

# Using Question Answer Relationship (QAR) Strategy On Students' Narrative Reading Comprehension Achievement On Eighth Grade Of SMP Negeri 14 Palembang

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## ABSTRACT

This study aimed to investigate the effect of the Question Answer Relationship (QAR) strategy on students' reading comprehension in narrative texts. This research used a quantitative quasi-experimental design with a pre-test and post-test non-equivalent group design involving 68 eighth-grade students at SMP Negeri 14 Palembang. The results showed that both groups improved; however, the experimental group showed a more significant increase. The control group's mean score rose from 47.82 to 60.03, while the experimental group improved from 51.97 to a higher level categorized as *good*, with most students (52.9%) achieving this level. Statistical analysis revealed a significant difference between the groups ( $p < 0.05$ ). Therefore, the QAR strategy is effective in improving students' reading comprehension and is recommended for teaching narrative texts.

**Keywords:** QAR Strategy, Reading Comprehension, Narrative Text, Quasi-Experimental Study

## BACKGROUND

Reading is one of the most essential skills in language learning, particularly in learning English as a foreign language. It enables students to gain knowledge, improve vocabulary, and develop critical thinking. As stated in the study, "*reading is a good way in which the reader integrates information into the text with the knowledge already possessed to form meaning*". This indicates that reading is not only decoding text but also constructing meaning. Furthermore, reading comprehension plays a crucial role in academic success. According to Anderson (2003), reading supports vocabulary development and overall language proficiency. However, many students still face difficulties in understanding texts, especially in English. These difficulties include limited vocabulary, lack of grammar understanding, and inability to infer meaning from context. Based on preliminary observation at SMP Negeri 14 Palembang, students often struggle to comprehend reading texts, especially when the texts are long or when the questions use different wording from the text. This indicates that students need an effective strategy to improve their comprehension.

One of the strategies that can be applied is the Question Answer Relationship (QAR) strategy. Raphael (2005) explains that QAR helps students understand the relationship between questions and answers by categorizing questions based on their sources. This strategy trains students to think critically and locate answers effectively. Previous studies have shown that QAR strategy significantly improves students' reading comprehension. For instance, Pratiwi (2020) found a significant effect of QAR on students' reading comprehension skills. Therefore, this study aims to examine the effectiveness of QAR strategy in improving students' narrative reading comprehension. Vaughn, Klingner, and Bryant (2013) demonstrated that collaborative strategic reading, which shares similarities with QAR in its structured approach to question-answer relationships, significantly improved reading

comprehension outcomes for students with learning difficulties through peer-mediated instruction.

## LITERATURE REVIEW

Reading comprehension is defined as the ability to understand and interpret text. It involves decoding words and constructing meaning. As stated, "*reading comprehension is the process of producing meaning from a text*". This process requires several components such as identifying main ideas, understanding details, recognizing references, vocabulary knowledge, inference, and summarizing. These components work together to help students fully understand a text. Narrative text is a type of text that tells a story or sequence of events. It aims to entertain readers and often includes elements such as orientation, complication, resolution, and reorientation. Narrative texts are commonly used in junior high school, making them suitable for this study. The QAR strategy helps students understand how to answer questions based on their relationship to the text. It consists of four categories:

1. Right There
2. Think and Search
3. Author and You
4. On Your Own

According to Wiesendanger (2001), QAR encourages students to focus on meaning and improves their ability to answer comprehension questions. The procedure of QAR includes:

- Analysing questions
- Understanding QAR types
- Reading the text
- Answering questions
- Sharing answers

This structured process helps students become more active readers.

Afflerbach, Pearson, and Paris (2008) clarified the differences between reading skills and reading strategies, emphasizing that strategies such as QAR are intentional and goal-directed actions that readers employ to construct meaning, whereas skills are automatic processes that readers perform without conscious effort. Cain and Oakhill (2011) found that comprehension difficulties often lead to reduced reading experience, which in turn limits vocabulary growth, creating a negative cycle that further widens the gap between good and poor comprehenders". Duke and Pearson (2002) argued that effective reading comprehension instruction includes explicit teaching of strategies such as question-answer relationships, summarization, and prediction, which help students become more active and purposeful readers.

Grabe and Stoller (2019) emphasized that reading comprehension is a complex process involving the interaction between the reader's background knowledge, the text, and the reading context, requiring explicit strategy instruction to help learners navigate this complexity". Klinger, Vaughn, and Boardman (2015) provided practical frameworks for teaching reading comprehension to students with learning difficulties, highlighting the importance of strategies like QAR in helping struggling readers identify where to find answers to different types of questions". Liang and Dole (2006) reviewed several comprehension instructional frameworks, including the QAR strategy, and concluded that such frameworks provide teachers with structured approaches to explicitly teach students how to think about their thinking during reading".

McNamara (2007) edited a comprehensive volume on reading comprehension strategies, which includes theoretical foundations, intervention designs, and technology-based approaches to improving students' ability to understand and learn from text.

"In the Indonesian context, Nurjanah (2018) investigated the effect of QAR strategy on students' reading comprehension of narrative texts and found that the strategy significantly improved students' ability to answer comprehension questions, particularly in identifying main ideas and making inferences". Rahmawati and Lestari (2021) implemented the QAR strategy

in an EFL classroom in Indonesia and reported that students showed significant improvement in their reading comprehension of narrative texts, especially when distinguishing between 'Right There' questions and 'Think and Search' questions". Snow (2002) defined reading comprehension as the process of simultaneously extracting and constructing meaning through interaction and involvement with written language, emphasizing that effective comprehension instruction requires explicit teaching of cognitive strategies such as QAR.

METHOD

This study employed a quantitative approach using a quasi-experimental design to investigate the effect of the Question Answer Relationship (QAR) strategy on students' reading comprehension achievement. Specifically, this research applied a pre-test and post-test non-equivalent group design, in which two intact classes were assigned as the experimental and control groups without randomization. The design of the study can be illustrated as follows:

Table 1: Design of the Study

| Group        | Pre-test       | Treatment               | Post-test      |
|--------------|----------------|-------------------------|----------------|
| Experimental | O <sub>1</sub> | X (QAR Strategy)        | O <sub>2</sub> |
| Control      | O <sub>3</sub> | – (Conventional Method) | O <sub>4</sub> |

This design allowed the researcher to compare students' reading comprehension before and after the treatment and to determine whether the QAR strategy had a significant effect compared to the conventional teaching method. In this study, two classes were selected as research subjects. The experimental class was taught using the QAR strategy, while the control class was taught using a conventional teaching method. The experimental class received treatment through structured steps of the QAR strategy, including analysing questions, identifying QAR categories, reading texts purposefully, answering questions, and discussing answers collaboratively. This approach emphasized active learning and critical thinking. On the other hand, the control class was taught using the conventional method, where the teacher explained the material, asked students to read the text, and answered questions without applying a specific strategy. The learning process in this class was more teacher-centred.

The population of this study consisted of all eighth-grade students at SMP Negeri 14 Palembang in the academic year 2024/2025. There were 368 students distributed across eleven classes.

Table 2: Population of the Study

| No. | Class   | Total Students |
|-----|---------|----------------|
| 1   | VIII 1  | 34             |
| 2   | VIII 2  | 34             |
| 3   | VIII 3  | 33             |
| 4   | VIII 4  | 34             |
| 5   | VIII 5  | 34             |
| 6   | VIII 6  | 33             |
| 7   | VIII 7  | 33             |
| 8   | VIII 8  | 34             |
| 9   | VIII 9  | 33             |
| 10  | VIII 10 | 33             |
| 11  | VIII 11 | 33             |

|                |     |
|----------------|-----|
| Total Students | 368 |
|----------------|-----|

The sample of this study consisted of two classes selected from the population. The total number of students in the sample was 68 students.

- Class VIII.4 (34 students) → Experimental Class
- Class VIII.5 (34 students) → Control Class

The sampling technique used in this study was convenience sampling. The classes were selected based on the teacher's recommendation and similarity in students' abilities.

The instrument used in this study was a reading comprehension test in the form of multiple-choice questions based on narrative texts. The test was designed to measure students' ability in several aspects of reading comprehension, including:

- Identifying main ideas
- Understanding detailed information
- Making inferences
- Understanding vocabulary in context

Initially, the test consisted of 80 items. Before being used, the test was analyzed for validity and reliability.

- **Validity:** The instrument was validated through expert judgment and statistical analysis. Only valid items were used in the final test.
- **Reliability:** The reliability of the test was measured using the split-half method, resulting in a coefficient of 0.783, which indicates that the instrument was reliable.

The same set of test items (with adjustment) was used for both pre-test and post-test. The data collection was conducted in three main stages:

1. **Pre-test**  
Both the experimental and control groups were given a pre-test to measure their initial reading comprehension ability.
2. **Treatment**  
The experimental group was taught using the QAR strategy, while the control group was taught using the conventional method. The treatment was conducted over ten meetings.
3. **Post-test**  
After the treatment, both groups were given a post-test to measure their reading comprehension achievement.

## DATA ANALYSIS

The data obtained from the pre-test and post-test were analyzed using both descriptive and inferential statistics.

### 1. Descriptive Statistics

Descriptive statistics were used to summarize the data, including:

- Mean score
- Minimum and maximum scores
- Standard deviation
- Frequency distribution

### 2. Inferential Statistics

Inferential statistics were used to test the research hypothesis.

#### • Paired Sample t-test

This test was used to determine whether there was a significant improvement within each group (pre-test vs post-test).

#### • Independent Sample t-test

This test was used to compare the post-test results between the experimental and control groups.

The level of significance used in this study was 0.05 ( $p < 0.05$ ). If the significance value was less than 0.05, it indicated that there was a significant effect of the QAR strategy on students' reading comprehension.

## RESULT AND DISCUSSION

The researchers discovered the distribution of the frequency of the students' post-test scores in the experiment class in the post-test, and it is displayed in the table below:

**Table 3**  
**Distribution of Data Frequency on Students' Post-test Scores in Experimental Group**

| No    | Score  | Frequency | Percentage | Catagory  |
|-------|--------|-----------|------------|-----------|
| 1     | 85-100 | 1         | 2.9%       | Very Good |
| 2     | 74-84  | 18        | 52.9%      | Good      |
| 3     | 55-69  | 12        | 35.5%      | Fair      |
| 4     | 40-54  | 3         | 8.8%       | Poor      |
| 5     | 0-39   | 0         | 0%         | Very Poor |
| Total |        | 34        | 100%       |           |

The table presents the students who achieved scores in good category (74–84), with 18 students (52.9%). This indicates that more than half of the students reached a satisfactory level of reading comprehension after the treatment. In addition, 1 student (2.9%) achieved the very good category (85–100), showing that some students were able to reach a high level of comprehension. Meanwhile, 12 students (35.5%) were categorized as fair (55–69), which suggests that although they improved, they still need further development. Only 3 students (8.8%) remained in the poor category (40–54), and no students were categorized as very poor (0%).

**Table 4:**  
**Distribution of Data Frequency on Students' Post-test Scores in Control Group**

| No    | Score  | Frequency | Percentage | Catagory  |
|-------|--------|-----------|------------|-----------|
| 1     | 86-100 | 0         | 0%         | Very Good |
| 2     | 71-85  | 7         | 20.6%      | Good      |
| 3     | 56-70  | 17        | 50.0%      | Fair      |
| 4     | 41-55  | 10        | 29.4%      | Poor      |
| 5     | 0-40   | 1         | 2.9%       | Very Poor |
| Total |        | 34        | 100%       |           |

The distribution of the scores in the control class shows that most students were in the fair category, with 17 students (50.0%). This was followed by the poor category, which consisted of 10 students (29.4%). In addition, 7 students (20.6%) were classified into the good category. Only 1 student (2.9%) fell into the very poor category, and none of the students reached the very good category.

**Table 5:**  
**Descriptive Statistics of Students' Pretest Scores in Control Group**

|                    | N  | Minimum | Maximum | Mean  | Std. Deviation |
|--------------------|----|---------|---------|-------|----------------|
| Pre Test Control   | 34 | 22      | 72      | 47,82 | 12.729         |
| Valid N (listwise) | 34 |         |         |       |                |

The findings showed that the sample consisted of 34 students. The mean score obtained was 55.89. Meanwhile, the minimum score achieved by the students was 26, and the

maximum score was 83. In addition, the standard deviation was 14.001, indicating that there was some variation in the students' scores within the group.

**Table 6:**  
**Descriptive Statistics of Students' Post-test Scores in Control Group**

|                    | N  | Minimum | Maximum | Mean  | Std. Deviation |
|--------------------|----|---------|---------|-------|----------------|
| Pre-Test Control   | 34 | 36      | 81      | 60,03 | 11,569         |
| Valid N (listwise) | 34 |         |         |       |                |

The findings showed that the sample consisted of 34 students. The mean score obtained was 60.03. Meanwhile, the minimum score achieved by the students was 36, and the maximum score was 81. In addition, the standard deviation was 11.569, indicating that there was some variation in the students' scores within the group.

**Table 7:**  
**Descriptive Statistics of Students' Pretest Scores in Experimental Group**

|                       | N  | Minimum | Maximum | Mean  | Std. Deviation |
|-----------------------|----|---------|---------|-------|----------------|
| Pre Test Experimental | 34 | 28      | 83      | 51,97 | 14,031         |
| Valid N (listwise)    | 34 |         |         |       |                |

The findings indicated that the sample consisted of 34 students. The mean score was 51.97. The lowest score obtained was 28, while the highest score reached 83. Furthermore, the standard deviation was 14.031, which reflects the variation in the students' scores within the group.

To provide a clearer depiction of the students' progress in both the experimental and control groups, the researcher computed the percentage of score improvement from the pretest to the posttest using the following formula:

$$\text{Score Improvement (\%)} = \frac{\text{Posttest Mean} - \text{Pretest Mean}}{\text{Pretest Mean}} \times 100$$

The control group had a mean pre-test score of 47.82 and a mean post-test score of 60.03, which shows an improvement of:  $(60.03 - 47.82) / 47.82 \times 100 = 25.21\%$ . The experimental group had a mean pre-test score of 51.65 and a mean post-test score of 70.53, which shows an improvement of:  $(70.53 - 51.97) / 51.97 \times 100 = 35.72\%$ .

**Table 8:**  
**Normality Test of Students' Pretest Scores in Control and Experimental Groups**

| No | Students' Pre-Test | N  | Shapiro Wilk | Sig. | Result |
|----|--------------------|----|--------------|------|--------|
| 1  | Control            | 34 | .967         | .381 | Normal |
| 2  | Experimental       | 34 | .965         | .349 | Normal |

The results showed that the p-values ranged from 0.381 to 0.349. Since all of these values were higher than the significance level of 0.05, it indicates that the data were considered

normal. Therefore, it can be concluded that the pre-test scores of both the control group and the experimental group were considered normal.

**Table 9: Normality Test of Students' Post-test Scores in Control and Experimental Groups**

| No | Students' Pre-Test | N  | Shapiro Wilk | Sig. | Result |
|----|--------------------|----|--------------|------|--------|
| 1  | Control            | 34 | .969         | .429 | Normal |
| 2  | Experimental       | 34 | .960         | .240 | Normal |

Based on the results, the p-values were 0.429 and 0.240. Since both values were higher than the significance level of 0.05, it indicates that the data were considered normal. Therefore, it can be concluded that the post-test scores of both the control group and the experimental group were considered normal.

**Table 10: Homogeneity Test on Students' Pretest Scores in Control and Experimental Groups**

| Levene Statistic | df1 | df2 | Sig.  |
|------------------|-----|-----|-------|
| 1.448            | 1   | 66  | 0.233 |

Based on the result above, it was found that the significance value was 0.233. Since this value was higher than the significance level of 0.05, it indicates that the data met the assumption of homogeneity. Therefore, it can be stated that the pre-test scores of both the control and experimental groups were homogeneous.

**Table 11: Homogeneity Test on Students' Post-test Scores in Control and Experimental Groups**

| Levene Statistic | df1 | df2 | Sig.  |
|------------------|-----|-----|-------|
| 1.092            | 1   | 66  | 0.300 |

Based on the result above, it was found that the significance value was 0.300. Since this value was higher than the significance level of 0.05, it indicates that the data fulfilled the assumption of homogeneity. Therefore, it can be stated that the post-test scores of both the control and experimental groups were homogeneous.

**Table 12: Result Analysis of Paired Sample t-test from Students' Pretest and Post-test Scores in Experimental Groups**

| Paired Samples Test |                    | Paired Differences                        |                |                 |         |         |         |    |                 |
|---------------------|--------------------|-------------------------------------------|----------------|-----------------|---------|---------|---------|----|-----------------|
|                     |                    | 95% Confidence Interval of the Difference |                |                 |         |         |         |    |                 |
|                     |                    | Mean                                      | Std. Deviation | Std. Error Mean | Lower   | Upper   | T       | df | Sig. (2-tailed) |
| Paire 1             | Pre Test-Post Test | -18,559                                   | 9,921          | 1,702           | -22,021 | -15,097 | -10,907 | 33 | <,001           |

The table shows that the  $t$  value is 3.917 and the  $p$  value is  $< .001$ . Because the obtained  $t$  value is greater than the critical value on the  $t$ -table (1.691) and the  $p$  value is smaller than the significance level of 0.05, this indicates that there is a statistically significant difference between the compared groups. Thus, these results indicate a clear difference in the outcomes obtained by each group. The analysis results in determining this significant difference.

## DISCUSSION

The results show that the QAR strategy improved students' reading comprehension in the experimental group. Most students reached the *good* category (52.9%), and none remained in the *very poor* category after the treatment. In contrast, the control group showed only slight improvement, with most students still in the *fair* category. Statistical analysis indicated a significant difference between both groups ( $p < 0.05$ ). Therefore, the alternative hypothesis ( $H_1$ ) is accepted and the null hypothesis ( $H_0$ ) is rejected, meaning that the QAR strategy has a significant effect on students' reading comprehension.

## CONCLUSION

This study concludes that the Question Answer Relationship (QAR) strategy significantly improves students' reading comprehension at SMP Negeri 14 Palembang. The post-test results showed that the experimental group achieved a higher mean score (72.15) compared to the control group (60.03). Most students in the experimental group (52.9%) reached the *good* category, indicating substantial improvement. In contrast, the control group showed only moderate progress, with most students remaining in the *fair* category. The statistical analysis confirmed a significant difference between both groups ( $p < 0.05$ ). Therefore, the alternative hypothesis ( $H_1$ ) is accepted and the null hypothesis ( $H_0$ ) is rejected.

## REFERENCES

- Afflerbach, P., Pearson, P. D., & Paris, S. G. (2008). Clarifying differences between reading skills and reading strategies. *The Reading Teacher*, 61(5), 364–373. <https://doi.org/10.1598/RT.61.5.1>
- Anderson, N. J. (2003). Reading. In D. Nunan (Ed.), *Practical English language teaching* (pp. 67–86). McGraw-Hill.
- Cain, K., & Oakhill, J. (2011). Matthew effects in young readers: Reading comprehension and reading experience aid vocabulary development. *Journal of Learning Disabilities*, 44(5), 431–443. <https://doi.org/10.1177/0022219411410042>
- Duke, N. K., & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction* (3rd ed., pp. 205–242). International Reading Association.
- Grabe, W., & Stoller, F. L. (2019). *Teaching and researching reading* (3rd ed.). Routledge.
- Klinger, J. K., Vaughn, S., & Boardman, A. (2015). *Teaching reading comprehension to students with learning difficulties* (2nd ed.). Guilford Press.
- Liang, L. A., & Dole, J. A. (2006). Help with teaching reading comprehension: Comprehension instructional frameworks. *The Reading Teacher*, 59(8), 742–753. <https://doi.org/10.1598/RT.59.8.2>
- McNamara, D. S. (Ed.). (2007). *Reading comprehension strategies: Theories, interventions, and technologies*. Lawrence Erlbaum Associates.
- Nurjanah, R. L. (2018). The effect of using Question Answer Relationship (QAR) strategy on students' reading comprehension of narrative text. *Edukasi: Jurnal Pendidikan dan Pengajaran*, 5(2), 123–132. <https://doi.org/10.19109/ejpp.v5i2.3033>
- Pratiwi, D. (2020). The effect of Question-Answer Relationship (QAR) strategy on students' reading comprehension. *Journal of English Education Research*, 5(2), 120–128.
- Rahmawati, F., & Lestari, S. (2021). Implementing QAR strategy to enhance students' reading comprehension in narrative texts. *Journal of English Language Teaching and Linguistics*, 6(1), 45–56. <https://doi.org/10.21462/jeltl.v6i1.567>

- Raphael, T. E. (2005). Question-answer relationships (QAR) in the primary grades: Laying the foundation for comprehension. *The Reading Teacher*, 59(3), 206–210. <https://doi.org/10.1598/RT.59.3.2>
- Snow, C. E. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. RAND Corporation.
- Vaughn, S., Klingner, J. K., & Bryant, D. P. (2013). Collaborative strategic reading as a means to enhance peer-mediated instruction for reading comprehension outcomes. *Journal of Learning Disabilities*, 46(4), 348–360. <https://doi.org/10.1177/0022219412467037>
- Wiesendanger, K. D. (2001). *Strategies for literacy education*. Merrill Prentice Hall.