The Implementation of Prediction Strategy to Improve Student's Reading Comprehension

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Abstract

The purpose of this study was to investigate the effects of the Prediction Strategy on the reading comprehension of 40 students at one of Tahfizh Islamic Boarding School in Palembang. Using a nonequivalent group pretest-posttest design, the study used a quasi-experimental design. The Prediction Strategy was taught to the experimental group, and the lecture method was taught to the control group. Multiple-choice questions from pretests and posttests were used to gather the data. The results showed that after learning the Prediction Strategy, the experimental group's reading comprehension greatly increased. The experimental group's mean score skyrocketed from 71.25 to 83.00, whereas the control group's score grew from 75.38 to 80.12. The experimental group's improvement was statistically significant, according to the paired sample t-test (p-value = 0.000). However, the independent sample t-test revealed no significant difference between the two groups' posttest results (p-value = 0.469). The findings demonstrated that the Prediction Strategy helped students. The results showed that the Prediction Strategy was helpful in improving students' reading comprehension skills. As an alternative to teaching reading comprehension, the Prediction Strategy is advised.

Keywords: Prediction Strategy; Reading Comprehension

INTRODUCTION

Reading is a crucial skill in language learning, providing access to knowledge and information. In learning English as a foreign language, reading comprehension is essential, as it involves not only recognizing words but also understanding their meaning. Husna (2022) states that academic success is closely tied to reading ability, while Elleman and Oslund (2019) emphasize that reading is a complex cognitive skill requiring multiple sub-skills. Additionally, McClung and Pearson (2019) highlight its role in knowledge acquisition across various subjects. Reading comprehension is an active process that connects prior knowledge with new information (Qanwal & Karim, 2014). Syahabuddin et al. (2019) explain that it involves both word recognition and understanding, while Ilma (2023) describes it as a process of constructing meaning by integrating new insights with existing knowledge. Effective reading comprehension enhances critical thinking and retention, making it a vital skill for students. One effective strategy to improve comprehension is the *prediction strategy*, which encourages students to anticipate content before engaging with a text. The Prediction Strategy is a powerful tool for improving reading comprehension and is crucial in keeping children actively involved in the reading process. Using available clues like titles, headings, subheadings, illustrations, diagrams, and their own past knowledge or personal experiences, this method encourages students to make educated guesses or anticipate the potential content, structure, or meaning of a document before they start reading. Students are not only psychologically ready but also encouraged to draw on pertinent prior knowledge through this anticipatory process, which promotes greater comprehension and memory of the material. Additionally, as they attempt to validate, amend,

or improve their initial beliefs while reading, learners who make predictions become more engaged, inquisitive, and invested in the reading activity. Reading becomes a dynamic interaction between the reader and the written content when the reader actively engages with the text, improving comprehension and fostering critical thinking. Previous research has shown that the prediction strategy significantly enhances students' reading comprehension (Wulandari, 2017; Hasruddin et al., 2021; Khairiyah, 2018; Purwati, 2018; Alfisyahrin, 2022). By making predictions based on textual elements such as headings and images, students actively engage with the text, improving their understanding. However, despite its benefits, reading literacy in Indonesia remains low. The 2022 PISA report indicates a decline in students' reading performance, with Indonesia scoring 359 points, reflecting limited reading proficiency. Contributing factors include restricted access to quality reading materials, weak reading culture, and a lack of innovative teaching strategies. At one of Tahfizh Islamic Boarding School in Palembang, similar challenges exist. A preliminary study conducted on September 5th, 2024, through an interview with an English teacher, revealed that eleventh-grade students struggle with reading comprehension. While the school's *Dauroh* program focuses on vocabulary enrichment, it does not address reading comprehension. Given the importance of reading skills, an effective instructional strategy is needed to enhance students' understanding. Although previous studies have explored prediction strategies in reading instruction, research specifically targeting eleventh-grade students remains limited. Therefore, this study aims to investigate the implementation of prediction strategy to improve student's reading comprehension.

METHOD

This study employed a quasi-experimental design with a nonequivalent group pretest-posttest format. To ascertain whether the independent variables affected the dependent variables, experimental research looked at them (Creswell and Creswell, 2018). Forty eleventh-grade students from one of Tahfizh Islamic Boarding School in Palembang made up the population. They were split into two groups: twenty students became the experimental group and twenty students became the control group. In a quasi-experimental situation, researchers assigned people to groups although not at randomly, they were unable to purposefully form treatment groups (Creswell and Creswell, 2018). While the control group was instructed through lectures, the experimental group was instructed through the Prediction Strategy. The primary tool used in this study was a multiple-choice reading comprehension test that was intended to evaluate a number of crucial reading skills, such as mastering vocabulary, comprehending references, drawing conclusions, identifying specific information, and identifying main ideas. These elements were chosen to guarantee a thorough assessment of pupils' comprehension of textual materials. The test was given in two stages: first as a pretest to gauge students' reading comprehension skills prior to the intervention, and then again as a posttest to gauge progress following the use of the prediction approach. In order to improve their reading comprehension, the experimental group took part in 10 instructional sessions where the Prediction Strategy was systematically applied. During these sessions, students were first encouraged to preview the text by looking at titles, headings, images, and key vocabulary, which served as contextual clues. They were then guided to make predictions about the text's content, main ideas, and potential outcomes. Following the creation of predictions, students shared their assumptions with peers in interactive discussions, which promoted critical thinking and collaborative learning. As they read the text, students were asked to confirm, validate, or modify their predictions, which increased their level of engagement and strengthened their comprehension of the subject matter. The control group, on the other hand, was taught mostly through lectures, teacher-led explanations, and guided reading with little student participation. This set of students passively followed the teacher's instructions, emphasizing listening comprehension

above active engagement. Prior to the treatment period, a pretest was given to both groups to determine baseline reading comprehension levels in order to evaluate the efficacy of the training. A posttest was administered following the conclusion of the training sessions in order to gauge any gains in understanding and assess the effectiveness of the various teaching strategies. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data in this study in order to guarantee the precision and dependability of the findings. Several stages were involved in the analysis: First, the central tendency (mean scores) and variability (standard deviations) of the experimental and control groups' students' performance on the pretest and posttest were compiled using descriptive statistics. This gave a clear picture of how reading comprehension has improved overall. A normality test using the Kolmogorov–Smirnov technique was then performed to make sure the data satisfied the assumptions needed for parametric testing. Using this test, it was possible to ascertain whether each group's score distribution was normal. Additionally, to determine if the variances between the two groups were statistically identical, a homogeneity of variance test—more precisely, Levene's Test—was used. Fulfilling these presumptions is essential to confirming the use of additional parametric analyses. A paired sample t-test was used within each group to determine if the students' posttest scores substantially improved in comparison to their pretest scores once the data's acceptability for parametric testing was confirmed. This made it easier to assess how well the teaching strategy worked for each group separately. Finally, posttest results in the experimental and control groups were compared using an independent sample t-test. The aim of this study was to determine if students who were taught using the Prediction Strategy and those who were taught using the lecture method differed statistically significantly in their reading comprehension proficiency. It would be possible to determine whether the teaching method significantly affected the students' reading comprehension when the exam results were compared to those of the two groups.

RESULTS AND DISCUSSION

Results

The purpose of this study was to investigate how using the Prediction Strategy affected the reading comprehension of the pupils. Students' performance before and after the intervention was compared using a nonequivalent group pretest-posttest format in a quasi-experimental approach. While the control group was instructed through lectures, the experimental group was instructed through the Prediction Strategy.

1. Descriptive Statistics
The initial step in data analysis involved calculating descriptive statistics for both the experimental and control groups. The results are presented in Table 1.

Table 1. Descriptive Statistics of Pretest and Posttest Scores

Group	N	Mean Pretest	Mean Posttest	Std. Deviation Pretest	Std. Deviation Posttest
Experimental	20	71.25	83.00	4.53	3.89
Control	20	75.38	80.12	5.21	4.34

From Table 1, it is evident that the posttest scores of both groups improved. Nonetheless, the experimental group's improvement was more noticeable than the control group's (average improvement of 11.75 points versus 4.74 points).

Hypothesis Testing

a. **Paired Sample t-test:** To find out if students' reading comprehension significantly improved within each group, a paired sample t-test was used. Table 2 displays the findings.

Table 2. Paired Sample t-test Results

Group	Mean Difference	t-value	p-value (Sig. 2-tailed)
Experimental	11.75	6.12	0.000
Control	4.74	1.85	0.069

The Prediction Strategy successfully improved students' reading comprehension, as evidenced by the experimental group's notable improvement ($p = 0.000$, $t = 6.12$). In contrast, there was no statistically significant improvement in the control group ($p = 0.069$, $t = 1.85$).

b. **Independent Sample t-test:** An independent sample t-test was used to see if the experimental group's improvement differed substantially from the control group's. Table 3 displays the findings.

Table 3. Independent Sample t-test Results

Comparison	t-value	p-value (Sig. 2-tailed)
Experimental vs. Control	0.73	0.469

Although the Prediction Strategy enhanced students' reading comprehension, its impact was not substantially different from that of the conventional lecture method in this study, according to the p-value (0.469), which showed no statistically significant difference between the posttest scores of the two groups.

Discussion

The data analysis results demonstrated a significant improvement in reading comprehension among students in the experimental group following the implementation of the Prediction Strategy. Specifically, the experimental group's mean posttest score rose considerably from 71.25 to 83.00, with a p-value of 0.000 and a t-value of 6.12. Using the Prediction Strategy significantly improved pupils' reading comprehension ($p < 0.05$). This strategy's performance can be ascribed to the fact that it encouraged students to actively engage with the material by forming predictions based on textual clues such as titles, images, and important words prior to reading. This technique increased students' cognitive engagement, engaged their past knowledge, and steered their reading process, resulting in better comprehension and retention of the material. In contrast, the control group, which was taught using traditional approaches such as lectures and direct explanation, had a rise in mean scores from 75.38 to 80.12. However, this rise was not statistically significant ($p = 0.069$, $t = 1.85$), indicating that while there was some improvement in the students' reading comprehension, it was insufficient to confirm the success of the conventional strategy in this situation. This suggests that passive learning, in which students acquire information without actively participating, may not be adequate to achieve significant gains in reading comprehension, particularly when contrasted to tactics that encourage active involvement. Sumirat et al. (2019) claim that employing a prediction strategy could improve students' comprehension of English literature. Students so take part in the educational process. The students' reading abilities have reportedly improved. Interestingly, when an independent sample t-test was used to compare the posttest scores of the experimental and control groups, there was no statistically significant difference ($p = 0.469$, $t = 0.73$). This finding suggests that, despite the experimental group's significant improvement from pretest to

posttest, the posttest performance difference between the two groups was insufficient to be considered statistically significant. Several factors could contribute to this outcome. One possibility is that the relatively small sample size (n=20 per group) reduced the statistical tests' ability to detect differences between groups. Furthermore, it is worth noting that the control group had a slightly higher initial score than the experimental group on the pretest. This implies that the students in the control group may have had a stronger foundation in reading comprehension at the start, allowing them to perform reasonably well even without the Prediction Strategy. This result was consistent with Altay & Altay (2017), who likewise found no discernible difference between the two strategies in terms of reading comprehension. According to the researcher's pretest and posttest data, this implied that even while the Prediction Strategy might not have produced a significant improvement, it nonetheless contributed to lower-achieving students catching up to their counterparts. Furthermore, observational data gathered during the study supported the quantitative results. Students in the experimental group showed higher levels of engagement during the learning process. They actively discussed their predictions, engaged with the text more frequently, and demonstrated a greater willingness to connect the predictions to the text's actual content. This level of engagement was in stark contrast with the control group, where students were more passive, mostly listening to the teacher's explanations with little interaction or independent analysis of the text. Alfisyahrin (2022) claims that students found acquiring reading comprehension to be enjoyable and comfortable, which helped to progressively lessen the reading challenges they had previously faced. This result was consistent with earlier studies that shown how well prediction improves critical thinking and active reading. All things considered, the Prediction Strategy has proven to be an effective way to improve students' reading skills and increase their involvement in the learning process. The findings of this study showed that the Prediction Strategy significantly improved students' reading comprehension in the experimental group. This result is in line with Wulandari (2017) and Hasruddin et al. (2021), who found that prediction strategy enhanced students' understanding and engagement. Similarly, Sumirat et al. (2019) also reported significant gains after applying this strategy. However, the lack of a significant difference in posttest scores between the two groups contrasts with Fadilah (2020), who found a strong effect when prediction strategy was combined with Webtoon. This suggests that factors such as treatment duration, media used, or students' initial reading levels may influence the outcome. Further research is recommended to explore these aspects and strengthen the findings.

CONCLUSION

The findings support the notion that using a prediction strategy improves students' reading comprehension. The group taught using this strategy demonstrated a significant improvement in text comprehension compared to the group taught using traditional methods. Furthermore, students in the control group were generally passive and relied on the teacher's explanation, whereas students in the experimental group actively participated by discussing, making predictions, and connecting new information to prior knowledge. This not only improved their comprehension, but also increased their involvement and motivation in the learning process. Nonetheless, more research is needed to assess the long-term effectiveness of this strategy and its applicability to various learning environments and student populations. Furthermore, educators are encouraged to investigate how prediction strategies can be combined with other interactive approaches to improve learning outcomes. Finally, encouraging active learning through strategies such as prediction may have a significant impact on students' overall literacy skills and academic success.

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