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Effects of peer-mediated intervention on the reading fluency of a fourth-grade student

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Abstract

This study aimed to assess the effectiveness of a peer-mediated intervention on improving the reading fluency of a fourth-grade student facing difficulties in reading fluency. The study was conducted in an elementary school in Saudi Arabia, within a general education fourth-grade classroom. It spanned two months, involving a student grappling with reading fluency issues, and he significantly underperformed compared to his peers. The study was carried out on single subject design. Participants included the target student and a proficient peer tutor, both sharing the same class, teachers, schedule, Arabic background, socioeconomic status, and urban living environment. Reading assessment employed a fourth-grade primary school reading book to ensure consistent evaluation throughout the baseline, intervention, and maintenance phases. The independent variable was the peer-mediated reading strategy, a well-established method for enhancing reading outcomes. The dependent variable measured the student's reading fluency in terms of the number of correct words read per minute. Results demonstrated the effectiveness of the peer-mediated reading approach in significantly improving the struggling student's reading fluency. Visual analysis revealed a consistent upward trend, indicating substantial improvements following the intervention, with an immediate peak observed after the first intervention point compared to the baseline. These findings highlight the positive impact of peer-mediated interventions on enhancing reading fluency in struggling students. Limitations, implications, and recommendations for future research were thoroughly examined and discussed in this study.

Keywords: elementary education, fourth-grade student, peer-mediated intervention, reading assessment, reading fluency, single subject design.



Public Interest Statement

This study is significant as it demonstrates the effectiveness of peer-mediated interventions in enhancing reading fluency among struggling students. Conducted in a real-world classroom setting in Saudi Arabia, the research provides practical insights into improving reading skills using peer support. The positive results, indicated by the substantial improvements in reading fluency, highlight the potential for peer-mediated strategies to be integrated into regular educational practices. This approach not only benefits the target students but also fosters a collaborative learning environment. The findings underscore the value of peer tutoring and offer a feasible, resource-efficient method for addressing reading difficulties in elementary education.

Introduction

Effects of Peer-mediated Intervention on the Reading Fluency of a Fourth-grade Student

Reading is an essential skill that every student must possess. The skill enables learners to enter the world of knowledge and ideas (Khasawneh & Fallatah, 2022). It is also a means and an end during the early years of school, where the principles of learning to read and reading to learn are installed. The ability to read in a fluent and effective manner holds the potential for opening the doors for both academic and professional success (Brunner, 1993; Josephs & Jolivette, 2016). In the classrooms, students with fluent reading can read and understand instructions and solve problems across various subjects independently. Such learners are also likely to perform better. On the other hand, those with reading difficulty who struggle with basic reading concepts are more vulnerable to academic failure; hence, improving their reading skills equals enhancing their chances of performing better. Various approaches have been used to improve the ability of adolescents to read fluently and effectively, but peer-mediated reading intervention has been shown to be very effective in achieving reading improvements (Josephs & Jolivette, 2016). However, very little research have been done to show whether a similar intervention can improve the reading fluency of students at a younger age like children in fourth grade. Educators have relied on National Reading Panel recommendations to adopt peer-mediated strategies for improving reading fluency. Peer-mediated strategies are evidence-based interventions designed and implemented to expand the academic and social participation of students with learning disabilities. The interventions affect the learners' on-task behaviors, reading fluency, and social behavior. To further explore the application of particular interventions, this study examines the impact of peer-mediated strategies on reading fluency in fourth-grade students with reading difficulties.

Literature Review

Reading Fluency

Reading fluency is an essential part of literacy instruction that determines students' knowledge and skills in interacting with written or oral words. Makebo et al. (2022) perceive reading as the most important skill necessary for learners to succeed in the academic environment. Reading is basically word recognition and the ability to join words to form complete sentences with meaning. Hence, Makebo et al. (2022) define fluency as a student's ability to have clear meaning from reading comprehension with no hesitation and at an appropriate speed. In the same context, oral reading fluency refers to the ability to read aloud a text accurately with natural speed (Aldhanhani & Abu-Ayyash, 2020). Another study by Paige (2020) defined reading fluency based on an individual's reading rate, word recognition accuracy, and expression. All of these definitions emphasize a skill that every learner needs to maintain high-level academic performance.

Reading fluency is a critical component of students' learning and academic success. It also opens doors for future financial independence. Rupley et al. (2020) state that reading fluency positively affects students' school achievements. The skill allows learners to recognize words correctly, read them at the required pace, and communicate efficiently with other students and teachers in the teaching and learning environment. Accordingly, Khasawneh and Fallatah (2022) opine that reading fluency is the basis of reaching mastery in reading and an indicator of educational quality. Reading fluency is necessary for learners with disabilities because it shapes their reading skills, which determines their performance. A study by Hudson et al. (2020) established that students with disabilities exhibit early reading difficulties related to decoding and fluency. Thus, peer-mediated interventions for improving reading fluency are required to help such students reach mastery levels in reading and, in turn, improve their overall academic achievements.

Peer-Mediated Interventions

Peer-mediated interventions (PMIs) are evidence-based strategies implemented in classroom environments to expand the academic and social participation of students with learning disabilities. They are considered effective approaches for involving peers in educating and supporting students with intellectual and developmental disabilities. Hence, several PMIs have been proposed and tried as interventions to improve the reading fluency of students with disabilities. For example, Owen-DeSchryver et al. (2022) examined profiles of 204 students in the context of their academic and behavioral changes and impacts on the academic and behavioral outcomes of students with learning disabilities from eight public high schools. The scholars fronted the pilot study to examine the portrait of peers who participated in peer-to-peer programs based on their ratings on professionalism, responsibility, attendance, support in academics, and support related to socialization and independence. The researchers found many peer-mediated interventions within the schools, including modeling academic skills, behavior modeling, small group peer work, and activities, encouraging peers to ask questions, resource room support, eating lunch together, and extracurricular activities after school. The study also recorded significantly reduced behavioral referrals and suspensions among peer partners.

In another study, Travers and Carter (2022) conducted a systematic review of 98 studies discussing peer-mediated interventions to establish their impacts on students without disabilities. The researchers assessed the extent to which PMI literature has examined the effects of the interventions on middle and high school peers, how the impacts have been evaluated, and the effects on peers due to their involvement in PMIs. From the review, Travers and Carter (2022) established most of the studies included qualitative and quantitative measures of peer impact. Thus, they recommended focused research on practices for addressing the benefits of involving peers without disabilities in PMIs.

Taguchi et al. (2023) used 27 U.S. college-level Japanese students to explore the effectiveness of a semester-long repeated reading program on improving reading fluency. The study engaged the students in reading a 300- to 500-word passage through an audio-supported repeated reading (RR) mechanism. The effects and perceptions of the program were assessed based on a learner's reading speed and comprehension, as well as their attitudes towards repeated reading. From these interventions, the researchers identified repeated reading as one of the strategies for improving reading fluency among students with disabilities. Overall, the study found that learners exposed to repeated reading experienced improved and increased reading rates, thus justifying its efficacy.

Students with intellectual and developmental disabilities often struggle to read and, thus, record poor academic scores. Accordingly, improving their reading fluency is necessary to enhance their academic achievements and socialization abilities. Although further research is needed to assess the

comparative efficacy of PMIs on students with disabilities, the available research indicates that peer-mediated interventions such as repeated reading, continuous reading, choral reading, readers' theatre, paired reading, and rhyming poetry, among other strategies, provide the basis for improving such students' reading fluency, on-task behavior, and social behavior.

Hofstadter-Duke and Daly (2011) were able to demonstrate that an experimentally derived peer-mediated reading intervention was able to improve reading outcomes for same grade peers. A similar result was obtained when an intervention program involving the instruction of vocabulary, correction of errors, and the building of fluency (Kai Yung Tam et al., 2006). What was particularly striking in this study, is the rapid improvement in the oral reading rate of the learners when compared to the baseline (Kai Yung Tam et al., 2006). Therrien et al (2011) were also able to report improved reading and fluency of students when a modified RAAC intervention was used. These studies further go to suggest that these different interventions approach could have a similar positive impact on younger age students.

Other Reading interventions

Child-centered reading interventions have been explored to determine their effectiveness in helping students with reading difficulties. This approach entails the use of visual aids, writing stages, and dictating (Bastug and Demirtas, 2017). This multi-faceted approach has revealed some positive outcomes when applied to elementary school students. Students have been shown to improve their levels of reading, their speed to read, and the ability to understand the contents of the material they are reading (Bastug & Demirtas, 2017).

Council et al (2016) were able to examine the impacts of a computer-derived, reading intervention on the reading abilities of urban primary-schooling black girls. Positive outcomes were obtained when it came to the reading abilities of the students including behavioral improvements were recorded. This was a systematic and culturally oriented intervention which imparted positive outcomes to the reading acumen of the students. A similar computer-derived approach called RACE is analyzed by Barber et al (2018). Their participants are also from an urban setting and culturally relevant material was also used. The RACE intervention achieved significant improvements in the oral reading fluency of the students emphasizing the usefulness of this technology in an urban setting.

Spencer and Manis (2010) utilize a randomized experimental design to assess the efficacy of an intervention program on the reading abilities of struggling readers. This intervention program significantly improved the reading fluency of the students, while failed to show much improvement when it came to reading comprehension. A similar intervention program was utilized by Ziadat and AL-Awan (2017) to assess its efficacy in improving the reading fluency of students with learning disabilities. It was interesting to note that, this intervention called NIM reduced reading deficiencies in students that had different levels of learning disabilities. Ritchey et al (2017) use a short-term reading intervention on students with poor reading abilities. Similar to the two studies described above, the intervention favored the reading fluency and comprehension of the students. All these evidence points in the direction that; various interventions can help improve oral reading fluency and comprehension. Therefore, it would be beneficial to explore the impacts that a peer-mediated intervention would have on fourth-grade students.

Purpose

The purpose of this study is to investigate the effectiveness of the peer-mediated intervention on the reading fluency of a fourth-grade student with reading fluency difficulties.

Research Questions

1. Does the use of peer-mediated intervention increase the reading fluency of a fourth-grade student with reading fluency difficulties?
2. Does the effect of using peer-mediated intervention to improve reading fluency last for a long time?

Method

Setting

This study was carried out in one elementary school located in Alahsa city in the eastern province in Saudi Arabia. The place was a general education classroom for the fourth-grade students who are at the primary level of their studies. This study was conducted for a period of 2 months. This class has students who are struggling with their reading fluency, as well as reading examinations. Based on the average performance data, the target student that was selected is performing significantly poorer when compared to his peers.

Participants

Participants in this study are two students, the target student has poor reading fluency, and the other student is the one who is proficient at reading and was the peer tutor. Both of the students are in the same class (fourth grade) where they study the same subjects i.e. math, reading and fluency, and science. The peer-mediated intervention which the researcher proposed entails a reading aided by a peer student. It is important to note that both of the students in this study have been exposed to the same teachers and schedule hours, which enable the reduction of any confounders from the study. Additionally, both of the students are all Saudis, share a common socioeconomic status and both live within the urban setup in Saudi Arabia.

Reading Materials Used

To assess the student's reading level consistently across the baseline stage, intervention phase, and maintenance phase, the primary resource employed was a fourth-grade primary school reading book. This ensured that the student encountered different texts during each evaluation and in the same level.

Experimental Control

The participants of this study were selected based on their cumulative performance in reading fluency. Additionally, the student was selected based on various observations that have been made by the teacher. The importance of having both participants in the same class is to ensure that it is possible for peer-mediated intervention is possible and can be monitored. It is crucial that both of the students including the rest of the class are not made aware of the interventions being applied. Observation also were carried out discretely to help avoid modification of behavior by the students which could otherwise have a negative effect on the results obtained. Hence the true effect of our intervention would not be properly assessed. It was also crucial to ensure that the struggling student does not receive additional coaching at home which could falsely magnify the effects of our intervention. The results of the study were inspected visually and subsequently analyzed. Control of the experiment was confirmed through observation of changes due to the intervention that has been introduced.

Independent Variable and Dependent Variable

The independent variable present in this study was the peer-mediated reading strategy. Peer-mediated instructional strategies for a long time have been assessed for their efficacy when it comes to improving

reading outcomes (Hofstadter-Duke & Daly, 2011; Josephs & Jolivet, 2016). The dependent variable that was assessed in this study is the reading fluency of the student, specifically is the number of correct words read per minute.

Baseline Phase

The baseline phase for this study entail observations made to the participant in his classroom in the school. Given that our observations are focused on the outcomes in reading fluency, the researcher focus entirely on the reading fluency. During the baseline, the researcher conducts daily five-minute reading tests to ascertain the student's current reading level. The reading tests that were applied were form of leveled passages of various texts. Each of these passages was read by the student once in each of the five-minute reading tests. Five observations were made for the student in the reading fluency. A fluency recording sheet was incorporated to count the number of words that the student read correctly per minute. The data obtained was used to draw graphs and appropriate charts that indicate the ability of the student to read fluently before the peer-mediated intervention was introduced.

Intervention Phase

Prior to the implementation of the peer-mediated intervention, the peer tutor was acquainted with simple aspects or rather rules they were adhering to in the duration of the study. This implies that the students weren't provided with comprehensive information about the study's details since doing so could lead to alterations in their behavior, which is contrary to our intentions. Simple aspects like how to engage each other and when to seek guidance from their teachers helped a lot in maintaining the quality of the study. The researcher also ensures the peer tutor delivers the intervention appropriately. The peer tutor was also guided on the material to use during the study in an attempt to improve the struggling student's habits.

As earlier indicated, during the intervention phase, the target student was observed while he receives the intervention from the peer tutor, of a maximum of five sessions for a period of 25 minutes each. Interval sampling which was done for every two minutes, and the observer presented record the correct number of words that have been read correctly during the five-minute reading test that has been administered. For this to be accurate, a timer was used, done discretely, and the student was made to read a passage for a period of five minutes. During the reading process, the observer marked the incorrectly read words and eliminate them from the total tally of words read within the stipulated time.

Subsequently, an average was determined to assess the number of correctly read words in a minute.

Maintenance Phase

Three weeks after the conclusion of the intervention phase, the maintenance phase was conducted to observe the student reading fluency. This was crucial in determining whether this intervention is useful as a long-term solution or a short-term solution.

Fidelity of Implementation

At any given time when the observations were made, two observers were present to collect data using the same tools and protocols. The data obtained was recorded and subsequently an average obtained of the two recordings (Richards, 2020). Deviations were also determined to help settle discrepancies were the observations made deviated by a significantly huge margin.

Results

The results obtained from this study showed the effectiveness of using the peer-mediated reading approach on a student struggling with reading fluency. From the intervention, the student who is struggling with reading fluency significantly improve. A comprehensive visual analysis then carried out to show that no overlapping data was recorded for the student who is struggling with reading fluency. The researcher saw upward trend for the student when it comes to the intervention, in other words, significant improvements in his reading fluency abilities. Additionally, the researcher saw an immediate peak or upward trend at the first point following intervention in comparison to the baseline.

Baseline Phase

Before the peer-mediated reading approach was implemented, the number of correctly read words by the struggling student was recorded. This is given in the baseline section of the figure above. The average number of words that were correctly read by the student at the baseline phase was 42 words per minute. During the baseline phase, the student's performance levels were as follows: 44 words per minute in the first assessment, 41 words per minute in the second assessment, 40 words per minute in the third assessment, 42 words per minute in the fourth assessment, and 45 words per minute in the last assessment.

Intervention Phase

Following the intervention, the student's reading performance exhibited remarkable progress. The first assessment after the intervention recorded a reading speed of 68 words per minute, indicating an immediate positive effect. The second assessment demonstrated further improvement, with the student reading at 65 words per minute. This steady progress continued with the third assessment, where the reading speed reached 62 words per minute, showcasing the sustained benefits of the intervention. In the fourth assessment, a significant leap was observed as the student achieved a reading rate of 61 words per minute. Finally, in the fifth assessment, the student's reading speed surged to an impressive 63 words per minute. These consistent advancements underscore the substantial and lasting positive impact of the intervention on the student's reading abilities, reflecting the efficacy of the peer-mediated reading approach in fostering substantial improvement.

Maintenance Phase

After the intervention phase concluded, a maintenance phase occurred three weeks later to evaluate the student's reading fluency. This assessment aimed to determine whether the intervention had a lasting impact as a long-term solution or if its benefits were only short-term. The student's reading performance, measured during this post-intervention phase, showed notable consistency and progress. The recorded readings were as follows: 60 words per minute, 58 words per minute, 57 words per minute, 59 words per minute, and 57 words per minute. These measurements indicate that the positive effects of the intervention were sustained over this period, suggesting its potential as a lasting solution for enhancing the student's reading fluency. This sustained progress is encouraging, implying that the intervention had a lasting impact beyond its initial implementation and may continue to benefit the student's reading

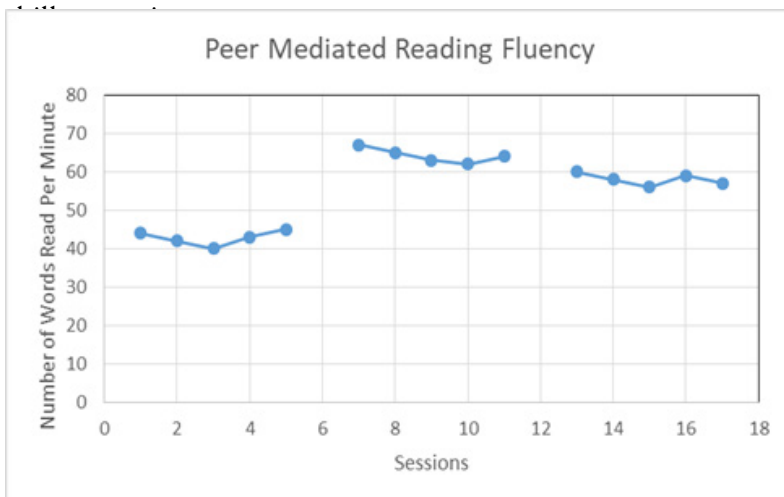


Figure 1.1 Results of Reading Fluency Abilities before, during, and after the Intervention.

These results are an indication that the peer-mediated intervention improved the number of correctly read words by the student and hence positively impacted on his ability to read fluently. The maintenance phase, on the other hand, recorded a slight dip from the intervention phase. The average number of correctly read words is 58 words per minute, which is 6 words less of the number of words read correctly in the intervention phase per minute.

Discussion

The results obtained from this study support the available literature on the effects of the peer-mediated intervention on the reading fluency abilities to struggling students. Most of the data obtained from previous studies have shown a positive effect of this intervention on the reading abilities of students. (Hofstadter-Duke & Daly, 2011; Josephs & Jolivette, 2016). The struggling student shows a positive response or outcome when the intervention is applied. This occurs immediately at the first point when the intervention is applied. This perhaps could be due to an increased understanding of content material and the ability to interact with his peer on his level (peer tutor) which many of the cases might not possible with the teacher. The significant improvement is by 21 words per minute which would point that the intervention strategy reaches its intended purpose. However, at the maintenance phase, the student's ability to read fluently decreases by six words. This goes to suggest that, removal of the intervention from the struggling student has a slight negative impact on the ability to read fluently. It would, therefore, be advisable to incorporate the intervention throughout the whole student's academic year, to a point where he has grasped the basics of reading and satisfactory results are obtained.

Limitations

This study has several limitations. Firstly, it cannot measure the extended impact of the intervention. Analyzing the intervention's effects over a period of 3 to 4 months could provide a more comprehensive understanding of its true efficacy. Additionally, teacher behavior towards struggling students may influence their reading and comprehension abilities, which should be considered as potential confounding factors in future studies. Another limitation is the small sample size, consisting of just two students. Consequently, the generalizability of the findings is limited. To address this limitation, future research should involve a larger number of participants to assess the intervention's effectiveness on a broader scale

Implications and Future Research

This study aligns with prior research on the impact of peer reading intervention on reading fluency. This knowledge can potentially be extended to assess its effectiveness in students with neurological disorders. To enhance the study's reliability, it is essential to consider various improvements in its design to address potential confounding factors. Furthermore, future research should consider integrating experimental methodologies, including control groups and focus groups, to thoroughly evaluate the intervention's impact on enhancing reading fluency. In addition, these findings can be of significant value in educational practice. To maximize the practical implications, it is crucial for educators and practitioners to consider implementing peer-mediated reading interventions in both regular and special education settings. Additionally, training programs and resources should be developed to equip teachers and specialists with the skills needed to implement this intervention effectively. By doing so, educators can harness the potential benefits identified in this study to support a wider range of students in improving their reading fluency.

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References

- Aldhanhani, Z. R., & Abu-Ayyash, E. A. S. (2020). Theories and research on oral reading fluency: What is needed? *Theory and Practice in Language Studies*, 10(4), pp. 379-388. <http://dx.doi.org/10.17507/tpls.1004.05>
- Barber, M., Cartledge, G., Council III, M., Konrad, M., Gardner, R., & Telesman, A. O. (2018). The effects of computer-assisted culturally relevant repeated readings on English learners' fluency and comprehension. *Learning Disabilities: A Contemporary Journal*, 16(2), 205-229.
- Baştuğ, M., & Demirtaş, G. (2017). Child-centered reading intervention: See, talk, dictate, read, write!. *International Electronic Journal of Elementary Education*, 8(4), 601-616.
- Brunner, M. S. (1993). *Reduced recidivism and increased employment opportunity through research-based reading instruction*. Office of Juvenile Justice and Delinquency Prevention, Department of Justice, Washington D.C.
- Council, M. R., Cartledge, G., Green, D., Barber, M., & Gardner, R. (2016). Reducing risk through a supplementary reading intervention: A case study of first- and second-grade urban students. *Behavioral Disorders*, 41(4), 241-257. <https://doi.org/10.17988/bedi-41-04-241-257.1>
- Hofstadter-Duke, K. L., & Daly, E. J. (2011). Improving oral reading fluency with a peer-mediated intervention. *Journal of Applied Behavior Analysis*, 44(3), 641-646. <https://doi.org/10.1901/jaba.2011.44-641>
- 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, 52. doi.org/10.3390/educsci10030052
- Josephs, N. L., & Jolivette, K. (2016). Effects of peer mediated instruction on the oral reading fluency skills of high school aged struggling readers. *Insights into Learning Disabilities*, 13(1), 39-59.
- Kai Yung Tam, Heward, W. L., & Heng, M. A. (2006). A reading instruction intervention program for English-language learners who are struggling readers. *The Journal of Special Education*, 40(2), 79-93. <https://doi.org/10.1177/00224669060400020401>
- Khasawneh, N. A. S., & Fallatah, R. H. M. (2022). The effectiveness of a proposed strategy based on repeated and choral reading in developing the reading fluency skills of primary school students. *Journal of Positive School Psychology*, 6(6), pp. 1394-1404. <https://journalppw.com/index.php/jpsp/article/view/7302>
- Makebo, T. H., Bachore, M. M., & Ayele, Z. A. (2022). Investigating the correlation between students' reading fluency and comprehension. *Journal of Language Teaching and Research*, 13(2), pp. 229-242. doi.org/10.17507/jltr.1302.02
- Owen-DeSchryver, J., Ziegler, M., Matthews, A., Mayberry, M., & Carter, E. (2022). The reciprocity of peer-mediated interventions: Examining outcomes for peers. *School Psychology Review*. doi.org/10.1080/2372966X.2022.2039959
- Paige, D. D. (2020). *Reading fluency: A brief history, the importance of supporting processes, and the role of assessment*. <https://files.eric.ed.gov/fulltext/ED607625.pdf>
- Richards, S. B. (2020). *Single subject research: Applications in educational settings*. Boston: Cengage. Student ISBN: 9781337566698
- Ritchey, K. D., Palombo, K., Silverman, R. D., & Speece, D. L. (2017). Effects of an informational text reading comprehension intervention for fifth-grade students. *Learning Disability Quarterly*, 40(2), 68-80. <https://doi.org/10.1177/0731948716682689>
- Rupley, W. H., Nicholas, W. D., Rasinski, T. V., & Paige, D. (2020). Fluency: Deep roots in reading instruction. *Education Sciences*, 10, 155. doi.org/10.3390/educsci10060155

Spencer, S. A., & Manis, F. R. (2010). The effects of a fluency intervention program on the fluency and comprehension outcomes of middle-school students with severe reading deficits. *Learning Disabilities Research & Practice, 25*(2), 76-86. <https://doi.org/10.1111/j.1540-5826.2010.00305.x>

Taguchi, E., Gorsuch, G., & Mitani, K. (2023). Using repeated reading for reading fluency development in a small Japanese foreign language program. *Pedagogies: An International Journal, 18*(1), pp. 97-114. doi.org/10.1080/1554480X.2021.1944866

Therrien, W. J., Kirk, J. F., & Woods-Groves, S. (2011). Meta-Analysis shows non-repetitive reading fluency interventions as options for teachers. *Remedial and Special Education, 33*(5), 309-319. <https://doi.org/10.1177/0741932511410360>

Travers, H. E., & Carter, E. W. (2022). A systematic review of how peer-mediated interventions impact students without disabilities. *Remedial and Special Education, 43*(1), pp. 40-57. doi.org/10.1177/0741932521989414

Ziadat, A. H., & AL-Awan, M. S. (2017). The effectiveness of neurological impress method on reading fluency of students with learning disabilities in Amman, Jordan. *International Education Studies, 11*(1), 165. <https://doi.org/10.5539/ies.v11n1p165>