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Applying Cooperative Learning STAD Model to Improve Students' Reading Comprehension

Ikram Senen¹, Ashadi², Marseilles Tianusa³, Azhari⁴

- 1,2Yogyakarta State University, Yogyakarta, Indonesia
- ³Arizona State University, Arizona, United States
- ⁴University of Pannonia, Veszprém, Hungary

Abstract

Background of the problem: Reading comprehension is a fundamental skill in learning, yet many students have difficulty in mastering it. Conventional learning methods are often less effective in increasing student engagement, so innovative learning models are needed. Purpose: To examine the effectiveness of STAD learning model in improving students' reading comprehension in grade VII at junior school South Halmahera. Method: This study used pre-experiment method with one-group pre-test and post-test design. The research sample consisted of 30 students, who were selected using cluster sampling techniques. Data was collected through reading comprehension tests before and after the application of the STAD model. Data analysis was conducted using t-test to measure the significance of differences in pre-test and post-test results. Result: The pre-test mean score was 55.30, while the post-test mean score increased to 77.40. The t-test result (19.55) was greater than the t-table (1.699) at a significant level of 0.05 with a degree of freedom (df) of 29. This shows that there is a significant increase in reading comprehension after the application of the STAD model. Implication: The results of this study indicate that the STAD learning model can be used as an effective strategy to improve students' reading comprehension. Therefore, it is recommended for educators to apply this model in learning to improve student learning outcomes, as well as develop further research to see its effectiveness in other subjects.

Keyword: Reading Comprehension; Cooperative Learning; STAD Model; English; Experiment

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©Corresponding author, Email: ikramsenen742@gmail.com

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INTRODUCTION

Background of the Problem

Reading comprehension involves a range of cognitive skills, including the ability to understand and retain information, infer the meaning of unfamiliar words, and process complex linguistic structures. Recent research highlights the intricate nature of these skills, particularly in the context of second language learning. Liu & Wang (2021) argue that reading comprehension in English as a second language (ESL) requires more advanced cognitive strategies due to the unique syntactic and morphological properties of the language. These skills are further enhanced through critical thinking instruction, which plays a pivotal role in improving comprehension and engagement (Kim, et, al, 2021; Zhang, L., & Anual, 2020). Farid et al., (2020) found that students who are taught critical thinking strategies are more motivated and demonstrate higher levels of engagement and independent thinking. In addition, critical thinking fosters collaborative learning environments, helping students improve their decision-making, enhance social awareness, and develop stronger mental skills. Such instruction not only supports language comprehension but also equips learners with the ability to analyze, evaluate, and synthesize information, all of which are essential for academic success in a second language.

Importance of Research for Field

Susiawaty & Anwar (2019) describe skills as the ability to execute a vital task, emphasizing that reading comprehension is fundamental to language proficiency. Recent research by Alghamdi & Al-Sherayei (2020) highlights that language skills consist of four main components integral to educational curricula: speaking, listening, reading, and writing. This comprehensive framework of language skills continues to be central to curriculum design globally. According to Patel & Jain (2019), language learners can enhance their understanding of complex texts, such as headlines, by systematically overcoming linguistic barriers. Meanwhile, recent studies by Ahmed & Siddiqui (2020) argue that newspapers remain a valuable tool across all language proficiency levels, offering varied strategies for practical implementation. Ahmed and Siddiqui's findings underscore that newspapers provide a medium for learners to improve their reading, writing, and speaking abilities through diverse exercises and interactive activities. This view is corroborated by other recent studies, which have affirmed the benefits of newspaper-based learning in language acquisition (Mubarak, 2021; Shahbaz, M., & Naqeebullah, 2020).

Research or Theoretical Gap

Recent research emphasizes that reading is not just a cognitive process but also a social one, where peer interactions significantly influence comprehension and engagement. According to Barnes et al., (2020) reading involves complex cognitive functions like constructing meaning and synthesizing information, which are enhanced through social learning. (Guthrie & Klauda, 2021; Koh et al., 2020) found that students' attitudes toward reading, shaped by both cognitive and emotional factors, improve significantly in peer-supported environments. Collaborative reading activities, such as peer discussions and feedback, promote deeper cognitive engagement and motivation, particularly during adolescence, when social influences are strong. Wang et al., (2022) further highlight that these peer interactions not only enhance comprehension but also create positive emotional connections to reading, making it more

enjoyable and effective. Thus, integrating cooperative reading strategies in education fosters both cognitive and social development in learners.

Recent research continues to underscore the complexity of reading comprehension, describing it as a multifaceted cognitive process that requires the simultaneous creation and extraction of meaning from written text. According to Elleman & Oslund (2019), reading comprehension is a challenging cognitive task due to its reliance on multiple, interacting skills and processes, which complicates both teaching and assessment. Alharbi, (2020) emphasizes that effective reading comprehension necessitates a clear understanding of text structure, vocabulary, and the ability to draw inferences, which are facilitated by the reader's prior knowledge and working memory. Brevik (2019) advocates for scaffolded instruction to improve comprehension, noting that targeted teaching strategies, such as modeling and guided practice, help students develop independent comprehension skills. In line with this (Roslan & Abdullah, 2022) asserts that teachers who use specific reading strategies, such as activating prior knowledge and questioning, significantly enhance their students' comprehension. Furthermore, research by (Ayu & Indriani, 2023) highlights the importance of promoting students' engagement with texts through strategies like previewing and summarizing, which foster deeper understanding and retention of information.

Recent studies have built upon the original reading self-efficacy questionnaire developed by (Shell et al., 1989), which used a 100-point scale to measure confidence in reading tasks and skills. For example, (Yilmaz & Kahraman, 2021) adapted this framework to assess EFL students' reading self-efficacy, affirming the questionnaire's relevance across various learner contexts and confirming its utility in educational research. Similarly, (Ali & Kaur, 2020) employed a scale to gauge self-confidence in reading tasks, ranging from 0 (unable to perform) to 100 (completely confident), which helped in identifying specific areas of reading challenges among learners. In another approach, (Park et al., 2019) utilized a 5-point rating scale to evaluate reading selfconfidence, examining students' perceived reading abilities and their confidence in general reading strategies, echoing the structure of (Shang, 2010) work. Research continues to explore the link between self-efficacy in reading and comprehension. For instance, (Mokhtari, K., & DeBacker, 2020) demonstrated a significant positive correlation between reading self-efficacy and comprehension in ESL learners, reinforcing earlier findings by (Naseri & Zaferanieh, 2012). Additionally, (Adesse & Dejene, 2023) investigated this relationship among first-year university students, revealing that high self-efficacy in reading was associated with better comprehension outcomes, supporting (Boakye, 2015) conclusions on the importance of self-belief in academic reading.

There is no consistent agreement on the most effective methods for teaching reading comprehension, especially in the context of cooperative learning. The lack of a standardized framework for integrating social and cognitive approaches in reading has led to mixed results across different studies. Limited knowledge of how different age groups and educational contexts respond to cooperative reading models further complicates the field. In addition, there is controversy regarding the long-term effects of peer-assisted reading strategies, with some studies showing only short-term comprehension gains. Furthermore, the absence of comprehensive research addressing cultural and linguistic diversity in reading instruction adds to the ongoing challenge of developing universally effective instructional practices.

Research Objective

The purpose of this study was to investigate how to use STAD cooperative learning model to improve students' reading comprehension among. To solve this problem, the researcher used the Student Teams Achievement Divisions (STAD) type cooperative learning model, which involves students in different small groups to help each other understand the subject matter. With this learning model, it can help students learn actively and work together, and ultimately improve their reading comprehension

THEORETICAL FRAMEWORK

Traditional teaching methods are typically quite difficult and necessitate individual work. Contrarily, cooperative learning necessitates active and productive collaboration with others, which is essential to human nature (kagan, 2014; Roger, T., & Johnson, 1994). Cooperative learning has been shown in the majority of research to have positive and helpful outcomes like high morale, effective relationships, student presence, confidence, and motivation (Johnson & Johnson, 2005, 2009; Tran & Lewis, 2012). According to studies on the cooperative learning approach, it is also more successful than conventional teaching and has a good impact on students' academic performance (Johnson & Johnson, 1974; Peterson, El & Coltrane, 2003; Sachs et al., 2003). Studies have shown that cooperative learning results is more effective than solo working because it fosters positive relationships between students and their excitement for learning (Sachs et al., 2003; Slavin, 2012). Likewise, a large body of research shows that CL outperforms competitive or individualistic experiences in terms of student achievement, interpersonal relationships, and psychological adjustment (Cooper, J., & Mueck, 1990; Doymus, 2004; Ghorbani Shemshadsara, 2012; Mevarech, 2015; Roger, T., & Johnson, 1994). Additionally, CL instruction can influence analytical thought (Johnson & Johnson, 2009). As a result, it provides a solution to issues with training and teaching that cannot be resolved with any other method (Slavin, 1991).

The Student Team-Achievement Division (STAD), a cooperative learning method, language learners work together in small and diverse groups to complete projects in a range of subjects such as math, languages, the arts, social studies, and science. Studies by (Adesoji & Ibraheem, 2009; Khan & Inamullah, 2011; Sharan, 2014; Tiantong & Teemuangsai, 2013; Tran & Lewis, 2012) have shown that the STAD method is the most effective cooperative learning strategy. STAD fosters independent learning while also fostering teamwork. This approach is thought to be particularly adaptable to learners of various skill levels in diverse groupings. Additionally, STAD pushes students to learn in groups and to concede that the work would be totally done if all participants comprehended the subject (Slavin, 1994). The researchers finally decided on the Student Teams Achievement Division (STAD) as the cooperative learning method. STAD is a cooperative learning method that splits up the class into groups of students with similar backgrounds in terms of sex, race, and talent. States STAD method, which will be utilized in subjects as broad as math, arts, social studies, and science from year two to year twelve, is one of the most straightforward and adaptable cooperative learning techniques (Elizabeth et al., 2014). Students who participate in STAD-style cooperative learning processes report being satisfied and motivated to learn in class (Anisensia et al., 2020; Kristin, 2016) explain how the STAD cooperative learning process consists of diverse small groups and settings that allow students to collaborate and discuss objectives and assignments while

supporting one another's comprehension of the subject matter through question-and-answer sessions.

The fundamental justification for selecting this strategy was that STAD can energize, encourage, and aid students in their academic endeavors (Slavin, 1994). STAD is also useful for both teachers and students. Because STAD can 1) Directly instruct students on collaborative techniques or teach strategies that are closely related to the aim of the lesson, particularly for enhancing comprehension of reading abilities, 2) boost self-worth and enhance racial relations, and 3) lead to greater success, particularly for underachievers, it is advantageous for students. (Slavin, 2012). Three advantages of utilizing STAD for teachers were recognized by (Hamm, M. & Adams, 1992): (1) Teachers grow more willing to collaborate with peers and more cooperative in their own professional contacts; (2) Teachers' time the used more efficiently; they can approach their work with a fresh, new mindset; and (3) Teachers have more time to support their own beliefs and ideals.

According to (Slavin, 1991) the instructor delivers a lesson, followed by team-based collaboration among students to ensure all members comprehend the material. Ultimately, individual quizzes are taken without any help from peers. The STAD model comprises five vital components: a). The presentation in class b). The team c). The personal assessment d). The Individual Improvement Score, and e). Team Recognition.

METHOD

Research Design

This study used a pre-experimental research design with a quantitative approach to examine the difference between pretest and posttest scores (Sugiyono, 2020). This approach is considered appropriate to the type of research conducted, because it examines the application of a method in a cooperative learning model to improve students' reading comprehension. This research design is explained as follows: O₁ is the pretest given before the application of STAD cooperative learning model in reading text comprehension, X is the treatment in the form of application of STAD cooperative learning model, and O₂ is the posttest given after the application of STAD cooperative learning model.

Data Source

The populations of this study were VIII grade students at a public junior school South Halmahera, totaling 90 students and spread across three classes, namely classes VII1 to VII3. The research sample was taken using cluster sampling technique, which selected 30 students from class VII2 as the sample. According to (Sugiyono, 2020) the sample is part of the population that has characteristics relevant to this study.

Data Collection and Procedure

The instruments in this study used reading tests in the pre-test and post-test. The test consisted of thirty multiple-choice questions, and the purpose of the post-test was to determine how well students understood the material.

The data of this study were collected in two steps. First, Pre-test: the researcher gave a test based on the reading test through the cooperative learning method of Student Team Achievement Division (STAD) type, then the researcher collected and gave scores based on the students' answers. Second, Post-test: this test was conducted if all steps had been passed, and

the purpose was to evaluate all learning activities to be analyzed.

Data Analysis

The data obtained in this study consists of quantitative reading comprehension scores from a pretest and posttest. These scores were derived from reading tests given to students before and after they were taught using the Student Team Achievement Division (STAD) cooperative learning model. The pretest scores provide baseline data on students' reading comprehension skills, while the posttest scores reflect their reading proficiency after the instructional intervention. To analyze the data collected, the study employed a t-test. The t-test is used to determine whether there is a statistically significant difference between the pretest and posttest scores, specifically to see if the STAD teaching method led to an improvement in students' reading comprehension.

In the data analysis process, the first step was to calculate the mean difference between the pretest and posttest scores. This involved determining the average change in reading comprehension scores after the students were taught using the STAD method. The mean difference provided a general measure of how much improvement had occurred. Next, the standard deviation of the score differences was computed. This step was important to understand how consistent the improvement was among all students. A small standard deviation would indicate that most students had similar gains in their reading comprehension, while a larger value would suggest a wider range of improvements.

After that, the standard error of the mean was calculated. This step helped in assessing the precision of the average difference, showing how much the sample mean might differ from the actual population mean. It provided a basis for determining the reliability of the observed mean difference Finally, the t-score was computed to test whether the observed improvement was statistically significant. The t-score compared the size of the mean difference relative to the variability of the scores. A higher T-score would indicate that the improvement in reading comprehension was substantial and unlikely to have occurred by chance.

The result was a t-value of 19.55, which was then compared to the critical value from the t-distribution table. Since the calculated t-value exceeded the critical value, it was concluded that there was a significant difference between the pretest and posttest scores. This result confirmed that the STAD cooperative learning model had a positive and statistically significant impact on students' reading comprehension.

The analysis followed a systematic sequence to determine the impact of the Student Team Achievement Division (STAD) method on students' reading comprehension. First, the pretest and posttest scores were collected to establish baseline performance and the outcome after the intervention. The next step involved calculating the mean difference between the pretest and posttest scores to quantify the overall improvement. Following this, the standard deviation of the differences was computed to measure the variability in the changes observed among students' scores. To further refine the analysis, the standard error of the mean difference was calculated, which provided an estimate of how much the sample mean difference might deviate from the true population mean.

Once these preliminary calculations were completed, a t-test was performed to assess whether the observed improvement was statistically significant. This test helped in determining if the increase in students' reading comprehension scores could be attributed to the STAD method rather than random chance. Finally, the calculated t-value was compared to a critical

value from a t-distribution table. This comparison was crucial for testing the hypothesis, as it established whether the observed improvement was statistically significant, leading to the rejection or acceptance of the null hypothesis.

FINDING AND DISCUSSION

Finding

The results showed that the STAD cooperative learning model was effective to improve students' reading comprehension. The STAD model also helped students to solve their problems in understanding the text because they worked on some tasks and quizzes in teams and after that the teams discussed finding solutions to the problems they found in their teams. Based on the statistical calculations in the data analysis, the researcher gave an interpretation of the pre-test and post-test scores. To determine whether the statistical results are significant, we compare the t-test with the t-table value. In this case, for df = 29 and P = 0.05, the t-table value is 1.699.

This is the critical limit that the t-test must exceed for the difference to be considered significant. The t-test value of 19.55 far exceeds the t-table value of 1.699, meaning that the differences found in the analysis could not have occurred by chance at the 5% significance level (P = 0.05). Based on the values obtained, we could tentatively draw the conclusion that, when using the STAD cooperative model could improve the reading comprehension of grade VII students at junior school South Halmahera, there is a significant difference in the average score between the pre-test and post-test. In addition, this shows that the alternative hypothesis (H1) is accepted, and the null hypothesis (H0) is rejected.

The analysis of the pretest and posttest scores aimed to evaluate the impact of the Student Team Achievement Division (STAD) cooperative learning model on students' reading comprehension. The students' scores were classified into several performance categories, and the frequency and percentage distribution for both the pretest and posttest are presented in Table.

Table I: The rate percentage and frequency distribution of pre-test and post-test score

No	Classification	Score Range	Pretest Frequency	Posttest
			(%)	Frequency (%)
1	Excellent	96 - 100	0 (0%)	1 (3.33%)
2	Very good	86 - 95	0 (0%)	4 (13.33%)
3	Good	76 – 85	2 (6,67%)	12 (40.00%)
4	Fairly good	66 – 75	3 (10,00%)	10 (33.33%)
5	Fair	56 - 65	6 (20,00%)	3 (10.00%)
6	Poor	36 - 55	19 (63,33%)	0 (0%)
7	Very Poor	0 -35	0 (0%)	0 (0%)
	Total		30 (100%)	30 (100%)

The pretest results indicate that no students achieved scores in the "Excellent" or "Very Good" categories, with the majority (63.33%) falling into the "Poor" category. In contrast, posttest results show substantial improvement, as 40% of students achieved a "Good" score, 13.33% achieved a "Very Good" score, and 1 student (3.33%) reached the "Excellent" category.

Table 2: The mean and standard deviation for the pretest and posttest scores are presented.

Test	Mean Score	Standard Deviation
Pre-test	55.30	6.11
Post-test	77.40	

The mean score increased from 55.30 in the pretest to 77.40 in the posttest, with a difference of 22.10 points. This substantial increase suggests that the STAD method significantly enhanced students' reading comprehension.

Statistical Analysis: T-test

To determine if the observed difference between pretest and posttest scores is statistically significant, an independent t-test was performed.

The t-test formula used is as follows:

$$t = \frac{\overline{D}}{Sx\overline{D}}$$

Where:

 \overline{D} = 22.10 (the mean difference between pretest and posttest scores)

 $S\overline{xD} = 1.13$ (standard error of the mean difference)

The t-score was calculated as:

$$t = \frac{22.10}{1.13} = 19.55$$

The result of the t-test, t = 19.55, was compared to the critical value from the t-distribution table (t-table) for a degree of freedom (df) of 29 and a significance level of 0.05, which is t = 1.699.

Hypothesis Testing

In this study, a t-test was conducted to determine whether the Student Team Achievement Division (STAD) cooperative learning model had a significant impact on students' reading comprehension. The statistical hypothesis testing involved comparing the calculated t-value with the critical t-value from the t-distribution table.

Component	Description	Value
Calculated t-value	The result from the t-test, representing the	19.55
(t)	observed effect size.	
Degrees of	Number of data points (N-1), where N is the	29
freedom (df)	sample size (30).	
Significance level	The threshold for rejecting the null	0.05
(α)	hypothesis (typically 0.05)	
Critical t-value (t-	The value from the t-distribution table for df	1.699
table)	= 29 at α = 0.05 significance level.	
Comparison result	Whether the calculated t-value exceeds the	19.55 >
	critical t-value	1.699

The null hypothesis (H0) stated that there is no significant difference between the students' pretest and posttest reading comprehension scores, meaning that any observed changes could be attributed to chance rather than the STAD model. In contrast, the alternative hypothesis (H1) posited that there is a significant difference between the pretest and posttest scores, indicating that the STAD model effectively improved reading comprehension.

After applying the t-test formula, the calculated t-value was found to be 19.55. This value was then compared to the t-table value for 29 degrees of freedom (N-1) and a significant level of 0.05, which was 1.699. Since the calculated t-value (19.55) is much greater than the critical t-value (1.699), this result leads to the rejection of the null hypothesis (H0). In other words, the difference between the pretest and posttest scores is statistically significant and not due to random variation.

Discussion

The findings of this study indicate that the Student Teams-Achievement Divisions (STAD) cooperative learning model significantly improves students' reading comprehension abilities. The observed improvement aligns with a body of research on cooperative learning, suggesting that STAD not only enhances academic achievement but also promotes a positive learning environment that fosters engagement and motivation. This section discusses the results in the context of existing literature, highlighting the implications for educational practice and further research.

The substantial increase in students' reading comprehension, as indicated by the rise in mean scores from pre-test to post-test, corroborates previous research on the effectiveness of STAD in academic settings. Slavin (1994) a seminal scholar in cooperative learning, found that STAD enhances students' comprehension by encouraging active engagement, critical thinking, and peer interaction. This interaction fosters a deeper understanding as students explain concepts to each other, reinforcing their learning through social and cognitive processes (Slavin, 2014). In a meta-analysis of cooperative learning's impact on academic achievement, (Kyndt et al., 2013) found that models like STAD significantly improved learning outcomes across diverse subjects and student populations. Their analysis highlighted that cooperative learning strategies tend to result in higher levels of information retention and comprehension, particularly in language-based subjects like reading comprehension. These outcomes are consistent with the present study's findings, which revealed marked improvements in students' reading comprehension scores following the STAD intervention. Thus, it can be inferred that STAD provides an effective pedagogical approach for literacy development, as it engages students in collaborative dialogue that promotes deeper cognitive processing (Webb, 2009).

The STAD model not only improved reading comprehension but also appeared to enhance students' engagement and motivation. This aligns with research by (Roseth et al., 2008), which found that cooperative learning structures positively influence student motivation by providing a supportive and interactive learning environment. Roseth and colleagues demonstrated that students in cooperative learning settings tend to exhibit higher levels of motivation and engagement because they feel a sense of responsibility toward their group's success. Furthermore, research by (Gillies, 2016) supports the notion that cooperative learning models, such as STAD, promote positive interdependence and individual accountability, which are key factors in maintaining high levels of student motivation. In the context of reading comprehension, these factors are crucial, as students are more likely to invest effort in understanding the text when they know their contributions are valued by their peers. This study found that students showed increased enthusiasm and readiness to participate in reading activities, suggesting that the STAD model effectively taps into these motivational drivers. Consequently, STAD not only improves academic performance but also contributes to the development of social skills that are essential for lifelong learning (Gillies, 2016; Slavin, 2010).

Positive interdependence among group members in the STAD cooperative learning model, according to (Hashemian et al., 2010) motivates students to assist one another and put in greater effort to attain mutual achievement. Students who struggle with comprehension especially benefit from this collaborative atmosphere since it makes it easier for them to absorb the content with the assistance of their more experienced peers. More astute students in the group voluntarily help and mentor their less astute friends, fostering an inclusive and encouraging learning environment. Overall, student involvement, motivation, and competency improved when the STAD learning model was introduced into reading comprehension classes. The pre-experimental group's high achievers and low achievers profited from peer support, individualized help, and a supportive learning environment made possible by the collaborative nature of the STAD cooperative learning model.

Student Team Achievement Division (STAD) is one of the techniques deemed ideal to help students feel pleased and like learning, according to (Ilma Anami Mufidah, 2013). They will be able to easily improve their reading comprehension when they are taught in a fun way, and as a result, they are expected to master reading comprehension well. The pre-experimental research methodology was used in this investigation. According to the research findings in this study, students' average reading comprehension scores varied between those who received instruction without the student team achievement division (STAD) technique (72.55%) and those who received instruction using the STAD technique (77.6%).

According to the research done by (Astiyandha & Umar, 2021) research utilizes a two-cycle action research methodology. This study aimed to improve students' reading skills using the technique Students Team Achievement Division. The program was attended by 37 eighthgrade students from junior school Strada Santo Fransiskus Xaverius III in North Jakarta. Quantitative data was acquired throughout the implementation using tests, questionnaires, and observation logs. The data was analyzed using descriptive analytic techniques. The results showed that implementing the STAD technique improved students' comprehension. Qualitative information gathered through daily notes, questionnaires, and observation sheets revealed that the participants showed a great deal of enthusiasm for learning to read utilizing the STAD method. Considering the research's findings, teachers are recommended to employ the STAD approach as a substitute to improve students' reading competency.

The corroborating theories, including some pertinent earlier studies. First, (Nur'aeni, 2013) looked at initiatives the reading proficiency of class VIII pupils utilizing the STAD approach. Second, (Wardiah, 2015) conducted research on the efficacy of the STAD learning approach in teaching discourse comprehension. Third, a study by (Al-Munawwarah, 2013) examined how well the STAD-type learning model taught reading comprehension to students in class VIII at junior school I Bandung. (Astiyandha & Umar, 2021) carried out study using the action research approach with the goal of helping grade VIII students from junior school Strada Santo Fransiskus Xaverius III in North Jakarta improve their reading skills by utilizing the Students Team Achievement Division technique. The four studies' findings demonstrate the efficacy of the STAD cooperative learning paradigm for teaching reading comprehension. The aforementioned reasoning, which is supported by pertinent data, prompted researchers to carry out an investigation into the efficacy of utilizing the STAD cooperative learning model to enhance reading comprehension abilities.

While the findings of this study are encouraging, there are limitations to consider. As a pre-experimental study, the absence of a control group limits the ability to attribute

improvements solely to the STAD model. Future research could benefit from a randomized control trial to confirm the causal impact of STAD on reading comprehension. Additionally, long-term studies could explore the sustained effects of STAD on literacy skills, as well as its applicability to other subject areas, such as science and mathematics, where comprehension plays a crucial role. Another area for future research involves exploring variations in group composition and dynamics. Research by (Webb, 2009) suggests that factors such as group size and diversity can influence the effectiveness of cooperative learning. Understanding these nuances could provide educators with insights into optimizing STAD for different classroom contexts. Lastly, given the growing role of technology in education, integrating digital tools with STAD may offer innovative ways to enhance cooperative learning and further engage students in the learning process (Kyndt et al., 2013).

CONCLUSION

Based on the results and discussion of the research in the preceding chapter, the researchers draw the conclusion that the cooperative students team achievement division (STAD) model improves students' reading comprehension among seventh graders.

This study explored the effectiveness of the STAD (Student Teams Achievement Divisions) cooperative learning model in improving reading comprehension among seventhgrade students at Junior School South Halmahera. Using pre-experimental research design, data was collected through pre-tests and post-tests involving 30 students. The results of the analysis showed a significant improvement in reading comprehension, where the mean score of the post-test reached 77.40, an increase from 55.30 in the pre-test. The t-test analysis showed a tvalue of 19.55, which exceeded the critical t-value of 1.699, so the alternative hypothesis was accepted and indicated that the implementation of the STAD model significantly improved students' reading comprehension. This finding highlights the importance of cooperative learning in enhancing students' engagement and motivation in the learning process. The theoretical implication of this study shows that a cooperative learning approach can strengthen concept understanding and improve interaction between students. In terms of praxis, the application of the STAD model is recommended as an effective strategy to improve learning outcomes, especially in the aspect of reading comprehension, which can be integrated into the educational curriculum. Politically, the results of this study can be the basis for educational policymakers to encourage the use of cooperative learning methods in the education system, in order to improve the quality of education and overall student learning outcomes.

In conclusion, this study contributes to the growing evidence that the STAD cooperative learning model is an effective strategy for improving reading comprehension. By promoting active engagement, peer support, and social learning, STAD provides a comprehensive approach to literacy development that aligns with contemporary educational goals. These findings suggest that incorporating STAD into instructional practices can enhance not only academic achievement but also foster important collaborative and interpersonal skills. As the education landscape continues to evolve, cooperative learning models like STAD offer valuable tools for creating inclusive and engaging learning environments that support diverse learners.

DECLARATION OF CONFLICTING INTEREST

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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