	12.08	13.33	9.07	3.21			

N: sample size; M; mean, MDN; median, SD: standard deviation; SE: standard error of measurement; W: Wilcoxon signed-rank test statistic; p: p value; r: effect size

According to Table 3, there is a statistically significant difference in favor of the post-test between the pre-test reading rate (MDN = 25.00) and the post-test reading rate (MDN = 53.25) scores of the experimental group students (W = 36, p = 0.008). When examined, the effect of the applied program on the reading rate of the students in the experimental group is "large" (r = 1.00). There is a statistically significant difference between the pre-test reading accuracy (MDN = 76.53) scores and the post-test reading accuracy (MDN = 87.67) scores (W = 36.00, p = 0.008). Considering the effect size, the effect of the applied program on students' reading accuracy skills is "large" (r = 1.00). There is a statistically significant difference between the pre-test prosody (MDN = 16.75) scores and the post-test prosody (MDN = 28.25) scores of the experimental group in favor of the post-test (W = 36.00, p = 0.014). The program applied to the experimental group had a "large" effect on the prosody skills of the students (r = 1.00). It was concluded that there is a statistically significant difference between the pre-test reading comprehension (MDN = 13.33) scores and the post-test reading comprehension (MDN = 55.00) scores in favor of the post-test (W = 36.00, p = 0.014). When examined, the effect of the applied program on students' reading comprehension skills was "large" (r = 1.00).

Findings Regarding the Third Sub-Problem

The third sub-problem of the study was expressed as, "Is there a significant difference between the pre-test and post-test scores of the control group for fluent reading and reading comprehension?" To compare the fluent reading and reading comprehension pre and post-test scores of the control group students, the nonparametric Wilcoxon Signed-Ranks test was used. The results are presented in Table 4.

Table 4.
Wilcoxon Signed-Ranks Test Results Regarding the Comparison of the Control Group Students' Reading Rate, Reading Accuracy, Prosody, and Reading Comprehension Pre-test and Post-test Scores

	Group	N	M	MDN	SD	SE	W	p	r
Reading Rate	Post-test	8	34.44	33.50	8.50	3.01	36.00	0.014	1.00
	Pre-test	8	24.44	23.75	5.43	1.92			
Reading Accuracy	Post-test	8	75.24	77.03	11.25	3.98	9.00	0.250	-
	Pre-test	8	78.67	80.86	8.82	3.12			
Prosody	Post-test	8	17.13	16.00	4.96	1.75	24.00	0.461	-
	Pre-test	8	15.13	17.25	5.00	1.77			
Reading	Post-test	8	35.83	40.00	19.33	6.84	26.00	0.052	-
Comprehension	Pre-test	8	18.33	15.00	12.22	4.32			

N: sample size; M; mean, MDN; median, SD: standard deviation; SE: standard error of measurement; W: Wilcoxon signed-rank test statistic; p: p value; r: effect size

According to Table 4, there is a statistically significant difference between the pre-test reading rate (MDN = 23.75) score and the post-test reading rate (MDN = 33.50) score of the control group students in favor of the post-test (W = 36.00, p = 0.014). It was concluded that the effect of the second grade curriculum on the reading rate of the control group students is "large" (r = 1.00). There is no statistically significant difference between students' pre-test reading accuracy (MDN = 80.86) scores and post-test reading accuracy (MDN = 77.03) scores (W = 9.00, p = 0.250). There is no statistically significant difference between the pre-test prosody (MDN = 17.25) scores and the post-test prosody (MDN = 16.00) scores of the control group (W = 24.00, p = 0.461). It was concluded that there is no statistically significant difference between the pre-test reading comprehension (MDN = 15.00) scores and the post-test reading comprehension (MDN = 40.00) scores of the control group (W = 26.00, p = 0.052).

Findings Regarding the Fourth Sub-Problem

The fourth sub-problem of the study was expressed as, "Is there a significant difference between fluent reading and reading comprehension post-test scores of the experimental group and the control group?" In comparing the fluent reading and reading comprehension post-test scores of the experimental group students and the control group students, the Mann-Whitney U test was used. The results are presented in Table 5.

Table 5.
Mann-Whitney U Test Results for Comparison of Experimental and Control Group Students' Reading Rate, Reading Accuracy, Prosody, and Reading Comprehension Post-test Scores

	Group	N	M	MDN	SD	SE	U	p	r
Reading Rate	Experiment	8	52.31	53.25	17.19	6.08	54.00	0.024	0.688
	Control	8	34.44	33.50	8.50	3.01			
Reading Accuracy	Experiment	8	86.94	87.67	9.69	3.43	52.00	0.038	0.625
	Control	8	75.24	77.03	11.25	3.98			
Prosody	Experiment	8	26.50	28.25	5.11	1.81	55.50	0.015	0.734
	Control	8	17.13	16.00	4.96	1.75			
Reading Comprehension	Experiment	8	59.58	55.00	24.07	8.51	49.50	0.073	-
	Control	8	35.83	40.00	19.33	6.84			

N: sample size; M; mean, MDN; median, SD: standard deviation; SE: standard error of measurement; U: Mann-Whitney U statistic; p: p value, r: effect size

According to Table 5, there is a statistically significant difference at the level of 0.05 between the fluent reading scores of the experimental and the control group students after the application. According to the Mann-Whitney U test results in Table 5, there is a statistically significant difference between the reading rate (MDN = 53.25) scores of the experimental group and the reading rate (MDN = 33.50) scores of the control group after the application of the program (U = 54.00, p = 0.024). When the effect size is considered (r = 0.688), the applied program had a great effect on the difference between the reading rate scores of the groups. Similarly, there is a statistically significant difference between the reading accuracy (MDN = 87.67) scores of the experimental group students and the reading accuracy (MDN = 77.03) scores of the control group students (U = 52.00, p = 0.038). Considering the effect size (r = 0.625), the applied program had a great effect on the difference between the reading accuracy scores of the groups. There is a statistically significant difference between the prosody (MDN = 28.25) scores of the experimental group and the prosody (MDN = 16.00) scores of the control group (U = 55.50, p = 0.015). When the effect size is considered (r = 0.734), the applied program had a great effect on the difference between the prosody scores of the groups. Finally, there is no statistically significant difference between the reading comprehension scores of the experimental group (MDN = 55.00) and the reading comprehension scores of the control group (MDN = 40.00) (U = 49.50, p = 0.073).

Conclusion and Discussion

In this study, the effect of the Parent-Assisted Fluent Reading Program developed for the second grade level on students' ability to read and understand fluent reading was evaluated. The study was carried out with 16 students, 8 experimental groups, and 8 control groups within a primary school in Kocaeli Province İzmit District during the 2018–2019 academic year. The Parent-Assisted Reading Intervention Program was applied for 12-weeks and the conducted research was within the framework of the randomized pre and post-test control group design.

As a result of the research, it was concluded that there was a significant difference between the fluent reading post-test scores of the students in the experimental and the control groups in favor of the experimental group; meanwhile, the was no significant difference between the reading comprehension scores. It was concluded that the Parent-Assisted Reading Intervention Program had a great effect on the differences between the reading rate, reading accuracy, and prosody scores of the experimental and the control group students. In the comparison of fluent reading and reading comprehension pre and post-test scores of the experimental group students, there was a significant difference in favor of the post-test. It was observed that the Parent-Assisted Fluent Reading Program applied to the experimental group students had a great effect on the difference between the students' pre and post-test fluent reading and reading comprehension scores. In the comparison of the fluent reading and reading comprehension skills of the control group students, there was a significant difference in favor of the post-test in the reading rate scores. It was observed that the second grade Turkish lesson curriculum had a great effect on the difference between the pre and post-test reading rate scores of the control group students.

Rasinski et al. (2017) applied the fluency enhancement course to third-grade students and concluded that the students had significant improvements in their fluent reading and reading comprehension skills. It can be stated that the results obtained are similar to the results of this study. However, the way the relevant study incorporated parental support was not explained in detail and the way the process was observed was not specified.

Rasinski & Stevenson (2005) aimed to evaluate the effects on reading skills with first-grade students who had just started reading with a fluency-based home reading program called "Fast Start." As a result of the research, which is essentially a re-evaluation of the "Fast Start" program developed by Rasinski (1994), it has been concluded that the applied program significantly contributed to the reading development of students who are at-risk in terms of word recognition and reading fluency. The implementation of the program in the form of home practices for 10–15 minutes was similar to the home practice time of the Parent-Assisted Reading Intervention Program developed within the scope of this study. Although they are similar in duration, the practices have different structures in terms of process. Supported reading studies were carried out in the Fast Start program with expert support provided in the process. Parents had been given training, but there was no observation of how the parents carried out the process. In this study, video recordings of the home applications of the students were made. The researcher watched the video recordings daily and provided support to each student and parent when needed. Another difference between the two studies is the students included in the study group. In the Fast Start program, students were grouped based on upper, middle, and low reading skills. An equal number of

students from all levels were randomly assigned to the experimental and the control group. The source of different reading level students in the experimental group was unclear; therefore, the difference in reading skills could not be determined. Although there are various differences, the results of the Parent-Assisted Reading Intervention Program and the Fast Start program are similar.

Additional studies showing similarities were conducted by Stahl, Heubach & Cramond (1997) Stahl & Heubach (2005). In these studies, the researchers aimed to help second grade students move from decoding to fluency with the "Fluency-Oriented Reading Instruction (FORI)" (Stahl et al., 1997) developed by Stahl and Heubach. It is stated that the implemented program was successful, but there is no clear emphasis on whether parental support can be provided. However, in this research, support was provided to parents at the beginning of the program and throughout the process on how they could help their children. It is emphasized that Fluency-Oriented Reading Instruction is a two-year project. The Parent-Assisted Reading Intervention Program consisted of 48 lesson hours. Another study was carried out by Reutzel & Hollingsworth (1993) where similar results were obtained. Reutzel & Hollingsworth (1993) aimed to evaluate the effect of the "Oral Recitation Lesson" developed by Hoffman (1985) on students' fluent reading and reading comprehension skills. In this study, it was found that there was a statistically significant difference in the number of reading errors made per minute. Also, three of the four reading comprehension evaluations were in favor of the experimental group.

The applied program significantly contributed to the development of both fluent reading and reading comprehension skills of the experimental group students. The programs developed in national (Çayır, 2014; Varol, 2017) and international (Hoffman, 1985; Rasinski, 1994; Rasinski et al., 1994; Stahl & Heubach, 2005) studies aimed at fluent reading and reading comprehension contributed significantly to the development of students' fluent reading and reading comprehension skills.

Finally, the use of nonparametric tests appears as a limitation of the study because the study group was small. The researcher was also a teacher; therefore, it would be appropriate to express another limitation that the practice, which lasts for one lesson, was performed outside of the students' daily routine lesson hours. Another limitation of the study is that the parents of the study group students had difficulty in setting up a suitable environment at home to carry out the study due to their low education level and poor income. The subject of text selection can also be expressed as an important limitation in the study. Although Ateşman (1997) classified the computational texts as structurally difficult, very easy, and easy; it did not explain the suitability of the texts to the second grade level. For example, although the word "öğretmenim" ("my teacher" in English) consists of four syllables and ten letters, students were easily able to

read this word because they are familiar with its meaning. In contrast, the word "cet" ("ancestor, forefather or grandfather" in English) only consists of one syllable and three letters; however, the lack of text is a major limitation because the students were not familiar with it and it is difficult to read.

Recommendations

Recommendations for Researchers

One of the limitations of the study was examining a small sample group. Similar programs can be studied with a larger sample group. Apart from this, the program can be applied to students who exhibit lower levels of fluent reading and reading comprehension skills than their peers at other grade levels. The program was implemented at an hour outside of the students' routine course hours. If possible, while the control group students continue their second grade curriculum, the program can be applied to the experimental group students during the routine course hours and the results can be compared. Finally, texts that are appropriate for the class level and improve fluent reading skills can be produced.

Recommendations for Practitioners

Additional help should be made available to support students' reading skills at home by providing detailed training to parents on fluent reading strategies. The program can be applied to the whole class in the first year right after the students learn to read and write. For the correct implementation of the program, it may be suggested that practitioners obtain detailed information about the fluent reading methods used within the framework of the program. In order for parents to actively participate in the process and give necessary feedback, parents may be asked to record and share their work, at least until they confidently understand the work required.

Informed Consent: Informed consent was obtained from the parents of the students who participated in this study.

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