



The Effectiveness of the Phonic Method Supported by Sound Bingo and Phonic Hunt Educational Games in Improving Arabic Reading Ability among Eighth-Grade Students at MTsN 1 Wonosobo

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Abstract

Arabic reading remains a significant challenge for Indonesian madrasah students due to limited phonemic awareness and the lack of engaging instructional strategies. This study aimed to evaluate the effectiveness of the Phonic method, supported by educational games (Sound Bingo and Phonic Hunt), in addressing Arabic reading difficulties among eighth-grade students at MTsN 1 Wonosobo. A quantitative experimental approach employing a pretest–posttest control group design was used. The study involved 62 students, equally divided into an experimental group ($n = 31$) and a control group ($n = 31$). The experimental group received instruction through the Phonic method integrated with educational games, whereas the control group was taught using conventional teaching methods. Data were collected through reading tests, observations, interviews, and documentation and were analyzed using normality and homogeneity tests, N-Gain analysis, and an independent-samples t-test. The results revealed that the experimental group achieved an N-Gain score of 0.547, categorized as moderate, which was substantially higher than the control group's score of 0.080, categorized as low. Furthermore, the calculated t-value (10.327) exceeded the critical t-values at both the 5% significance level (2.000) and the 1% significance level (2.660). In addition, all 31 students in the experimental group successfully achieved the Minimum Competency Criterion (KKM) of 75. These findings indicate that integrating the Phonic method with educational games is an effective pedagogical approach for improving Arabic reading proficiency among madrasah students.

1. INTRODUCTION

Arabic is one of the world's major languages, serving not only as a means of daily communication but also as the primary language of Islamic teachings. Therefore, mastery of Arabic constitutes an important objective in Islamic education.(Assa'idi, 2008) particularly in madrasahs. At the Madrasah Tsanawiyah (MTs) level, Arabic language instruction plays a strategic role in equipping students with both oral and written language skills, enabling them to better understand religious materials and Arabic texts.(Riska, 2024).

However, Arabic language learning is not without challenges. For most students, Arabic is a second or foreign language that is not used in everyday communication. As a result, many students experience difficulties in learning Arabic, particularly in reading skills.(Mubarroq & Arifin, 2021) Reading Arabic requires the ability to recognize the hijaiyah letters, understand diacritical marks (harakat), distinguish between letters with similar points of articulation (makhraj), and accurately pronounce words and sentences. For students who are not accustomed to Arabic, reading Arabic texts can be particularly challenging because the language differs from Indonesian in its script, reading direction, and phonological system.

Reading is one of the fundamental skills in Arabic language learning. Through reading, students acquire vocabulary (mufradat), comprehend sentence structures, and obtain information from simple Arabic texts. Nevertheless, in practice, some students are still unable to read Arabic accurately. These difficulties are reflected in incorrect pronunciation of letters, errors in reading harakat, inaccurate differentiation between long and short vowel sounds, and a lack of fluency when reading words, sentences, and short texts. Such conditions may negatively affect students' confidence in participating in Arabic language learning activities.

Based on preliminary observations conducted at MTsN 1 Wonosobo, the researcher found that several students were still unable to read Arabic accurately and fluently. Some students experienced difficulties in recognizing and pronouncing certain hijaiyah letters, particularly those with similar sounds. In addition, some students still required guidance in reading vowelized words, distinguishing between long and short sounds, and reading simple sentences. These preliminary findings indicate that students' Arabic reading abilities require further attention and improvement.

The learning process involves various components, one of which is the use of instructional methods. An instructional method refers to the approach employed to achieve predetermined learning objectives and encompasses the stages of interaction between teachers and students during the learning process.(Afandi et al., 2013) The Phonic Method is an instructional approach that emphasizes the recognition of letter sounds and their relationship to written symbols.(Retnomurti et al., 2019)

Through this method, students are taught to understand the sounds of individual letters systematically and sequentially, enabling them to read words and sentences accurately. The method is considered effective in enhancing students' phonetic awareness and making the reading-learning process easier and more enjoyable.

In addition to instructional methods, the use of engaging learning media also contributes significantly to learning success. Educational games such as Sound Bingo and Phonic Hunt provide interactive and enjoyable learning experiences. These media can increase students' interest and motivation by integrating game elements into the process of learning letter sounds and symbols.(Riska, 2024) Furthermore, educational games help reduce students' boredom and anxiety when learning Arabic. Therefore, the integration of the Phonic Method with educational game media is expected to provide an effective solution for overcoming students' difficulties in reading Arabic.

Based on the foregoing discussion, the researcher was interested in investigating the effectiveness of the Phonic Method supported by educational game media (Sound Bingo and Phonic Hunt) in overcoming Arabic reading difficulties among eighth-grade students at MTsN 1 Wonosobo. This study employed an experimental and a control class, using pretests and posttests to measure students' improvement in Arabic reading ability before and after the intervention. It is expected that the findings of this study will offer an engaging and effective instructional alternative for enhancing students' Arabic reading skills.

2. METHOD

This study employed a quantitative experimental approach using a field research design. The research was conducted directly at MTsN 1 Wonosobo to obtain empirical data regarding students' Arabic reading difficulties and the effectiveness of the instructional intervention. The experimental design applied in this study was the Pretest–Posttest Control Group Design, which involved an experimental group and a control group. The experimental group received instruction through the Phonics Method assisted by educational games (Sound Bingo and Phonic Hunt), while the control group received conventional instruction.

The participants of this study were eighth-grade students of MTsN 1 Wonosobo. Two classes were selected as the research sample, consisting of Class VIII D as the experimental group and Class VIII E as the control group, with 31 students in each class. Prior to the treatment, both groups were administered a pretest to measure their initial Arabic reading ability. The experimental group was then taught using the Phonics Method integrated with Sound Bingo and Phonic Hunt educational games, whereas the control group continued learning through conventional teaching methods. After the intervention period, a posttest was administered to both groups to evaluate the improvement in students' Arabic reading skills.

Data were collected through reading tests, classroom observations, interviews, and documentation. The reading test was used as the primary instrument to measure students' achievement in recognizing Arabic letters, distinguishing similar sounds, reading vowelized words accurately, differentiating long and short vowel sounds, and reading simple Arabic sentences fluently. Observations and interviews were conducted to support the interpretation of quantitative findings, while documentation was used to obtain relevant information regarding the research setting and participants.

The collected data were analyzed using descriptive and inferential statistical techniques. Prior to hypothesis testing, normality and homogeneity tests were conducted to ensure that the data met the assumptions required for parametric analysis. Students' learning improvement was measured using the N-Gain test, while the effectiveness of the treatment was examined using an independent-samples t-test. Statistical analyses were performed to determine whether there was a significant difference in Arabic reading achievement between the experimental and control groups after the implementation of the Phonics Method supported by educational games.

3. RESULT AND DISCUSSION

3.1 Description of the Research Site

The research was conducted at MTsN 1 Wonosobo, a public Islamic junior secondary school accredited with an "A" rating. The school has a total enrollment of 938 students, including 319 eighth-grade students. Based on preliminary observations, Arabic reading instruction was still predominantly conducted through conventional lecture-based methods. As a result, many students had not yet achieved the Minimum Competency Criterion (KKM) of

75, particularly in reading skills. The main difficulties encountered by students included recognizing Arabic letters, distinguishing similar points of articulation (*makhraj*), and reading Arabic words and sentences fluently. These findings indicated the need for a more engaging and effective instructional approach to improve students' Arabic reading proficiency.

3.2 Description of Research Data

In this study, two tests were administered: a pretest and a posttest. The pretest was used to measure the students' initial proficiency prior to the implementation of the instructional treatment, while the posttest was conducted to evaluate their proficiency after the treatment had been completed. (Arbain & Hali, 2021)

The data analysis revealed that the experimental group achieved a mean pretest score of 58.58, which increased to 81.23 on the posttest. Meanwhile, the control group obtained a mean pretest score of 55.81, which increased to 62.77 on the posttest. Although both groups showed improvement in their Arabic reading skills, the experimental group demonstrated a greater improvement compared to the control group. This indicates that the instructional treatment using the Phonic method supported by educational games was effective in enhancing students' Arabic reading proficiency.

Table 1. Comparison of Mean Scores of Pre-test and Post-test

Group	Pre-test	Post-test
Experimental Group	58.58	81.23
Control Group	55.81	62.77

3.3 Data Analysis Results

The data analysis was conducted to examine the difference between students' pretest and posttest scores after the implementation of the Phonic method supported by educational game media. The findings showed an improvement in students' Arabic reading ability after the treatment was given. The experimental group obtained a higher increase in scores compared to the control group, indicating that the Phonic method supported by educational games was effective in improving students' Arabic reading skills.

The homogeneity test is a statistical procedure used to determine whether two or more sample data groups come from populations that have the same variance. (Usmadi, 2020) In this study, the homogeneity test was conducted using the F-test (Fisher's test) formula, which compares the largest variance with the smallest variance of the two groups. (Sugiyono, n.d.)

Table 2. Homogeneity Test Analysis

Group	N	Variance (S ²)	F-count	F-table ($\alpha = 0.05$)	Conclusion
Experimental Class	31	37.83	1.485	1.841	Homogeneous
Control Class	31	56.19			

The homogeneity test was conducted using the F-test (Fisher's test) by comparing the largest variance and the smallest variance. The calculation result showed that F-count (1.485) < F-table (1.841) at a significance level of 0.05. Therefore, the data variance of the experimental and control classes was considered homogeneous.

The normality test is one of the prerequisite statistical tests used to determine whether the research data come from a normally distributed population or not. (Sugiyono, n.d) In this study,

the normality test was conducted using the Chi-Square (χ^2) test. This test was carried out by comparing the calculated χ^2 value with the χ^2 table value at a significance level of 5% ($\alpha = 0.05$). The decision criteria are as follows:

- If the value of χ^2 calculated $< \chi^2$ table, then H_0 is accepted, meaning that the data come from a normally distributed population.
- If the value of χ^2 calculated $> \chi^2$ table, then H_0 is rejected, meaning that the data do not come from a normally distributed population.

Table 3. Normality Test Analysis

Uji Normalitas	χ^2 Hitung	χ^2 Tabel ($\alpha = 0,05$)	Keputusan	Kesimpulan
Data Kemampuan Membaca Bahasa Arab	2,45	11,07	H_0 diterima	Data berdistribusi normal

The normality test was conducted to determine whether the Arabic reading ability data obtained from the sample were normally distributed. This study used the Chi-Square (χ^2) test at a significance level of 5% ($\alpha = 0.05$). The decision criterion was that if χ^2 count $< \chi^2$ table, the data were considered normally distributed.

The calculation result showed that the χ^2 count value was 2.45, while the χ^2 table value was 11.07. Since χ^2 count was lower than χ^2 table ($2.45 < 11.07$), H_0 was accepted. Therefore, the data were concluded to be normally distributed.

The N-Gain test (Normalized Gain) is an analysis used to measure the improvement of students' learning outcomes after receiving a treatment. This test compares the difference between the pretest and posttest scores with the maximum possible score improvement. (Wahab et al., 2021) In this study, the N-Gain test was used to determine the effectiveness of the Phonic method assisted by educational games in improving students' Arabic reading ability.

Table 4. N-gain Test Analysis

Group	Pretest Mean	Posttest Mean	N-Gain Score	Category
Experimental Class	58.52	81.23	0.3799	Moderate
Control Class	55.81	62.77	0.080	Low

Based on the results of the N-Gain test calculation, the improvement in students' Arabic reading ability in the experimental class obtained an N-Gain score of 0.547. This score is within the range of $0.30 \leq g \leq 0.70$, which is categorized as a moderate improvement. This indicates that the implementation of the Phonic method assisted by educational games provided a significant improvement in students' Arabic reading ability.

Meanwhile, the control class obtained an N-Gain score of 0.080. This score is categorized as a low improvement because $g < 0.30$. This shows that learning without the Phonic method only resulted in a low improvement in students' Arabic reading ability. Therefore, it can be concluded that the improvement of students' Arabic reading ability in the experimental class was higher than in the control class. The use of the Phonic method assisted by educational games was more effective in improving students' Arabic reading ability compared to conventional learning. The t-test is a parametric statistical test used to determine whether there is a significant difference or effect between research variables. It is used to examine whether an independent variable has a significant influence on a dependent variable individually (Adhikari et al., 2023).

Tabel 5. T-test Test Analysis

Statistical Analysis	Calculated Value (t-value)	t-table (5%)	t-table (1%)	Hypothesis Conclusion
Independent Samples t-Test	10.327	2.000	2.660	H ₀ rejected and H _a accepted

The independent samples t-test produced a calculated t-value of 10.327, which was higher than both the t-table value at the 5% significance level (2.000) and the 1% significance level (2.660). Since $t\text{-value} > t\text{-table}$, H₀ was rejected and H_a was accepted. Therefore, there was a significant difference between the experimental and control groups, indicating that the Phonic method assisted by educational games was effective in improving students' Arabic reading ability.

The findings of this study indicate that the integration of the Phonic method with educational games (Sound Bingo and Phonic Hunt) effectively improves Arabic reading ability among eighth-grade students at MTsN 1 Wonosobo. The improvement is reflected in the higher learning gains achieved by the experimental group compared to the control group. The experimental group obtained an N-Gain score of 0.547 (moderate category), while the control group obtained 0.080 (low category). The statistical test also showed a t-count value of 10.327, indicating a significant difference between the two groups after the treatment.

The results support previous studies highlighting the importance of phonics-based instruction in developing reading skills. (Wahdah, 2020) and (Hamka, n.d.) explained that conventional Arabic learning approaches often provide limited opportunities for students to develop phonological awareness and effective reading strategies. This condition becomes a challenge because phonological awareness is an important foundation for reading development. (Retnomurti et al., 2019) Therefore, the Phonic method applied in this study helped students recognize the relationship between hijaiyah letters, sounds, and pronunciation patterns.

This finding is in line with (Mansoer & Susliah, 2023), who stated that phonics instruction supports students in recognizing hijaiyah letters, and (Husna Muthiah Tsabitah & Arifin, 2023), who confirmed the effectiveness of phonics in improving Arabic word reading skills at the Madrasah Tsanawiyah level. However, this study extends previous findings by integrating the Phonic method with educational games, namely Sound Bingo and Phonic Hunt, to create a more interactive learning process.

The use of educational games contributed to increasing students' engagement and motivation during Arabic reading activities. Through game-based activities, students received repeated practice in identifying sounds and letters in an enjoyable learning atmosphere. This finding supports (Hellyana et al., 2023), who reported that educational game media can improve students' motivation in Arabic learning. In addition, (Pratama & Setyaningrum, 2018) stated that game-based learning encourages active participation and provides a meaningful learning.

The combination of phonics instruction and educational games provides a complementary learning approach. The Phonic method offers a structured strategy for developing students' decoding skills, while educational games strengthen motivation through interactive and enjoyable practice activities. This combination contributed to better learning outcomes in the experimental group compared to the control group, indicating that the integration of both approaches was more effective than conventional instruction in improving students' Arabic reading ability.

The practical implication of this study is that Arabic language teachers, especially at the Madrasah Tsanawiyah level, can consider integrating phonics-based learning with educational

games as an alternative strategy to overcome students' difficulties in Arabic reading. Future research is recommended to examine the long-term effectiveness of this approach and its application to other Arabic language skills, such as writing, speaking, and comprehension.

4. CONCLUSION

This study concludes that the implementation of the Phonic Method assisted by educational games (Sound Bingo and Phonic Hunt) was effective in improving students' Arabic reading ability at MTsN 1 Wonosobo. The experimental group showed a higher improvement with an N-Gain score of 0.547 (moderate category) compared to the control group with an N-Gain score of 0.080 (low category). The statistical analysis also confirmed a significant difference between the two groups, as shown by the t-count value of 10.327, which was higher than the t-table values at the 5% and 1% significance levels. These findings indicate that the integration of phonics-based instruction and educational games can improve students' phonological awareness, reading accuracy, motivation, and learning engagement. Therefore, the Phonic Method combined with educational games can be considered an effective alternative strategy for overcoming students' difficulties in Arabic reading.

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