

**THE EFFECTIVENESS OF WORD SEARCH PUZZLES ON READING COMPREHENSION  
ABILITY AT SMP IT AL AJWA**

**Risa Sahida Fisabilillah**

Institute of Prima Bangsa Cirebon  
[risasahida1406@gmail.com](mailto:risasahida1406@gmail.com)

**Lili Sururi Asipi**

Institute of Prima Bangsa Cirebon  
[kiakampung70@gmail.com](mailto:kiakampung70@gmail.com)

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**Abstract:** The title of this study is "Effectiveness of Word Search Puzzles on Reading Comprehension Ability at SMP IT Al Ajwa." This research was presented as a thesis submitted to the Faculty of Teacher Training and Education at Prima Bangsa Institute in July 2024. The study focuses on the use of word search puzzles as a tool to enhance students' reading comprehension skills. The purpose of this research is to find empirical evidence regarding the effect of using word search puzzles on students' ability to understand reading. The study was conducted on students at SMP IT Al Ajwa Cimaung, utilizing an experimental research method. The entire population of this research comprises students at SMP IT Al Ajwa Cimaung, with a sample of 80 students. The sample was divided into two groups: the experimental group and the control group. The experimental group consisted of 40 students from class A, while the control group consisted of 40 students from class B. The data collection instruments used in this research included tests and observations. The tests were employed to measure students' reading comprehension ability, while the observations were used to examine the implementation of the word search puzzles strategy in the learning process. After data collection was completed, the data were analyzed to determine the effect of using word search puzzles on students' reading comprehension ability. The results of the data analysis indicated that the obtained value was 2.21, while the table value was 1.994. Therefore, the obtained value was higher than the table value, indicating a significant influence of using the word search puzzle strategy on students' reading comprehension ability. This research provides an important contribution to the field of education, especially in seeking innovative ways to enhance students' literacy skills. By using games like word search puzzles, students can become more engaged and motivated in learning, which, in turn, can improve their ability to comprehend reading texts. The study also suggests that teachers in other schools consider using similar strategies in their teaching, especially in improving students' reading and comprehension abilities. With strong

empirical evidence, it is hoped that this strategy can become part of the learning curriculum in schools. Further research is also needed to explore the long-term impact of using this strategy and to see if similar results can be achieved in different contexts or with different student populations

**Keywords:** Word Search Puzzles, Reading Comprehension Ability, Students' Literacy Skills,

## INTRODUCTION

This research, conducted by Risa Sahida Fisabilillah and published in 2024 by Institut Prima Bangsa, explored the effectiveness of using word search puzzles to enhance reading comprehension among students at SMP IT Al Ajwa. The study aimed to provide empirical evidence on the impact of word search puzzles on reading comprehension, particularly within the unique educational context of SMP IT Al Ajwa, which features distinct teaching methods, curriculum structures, and student demographics.

Reading comprehension is a crucial skill in education as it enables students to understand, interpret, and analyze information from various texts. It is foundational for academic success across all subjects, as it allows students to grasp complex concepts, follow instructions, and critically evaluate information. According to Smith & Johnson (2022) and Garcia & Patel (2020), proficiency in reading comprehension can significantly influence a student's overall academic performance and future opportunities.

Despite its importance, many students struggle with reading comprehension. Common issues include difficulty in connecting individual words to the broader context of the text, understanding the main ideas, and conveying their interpretations coherently. Miller & Rodriguez (2013) note that students often find it challenging to grasp the nuances of language, such as idioms, metaphors, and complex sentence structures, which can hinder their ability to fully comprehend and engage with the material.

The motivation behind this research stemmed from the need to find engaging and effective strategies to improve reading comprehension, especially given the challenges faced by students at SMP IT Al Ajwa. The school, located in a diverse community, serves students with varying levels of English proficiency and educational backgrounds. This diversity presents a unique set of challenges in teaching and learning, necessitating innovative approaches to address these needs.

Previous studies have demonstrated the cognitive benefits of word games, including word search puzzles, in enhancing vocabulary and reading skills. For instance, Kim & Turner (2017) highlighted that word search puzzles can stimulate cognitive processes such as pattern

recognition, word association, and critical thinking. These skills are directly relevant to reading comprehension, as they help students identify key ideas, understand context, and retain information. Inspired by these findings, this research aimed to explore whether word search puzzles could be an effective tool for improving reading comprehension among the students of SMP IT Al Ajwa.

The primary research question guiding this study was: What is the impact of word search puzzles on students' reading comprehension abilities at SMP IT Al Ajwa? To address this question, the research was structured around two hypotheses. The null hypothesis (H<sub>0</sub>) posited that there is no significant effect on students' ability in reading comprehension when taught using word search strategies. In contrast, the alternative hypothesis (H<sub>a</sub>) proposed that the use of word search strategies has a significant impact on students' reading comprehension abilities.

To test these hypotheses, the study employed an experimental design with both pre-test and post-test assessments. The study involved two groups of students: an experimental group that received instruction using word search puzzles and a control group that followed traditional, teacher-centered strategies. Both groups were assessed on their reading comprehension skills before and after the intervention, using standardized tests designed to measure various aspects of comprehension, such as understanding main ideas, identifying supporting details, and making inferences.

In addition to quantitative assessments, the study also aimed to gather qualitative data on students' perceptions and attitudes towards the integration of word search puzzles in reading comprehension instruction. This was accomplished through surveys and interviews, where students were asked to reflect on their experiences and the perceived benefits of using word search puzzles as a learning tool. The qualitative component of the study provided valuable insights into the students' engagement, motivation, and overall enjoyment of the learning process.

The results of the study were analyzed using statistical methods, including t-tests, to determine whether there were significant differences in the reading comprehension scores of the experimental and control groups. Additionally, thematic analysis was employed to

interpret the qualitative data from the surveys and interviews, identifying common themes and patterns in students' responses.

The findings of this research are expected to contribute significantly to the field of English language teaching. By providing empirical evidence on the effectiveness of word search puzzles, the study aims to offer educators a practical tool to enhance reading comprehension instruction. The integration of word search puzzles could potentially make the learning experience more interactive and enjoyable, thereby increasing students' motivation and engagement. Moreover, the study's insights into students' attitudes towards this teaching strategy could inform future curriculum development and instructional design.

## **RESEARCH METHOD**

This research will be conducted using an experimental research design with a pre-test and post-test design. This design was chosen to evaluate the effectiveness of using word search puzzles in enhancing students' reading comprehension skills. In this study, two groups will be involved: an experimental group and a control group. The experimental group will receive instruction using word search puzzles, while the control group will receive instruction using teacher-centered strategies.

Both groups will be given a pre-test and post-test with the same material and tests. This is to measure changes in students' reading comprehension skills before and after the intervention. The independent variable in this study is the use of word search puzzles, while the dependent variable is students' reading comprehension ability.

The population of this study comprises all eighth-grade students enrolled at SMP IT Al Ajwa, Cimaung, during the 2023/2024 school year. From this population, a sample will be taken from two specific classes, namely eighth grade, with each class consisting of 40 students. Thus, the total number of students sampled in the study is 80. The sample was selected randomly to ensure fair representation of the population.

Data collection will be carried out using several instruments, including pre-test and post-test assessments and observation checklists. The pre-test and post-test assessments will measure students' reading comprehension skills before and after the intervention. Meanwhile, the observation checklists will record student engagement and behavior during learning sessions that use word search puzzles. These observations are crucial for understanding how students interact with the material and how the teaching strategy affects their level of engagement.

Data analysis will involve several important steps, including normality testing, homogeneity testing, and hypothesis testing using t-tests. The normality test will ensure that the data distribution is normal, which is an important assumption in many statistical tests. The homogeneity test will check the similarity of variances between the groups, while the hypothesis test will determine whether there is a statistically significant difference between the experimental and control groups.

In addition to quantitative measurements through tests, this study will also include observations of student engagement and behavior during sessions that use word search puzzles. These observations will note various aspects, such as student participation, their interest in the material, and their interactions with the teacher and classmates. These observations are expected to provide additional insights into how the use of word search puzzles can affect students' motivation and engagement in the learning process.

This research will be conducted in a classroom setting, and the researcher will ensure consistency in teaching approaches in both groups, except for the presence or absence of word search puzzles. This is important to isolate the influence of different teaching strategies and ensure that differences in learning outcomes are due to the intervention provided.

The researchers will also control for confounding variables that might affect the study results, such as student motivation, prior knowledge, and teacher support. For example, student motivation can greatly influence how much effort they put into understanding the material. Prior knowledge can also be a significant factor, as students with a strong foundational understanding of a topic may find it easier to improve their comprehension. Teacher support, in the form of motivational encouragement or academic assistance, can also affect students' learning outcomes.

During the research, the intervention of using word search puzzles will be provided over several learning sessions. These sessions will be designed to give students the opportunity to practice and strengthen their reading comprehension skills through a fun and interactive activity. On the other hand, the control group will receive more traditional instruction, with a more teacher-centered approach that may involve lectures or discussions.

At the end of the study, the collected data will be analyzed to evaluate the effectiveness of using word search puzzles. The results of this analysis are expected to provide empirical

evidence on the benefits of this strategy in enhancing students' reading comprehension skills. Additionally, this study is also expected to provide insights for teachers and educational practitioners on innovative and effective ways to teach reading skills.

## **RESULT AND DISCUSSION**

This study employed an experimental research design, involving two groups: an experimental group and a control group. A reading test with a maximum score of 100 was used as the assessment tool. Participants took a pre-test before the treatment and a post-test after the treatment. The experimental group received the treatment using a word search Strategy, while the control group did not.

The research findings indicate a notable enhancement in students' reading comprehension abilities when using the word search strategy. Students who were taught using this strategy achieved significantly higher scores compared to their peers who received instruction through a traditional teacher-centered approach. As detailed in Chapter II, a word search is a type of word game where letters are arranged in a grid, either rectangular or square. The primary objective of the game is to locate and highlight all the hidden words within the grid. These words can be arranged in various directions: horizontally, vertically, or diagonally. Typically, a list of hidden words is provided to players, but more challenging versions of the puzzle may require players to identify the words themselves. Thematic word search puzzles, where all hidden words relate to a specific topic, are particularly engaging and offer an added layer of complexity.

The word search strategy is more than just a game; it serves as an educational tool designed to make learning more interactive and enjoyable. By incorporating elements of play, word searches transform the learning environment into a more stimulating and relaxed space. This transformation is crucial in maintaining student motivation and engagement. Word search puzzles encourage active participation and critical thinking, as students must decipher the grid and recognize patterns related to the vocabulary and themes presented.

The educational value of word search puzzles extends beyond mere engagement. They offer multiple benefits that contribute to improved reading comprehension. First, word searches can help students enhance their vocabulary. By repeatedly encountering and identifying words within various contexts, students reinforce their understanding and recall of these words. This reinforcement aids in better word recognition and usage in reading and writing tasks.

Second, word search puzzles foster pattern recognition skills. As students search for words, they develop an ability to identify and analyze patterns in text. This skill is directly related to reading comprehension, as recognizing patterns can help students understand the structure and meaning of complex texts. The process of locating words within a grid also requires careful attention to detail, which further supports the development of focused reading skills.

Additionally, word searches can boost students' confidence in their reading abilities. Successfully completing puzzles provides a sense of accomplishment and encourages a positive attitude towards reading activities. This increased confidence can translate into improved performance in other reading-related tasks, as students feel more capable and motivated.

The results of the study were analyzed using statistical methods to determine the effectiveness of the word search strategy compared to the traditional teacher-centered approach. The observed t-value ( $t_{\text{observed}}$ ) was calculated to be 2.21, while the critical t-value ( $t_{\text{table}}$ ) was 1.994. These values were obtained using a significance level of 0.05, which is a common threshold for determining statistical significance in educational research.

The comparison of  $t_{\text{observed}}$  to  $t_{\text{table}}$  revealed that the observed value exceeded the critical value, indicating a significant difference in reading comprehension abilities between the two groups. Specifically, the group taught using the word search strategy demonstrated a statistically significant improvement in their reading comprehension scores compared to the group that received traditional teacher-centered instruction.

This result underscores the effectiveness of the word search strategy in enhancing students' reading comprehension skills. The significant difference suggests that the interactive and engaging nature of word search puzzles contributes to a more effective learning experience, leading to better comprehension outcomes.

The implications of these findings are profound for educators and curriculum developers. The success of the word search strategy in improving reading comprehension highlights the potential benefits of incorporating interactive and game-based learning tools into the

classroom. Educators may consider integrating word search puzzles and similar activities into their instructional practices to create a more dynamic and motivating learning environment.

Moreover, the study suggests that traditional teaching methods, while effective, can be complemented by innovative strategies that address diverse learning needs. By diversifying instructional approaches, teachers can cater to different learning styles and preferences, ultimately enhancing overall student achievement.

The positive impact of word search puzzles also points to the importance of fostering a positive and engaging classroom atmosphere. When students find learning enjoyable and meaningful, they are more likely to be actively involved and invested in their education. This increased engagement can lead to improved academic performance and a more positive attitude towards learning.

While the study provides valuable insights into the effectiveness of word search puzzles, there is still room for further research. Future studies could explore various aspects of game-based learning and its impact on different educational outcomes. For example, researchers could investigate how word search puzzles compare to other types of educational games and activities in terms of their effectiveness in improving reading comprehension and other academic skills.

Additionally, examining the long-term effects of incorporating word search puzzles into the curriculum could provide further insights into their sustained impact on students' reading abilities. Longitudinal studies could track students' progress over an extended period to determine whether the benefits of word search puzzles persist and how they influence overall academic performance.

## **CONCLUSION**

This research assessed the impact of word search puzzles on enhancing reading comprehension among students at Al Ajwa IT Middle School. The study's analysis revealed a t-observed value of 2.21, which is higher than the critical t-table value of 1.994. This indicates that the null hypothesis ( $H_0$ ) is rejected, meaning that the use of word search puzzles significantly improves students' reading comprehension abilities.



Reading comprehension is crucial in education as it enables students to interpret, analyze, and understand information from various texts. Enhanced comprehension skills benefit students not only in their English language studies but also across other subjects, where understanding textual material is key. The research demonstrates that word search puzzles are an effective tool for boosting these skills.

The findings suggest that incorporating word search puzzles into educational practices can lead to more engaging and effective learning experiences. By integrating this strategy into teaching, educators can support students in developing better comprehension skills, which will positively impact their overall academic performance. Therefore, the study highlights the value of using innovative and interactive methods, like word search puzzles, to improve educational outcomes.

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