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# Reading Comprehension Improvement through Question and Answer Relationship (QAR) Method 

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#### Abstract

The objective of this research was to find out the significant difference in reading comprehension between students who were taught using the Question and Answer Relationship (QAR) method and those who were taught using the conventional method. This research used a quantitative approach with the experimental design of the quasiexperimental method. The instrument of this research was a test, dividing into pretest and posttest. In this research, it was found that the experimental group's mean pretest score was in a low category and the posttest score was in a good category. While the control group's mean pretest score was in a low category, but the posttest score was in the moderate category. The result of the Independent Sample T-Test indicated that the $\mathrm{t}_{\text {count }}$ was 4.549 which was higher than $t_{\text {table }}(2.021)$ and the score of sig. (2-tailed) was 0.000 which was less than 0.05 . This research thus concluded that there was a significant difference in reading comprehension achievement between students who were taught using the Question and Answer Relationship (QAR) method and those who were taught using the conventional method.


Keywords: question and answer relationship method, reading comprehension
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## INTRODUCTION

Reading means an activity of accepting, analyzing, and interpreting what readers do to get the message that the writer wants to convey in the written media. Reading involves a mental process of understanding word by word and the purpose of connecting the reading media's direction so that the reader can finally deduce, memorize, retell, write
something into each reader's mind. Besides that, reading has always a purpose. With the purpose of reading, the reader then more concentrates or focuses on important things that he is looking for because he previously had a mental map or an image of the purpose in mind. Besides, the reader's mind and attention are prepared to concentrate on clearly defined purposes from the beginning
before reading, so that the reader's mind will always respond to questions or recall information following the set purposes (Nuriadi, 2008). Reading, in conclusion, is a means of getting information that has an impact on a reader's quality of life.

Reading comprehension is the most important part of an activity to gain insight, information, and entertainment. Many information is gathered and distributed in written media. Reading awareness is also an improved way of information and knowledge. The ability to read comprehensively is a provision and key to students' success in their educational process. Most knowledge acquisition is done by reading activities. Students' knowledge is not just obtained from the teaching and learning process at school but from daily reading. According to Izzah \& Hadi (2018), students must be encouraged to learn the structure of different text types and linguistic features that are relevant in their social and cultural contexts. The ability to read and understand reading, therefore, becomes an important part of the student's knowledge and improvement.

After doing an observation at SMP Negeri 1 Batauga, some problems encountered by students during reading such as less reading habits and a lack of vocabulary. Students with less vocabulary tend to ask friends or teachers when they have difficulties in comprehending the text. This activity unconsciously reduces other students' concentration. Besides, the student's thinking level is not sufficiently high to read the most important part of the learning process. For this reason, the teacher should implement the method, which can
enhance student thinking at a high level, so that they not only acquire knowledge and skills but also apply this teaching method to new situations.

The above-mentioned problems can be resolved because researchers propose Question and Answer Relationship (QAR) method. Raphael (1986) developed QAR as a tool to explain to students how to read texts and respond to questions. It enables them to understand how specifics and context information in the text must be identified. Students frequently focus more on text or context information without QAR guidance. Stahl (2004) further states that the questioning of teachers in QAR will be used as a model and springboard for critical thinking and nuanced student questioning. Teacher-led questioning can be a powerful vehicle for bringing text experiences to a higher level of thought and critical literacy. It indicates that QAR is useful to provide students with higherlevel questions so that students can develop their level of critical thinking and literacy.

According to Raphael in Wiesendanger (2001) that the purpose of QAR is to teach students to be the focus of meaning in context, to enhance learning activities, and to achieve certain skills. QAR may improve students' ability to respond to comprehensive questions by providing systematic means. The following are some level of questions in the QAR strategy: right there, think and search, on my own (Wiesendanger, 2001), and author and you (Muzammil, 2017).

1. Explicit text (right there)

It involves questions requiring readers to return to the passage and

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to find the right details for answering the question. Often they are called literal questions since somewhere in the passage the correct answer is found (Muzammil, 2017). The answer to this level of question can be found in the reading text, usually, as the phrase contained in the sentence, this type of question has a level in the literal level (Wiesendanger, 2001).
2. Implicit text (think and search)

It contains questions that typically require readers to consider in the passage the relationship between ideas and information. The reader must revert, locate the query information and consider how the information or ideas coincide (Muzammil, 2017). The answer to this level of question can be found in the reading text, but the question at this degree has a higher level of thinking than the first level of this question type has levelled the inferential levels (Wiesendanger, 2001).
3. Reading information and reader knowledge (on my own)
It contains issues that can be addressed through the awareness of the readers about a topic. This kind of question needs no reader to refer to a passage (Muzammil, 2017). At this level student are required to think about what has been known from reading and experience (prior knowledge) to formulate answers. This type of question has levelled at the application level and evaluation, the level of the QAR question is very influential in the student
comprehension level of the reading (Wiesendanger, 2001).
4. Author and you

This includes questions for which readers can use ideas and details not explicitly defined in the passage to address the issue. You have to think about what you read and formulate your thoughts or opinions (Muzammil, 2017).

Sejnost (2009) explains five steps in teaching reading comprehension using the QAR method:

1. Introducing the definition of QAR by describing each query form to provide a simple illustration of each query and to address the difference.
2. Then assigning the students to read a short piece of text.
3. Instructing the students to answer each question form upon having finished the reading. In this step, the teacher ensures the students to recheck their answers and ensure that the distinctions between each type are clearly understood.
4. Continuing this exercise and increase questions and types until students can recognize and distinguish between types easily.
5. Finally, ask students to read more and create a collection of questions to recognize and address their classmates.

By applying QAR in teaching reading, some advantages can be obtained by students (Galvan, 2019; Kinniburgh \& Prew, 2010). Raphael \& Au (2005) state that QAR will help to solve four problems to increase students literacy: (1) the need for a common language that reveals the often-overlooked reading and listening process, (2) the need for an organizational
structure for interrogation and comprehension practices in and around grades and schools, (3) the need for a whole-school literacy education reform that is open and transparent, with a focus on senior thinkers and decision-makers (4) the need to prepare students for highstakes testing without sacrificing the importance of text-based higher-order thinking.

Supporting the statement above, two questions have been raised by Readence et al (2004) regarding the purpose of QAR. First, the purpose of QAR was to define the form of question replies instead of encouraging the determination of the correct answers. Therefore, the students should not be informed that the answer to the question comes from discrete categories like text or reader. Second, rather than preceding the determination of the essence of the question-answer relationship, the answer to this question follows logically. He claims that QAR can only be used to track readers' input on their answers rather than assisting them in answering the questions.

According to Wilson et al (2009), the QAR structure was chosen for a professional development initiative because it is standard practice for students to answer questions in the text. QAR provides a space for students to reflect on these issues while also providing them with the tools and language to recognize connections between text and questions. QAR not only directs classroom lectures but also helps students become more strategic or metacognitive in their reading.

Research has proved the effectiveness of the QAR method that positively affects students' reading comprehension and students had positive perceptions of implementing this reading strategy (Thuy \& Huan, 2018). It is beneficial not only for students to answer questions, but also to understand the text; can also help them in critical reading when answering questions about the narrative text in which they have to properly understand the whole text and relate the text with their history and life experiences to overcome the difficulties in answering narrative text questions (Suswika et al., 2020). The method also helps students in solving reading exercises by making it easier to find the best answer, even if the solutions are not always explicitly contained in the text (e.g., from students' context information) (Ernaini et al., 2018).

## RESEARCH METHODOLOGY

A quantitative approach was used in conducting this research. As Mills \& Gay (2016) defined that quantitative research is the collection and analysis of numerical data to describe, explain, predict or control phenomena of interest. $n$ this study, the researchers used experimental research with a quasi-experimental design. The researchers divided the students into two groups: a control group and an experimental group. The experimental group was taught using the QAR method, while the control group was taught using a conventional method that an English teacher might usually use.

This research took place at SMP Negeri 1 Batauga of South Buton regency, Southeast Sulawesi. The population of the

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study consists of seventh-grade students, who counted 156 in total and were divided into six classes for the 2020/2021 academic year. Purposive cluster sampling was used as the sampling technique. Purposive sampling was developed to meet a specific need or goal (Cohen et al., 2007).

In this case, the researcher chose the students who had a low level of reading comprehension. After that, cluster sampling was used to divide the population into groups. Then, rather than individual elements, the researchers choose the classes or clusters to include in the study. Therefore, for this study, class VII-B was chosen as the experimental class, with 26 students, and class VII-E was chosen as the control class, with 26 students.

The instrument of this research was a test that consisted of pretest and posttest. The pretest was administered before treatment was applied, while the posttest was administered after the classes are given treatment. The data obtained from both tests were analyzed descriptively to find out such as the mean, standard deviation, minimum, and maximum score and inferentially to find out whether there was a significant result difference between the students who were taught using the conventional method and those who were taught using QAR method. But before using the inferential statistics test, a prerequisite analysis was used, which consisted of the normality and homogeneity test to find out whether the data were normally distributed and homogenous. All the data analyses were calculated using SPSS version 21.0.

## FINDING AND DISCUSSION

After the pretest, treatment, and posttest were administered, the data obtained from the tests are analyzed and their results are described below:

## Descriptive Analysis

Result of Pretest in Experimental Class
Before doing the treatment, the pretest is done to find out the students' reading comprehension. The data was then analyzed using descriptive statistics and obtained the mean score that is 51.58 , the standard deviation is 11.36 , the minimum score is 23 , and the maximum score is 73 . The data are then distributed into the scoring categories to find out the students' reading comprehension achievement. The pretest result is listed in the following table:
Table 1. Result of Pretest

| No | Category | Range | Freq. |
| :---: | :---: | :---: | :---: |
| 1 | Very good | $86-100$ | 0 |
| 2 | Good | $71-85$ | 1 |
| 3 | Moderate | $56-70$ | 10 |
| 4 | Low | $\leq 55$ | 15 |

The table above indicates that no student gets a very good category. Furthermore, only 1 student gets a good category, 10 students get a moderate category, and 15 students get a low category. In percentage, the data can be displayed in the following figure:
Figure 1. Distribution of Pretest Score
Percentage


The figure above indicates that $0 \%$ of the student is in the very good category, there are $3.85 \%$ of students are in a good category, $38.46 \%$ of students are in the moderate category, and there are $57.69 \%$ of students in the low category. In conclusion, the students' reading comprehension in the pretest for the experimental class is in a low category, as described by the frequency of students and the percentage in each category.

## Result of Posttest in Experimental Class

After several meetings doing the treatment using the QAR method, the posttest is administered to find out whether there is an improvement of students' reading comprehension through the QAR method. The posttest results were analyzed with descriptive statistics, obtaining the mean score is 71.31 , the standard deviation is 11.55 , the minimum score is 43.00 , and the maximum score is 87.00 . The data are then distributed into scoring categories to find out the students' reading comprehension achievement. The posttest result is listed in the following table:
Table 2. Result of Posttest

| No | Category | Range | Freq. |
| :---: | :---: | :---: | :---: |
| 1 | Very good | $86-100$ | 4 |
| 2 | Good | $71-85$ | 10 |
| 3 | Moderate | $56-70$ | 9 |
| 4 | Low | $\leq 55$ | 3 |

The table above indicates that 4 students are in very good category, 10 students are in good category, 9 students are in moderate category, and 3 students are in a low category. In percentage, the data can be displayed in the following figure:

Figure 2. Distribution of Posttest Score
Percentage


The figure above indicates that the lowest percentage of students' reading comprehension achievement is in a low category, with $11.54 \%$. While the highest percentage is obtained in the good category, with $38.46 \%$. Therefore, it can be deduced that the students have good reading comprehension achievement after being taught using the QAR method.

## Result of Pretest in Control Class

The same action is also done in the control class, in which the pretest is firstly administered before the treatment is applied. The descriptive data obtained from analyzing the students' score, for instance, the mean score is 34.77 , the standard deviation is 9.24 , the minimum score is 23.00 , and the maximum score is 56.00. The data are then distributed into the scoring category to find out the students' reading comprehension achievement and the result is presented in the following table:

Table 3. Result of Pretest

| No | Category | Range | Freq. |
| :---: | :---: | :---: | :---: |
| 1 | Very good | $86-100$ | 0 |
| 2 | Good | $71-85$ | 0 |
| 3 | Moderate | $56-70$ | 1 |
| 4 | Low | $\leq 55$ | 25 |

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The table above indicates that there is not any student who gets very good and good category. Meanwhile, there is 1 student who gets a moderate category and 25 students who get a low category. In percentage, the data can be displayed in the following figure:
Figure 3. Distribution of Pretest Score Percentage


From the figure above, it can be identified or indicates that the lowest percentages are very good and good category, in which there is not any student to achieve them. While the highest percentage is a low category which obtains $96.15 \%$. Referring to the students' score frequency and percentage, it is found that their reading comprehension achievement is in a very low category.

By looking at the frequency of students and the percentage in each category, it is known that the students' reading comprehension in pretest for the since it is the category that most students achieve.

## Result of Posttest in Control Class

After doing treatment using the conventional method, the pretest is administered. The data obtained such as the mean score is 58.61 , the standard deviation is 8.31 , the minimum score is 46.00 , and the maximum score is 73.00 . The data are then distributed into the
scoring category to find out the students' reading comprehension achievement and the result is presented in the following table:
Table 4. Result of Posttest

| No | Category | Range | Freq. |
| :---: | :---: | :---: | :---: |
| 1 | Very good | $86-100$ | 0 |
| 2 | Good | $71-85$ | 2 |
| 3 | Moderate | $56-70$ | 15 |
| 4 | Low | $\leq 55$ | 9 |

The table above indicates that the fewest category is very good with there are not any students to achieve it. While the most category obtained by the students is moderate in which 15 students achieve it. In percentage, the data can be displayed in the following figure:
Figure 4. Distribution of Pretest Score Percentage


The figure above indicates that the lowest percentage is a very good category in which $0 \%$ of students achieve it. While the highest percentage is a moderate category which obtains $57.69 \%$. Referring to the students' score frequency and percentage, it means that the students have moderate reading comprehension achievement after being taught using the conventional method.

## Prerequisite Analysis

The prerequisite analyses used are normality and homogeneity test. If the
data are both normally distributed and homogenous, the inferential statistics are used a parametric statistic. If they are not, nonparametric statistics are used. The results of both the tests are presented below:

## Normality Test

A normality test is used to find out whether the data are normally distributed. In this test, the Shapiro-Wilk test is used since the data are less than 50 . The data is normally distributed if the significance value is more than 0.05 .
Table 5. Result of Normality Test

| No | Group | df | Sig. |
| :---: | :---: | :---: | :---: |
| 1 | Experimental | 26 | 0.141 |
| 2 | Control | 26 | 0.107 |

The table above reveals that the significant value in the experimental class is 0.141 and in the control class is 0.107 . Since the values are more than 0.05 , the data are normally distributed.

## Homogeneity Test

A homogeneity test is used to know whether the data are taken from the homogenous population. The data can be said as homogenous data if the significant value is higher than 0.05 . The kind of test used is Levene's test.
Table 6. Result of Homogeneity Test

| Levene Statistic |
| :--- |
| df1 |
| df2 |
| The table above indicates that the |
| Tignificance value is 0.200 in which is |
| higher than 0.05, it can be concluded that |
| the data are homogenous. Since the data |
| are normally distributed and |
| homogenous, the inferential analysis is |
| used parametric statistics. |

## Inferential Analysis

To know whether there is a significant difference in reading comprehension achievement between students who are taught using the QAR method and those who are taught using the conventional method, the Independent Sample T-Test is used. If the score of $\mathrm{t}_{\text {count }}$ is fewer than $\mathrm{t}_{\text {table }}$, it means there is a different reading comprehension achievement between both classes and if the significance value is fewer than 0.05 , it means that the result is significant. If it is higher, it means there is not any significant value.
Table 7. Result of Independent Sample T Test

|  | t | df | Sig. (2- <br> tailed) |
| :---: | :---: | :---: | :---: |
| Equal <br> variance <br> assumed | 4.549 | 50 | 0.000 |

The result of the t-test above obtains the score of $\mathrm{t}_{\text {count }}$ that is 4.549 and df is 50 . This score is then consulted to the $\mathrm{t}_{\text {table }}$ in which the score is 2.021. It is found that $\mathrm{t}_{\text {count }}$ is higher than $\mathrm{t}_{\text {table }}$, therefore there is a difference in reading comprehension between both groups. Besides, the value of Sig. (2-tailed) is 0.000 which is fewer than 0.05 . It means the difference is significant.

## CONCLUSION

Since this research is aimed to find out the significant difference in reading comprehension achievement between students who were taught using the QAR method and those who were taught using the conventional method, the gaining data were gathered from the experimental and control groups. As shown in the

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experimental class, the mean pretest score is 51.58, which is in the low category, and the mean posttest score is 71.31, which is in the good category. Meanwhile, in the control class, the mean pretest score is 34.77 , which is in the low category, and the mean posttest score is 58.91, which is in the moderate category.

Based on the hypothesis test, it obtains a score of $\mathrm{t}_{\text {count }}$ that is 4.549 and df is 50 . After consulting $t_{\text {table }}$, the score of $t$ was found to be 2.021 . Besides, the score of sig. (2-tailed) is 0.000 which is fewer than 0.05 . Based on the finding, it can be concluded that there is a significant difference in reading comprehension achievement between students who are taught using the QAR method and those who are taught using the conventional method at SMP Negeri 1 Batauga. It suggests that the QAR method is better than the conventional method for improving students' reading comprehension achievement.

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