

Evaluating the Effectiveness of the SQ3R Method in Enhancing Students' Reading Proficiency

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Introduction

- The SQ3R method, has been progressively adapted to suit modern educational environments through the incorporation of digital tools (Kusumawati, 2019; Lu et al., 2020). The evolution of SQ3R into SQ4R, investigated by Alzu'bi (2020), and its integration with cooperative learning strategies like those discussed (Wang et al., 2017), further affirm the method's adaptability and enduring relevance in fostering comprehensive and critical reading skills across diverse educational settings.
- Moreover, the impact of SQ3R and SQ4R on reading comprehension has been substantiated through empirical study in different academic contexts. Ayitey & Baiden (2020) demonstrated how SQ3R can improve junior high students' understanding of expository texts, while Alzu'bi (2020) examined the effectiveness of SQ4R in enhancing English language comprehension among university freshmen.
- The use of the SQ3R approach to improve reading comprehension has been a central focus of educational study, showcasing its incorporation with technology and its efficacy in many learning environments (Kusumawati, 2019; Lu et al., 2020).
- The SQ3R sequence is one of several methods for teaching reading skills (Brown, 2000). According to current study, the SQ3R method can increase students' reading skills. Furthermore, the SQ3R method is appropriate for most reading texts and tasks that may be completed in a group or independently.

Research Question

1. What is the impact of implementing the SQ3R method on reading achievement among students at Walisongo High School?
2. What are students' perceptions regarding using the SQ3R method?

Method

1. This study employed a mixed-methods approach to address the questions of study. To investigate the first question of this study, a true experimental design was utilized, following the guidelines outlined (Ary et al., 2009), Experimental study aims to examine the effects of systematically manipulating one or more variables on another variable.
2. To address the question number two qualitatively, the authors conducted interviews Benson (2012) Semi-structured interviews were employed to explore students' perceptions of the SQ3R method. This interview format is designed to elicit subjective responses from individuals reflecting on specific events or phenomena they have experienced (AdeoyeOlatunde & Olenik, 2021)

Finding and Discussion

In this section, the authors present an integrated analysis of two distinct data types: quantitative data addressing first question, and qualitative data pertaining to second question of study.

- *3.1 The Influence of using the SQ3R method on students' reading achievement*

1. Table 1 Reading scores between the control and experimental class.

Class	Average Score Before Treatment	Average Score After Treatment
Control Class (X-2)	48,89	76,85
Experiment Class (X-3)	72,37	88,76

The analysis begins with Table 1, which illustrates the average change in reading scores between the control group and the experimental group before and after treatment. Using SPSS version 26, the authors calculated the average within each group. Notably, the experimental group demonstrated a substantial increase in reading scores, averaging 88.78, compared to the control group's average of 76.85.

Findings and Discussion

Table 2 Normality Results

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test Experiment (X-3)	,175	27	,033	,951	27	,232
Post-Test Experiment (X-3)	,225	27	,001	,911	27	,025

- Upon analysis, it was observed that several groups exhibited non-normal distribution, as indicated by p-values below 0.05 in the Kolmogorov-Smirnov and Shapiro-Wilk columns. Specifically, the Pre-Test Experiment and Post-test Experiment groups in the Kolmogorov- Smirnov column displayed p-values below 0.05, indicating non-normal distribution. Conversely, the Pre-Test and Post-Test control groups demonstrated p-values exceeding 0.05, indicating normal distribution. Consequently, the Wilcoxon signed-rank test was selected to assess differences within the data, as detailed in Table 3.

Findings and Discussion

Table 3. Wilcoxon Test for Comparing Related Samples and Detecting Difference.

	Post-test Experiment – Pre-Test Experiment	Post-test control - Pre-test control
Z	-4,221b	-3,985b
Asymp. Sig. (2-tailed)	,000	,000
a. Wilcoxon Signed Ranks Test b. b. Based on negative ranks to determine if there is a statistically significant difference between the two groups tested.		

Based on Table 3, the results of the Wilcoxon test, utilized to compare two groups of data that do not meet the assumption of normality, indicate significant findings. This non-parametric test is employed to assess whether a statistically significant difference exists between the tested groups, without relying on assumptions about data distribution. The authors observed significant outcomes within both the control and experimental classes, notably in the pre-test and post-test phases, where the experimental group exhibited a noteworthy increase in scores following the implementation of the SQ3R method. Similarly, the control group also demonstrated significance in pre-test and post-test scores compared to before receiving instruction via the conventional method. The disparity between the experimental and control groups is evident in Table 3, wherein the Z value in the pre-test and post-test for the experimental group highlights a distinction from the control group. Subsequently, this Z value is employed to compute the p-value (probability), indicating the likelihood of a random difference between the two groups. A lower p-value (typically less than 0.05) indicates a significant difference.

Findings and Discussion

1. In transcript 1 above the four students share their perspectives on the SQ3R method presented by the authors.
2. in transcript 2, students' opinions on the SQ3R method offered earlier were favorable, and they were motivated to use this method to overcome challenges and absorb knowledge better.
3. in transcript 3, one learner admitted that the individual in question may still require further training, as previously described in a narrative.
4. According to the results of the interviews conducted by the authors (transcript 4), the student claimed that by following the structure taught previously in the SQ3R method, as well as regularly reading and evaluating the substance of the reading, his grasp of the topic improved.
5. According to the findings of the interview, which are included in transcript 5, the students say that by using the previously taught SQ3R method, the individual may rapidly locate the components sought in the topic, such as specific facts in the supplied text.

Conclusion

- This study presents findings regarding the effectiveness of the SQ3R method in improving student reading achievement, which includes quantitative and qualitative data. Quantitative analysis showed a significant increase in reading scores in the experimental group compared with the control group, as evidenced by the posttreatment mean scores. However, the normality test showed that not all data sets followed a normal distribution, prompting the use of the Wilcoxon test for non-parametric analysis, which also showed significant differences between pre-test and post-test scores in both groups. Qualitative data from interviews further supports these findings, as students expressed positive perceptions of the SQ3R method, highlighting its effectiveness in facilitating comprehension, analyzing text, and finding important information. Additionally, students recognize the need for practice to fully utilize the benefits of this method. Discussion of these findings underscores the role of the SQ3R method in encouraging active engagement, critical thinking, and increasing understanding among students, in line with previous study. Recommendations for future study include further exploration of specific text types and integration of language support strategies to improve student learning outcomes. Overall, this study concludes that the SQ3R method is a valuable tool for improving reading achievement among middle school students, providing insight into its applicability and potential for improving teaching and learning practices.

References

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