

An In-Depth Examination of the Online Fluency Development Approach for Addressing Reading Difficulties*

Gülizar Nacar¹ 

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Abstract

Purpose: This study aims to conduct an in-depth examination of the effectiveness of an online fluency development approach in addressing reading difficulties.

Method: A total of 36 sessions were implemented with a third-grade student selected through purposive sampling. The sessions were held three times a week, each lasting 40 minutes and conducted online. Data were obtained from the researcher's journal, interviews with the student's classroom teacher and family, the Prosodic Reading Scale, and pre- and post-assessments of the student's reading fluency skills. These assessments were grounded in program-based measurements, including the number of correctly read words per minute and scores from the Prosodic Reading Scale. The percentage change in reading speed was calculated by comparing the pre-test and post-test results, and the fluency data were interpreted accordingly. Furthermore, the student's prosodic reading scale scores were analyzed through pre- and post-test comparisons.

Findings: The findings indicate that the online fluency development approach enhanced the student's reading speed by 45% and improved prosodic reading skills. In addition, based on the views of the student, parent, and teacher, a notable increase was observed in the student's reading motivation and awareness.

Implications: Online reading programs can also be incorporated into the curriculum and teaching-learning processes, allowing for early intervention in students' reading difficulties. Moreover, longitudinal and follow-up studies could be designed to further examine the long-term effects of online intervention programs.

Keywords

reading fluency, reading speed, accurate reading, online reading

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¹ **Corresponding Author:** İstanbul University Cerrahpaşa, Türkiye. gulizar.nacar@ogr.iuc.edu.tr

Introduction

Reading is a fundamental skill that is frequently used and needed in daily life. It is an essential competency acquired during the school years. Students with advanced reading skills are generally expected to achieve higher academic success. However, students who struggle with reading often develop a negative attitude toward it. Such attitudes may lead to decreased performance in other subjects and feelings of failure, which can, in turn, adversely affect students' social lives and future career choices. Therefore, monitoring students' reading skills and providing support when necessary are crucial in the early years of education.

Fluent reading, a key component of reading ability, enables students to comprehend texts more effectively. To have a successful reading experience, individuals must be able to read fluently. Rasinski (2004, p. 46) defined fluent reading as the ability to devote less time to decoding and to recognize the deeper levels of meaning embedded within the text. He also identified three dimensions of fluent reading: accuracy, automaticity, and prosody. Accordingly, fluent readers are expected to read a text accurately, at an appropriate rate, and with proper intonation.

Individuals must possess effective reading comprehension skills to keep pace with the demands of the modern age. Fluent reading is positively correlated with reading comprehension (Ceyhan, 2019; Keskin, 2012; Kodan & Akyol, 2018; Palmer, 2010; Rasinski, 2004; Şahin & Baştuğ, 2020; Yılmaz, 2008). Therefore, it is essential to identify students who experience difficulties with fluent reading and to implement appropriate interventions.

Various methods and strategies have been developed to enhance the fluent reading skills of such students. Examples include repeated reading, echo reading, paired reading, shared reading, choral reading, the neurological impress method, and peer tutoring (Baştuğ, 2020). Traditionally, these approaches have been implemented in settings where the teacher and students share the same physical environment. However, with advances in technology, reading—long performed with printed books—has shifted to digital platforms (Odabaş et al., 2020). Moreover, following the pandemic, alternative approaches to traditional instructional methods have begun to emerge. One of these approaches is the delivery of education in online environments.

Reading in Online Environments

With the increasing digitalization of education, reading in online environments has gained growing prominence in the field of reading education. In particular, prolonged school closures and accessibility challenges during the COVID-19 pandemic have further emphasized the importance of online reading practices. Such practices have become valuable tools for addressing students' reading difficulties and enhancing their reading fluency and comprehension skills. Online reading can be broadly defined as engaging in reading activities through digital texts using various reading strategies. International studies comparing the effects of online and traditional reading practices on students' reading fluency and comprehension are particularly noteworthy. For example, Sanches-Ferreira et al. (2022) reported improvements in the reading fluency and accuracy of elementary school students who participated in an online peer-assisted reading intervention. Similarly, Mize and Park (2021) examined the effects of an iPad-assisted repeated reading program on the reading fluency and attitudes of fourth-grade students with reading difficulties, reporting positive gains in both reading speed and attitudes.

An exploratory study conducted by Beach et al. (2021) examined the adaptation of a traditional summer reading intervention to an online format during the COVID-19 pandemic. The study involved 35 low-income second- and third-grade students who participated in 30-minute one-on-one Zoom sessions using the Sound Partners program over 22 days. The findings revealed that students maintained their reading fluency and accuracy while achieving approximately a 10% improvement on curriculum-based tests ($p < .001$, $d = 1.25\text{--}1.30$). Participant feedback also indicated that the online summer reading intervention was both feasible and effective. Similarly, Duijnen (2021) implemented a concurrent online fluency intervention with three second- and third-grade students experiencing reading difficulties. Students with comparable reading skills took part in an eight-week small-group program consisting of 15 sessions, each lasting 45 minutes. The results demonstrated improvements in students' decoding and accuracy skills, as well as their reading comprehension performance. Maki and Hammerschmidt-Snidarich (2022), in their meta-analysis, demonstrated that online reading fluency interventions are generally effective in improving students' oral reading fluency skills. Alves and Romig (2021) adapted a face-to-face instructional plan into an online synchronous intervention for students with reading difficulties, emphasizing that online education can serve educational purposes not only during pandemics but also in a variety of contexts. Findings from studies on improving reading skills in online environments suggest that such interventions can be used as alternative tools for enhancing reading performance. Nevertheless, further research on online reading practices is required, particularly within the context of the Turkish education system and its curriculum. In today's increasingly digitalized world, it is essential to conduct both theoretical and applied research to enhance the effectiveness of online reading studies, especially in developing a critical skill such as reading. In this context, the present study examined the effectiveness of an online reading fluency approach in addressing reading difficulties. To this end, the main research question of the study was: "What is the effect of the online reading fluency development approach on addressing reading difficulties?" The following sub-questions were examined within the scope of this study:

1. What is the effect of the online reading fluency development approach on improving reading speed?
2. What is the effect of the online reading fluency development approach on enhancing prosodic reading skills?
3. What are the views of students, parents, and teachers regarding the online reading fluency development approach?

Method

Model

This study, conducted to examine in depth an approach to improving online reading fluency in addressing reading difficulties, employed a case study design, which is a qualitative research method. Case studies are defined as a research design in which the researcher conducts an in-depth analysis of a situation, event, activity, process, or one or more individuals (Creswell, 2017).

The case study design was chosen to allow for a detailed examination of the role of online reading fluency in addressing reading difficulties from multiple perspectives.

Study Group

This study was conducted with a third-grade student at an elementary school in Istanbul during the 2022–2023 academic year. Purposive sampling, which “allows for in-depth investigation by selecting information-rich cases based on the purpose of the research,” was used in participant selection (Büyüköztürk et al., 2019, p. 92). The following criteria were applied to select the third-grade student enrolled at the designated school:

- The student’s native language should be Turkish.
- The student should have no diagnosed mental, visual, or auditory impairment.
- The number of correctly read words per minute should range between 0 and 60.

A student who met the above criteria and was enrolled to third grade during the 2022–2023 academic year was selected for the study. For ethical reasons, the student’s real name was withheld, and the pseudonym *Ece* was used.

Ece’s Reading Backstory: Ece is a third-grade student at a public elementary school who is academically successful and well-liked by her peers. However, she makes errors while reading. These reading errors generally stem from her tendency to guess words after reading only part of them, rather than relying on their phonetic structure to identify them letter by letter and syllable by syllable. In addition, when she encounters a difficult word, she tends to reread the previous word in an attempt to save time. This behavior negatively affects her overall reading performance.

Role of the Researcher

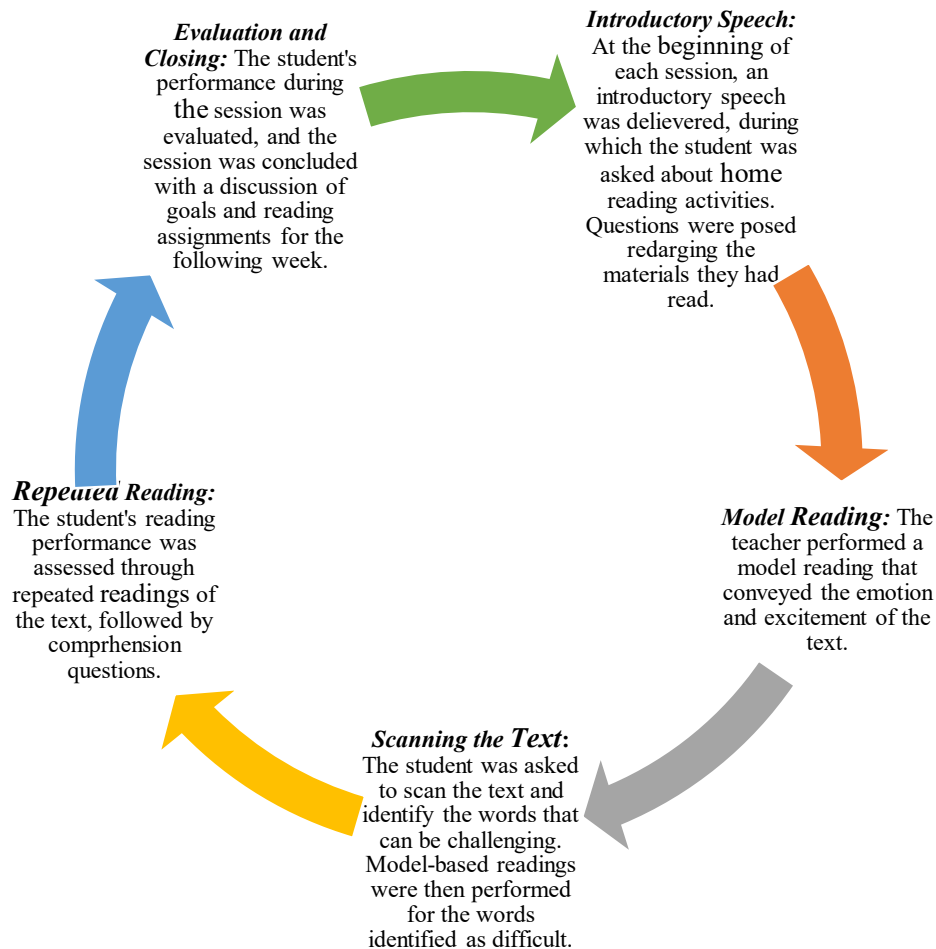
In this study, the researcher also served as the program implementer. Throughout the process, each reading session was conducted by the researcher, observations were made during implementation, and data were collected accordingly. Since the researcher also served as the implementer, steps were taken to minimize potential researcher bias. All reading sessions were video recorded to allow for external review when necessary. In addition, pre- and post-assessments were scored by an independent evaluator who was blinded to the sequence of the recordings. During qualitative data analysis, an independent coder contributed to the reliability process to further reduce bias. These precautions helped strengthen the trustworthiness and objectivity of the findings.

Implementation Process

After obtaining the necessary permissions, a study plan consisting of 36 online reading sessions, each lasting 40 minutes, was implemented with the student three days a week (Monday, Wednesday, and Friday). The texts used in the sessions were provided by an academic expert in the field.

Figure 1

Structured Instructional Cycle of the Online Fluency Development Sessions



Each session followed a structured format consisting of four components: an introductory warm-up activity, guided repeated reading practices, performance-based evaluation, and feedback. During the warm-up, the student engaged in brief phonological awareness or preview activities to activate prior knowledge. The repeated reading component included model reading, echo reading, and independent reading attempts. At the end of each session, the student's performance was evaluated and brief feedback was provided regarding accuracy, rate, and prosody. The texts selected for the sessions were narrative passages appropriate for third-grade students. The selection criteria included readability, lexical accessibility, topic familiarity, and length (ranging between 80 and 120 words). Readability and age-appropriateness were confirmed through expert review. The texts were also examined for their suitability for repeated reading practices, including syntactic simplicity, rhythmic flow, and opportunities for prosodic phrasing.

Data Collection and Analysis

Data were collected through the researcher's diary, which is frequently used in qualitative research, interviews with the student's classroom teacher and family, and measurements of the

student's fluent reading skills taken at the beginning and end of the study. These measurements were based on *the number of correctly read words per minute* (Deno, 1985) and data obtained from the Prosodic Reading Scale included in the program-based assessment. The *Prosodic Reading Scale*, developed by Keskin et al., (2013), consists of fifteen items with a maximum possible score of 60. To ensure content validity, expert opinions were obtained from specialists in the field of reading and reading fluency. For construct validity, the Kaiser–Meyer–Olkin (KMO) value was found to be .97, and Bartlett's test of sphericity was significant ($p < .01$). Factor analysis conducted using the Varimax rotation technique indicated that the scale loaded on a single factor, which explained 79% of the total variance. The internal consistency of the scale, as measured by Cronbach's alpha, was calculated to be .981. Students' reading speeds were determined by subtracting the number of incorrectly read words from the number of correctly read words. The percentage change in reading speed between the pretest and posttest was calculated, and the reading fluency data were interpreted accordingly. The student's pretest, midtest, and posttest scores on the Prosodic Reading Scale were also compared and evaluated. The qualitative data obtained in the study were analyzed using content analysis. Content analysis, commonly employed in qualitative research, is used to gain an in-depth understanding by identifying meaningful patterns, themes, and relationships within the data. It involves organizing data systematically through processes of coding, categorizing, and interpreting it under specific concepts and themes (Yıldırım & Şimşek, 2021). For this purpose, first, codes, concepts, and subthemes were generated, followed by the development and interpretation of the main theme derived from these subthemes. To enhance the credibility of the qualitative findings, the coding process was reviewed by a second researcher with expertise in reading education. After the initial coding was completed by the primary researcher, the second researcher examined a portion of the data and provided feedback on the coding scheme. Minor disagreements were discussed and resolved through consensus. This process contributed to the trustworthiness of the analysis, even though the primary coding was carried out by the researcher.

Findings

This section presents the findings obtained from the data collected in the study.

Findings Regarding the Effect of the Online Reading Fluency Development Approach on Reading Speed

Table 1

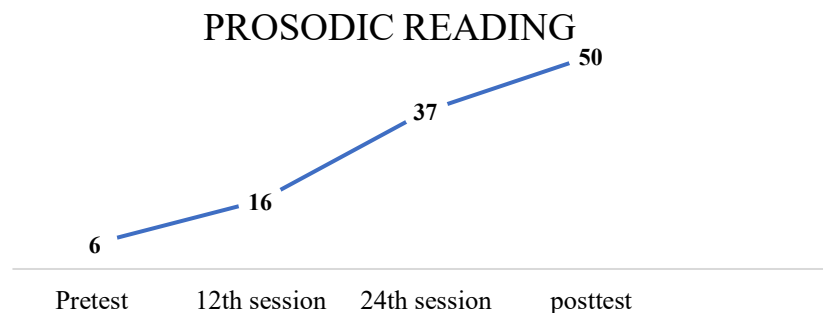
Findings Regarding the Effect of the Online Reading Fluency Development Approach on Reading Speed

	Total Words Read	Incorrect Words	Reading Speed	Percentage Change
Pretest	56	1	55	%45
Posttest	82	2	80	

Findings Regarding the Effect of the Online Reading Fluency Development Approach on Prosodic Reading Skills

Figure 2

Changes in Prosodic Reading Scores Across Sessions



According to the table, the student scored 6 points on the 60-point Prosodic Reading Scale in the pretest, 16 points after the 12th reading session, 37 points after the 24th reading session, and 50 points in the posttest (after the 36th reading session). Based on these results, it can be concluded that the online reading fluency development approach was effective in improving prosodic reading skills.

Student, Parent, and Teacher Views Regarding the Online Reading Fluency Development Implementation

The student, parent, and teacher views were obtained regarding the online reading fluency development implementation. The data were analyzed through content analysis, and corresponding codes, subthemes, and main themes were generated.

Table 2

Theme 1: Motivation and Participation

Main Theme	Subtheme	Statements
Motivation and Participation	• The student's anticipation of the lessons	• "The student expressed that she eagerly awaited the lesson days."
	• Willingly fulfilling tasks and responsibilities	• "It was stated that she completed her tasks and responsibilities on time and with enthusiasm."
	• Increased motivation by the end of the process	• "It was observed that she was making an effort to prove herself."
	• Effort to prove herself	

An evaluation of the online reading fluency development approach based on student, parent, and teacher views revealed that the student eagerly anticipated the lessons, willingly completed assigned tasks and responsibilities, and, by the end of the process, demonstrated increased motivation and a strong desire to prove herself. These findings suggest that the approach had a positive impact on the student's attitude toward the reading process.

Table 3

Theme 2: Development in Reading Skills

Main Theme	Subthemes	Statements
Development in Reading Skills	<ul style="list-style-type: none"> Noticeable improvement in reading skills Progress recognized by classmates Increased interest in reading activities 	<ul style="list-style-type: none"> “The student stated that she was aware of the progress in her reading.” “Classmates noticed and expressed the improvement in the student’s reading skills.”

The online reading fluency development approach led to a noticeable improvement in the student’s reading skills. This progress was also recognized by classmates, serving as a form of social reinforcement that significantly increased the student’s engagement in reading activities. This holistic development demonstrates the effectiveness of the approach in enhancing both individual learning outcomes and classroom interaction.

Table 4

Theme 3: Reading Habit and Passion

Main Theme	Subthemes	Statements
Reading Habit and Passion	<ul style="list-style-type: none"> Increased awareness of reading books Habit of carrying books Development in reading passion 	<ul style="list-style-type: none"> “It was stated that the student’s passion for and awareness of reading books had increased....” “It was mentioned that she carried at least one book in her bag wherever she went.”

The online reading fluency development approach enhanced the student’s awareness of reading, fostered a habit of carrying books, and cultivated a passion for reading. The student’s increased interest in reading, reflected in her daily life at the end of the process, demonstrates the lasting and positive impact of the approach.

Table 5

Theme 4: Attitudes Toward the Online Process

Main Theme	Subthemes	Statements
Attitudes Toward the Online Process	<ul style="list-style-type: none"> Finding the process enjoyable Lessons meeting expectations Contribution of the online process to learning 	<ul style="list-style-type: none"> “The student stated that the online lessons were enjoyable....” “The student’s opinions about the online reading fluency development approach were positive.”

The online reading fluency development approach was found to be enjoyable by the student, the lessons met expectations, and the process was observed to make significant contributions to overall learning. This demonstrates that online implementations can increase student engagement and make the learning process more effective.

Conclusion and Discussion

This study conducted an in-depth examination of the impact of an online reading fluency development approach on the reading skills of a student with reading difficulties. The findings revealed notable improvements in both the student's reading speed (a 45% increase) and prosodic reading skills. Furthermore, the student, parent, and teacher views indicated that the intervention had positive effects on motivation, awareness, and reading habits. These results are consistent with recent research. For example, Romig and Jetton (2023) found that online repeated reading interventions significantly improved students' oral reading fluency. Similarly, Cruz et al., (2022) demonstrated that both online and face-to-face fluency interventions are effective, and that online implementations can successfully serve as alternatives to traditional methods.

The literature supports that online practices enhance not only reading speed but also prosodic reading skills. Hudson et al., (2020) emphasized that one-on-one structured repeated reading practices are effective not only for speed and accuracy but also for prosody. Studies focusing on improving online reading have been found to positively contribute to the development of students' prosodic reading skills. These findings indicate that online reading environments and strategies can effectively be used to improve students' prosodic reading performance.

The improvements observed in reading speed and accuracy may be interpreted within the framework of Automaticity Theory (LaBerge & Samuels, 1974), which suggests that fluent readers allocate fewer cognitive resources to decoding and more to comprehension. The student's increased prosodic competence also aligns with cognitive models emphasizing the role of prosody in supporting higher-level comprehension processes. Furthermore, the student's enhanced motivation during the intervention can be linked to Bandura's (1997) concept of self-efficacy, as repeated success experiences may have strengthened her belief in her ability to read fluently. From the perspective of Participation Theory (Guthrie & Wigfield, 2000), the student's active engagement in the online sessions contributed to her developing a positive reading identity, thereby supporting both cognitive and affective growth.

This study also revealed increases in the student's motivation, awareness, and reading habits during the online reading sessions. Interventions designed to enhance reading skills additionally support students' affective domains. Cheng et al., (2021) demonstrated that fluency interventions allowing students to select their own reading topics positively influence not only performance but also attitudes toward reading. Accordingly, studies aimed at improving students' reading skills in online environments appear to support both their motivation and their perceptions of reading.

In this study, a 36-session intervention program was implemented. The duration and intensity of interventions are important factors in reading development research. A meta-analysis by Maki and Hammerschmidt-Snidarich (2022) emphasized the significance of intervention duration and intensity. The researchers noted that regular and structured practices have a moderate effect on improving students' reading skills. In this context, the systematic intervention program consisting

of 36 reading sessions conducted three times a week in the present study can be considered to have contributed to the improvement of the student's reading skills.

The findings of this study reveal that online reading fluency interventions are effective in both cognitive (speed, accuracy, prosody) and affective (motivation, attitude) domains. Many effective strategies and practices used in traditional face-to-face reading instruction can also be adapted to online environments. Both recent research in the relevant literature and the results of this study demonstrate that reading strategies can successfully be implemented online. Therefore, online reading interventions can be regarded as an alternative approach to improving reading skills. Based on these results, several recommendations can be made:

Online reading fluency interventions can be integrated into school programs for students with reading difficulties. They can serve as alternative learning environments and processes not only under normal conditions but also during extraordinary situations such as the COVID-19 pandemic or earthquakes. To this end, teachers can implement various reading strategies—such as repeated reading, paired reading, echo reading, and readers' theater—in online environments.

Online reading programs can also be incorporated into the curriculum and teaching–learning processes, allowing for early intervention in students' reading difficulties. This study was conducted with a limited number of participants; therefore, future research could be carried out with larger samples representing different socioeconomic backgrounds. Moreover, longitudinal and follow-up studies could be designed to further examine the long-term effects of online intervention programs. Furthermore, future research could also explore the effects of online practices on group interaction and collaboration in depth.

Declarations

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Ethics Statements: Ethical approval for this study was obtained from the Social and Human Sciences Ethics Committee of İstanbul University–Cerrahpaşa (Approval No: 191, Date: 02.05.2023).

Conflict of Interest: The author declares that there is no conflict of interest regarding the publication of this article.

Informed Consent: Informed consent was obtained from the student and the student's parent prior to data collection.

Data availability: The data supporting the findings of this study are available from the corresponding author upon reasonable request.

References

- Alves, K. D., & Romig, J. E. (2021). Virtual reading lessons for upper elementary students with learning disabilities. *Intervention in School and Clinic*, 57(2), 95-102. <https://doi.org/10.1177/10534512211001865>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- Baştuğ, M. (2012). *İlköğretim birinci kademe öğrencilerinin akıcı okuma becerilerinin çeşitli değişkenler açısından incelenmesi* [Yayınlanmamış doktora tezi]. Gazi Üniversitesi.
- Baştuğ, M. (2021). *Akıcı okumayı geliştirme: kavramlar, uygulamalar, değerlendirmeler*. Pegem Akademi Yayıncılık.
- Beach, K. D., Washburn, E. K., Gesel, S. A., & Williams, P. (2021). Pivoting an elementary summer reading intervention to a virtual context in response to COVID-19: An examination of program transformation and outcomes. *Journal of Education for Students Placed at Risk (JESPAR)*, 26(2), 112-134.
- Büyüköztürk, Ş., Çakmak, E. K., Akgün E. Ö., Karadeniz, Ş., & Demirel, F. (2019). *Eğitimde bilimsel araştırma yöntemleri* (26. Baskı). Pegem Akademi.
- Cavalcanti, A. P., Barbosa, A., Carvalho, R., Freitas, F., Tsai, Y.-S., Gašević, D., & Mello, R. F. (2021). Automatic feedback in online learning environments: A systematic literature review. *Computers and Education: Artificial Intelligence*, 2, 100027. <https://doi.org/10.1016/j.caeai.2021.100027>
- Ceyhan, S. (2019). *Etkileşimli sesli okumanın öğrencilerin okuduğunu anlama, okuma motivasyonu ve akıcı okumalarına etkisi*. [Doktora Tezi] Gazi Üniversitesi.
- Cheng, M. P., Mercer, S. H., & Saqui, S. (2021). Exploring the effectiveness of student topic choice in reading fluency interventions. *Contemporary School Psychology*, 27(2), 348-357. <https://doi.org/10.1007/s40688-021-00393-2>
- Chard, D. J., Vaughn, S., & Tyler, B. J. (2002). A synthesis of research on effective interventions for building reading fluency with elementary students with learning disabilities. *Journal of Learning Disabilities*, 35(5), 386-406. <http://dx.doi.org/10.1080/1045988X.2016.1212321>
- Creswell, J. W. (2017). *Araştırma deseni: Nitel, nicel ve karma yöntem yaklaşımları* (Çev. S. B. Demir) Eğiten Kitap.
- Cruz, J., Mendes, S. A., Marques, S., Alves, D., & Cadime, I. (2022). Face-to-face versus remote: Effects of an intervention in reading fluency during the COVID-19 pandemic. *Frontiers in Education*, 6, Article 817711. <https://doi.org/10.3389/educ.2021.817711>
- Deno, S. L. (1985). Curriculum-based measurement: The emerging alternative. *Exceptional Children*, 52(3), 219-232. <https://doi.org/10.1177/001440298505200303>
- Guthrie, J.T. & Wigfield, A. (2000). Engagement and motivation in reading. (Eds. ML Kâmil, PB Mosenthal, PD Pearson and R. Barr) *Handbook of Reading Research*, Lawrence Erlbaum Associates, New Jersey
- Hudson, A., Koh, P. W., Moore, K. A., & Binks-Cantrell, E. (2020). Fluency interventions for elementary students with reading difficulties: A synthesis of research from 2000-2019. *Education Sciences*, 10(3), 52. <https://doi.org/10.3390/educsci10030052>
- Keskin, H. K., Baştuğ, M., & Akyol, H. (2013). Sesli okuma ve konuşma prozodisi: ilişkisel bir çalışma. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*. 9(2), 168-180.
- Keskin, H. K. (2012). Akıcı okuma yöntemlerinin okuma becerileri üzerindeki etkisi. [Doktora Tezi] Gazi Üniversitesi.

- Kodan, H., & Akyol, H. (2018). Koro, tekrarlı ve yardımcı okuma yöntemlerinin zayıf okuyucuların okuma ve anlama becerileri üzerine etkisi. *Eğitim ve Bilim*, 43(193), 159-179.
- Kuhn, M., Schwanenflugel, P., & Meisinger, E. (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>
- LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6(2), 293-323. [https://doi.org/10.1016/0010-0285\(74\)90015-2](https://doi.org/10.1016/0010-0285(74)90015-2)
- Maki, K. E., & Hammerschmidt-Snidarich, S. (2022). Reading fluency intervention dosage: A novel meta-analysis and research synthesis. *Journal of School Psychology*, 92, 148-165. <https://doi.org/10.1016/j.jsp.2022.03.008>
- Mize, M. T., & Park, Y. (2021). iPad-assisted reading fluency instruction for fourth graders with reading difficulties: A single case experimental design. *Reading Improvement*, 58(4), 147-155. <https://eric.ed.gov/?id=EJ1287878>
- Odabaş, H., Odabaş, Z. Y., & Binici, K. (2020). Dijital bilgi kaynakları ve ortamlarının üniversite öğrencilerinin okuma davranışlarına etkileri, *Milli Eğitim Dergisi*, 49, 89-116.
- Palmer, M. L. (2010). *The relationship between reading fluency, writing fluency, and reading comprehension in suburban third-grade students* [Doktora tezi] San Diego State University.
- Rasinski, T. (2004). Creating Fluent Readers. *Educational Leadership*, 61(6), 46-51.
- Romig, J. E., & Jetton, A. (2023). Effects of a repeated reading intervention delivered online to upper elementary students. *Journal of Special Education Technology*, 39(2), 163-178. <https://doi.org/10.1177/01626434231184879>
- Şahin, M., & Baştuğ, M. (2020). Okuma güçlüğünü gidermede nörolojik etki yönteminin rolü. *Academy Journal of Educational Sciences*, 4(2), 93-101.
- Sanches-Ferreira, M., Martins, H., Valqueresma, A., & Alves, S. (2022). Implementing an online peer tutoring intervention to promote reading skills of elementary students: Effects on fluency and accuracy. *Frontiers in Education*, 7, Article 983332. <https://doi.org/10.3389/feduc.2022.983332>
- Van Duijnen, T. (2021). *The efficacy of a synchronous online reading fluency intervention with struggling readers*. [Yüksek lisans tezi]. University of Victoria.
- Yıldırım, A., & Şimşek, H. (2021). *Sosyal bilimlerde nitel araştırma yöntemleri* (13. baskı). Seçkin Yayıncılık.
- Yıldız, M. (2013). Okuma motivasyonu, akıcı okuma ve okuduğunu anlamanın beşinci sınıf öğrencilerinin akademik başarılarındaki rolü. *Electronic Turkish Studies*, 8(4), 1461-1478.
- Yılmaz, M. (2008). Kelime tekrar tekniğinin akıcı okuma becerilerini geliştirmeye etkisi. *Türk Eğitim Bilimleri Dergisi*, 6(2), 323-350.