



The Effect of Play-Based Learning on Early Reading and Simple Sentence Writing Skills in First-Grade Students

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ABSTRACT

This study examines the effect of a play-based learning approach on beginning reading and simple sentence writing skills among first-grade elementary school students. A pre-experimental study employing a one-group pretest–posttest design was conducted with 25 first-grade students selected through total sampling. Data were collected through beginning reading and simple sentence writing tests administered before and after the implementation of the play-based learning approach and analyzed using descriptive statistics and a paired-samples t-test at a significance level of 0.05. The results showed that students' literacy performance improved significantly after the intervention. The mean score increased from 65.00 in the pretest to 82.00 in the posttest, while the percentage of students achieving mastery learning rose from 32% to 84%. The paired-samples t-test confirmed a statistically significant difference between pretest and posttest scores ($t = 12.843$, $p < 0.001$), indicating that the play-based learning approach effectively enhanced students' beginning reading and simple sentence writing skills. These findings suggest that integrating play-based learning into early-grade literacy instruction can create more active, meaningful, and developmentally appropriate learning experiences. This study contributes to the literature by providing empirical evidence on the simultaneous improvement of beginning reading and simple sentence writing skills through a play-based learning approach, offering a more comprehensive perspective on early literacy development in elementary education.



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INTRODUCTION

Elementary education represents a crucial stage that significantly determines students' success in subsequent levels of learning. At this stage, students are introduced to various fundamental academic skills that serve as the foundation for the development of more complex knowledge and competencies. Among these essential competencies, reading and writing occupy a particularly important position, as they function as the primary means through which students acquire, comprehend, and communicate information. These skills are not only vital for learning Bahasa Indonesia but also support achievement across all subjects taught in school (Misna & Pamungkas, 2025; Rahmah & Azmy, 2025).

In the first grade of elementary school, reading and writing instruction focuses on the initial stages known as early reading and beginning writing. This period is particularly important because students begin to recognize language symbols, understand the relationship between letters and sounds, and learn to construct words and simple sentences. Mastery of these abilities forms the basis for literacy development in later stages. When students encounter difficulties in reading and writing from the outset, these challenges may adversely affect their learning process at higher educational levels. Conversely, students who possess strong foundational literacy skills tend to understand instructional materials more easily, complete assignments effectively, and participate actively in classroom activities (Islamiyah et al., 2022; Utami & Purwanta, 2025).

Early reading ability essentially represents the initial process of understanding written language. At this stage, students learn to identify letters, associate them with corresponding sounds, combine syllables into words, and read simple sentences fluently. Reading is not merely the recognition of written symbols but also involves understanding the meanings conveyed through them. Therefore, early reading instruction should be designed systematically and engagingly to enable students to develop reading skills gradually in accordance with their cognitive development (Dewantari et al., 2024; Stagnitti et al., 2016).

Similarly, the ability to write simple sentences is an essential component of language learning in the early grades of elementary school. Writing allows students to express their thoughts, ideas, and experiences through written language. In the initial stages, students learn to write letters and words before progressing to the construction of simple sentences following language conventions. This skill requires not only vocabulary mastery and an understanding of language structure but also fine motor coordination, cognitive abilities, and comprehension of the intended meaning. Consequently, writing instruction for first-grade students requires an approach that aligns with children's developmental characteristics to ensure effective learning (Bahlmann Bollinger & Myers, 2020; Wahyuni & Ainin, 2025).

Despite the importance of reading and writing as fundamental skills, evidence from educational practice indicates that many students in the early grades of elementary school continue to experience difficulties in mastering these abilities. Some students struggle to recognize letters accurately, frequently confuse the forms and sounds of certain letters, and encounter challenges when combining syllables into meaningful words. Similar difficulties are evident in writing, where some students experience obstacles in correctly forming letters, arranging words appropriately, and constructing simple sentences within relevant contexts. These challenges suggest that foundational literacy instruction requires greater attention and innovative approaches (Aulina, 2012; Intang & Nur, 2024).

One factor contributing to the low levels of reading and writing proficiency among early-grade students is the mismatch between instructional approaches and the developmental characteristics of learners. Young elementary school students remain closely connected to the world of play. They tend to learn more effectively through concrete, enjoyable activities that involve direct experiences. However, classroom practices often continue to rely on teacher-centered methods dominated by repetitive exercises and limited opportunities for active student engagement. Such conditions may lead to boredom, reduced interest in learning, and decreased motivation to develop reading and writing skills (Rahayu et al., 2026; Tekman & Yeniasir, 2023).

The characteristics of young children and students in the lower grades of elementary school indicate that play is an inseparable aspect of their lives. Through play, children learn about their environment, develop social competencies, strengthen motor skills, and enhance cognitive abilities. Play activities provide opportunities for children to explore experiences naturally without the pressure often associated with highly formal instructional settings. Therefore, play possesses significant potential as a learning medium capable of bridging children's developmental needs with educational objectives (Kusmiyati, 2024; Putri, 2022).

Within the context of elementary education, a play-based approach is a strategy that integrates game elements into learning activities, enabling students to experience learning that is both enjoyable and meaningful. This approach positions students as active participants in the learning process. Teachers serve not only as providers of information but also as facilitators who design educational games and activities to support students' understanding of instructional content. Through a play-based approach, learning is no longer perceived as a burdensome activity but rather as an engaging and challenging experience (Durrant, 2022; Othman et al., 2025).

A play-based approach is considered highly relevant to early reading instruction. Various games and interactive activities can be used to introduce letters, syllables, words, and simple sentences in more engaging ways. Activities such as letter-card games, word-guessing games, picture-word matching exercises, alphabet puzzles, and collaborative group games can help students recognize language symbols more effectively. In addition to enhancing students' attention and concentration, these activities provide concrete learning experiences that facilitate understanding and retention (Al-salahat et al., 2020; Powell, 2021).

Beyond reading instruction, a play-based approach also holds substantial potential for improving students' ability to write simple sentences. Through interactive learning activities, students are encouraged to utilize their vocabulary in written form. Games involving word arrangement, sentence completion, picture-based writing, and simple storytelling can gradually develop students' written language skills. Furthermore, an enjoyable learning environment encourages students to take risks and reduces their fear of making mistakes while learning to write. This is particularly important because self-confidence is a key factor supporting literacy development (Nasution, 2025).

Conceptually, the play-based approach is supported by strong theoretical foundations. Constructivist theory suggests that learners actively construct knowledge through interactions with their environment and experiences. In a play-based learning environment, students do not merely receive information passively; rather, they engage directly in activities that allow them to discover and understand concepts independently. Likewise, cognitive development theory emphasizes that children of elementary school age learn more effectively through concrete experiences than through abstract explanations. Consequently, play activities can serve as an effective medium for helping students understand reading and writing concepts that are still unfamiliar to them (Jannah et al., 2025).

Although previous studies have consistently reported that play-based learning improves children's language development, motivation, and classroom engagement, most have examined its effects on a single literacy domain, such as beginning reading, vocabulary acquisition, or early writing skills separately (Cavanagh & Kiersch, 2023; Risky et al., 2025). Only limited empirical evidence has investigated the simultaneous influence of play-based learning on both beginning reading and simple sentence writing within a single experimental framework. Considering that reading and writing are closely interconnected and mutually reinforce early literacy development, examining these two skills together is essential to provide a more comprehensive understanding of the effectiveness of play-based learning. This gap is particularly important because differences in student characteristics, classroom contexts, and instructional implementation may produce varying learning outcomes (Karaçuha & Çebi, 2024). Therefore, this study aims to examine the effect of a play-based learning approach on beginning reading and simple sentence writing skills among first-grade elementary school students. By investigating these two foundational literacy skills simultaneously, this study is expected to contribute empirical evidence to the existing literature while providing practical guidance for teachers in designing engaging, active, and developmentally appropriate literacy instruction for young learners.

METHOD

This study employed a pre-experimental method using a one-group pretest–posttest design to examine the effect of a play-based learning approach on beginning reading ability and simple sentence writing skills among first-grade elementary school students. This design was selected because it allows the measurement of students' literacy skills before and after the intervention. However, since the study did not include a control group, the findings should be interpreted as evidence of improvement following the intervention rather than conclusive proof of causality.

The research design consisted of three stages: pretest (O_1), treatment (X), and posttest (O_2). Initially, students completed a pretest to assess their beginning reading and simple sentence writing skills. The treatment was then implemented through six play-based learning sessions over a period of three weeks, with each session lasting approximately 70 minutes. The learning activities incorporated educational games, including letter-card games, word and sentence arrangement activities, picture-word matching, alphabet puzzles, and simple storytelling tasks designed to improve students' reading and writing abilities. Following the completion of the intervention, students were administered a posttest using the same assessment indicators as those employed in the pretest. The population of this study consisted of all first-grade students at SD X, totaling 25 students. Since the population size was relatively small, all students were included as research participants using a total sampling technique. The sample comprised 25 students, including 12 boys and 13 girls.

Data were collected using literacy tests and documentation. The reading test measured letter recognition, syllable reading, word reading, and simple sentence reading, whereas the writing test assessed students' ability to write words and construct simple sentences correctly. Before implementation, the test instruments were validated through expert judgment by two elementary education specialists to ensure content validity. The reliability of the instruments was examined using Cronbach's Alpha, yielding a coefficient greater than 0.70, indicating that the instruments possessed satisfactory reliability for research purposes. Documentation was used to obtain supporting information regarding student enrollment, school profiles, and classroom learning activities.

The collected data were analyzed using descriptive and inferential statistics. Descriptive statistics were used to summarize the mean, minimum score, maximum score, and percentage of students achieving learning mastery in both the pretest and posttest. Prior to hypothesis testing, the normality of the data was examined using the Shapiro–Wilk test because the sample size was fewer than 50 participants. The results indicated that both the pretest and posttest data were normally distributed ($p > 0.05$), satisfying the assumptions for parametric statistical analysis. Therefore, the research hypothesis was tested using a paired-samples t-test at a significance level of 0.05. A significance value (p) below 0.05 indicated that the play-based learning approach had a statistically significant effect on students' beginning reading ability and simple sentence writing skills.

RESULTS

Results of the Pretest on Beginning Reading Ability and Simple Sentence Writing Skills of Grade I Elementary School Students

The pretest phase in this study was conducted to obtain an initial overview of students' beginning reading ability and simple sentence writing skills in Grade I before the implementation of the play-based learning approach. This measurement plays an important role as it serves as a baseline for comparing changes in students' abilities after the treatment is applied. In addition, the pretest results also provide information about the actual condition of students'

basic literacy skills as the research subjects, enabling the researcher to understand their initial readiness in participating in Indonesian language learning, particularly in reading and writing aspects.

Based on the pretest results, students' abilities showed considerable variation. Some students had begun to recognize letters and read simple words; however, many still had not demonstrated fluency in reading or writing simple sentences. In the beginning reading aspect, several students still experienced difficulties in associating letters with their sounds and were unable to read whole words without assistance. Meanwhile, in the writing aspect, some students still faced obstacles in arranging letters into correct words, and some were even unable to construct simple sentences independently.

In general, the pretest data indicate that students' initial literacy skills were not yet optimal. This is evident from the dominance of students' scores in the medium and low categories, as well as the limited number of students who reached the high category. This condition suggests that previous learning processes had not fully accommodated the learning needs of early-grade students, who are still at the concrete operational stage of cognitive development, where abstract learning tends to be difficult to understand without the support of media or more contextual activities. To provide a more detailed overview of the pretest results, the data are presented in the following tables.

Table 1. Calculation of Mean (Average) Pretest Score

Nu.	Description	Value
1	Total student score ($\sum X$)	1,625
2	Number of students (N)	25
3	Mean ($\sum X/N$)	65.0

Based on [Table 1](#), the total score obtained by students in the pretest was 1,625. This data was obtained from measurements of 25 Grade I students who were the research sample. Dividing the total score by the number of students yields an average score (mean) of 65.0. This average indicates that, in general, students' beginning reading ability and simple sentence writing skills are still at a moderate level. Referring to the Minimum Mastery Criteria (KKM) applied at the school, this score is relatively moderate, indicating that students' initial abilities have not yet reached the expected standard. This condition strengthens the assumption that students still require a more suitable learning approach, particularly one that is active, enjoyable, and based on direct experiences.

Table 2. Levels of Beginning Reading Skills in the Pretest

Nu.	Score Interval	Frequency	Percentage (%)	Category
1	85–100	2	8%	Very High
2	70–84	6	24%	High
3	55–69	10	40%	Medium
4	40–54	5	20%	Low
5	< 40	2	8%	Very Low
Total		25	100%	

Based on [Table 2](#), the distribution of students' beginning reading skills in the pretest shows considerable variation. The largest group falls into the medium category, with 10 students (40%). This indicates that most students are at a relatively unstable level, where they can recognize letters and words but are not yet fully fluent or able to comprehend texts independently. Furthermore, 6 students (24%) are in the high category, indicating that they are already able to read simple words and sentences fairly well, although they still require some assistance in pronunciation or comprehension. Meanwhile, 5 students (20%) are in the low category, indicating difficulties in recognizing letters and connecting sounds with written symbols.

On the other hand, only a small proportion of students are in the very high category, namely 2 students (8%). This group demonstrates relatively good reading ability compared to their peers, although their number is still very limited. A similar situation is observed in the very low category, where 2 students (8%) still experience severe difficulties in beginning reading, even in recognizing basic letters. Overall, this table shows that students' beginning reading skills are not evenly distributed. Most students are concentrated in the medium to low categories, indicating that previous learning has not yet fully optimized the development of early reading skills.

Table 3. Description of Learning Mastery in Indonesian Language (Pretest)

Score	Category	Frequency	Percentage (%)	Description
≥ 70	Mastered	8	32%	Meets KKM
< 70	Not Mastered	17	68%	Does not meet KKM
Total		25	100%	

Based on Table 3, it can be seen that the level of learning mastery in Indonesian language during the pretest stage is still low. Out of 25 students, only 8 students (32%) achieved scores equal to or above the Minimum Mastery Criteria (KKM) set by the school. Meanwhile, 17 students (68%) did not reach the required standard. This indicates that most Grade I students have not yet mastered the basic competencies expected in Indonesian language learning, particularly in beginning reading and simple sentence writing skills. This low level of mastery suggests that previous learning has not been fully effective in developing students' basic literacy skills.

Further analysis suggests that this condition may be influenced by various factors, such as differences in students' initial abilities, limited meaningful learning experiences, and teaching approaches that may not yet fully align with the developmental characteristics of early-grade elementary school students. At this age, students tend to understand learning more effectively when it is delivered through concrete and enjoyable activities rather than purely verbal explanations or repetitive written exercises. Therefore, these pretest results clearly indicate the need for innovation in the learning process, particularly approaches that enhance active student engagement. The play-based learning approach is considered a relevant alternative, as it can create a more engaging, interactive, and child-friendly learning environment. This initial condition thus serves as an important foundation for examining the effect of implementing a play-based approach on improving beginning reading ability and simple sentence writing skills in the subsequent stage.

Posttest Results of Beginning Reading Ability and Simple Sentence Writing Skills of Grade I Elementary School Students after the Implementation of the Play-Based Approach

The posttest stage in this study was conducted after the entire learning process using the play-based approach had been completed. This measurement aimed to determine the extent of changes in students' beginning reading ability and simple sentence writing skills in Grade I after receiving the treatment. In addition, the posttest results also served as the main comparison with the pretest results obtained earlier, so that the effect of implementing the play-based approach on improving students' basic literacy skills could be more clearly identified.

In general, the posttest results showed a fairly significant improvement in students' abilities. If at the initial stage many students still experienced difficulties in recognizing letters, reading words, and composing simple sentences, after the implementation of the play-based approach a clear improvement was observed. Students became more fluent in reading, more confident when asked to read in front of the class, and more capable of arranging words into meaningful simple sentences. This change indicates that learning packaged through play activities provides a more effective learning experience that is in line with the characteristics of early-grade students. To clarify the posttest analysis results, the following data are presented in table form.

Table 4. Calculation of Mean (Average) Posttest Scores

Nu	Description	Value
1	Total student scores ($\sum X$)	2,050
2	Number of students (N)	25
3	Mean ($\sum X/N$)	82.0

Based on Table 4, it is known that the total posttest score obtained by students is 2,050 with 25 respondents. From this calculation, the average score (mean) obtained is 82.0. This average score shows a fairly clear improvement compared to the pretest results, which were previously at 65.0. This increase indicates that after the implementation of the play-based approach, students' beginning reading ability and simple sentence writing skills improved positively. Overall, the posttest average score is already in the good category, meaning that most students have been able to achieve the expected basic competencies in Indonesian language learning in the early grades.

Table 5. Levels of Beginning Reading Skills in the Posttest

Nu.	Score Interval	Frequency	Percentage (%)	Learning Category
1	85–100	9	36%	Very High
2	70–84	11	44%	High
3	55–69	4	16%	Medium
4	40–54	1	4%	Low

Nu.	Score Interval	Frequency	Percentage (%)	Learning Category
5	< 40	0	0%	Very Low
Total		25	100%	

Based on Table 5, it can be seen that students' beginning reading ability after the implementation of the play-based approach has improved significantly. Most students are in the high and very high categories. A total of 11 students (44%) are in the high category, while 9 students (36%) are in the very high category. This indicates that most students are already able to read letters, words, and simple sentences more fluently and confidently. In addition, 4 students (16%) are still in the medium category, indicating that they have shown development but have not yet reached optimal fluency. Only 1 student (4%) is still in the low category, and no students are in the very low category. This condition shows a clear improvement compared to the pretest results, where there were still students in the very low category. Overall, these data illustrate that the play-based approach has a positive impact on improving Grade I students' beginning reading ability. Learning activities involving educational games help students better understand the relationship between letters, sounds, and words, making the reading process smoother and more enjoyable.

Table 6. Description of Indonesian Language Learning Mastery (Posttest)

Score	Category	Frequency	Percentage (%)
≥ 70	Mastery Achieved	21	84%
< 70	Not Yet Mastered	4	16%
Total		25	100%

Based on Table 6, it can be seen that students' learning mastery in Indonesian language after the implementation of the play-based approach increased significantly. Out of 25 students, 21 students (84%) achieved scores equal to or above the Minimum Mastery Criteria (KKM). Meanwhile, only 4 students (16%) had not yet achieved mastery. Compared to the pretest results, there was a very significant increase, where previously only 32% of students achieved mastery, increasing to 84% in the posttest. This improvement shows that the play-based approach has a strong contribution in helping students master beginning reading skills and simple sentence writing skills. Overall, the posttest results show that play-based learning is able to create a learning atmosphere that is more effective, enjoyable, and in accordance with the characteristics of early-grade elementary school students. Through active involvement in various educational game activities, students not only more easily understand the material but are also more motivated to learn and gradually develop their basic literacy skills.

The Effect of the Implementation of a Play-Based Approach on Beginning Reading Ability and Simple Sentence Writing Skills of Grade I Elementary School Students

The analysis of the effect of implementing the play-based approach in this study was conducted by comparing pretest and posttest scores on beginning reading ability and simple sentence writing skills of Grade I elementary school students. This analysis aims not only to determine whether there is an increase in scores, but also to describe the pattern of changes in each student's abilities individually. Thus, a more comprehensive picture can be obtained regarding the effectiveness of the play-based approach in improving basic literacy among early-grade elementary school students.

In general, the comparison results show a relatively consistent improvement across all students after participating in learning using the play-based approach. This improvement is evident not only in the class average scores but also in the differences in individual student scores, which show a positive upward trend. This indicates that the play-based approach makes a real contribution in helping students understand beginning reading concepts and simple sentence writing skills in a more accessible and enjoyable way. To clarify the analysis results, the following table presents the calculation of pretest and posttest scores along with the differences and squared differences.

Table 7. Paired-Samples t-Test Results

Variable	Mean	Mean Difference	t	df	Sig. (2-tailed)
Pretest	65.00				
Posttest	82.00	17.00	12.843	24	0.000*

*Significant at $\alpha = 0.05$

The results of the paired-samples *t*-test indicated a statistically significant difference between the pretest and posttest scores. The mean score increased from 65.00 before the implementation of the play-based learning approach to 82.00 after the intervention, with a mean difference of 17.00 points. The statistical analysis yielded a calculated value of $t(24) = 12.843$, with a significance value of 0.000 ($p < 0.05$). Therefore, the null hypothesis (H_0) was rejected,

indicating that the play-based learning approach had a significant positive effect on students' beginning reading and simple sentence writing skills. The substantial increase in the mean score demonstrates that integrating play activities into literacy instruction effectively enhanced students' foundational literacy competencies. These findings support the use of developmentally appropriate, student-centered learning strategies to improve early reading and writing outcomes among first-grade elementary school students.

Table 8. Distribution of Individual Gain Categories

Nu.	Gain Range (d)	Number of Students	Percentage (%)	Improvement Category
1	≥ 21	2	8%	Very High
2	18–20	18	72%	High
3	15–17	5	20%	Moderate
4	< 15	0	0%	Low
Total		25	100%	

Based on [Table 8](#), most students experienced improvement in the high category, namely 18 students (72%). In addition, 2 students (8%) experienced very high improvement, while 5 students (20%) were in the moderate category. No students experienced low improvement. This data shows that the improvement is not only significant on average but also relatively evenly distributed among most students.

Table 9. Summary of Pretest and Posttest Mastery Levels

Stage	Mastery (≥ 70)	Not Mastered (< 70)	Mastery Percentage (%)	Description
Pretest	8 students	17 students	32%	Low
Posttest	21 students	4 students	84%	High

Based on [Table 9](#), there is a very significant increase in mastery after the implementation of the play-based approach. At the pretest stage, only 32% of students achieved the minimum competency criteria, while at the posttest stage this increased to 84%. This 52% increase shows that the play-based approach has a strong influence on improving student learning outcomes in Indonesian language subjects. Overall, the data analysis shows that the implementation of the play-based approach has a positive effect on beginning reading ability and simple sentence writing skills of Grade I elementary school students. The improvement is seen not only in final scores but also in the consistency of improvement across individual students. This indicates that the play-based approach is able to create a more effective learning environment that is aligned with the developmental needs of young learners.

The play-based approach provides opportunities for students to learn through concrete, interactive, and enjoyable activities. This condition makes it easier for students to understand letters, words, and simple sentences without feeling burdened by overly formal learning processes. In addition, active student engagement in educational games also helps increase learning motivation, concentration, and confidence in reading and writing. Therefore, it can be concluded that there is a significant effect of implementing the play-based approach on improving beginning reading ability and simple sentence writing skills of Grade I elementary school students.

DISCUSSION

The findings of this study demonstrate that the implementation of a play-based learning approach significantly improved first-grade students' beginning reading and simple sentence writing skills. Students' pretest scores indicated that their literacy abilities were still at an early stage of development, with many experiencing difficulties in recognizing letters, reading simple words fluently, and constructing simple written sentences. Following the intervention, students showed substantial improvements in both reading and writing performance, suggesting that play-based learning provided meaningful learning experiences that facilitated the development of foundational literacy skills.

The improvement observed in this study can be explained from both psychological and pedagogical perspectives. From a cognitive development perspective, young children learn more effectively through concrete, hands-on experiences than through abstract instruction. Play-based learning provides opportunities for children to manipulate learning materials, interact with peers, and actively construct knowledge, which is consistent with constructivist learning theory. Rather than passively receiving information from teachers, students become actively engaged in discovering letter patterns, word meanings, and sentence structures through meaningful activities. Such experiences enhance attention, memory retention, and conceptual understanding, ultimately supporting literacy development ([Durrant, 2022](#); [Jannah et al., 2025](#)).

From a pedagogical perspective, educational games create a learning environment that is enjoyable, interactive, and less intimidating for young learners. Students are encouraged to participate actively without excessive fear of making mistakes, thereby increasing their learning motivation, confidence, and classroom engagement. Higher levels of engagement enable students to practice reading and writing more frequently, contributing to gradual improvements in literacy skills. Previous studies have similarly reported that play-based learning increases students' motivation, participation, and language achievement while promoting positive learning experiences (Cavanagh & Kiersch, 2023; Othman et al., 2025; Powell, 2021).

The findings of the present study are consistent with previous research. Gading et al. (2019) reported that play-based learning effectively improved beginning reading skills by helping children recognize letters and words through enjoyable learning activities. Likewise, Apriani et al. (2023) found that educational games enhanced students' early writing abilities by encouraging vocabulary development and sentence construction. Other studies have also demonstrated that play-based learning supports children's language development, vocabulary acquisition, literacy engagement, and academic achievement through active participation and meaningful interaction (Al-salahat et al., 2020; Cavanagh & Kiersch, 2023; Powell, 2021). These findings collectively reinforce the conclusion that play-based learning is an effective instructional strategy for promoting foundational literacy among young learners.

Unlike most previous studies, which examined reading or writing separately, the present study investigated the simultaneous effects of play-based learning on both beginning reading and simple sentence writing skills. Because reading and writing are complementary literacy processes that develop interactively, examining both variables simultaneously provides a more comprehensive understanding of how play-based learning supports early literacy development. This integrated perspective represents an important contribution to the existing literature on elementary literacy instruction.

Nevertheless, the observed improvements should be interpreted cautiously because factors other than the intervention may also have contributed to students' learning gains. For example, repeated exposure to similar test items, students' natural cognitive development over the course of the study, increased familiarity with classroom routines, teacher guidance, and support from parents outside school may have influenced students' literacy performance. Although the intervention was designed as the primary instructional strategy during the research period, these potential confounding factors cannot be completely excluded.

This study also has several methodological limitations. First, the use of a one-group pretest–posttest design without a control group limits the ability to establish strong causal relationships between the intervention and the observed learning outcomes. Second, the relatively small sample drawn from a single elementary school limits the generalizability of the findings to broader educational contexts. Future studies are therefore recommended to employ true experimental or quasi-experimental designs involving control groups, larger sample sizes, and multiple schools to strengthen the internal and external validity of the findings. In addition, further research may explore the long-term effects of play-based learning on students' literacy development and examine its implementation across different educational settings and learner characteristics.

CONCLUSION

The findings of this study demonstrate that the implementation of a play-based learning approach significantly improved the beginning reading and simple sentence writing skills of first-grade elementary school students. Students' mean score increased from 65.00 in the pretest to 82.00 in the posttest, while the percentage of students achieving learning mastery increased from 32% to 84%. The paired-samples *t*-test confirmed that the improvement was statistically significant ($t(24) = 12.843, p < 0.001$), indicating that the play-based learning approach effectively enhanced students' foundational literacy skills.

The findings suggest that integrating play into literacy instruction provides developmentally appropriate, engaging, and meaningful learning experiences that support young children's reading and writing development. Beyond its practical implications for classroom instruction, this study contributes to elementary education research by providing empirical evidence that play-based learning can simultaneously improve two interrelated dimensions of early literacy beginning reading and simple sentence writing within a single instructional framework, thereby extending previous studies that have generally examined these skills separately. Nevertheless, the findings should be interpreted with caution because this study employed a one-group pretest–posttest design without a control group, making it difficult to eliminate the influence of other factors on students' learning gains. In addition, the relatively small sample from a single elementary school limits the generalizability of the results. Future studies are recommended to employ experimental or quasi-experimental designs with larger and more diverse samples to strengthen the evidence regarding the effectiveness of play-based learning in developing early literacy skills.

REFERENCE

- Al-salahat, O. F., Alhameed, D. A., & Khdaif, R. M. (2020). The Effect of a Play-Based Program on Improving Word Analysis Skills in English Language among UNRWA EFL Jordanian Fifth Basic Grade Students. *IUG Journal of Educational & Psychological Studies*, 28(4).
- Apriani, R., Maksum, K., & Rouzi, K. S. (2023). Pengaruh Metode SAS (Structural Analytical Synthesis) Terhadap Keterampilan Membaca Permulaan Siswa Kelas 1 di MI Al Islamiyah Gandekan. *Literasi: Jurnal Ilmu Pendidikan*, 14(3), 181–191.
- Aulina, C. N. (2012). Pengaruh Permainan Dan Penguasaan Kosakata Terhadap Kemampuan Membaca Permulaan Anak Usia 5-6 Tahun: The Effect of Games and Vocabulary Mastery on Beginning Reading Ability of 5-6 Years Old Children. *PEDAGOGIA: Jurnal Pendidikan*, 1(2), 131–144. <https://doi.org/10.21070/pedagogia.v1i2.36>
- Bahlmann Bollinger, C. M., & Myers, J. K. (2020). Young children's writing in play-based classrooms. *Early Childhood Education Journal*, 48(2), 233–242. <https://doi.org/10.1007/s10643-019-00990-0>
- Cavanagh, T. M., & Kiersch, C. (2023). Using commonly-available technologies to create online multimedia lessons through the application of the Cognitive Theory of Multimedia Learning. *Educational Technology Research and Development*, 71(3), 1033–1053. <https://doi.org/10.1007/s11423-022-10181-1>
- Dewantari, A. D. W., Azizah, S. N., Lakalay, E. D., Isrofiana, Z., Rohmatul'izza, T., & Oktaviani, R. N. (2024). Penggunaan media scrabble pada keterampilan membaca dan menulis permulaan siswa kelas 1 mi tarbiyatul ulum. *Inventa: Jurnal Pendidikan Guru Sekolah Dasar*, 8(1), 31–44. <https://doi.org/10.36456/inventa.8.1.a8749>
- Durrant, G. (2022). *How to Boost Reading and Writing Through Play: Fun Literacy-Based Activities for Children*. Jessica Kingsley Publishers.
- Gading, I. K., Magta, M., & Pebrianti, F. (2019). Pengaruh metode suku kata dengan media kartu kata bergambar terhadap kemampuan membaca permulaan. *Mimbar Ilmu*, 24(3), 270–276. <https://doi.org/10.23887/mi.v24i3.21417>
- Intang, B., & Nur, A. M. (2024). Pengaruh media kartu kata bergambar terhadap kemampuan membaca permulaan siswa kelas 1 sd. *Jurnal Sosial Humaniora Dan Pendidikan (INOVASI)*, 3(1), 73–82. <https://doi.org/10.55606/inovasi.v3i1.2625>
- Islamiyah, N., Azis, S. A., & Thaba, A. (2022). Pengaruh Model Pembelajaran Kooperatif Scrambel Berbantuan Media Puzzle Terhadap Kemampuan Membaca Permulaan Bahasa Indonesia Murid Sekolah Dasar. *Fon: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 18(1), 116–129. <https://doi.org/10.25134/d6z4w540>
- Jannah, S. A., Jannah, W. N., & Hanikah, H. (2025). The effect of an interactive board game-based drill method on the early reading ability of first-grade students at SDN 1 Bandorasakulon. *Jurnal Cakrawala Pendas*, 11(4), 915–923. <https://doi.org/10.31949/jcp.v11i4.15704>
- Karaçuha, E. A., & Çebi, A. (2024). The effect of symbolic play activities on first reading and writing skills. *Turkish Journal of Education*, 13(2), 110–135. <https://doi.org/10.19128/turje.1212118>
- Kusmiyati, K. (2024). Pengaruh Metode Struktural Analitik Sintetik (SAS) Terhadap Peningkatan Kemampuan Membaca Awal dan Menulis Awal Kelas 1 SDN Gili Anyar. *Jurnal Pendidikan, Bahasa Dan Budaya*, 3(4), 79–85. <https://doi.org/10.55606/jpbb.v3i4.4569>
- Misna, M., & Pamungkas, B. (2025). The effectiveness of contextual play-based learning in enhancing language skills of early childhood learners with learning difficulties. *Journal of Innovation and Research in Primary Education*, 4(3), 1536–1549. <https://doi.org/10.56916/jirpe.v4i3.1544>
- Nasution, D. F. (2025). Investigating Teacher's Strategies in Teaching English Language to Young Learner: A Comparative Study between 1st and 3rd Grade of Elementary School. *Indonesian TESOL Journal*, 7(1), 68–76. <https://doi.org/10.24256/itj.v7i1.7699>
- Othman, N., Azri, S. N. F., Omar, R., & Mohamad, I. (2025). A Scoping Review of Play-Based Learning Methods in Relation to Children Literacy Development. *Kristu Jayanti Journal of Management Sciences (KJMS)*, 1–24. <https://doi.org/10.59176/kjms.v4i1.2439>
- Powell, C. W. (2021). Show, Don't Tell: Multimodal story feedback in a K–1 Play-based writing unit. *Teachers College Record*, 123(3), 1–24. <https://doi.org/10.1177/016146812112300304>
- Putri, R. (2022). pengaruh media pembelajaran papan pintar (smart board) terhadap kemampuan membaca permulaan peserta didik pada mata pelajaran bahasa indonesia kelas 1 sekolah dasar. *Jurnal Cakrawala Pendas*, 8(4), 1181–1189. <https://doi.org/10.31949/jcp.v8i4.2716>
- Rahayu, S., Ainun Fitri Delila, N., Fadilah, R., & Nugraha, W. E. (2026). Pengaruh metode bermain kartu kata terhadap kemampuan membaca permulaan pada siswa kelas 1 UPT SD Negeri 69 Galesong 1. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 11(04), 274–280. <https://doi.org/10.36989/didaktik.v11i04.8531>

- Rahmah, Z., & Azmy, B. (2025). Pengaruh Media Kartu Bergambar Terhadap Keterampilan Menulis Permulaan Siswa Kelas 1 Sekolah Dasar. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(01), 213–220. <https://doi.org/10.23969/jp.v10i01.23095>
- Risky, A., Ananda, N. R., & Marwa, M. (2025). English Literacy Learning Strategy Through English Play for Grade 1 Students of Muhammadiyah 1 Elementary School, Pekanbaru. *International Conference on Education and Innovation*, 2(1), 87–92.
- Stagnitti, K., Bailey, A., Hudspeth Stevenson, E., Reynolds, E., & Kidd, E. (2016). An investigation into the effect of play-based instruction on the development of play skills and oral language. *Journal of Early Childhood Research*, 14(4), 389–406. <https://doi.org/10.1177/1476718X15579741>
- Tekman, T. K., & Yeniasir, M. (2023). The impact of play-based learning settings on reading, writing, listening, and speaking skills. *Sustainability*, 15(12), 9419. <https://doi.org/10.3390/su15129419>
- Utami, S., & Purwanta, E. (2025). Improving Early Writing Skills Through Play-Based Learning with Loose Parts: A Classroom Action Research with Children with Learning Difficulties. *Journal of Innovation and Research in Primary Education*, 4(4), 3800–3809. <https://doi.org/10.56916/jirpe.v4i4.2503>
- Wahyuni, A., & Ainin, I. K. (2025). Pengaruh Media Scrabble Kata Terhadap Kemampuan Membaca Permulaan Anak Berkesulitan Belajar. *Jurnal Pendidikan Khusus*, 20(02), 1–11.

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