The Implementation Of STAD To EFL Learners In Reading Comprehension

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Abstract:
Background: *Nowadays, in teaching and learning English, reading comprehension is considered the most important. Students may increase their knowledge by reading. In order to answer the questions, students must also have reading comprehension abilities. However, students lack of comprehension of the reading subject is caused by an inappropriate strategy adopted by the teacher when attempting to explain the reading material.*
Materials and Methods: *The research design was quantitative with a quasi-experimental design. The population and the sample were students of Islamic Senior High School in Indonesia, especially in the tenth grade. The instrument was test and analyzed using an independent sample t-test.*
Results: *The results showed that the students' mean score in the experimental group before utilizing STAD was 32.8276 and the students' mean score after utilizing STAD was 78.3793. In the control group there is also an improvement mean score from 33.8000 to 53.2800. However, the improvement in the experimental group was higher than the control group.*
Conclusion: *In conclusion, there was a significant effect of the implementation of STAD technique on students' reading comprehension. In the same line, STAD technique can be used as an alternative technique to be applied in reading to the students at senior high school level.*
Key Word: *Implementation; STAD; Reading Comprehension.*

I. Introduction

Learning English as a foreign language in a school context has become a skill that is critically important to students. Reading is one of the ways to get information. It is the process by which people gain information and ideas from books, newspapers, manuals, letters, contracts, advertisements, and a host of other materials[1]. Through reading, readers can expand their knowledge. To find out the information in a text, the reader should have good comprehension. A good reading comprehension will guide the reader to find out the meaning of the context, in both literal and implied meaning. Besides, good comprehension will show the reader's ability. Therefore, good comprehension is necessary for comprehending the meaning that the reader wants to comprehend.

In school, students learn English through textbooks and printed material. When they face the text book and printed materials, they deal with words that they need to understand well. Students must have good reading skills to comprehend every single piece of material that they read. Whenever students do not have enough reading skills to master the material, they will just get stuck there. It will be hard for the students to move on to the next material in their classroom learning process. Thus, reading becomes their need if they want to achieve a better level of English proficiency. In the context of classroom learning, especially in the reading comprehension section, the materials are complex. There are many kinds of texts that students need to comprehend. After they read the texts, they still deal with comprehension, questions, vocabulary questions, references, inferences, etc.

Furthermore, students must have reading comprehension abilities to answer the questions. Reading abilities are used to improve understanding and memory of information included in printed materials[2]. The first essential ability in reading comprehension is reading for the main idea. Students must be able to determine the main concept of a paragraph or what the paragraph informs the reader about in order to demonstrate this competency. The second is reading for other sentences in the paragraph, namely, the details that support the main idea. The detailed sentences are usually more specific than the topic. Reading for specific information is the next reading comprehension ability. Students' tasks in this section seem less complicated than determining the main idea. Students should simply read the relevant parts and ignore the distractor. Guessing meaning from the context is one of the other reading comprehension abilities connected to vocabulary development. It is necessary for students to comprehend new words in order to infer meaning from context. Students should focus more on the context of the text while reading words they are unfamiliar with.

Additionally, students lack of understanding of reading lessons is also caused by an inappropriate strategy when the teacher attempts to explain the reading material. The strategy used by the teacher is unattractive and monotonous. Accordingly, the students felt bored and lazy, and they were busy with themselves because they have no skill in reading text. Based on the pre-survey conducted at Islamic Senior High School in Indonesia, the researcher observed the teacher in the classroom teaching. It is found that even in classrooms where the teaching process is truly teacher-centered, the teacher speaks by outlining the subjects in front of the class. On the other hand, research found the same process as in the case of this present research that the teacher used teacher-centered in teaching[3]. Several activities used in the teacher-centered are individual tasks, which force the students to focus on particular points. This kind of situation could have a negative effect on the students. Because they believe they have no involvement in the classroom, students may have a tendency to get disinterested in the teacher. It also impacts the academic success of students.

In emphasizing this research, the researcher also took the data of students' reading in the tenth grade at Islamic Senior High School in Indonesia as pre-survey data. The result of the pre-survey can be seen in the table below.

Table no 1: Students' Reading Comprehension Result

No	Score	Category	Frequency	Percentage
1.	80-100	Excellent	8	27%
2.	66-79	Good	5	17%
3.	56-65	Fair	7	23%
4.	40-55	Poor	9	30%
5.	30-39	Very Poor	1	3%
Total			30	100%

Based on the table above, there are 17 students falling into fair, poor, and very poor categories. This issue makes the teacher work extra hard at helping the students' reading comprehension. A teacher must make learning in the classroom relevant to the growth of students' abilities. Achieving the objective may depend largely on the way instructors manage and structure the lesson. In addition, learning always sees the relationship between the variables of mutual support, namely the conditions of learning, teaching techniques, and learning outcomes[4]. Learning conditions act as a factor influencing the effect of the technique on improving learning outcomes. Learning conditions interact with the learning technique in different ways to achieve different learning outcomes under different learning conditions.

In this case, one of the techniques that can be used by teacher and students in teaching and learning about reading comprehension is the Student Teams Achievement Division (STAD). STAD is a cooperative learning model in which small groups of students with different levels of ability work together to accomplish learning goals. In addition, cooperative learning can decrease the number of students in the class, and it helps the teacher create effective teaching and learning processes. STAD cooperative learning is a technique that gives the team a compound capable of practice to learn the concepts and skills together with the students[5]. Moreover, STAD emphasizes the use of team goals and team success that can only be achieved if all members of the team learn the objectives being taught. In this case, the team as the most important feature of STAD. At every point, emphasis is placed on teamwork. Members are doing their best for the team, and the team doing its best to help its members[6]. The STAD technique has the steps of learning, namely (1) students follow a pre-test; (2) the student is ranked from top to bottom; (3) students are divided into groups; (4) the teacher presents the material; (5) the students receive a worksheet; (6) the teacher checks groups for the advancement of learning; (7) teachers manage individual quizzes; and (8) the teacher gives a score group based on scores obtained individually[7].

Moreover, researches concerning the use of cooperative learning have been extensively carried out before. Firstly, from Amy T. Peterson in the research entitled Asynchrony and Promotive Interaction in Online Cooperative Learning. It is shown that the results revealed a more complicated picture of asynchrony's effects on cooperative learning. Specifically, asynchrony changes the way that students interact in cooperative learning in that they engage in lower levels of promotive interaction, have lower levels of belonging, and have higher levels of stress. Additionally, asynchrony affects academic and personal support differently and diminishes the well-established correlations between cooperative outcomes over time.[8] Secondly, from Zhang Yingting, Subadrah Madhawa Nair, and Walton Wider in the research entitled Effect of the STAD Method on Chinese College Students' English Communicative Competence. The research findings have conspicuously revealed that students in the group who used the STAD method improved significantly in their overall performance in English communicative competence. Furthermore, it dramatically improved their speaking and listening skills. However, students in the group who employ the conventional teaching method were outperformed by those in the group who use the STAD method since they could not show improvement in their communicative competence. As a

result, it can be drawn that by using the STAD method in colleges, English instruction can help enhance students' communicative competence.[9]

Thirdly, from Ali Akbar Khansir and Tahereh Alipour in the study entitled The Impact of Students Team Achievement Divisions (STAD) on Iranian EFL Learners' Listening Comprehension. The results of this study supported the use of STAD in listening as it allowed the students to comprehend more information, associate it with other ideas, and incorporate new ideas into their prior knowledge. Therefore, when information is cooperated by their peers, learning would be easier. This study indicated that the use of cooperative learning can help to save time and energy for get more information.[10] Lastly, from Subadrah Madhawa Nair and Mogana Sanai in the study entitled Effect of Utilizing the STAD Method (Cooperative Learning Approach) in Enhancing Students' Descriptive Writing Skill. The STAD method utilized in this study significantly enhanced students' performances in descriptive writing. Findings from the interviews with students indicated that both the high and low scorers liked the STAD method utilized by the teacher in the classroom. According to the students, the STAD method creates a fun learning environment in the classroom. The STAD method created a platform for students to work collaboratively in groups and motivate them towards learning, which enhanced their writing skills.[11]

The positive effects of cooperative learning are documented in listening, speaking, and writing skills, but its efficacy in reading skill remains unclear. However, it seems that reading comprehension as a language skill should be considered, especially in Indonesian society. As such, this research investigates the effect of utilizing STAD in EFL among students at Islamic Senior High School. Based on the facts and statements, the researcher is interested in finding out the effect of STAD on EFL students at Islamic Senior High School of Indonesia in terms of reading comprehension. Thought, for more information on this research, the researcher formulated the research question and hypothesis as: Is there any significant difference of reading comprehension between the students who are taught with and those without STAD?

II. Material And Methods

The research method of this study is quantitative, with quasi-experimental design. This design is applied because the researcher comparing two group which are experimental group and control group. In experimental group, the students gave pre-test, treatment, and post-test. In the control group, the students gave pre-test and post-test but did not get a treatment. The researcher conducted quasi-experimental design by using two groups pre-test and post-test[12]. The detail about the design, are described in the table below.

Table no 2: Quasi-experimental Design

Group	Pre-test	Independent Variable	Post-test
Experimental	G1	X	G2
Control	G1	-	G2

Notes:
G1: Pre-test for experimental and control group.
G2: Post-test for experimental and control group.
X: Treatment (STAD)

The population was the two class tenth grade students of Islamic Senior High School in Indonesia. In this research, purposive sampling was used by the researcher. It is believed that the sample could give sufficient information and it was chosen from the population to be a representative. The researcher chose twenty nine students for experimental group and twenty five students for control group.

There are many kinds of instruments as such test[13], that used in the current research. In collecting the data, the researcher used pre-test and post-test. Pre-test was administered before teaching using STAD to experimental group and without using STAD to control group in reading comprehension. Meanwhile post-test was administered after doing a treatment by using STAD to experimental group and without using STAD to control group.

The data from the results of the students' test was analyzed quantitatively. Quantitative data analysis is also called statistical analysis. It means the result of the data in numerical form. The statistical computation was used to analyze the quantitative data of this research. The data collected was processed by comparing the scores between the experimental group and control group to see whether there is a significant difference between students who were given treatment or not. In the current research, independent sample test was used by the researcher.

III. Result

The researcher presented the research data from the tenth grade students at Islamic Senior High School on reading comprehension when they were taught using STAD and without using STAD. The researcher used a quantitative with quasi-experimental design. The researcher used two classes in tenth grade to conduct this research. The data for this research were the pre-test scores and post-test scores of the experimental group and the control group. The researcher showed the data pre-test and post-test of the experimental group below.

Table no 3: Statistical Data of Pre-test Scores in Experimental Group

N	Valid	29
	Missing	2
Mean		32.8276
Std. Error of Mean		1.09305
Median		33.0000
Mode		33.00
Std. Deviation		5.888624
Variance		34.648
Range		23.00
Minimum		20.00
Maximum		43.00
Sum		952.00

Table no 4: Statistical Data of Post-test Scores in Experimental Group

N	Valid	29
	Missing	2
Mean		78.3793
Std. Error of Mean		1.86847
Median		80.0000
Mode		87.00
Std. Deviation		1.00620E1
Variance		101.244
Range		37.00
Minimum		50.00
Maximum		87.00
Sum		2273.00

As shown in the table no 3 and 4, the mean of the pre-test was 32.8276, while the mean of the post-test was 78.3793. The median of pre-test was 33.0000, and the median of post-test was 80.0000. The mode of pre-test was 33.00, and the mode of post-test was 87.00. The standard deviation of pre-test was 5.88624 while the standard deviation of post-test was 1.00620E1. The pre-test range was 23.00, while the post-test range was 37.00. The pre-test minimum score was 20.00, while the post-test minimum score was 50. The pretest highest score was 43.00, and the post-test highest score was 87.00. The pre-test summary was 952.00, while the post-test summary was 2273.00.

Moreover, the researcher organized the percentage and frequency of the pre-test and post-test in experimental group. It is shown in the table below.

Table no 5: Frequency of Pre-test score in Experimental Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	2	6.5	6.9	6.9
	27	3	9.7	10.3	17.2
	30	7	22.6	24.1	41.4
	33	8	25.8	27.6	69.0
	37	4	12.9	13.8	82.8
	40	2	6.5	6.9	89.7
	43	3	9.7	10.3	100.0
	Total	29	93.5	100.0	
Missing	System	2	6.5		
Total		31	100.0		

In the table above, showed that 2 students or 6.5% received 20; 3 students or 9.7% received 27; 7 students or 22.6% received 30; 8 students or 25.8% received 33; 4 students or 12.9% received 37; 2 students or 6.5% received 40; and 3 students or 9.7% received 43.

Table no 6: Frequency of Post-test score in Experimental Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50	1	3.2	3.4	3.4
	53	1	3.2	3.4	6.9
	57	1	3.2	3.4	10.3
	70	2	6.5	6.9	17.2
	73	1	3.2	3.4	20.7
	77	4	12.9	13.8	34.5
	80	7	22.6	24.1	58.6
	83	3	9.7	10.3	69.0
	87	9	29.0	31.0	100.0
	Total	29	93.5	100.0	
Missing	System	2	6.5		
Total		31	100.0		

The students' post-test results improved after they received the treatment. Their results were as follows: 1 student or 3.2% received 50; 1 student or 3.2% received 53; 1 student or 3.2% received 57; 2 students or 6.5% received 70; 1 student or 3.2% received 73; 4 students or 12.9% received 77; 7 students or 22.6% received 80; 3 students or 9.7% received 83; whereas 9 students or 29% received 87.
Next, the researcher showed the data pre-test and post-test of the control group below.

Table no 7: Statistical Data of Pre-test Scores in Control Group

N	Valid	25
	Missing	0
Mean		33.8000
Std. Error of Mean		1.30894
Median		37.0000
Mode		37.00
Std. Deviation		6.54472
Variance		42.833
Range		20.00
Minimum		23.00
Maximum		43.00
Sum		845.00

Table no 8: Statistical Data of Post-test Scores in Control Group

N	Valid	25
	Missing	0
Mean		53.2800
Std. Error of Mean		2.34273
Median		53.0000
Mode		50.00[a]
Std. Deviation		1.17137E1
Variance		137.210
Range		50.00
Minimum		30.00
Maximum		80.00
Sum		1332.00

As shown in the table above, the mean of the pre-test was 33.8000 and the mean of the post-test was 53.2800. The pre-test median was 37.0000, and the post-test median was 53.0000. The pre-test mode was 37.00, and the post-test mode was 50.00[a]. The pre-test standard deviation was 6.54472, while the post-test standard deviation was 1.17137E1. The pre-test range was 20.00, while the post-test range was 50.00. The pre-test minimum score was 23.00, while the post-test minimum score was 30.00. The maximum score in the pre-test was 43.00, and the maximum score in the post-test was 80.00. The pre-test summary was 845.00, while the post-test summary was 1332.00.
Furthermore, the percentage and frequency of the pre-test and post-test were organized by the researcher. It can be seen in the table below.

Table no 9: Frequency of Pre-test score in Control Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	23	2	8.0	8.0	8.0
	27	6	24.0	24.0	32.0
	30	2	8.0	8.0	40.0
	33	2	8.0	8.0	48.0
	37	7	28.0	28.0	76.0
	40	2	8.0	8.0	84.0
	43	4	16.0	16.0	100.0
	Total	25	100.0	100.0	

In the table above, showed that 2 students or 8.0% received 23; 6 students or 24.0% received 27; 2 students or 8.0% received 30; 2 students or 8.0% received 33; 7 students or 28.0% received 37; 2 students or 8.0% received 40; and 4 students or 16.0% received 43.

Table no 10: Frequency of Post-test score in Control Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	30	1	4.0	4.0	4.0
	37	2	8.0	8.0	12.0
	43	2	8.0	8.0	20.0
	47	3	12.0	12.0	32.0
	50	4	16.0	16.0	48.0
	53	3	12.0	12.0	60.0
	57	4	16.0	16.0	76.0
	60	1	4.0	4.0	80.0
	63	1	4.0	4.0	84.0
	67	2	8.0	8.0	92.0
	77	1	4.0	4.0	96.0
	80	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

The students' post-test results improved after they received the treatment. Their results were as follows: 1 student or 4.0% received 30; 2 students or 8.0% received 37; 2 students or 8.0% received 43; 3 students or 12.0% received 47; 4 students or 16.0% received 50; 3 students or 12.0% received 53; 4 students or 16.0% received 57; 1 student or 4.0% received 60; 1 student or 4.0% received 63; 2 students or 8.0% received 67; 1 student or 4.0% received 77; whereas 1 student or 4.0% received 80.

Therefore, when the pre-test and post-test of the experimental and control group students were compared, it was found that the students of the experimental group increased their mean scores from 32.8276 to 78.3793, whereas the students of the control group increased their mean scores from 33.8000 to 53.2800. This result shows that there was an improvement in the performance of the experimental group over the control group in the post-test. Thus, it can be said that the current research, "The STAD had impact on students' reading comprehension". It is proven in the table below.

Table no 11: Group Statistics

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental group	29	78.3793	10.06200	1.86847
Control group	25	53.2800	11.71367	2.34273

The results of independent sample test of the current research showed in the table below.

Table no 12: Results of Independent Sample T-test

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper

	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.685	.412	8.472	52	.000	25.09931	2.96265	19.15431	31.04431
Equal variances not assumed			8.376	47.700	.000	25.09931	25.0993	19.07328	31.12534

The table no 12 shown that F = 0.685 (p = 0.412), which is higher than 0.05, indicating that there is no difference in variance data between the experimental and control groups. The data can be considered to be homogeneous. The homogeneity analysis revealed that both groups had the same variances; hence, the data from Equal Variances Assumed was utilized to interpret the t-test result. Meanwhile, the p-value (Sig. 2 tailed) was compared to the conventional level of significance of 0.05 to see if the null hypothesis could be rejected. As shown in the table above, the p-value was less than 0.05 (0.000 < 0.05). It implies that the null hypothesis can be rejected. It may be inferred that the use of the STAD had a significant effect on tenth grade students reading comprehension.

IV. Discussion

The results show that STAD has a significant effect on students' reading comprehension. The findings are consistent with previous researches such as Peterson (2023), Yingting, Nair, & Wider (2022), Khansir & Alipour (2015), Nair & Sanai (2018). However, this research provided empirical evidence for Indonesian students as EFL learners to investigate the potential role of STAD in enhancing students' ability for reading comprehension. The findings of the research provided empirical support for the effectiveness of the STAD in enhancing Indonesian students reading comprehension as EFL learners. Additionally, Ugwu (2019) support that STAD is one of the simplest cooperative learning strategies which can be effectively used by teachers who are new to cooperative learning.

The results of this research supported the use of STAD on reading comprehension as it allowed the students to comprehend more information, associate it with other ideas, and incorporate new ideas into their prior knowledge. Therefore, when information is cooperated by their peer, learning would be easier. The results of the current research supported the theoretical and pedagogical value of STAD in reading comprehension class. From a theoretical point of view, this research presented STAD as techniques for foreign language reading instruction that are in line with second language learning theories that highlight the role of cooperation in language learning. From a pedagogical viewpoint, it is plausible to recommend language teachers consider different learning conditions because they definitely have significance for teaching purposes, as the findings suggest. Teachers can implement these important points in the process of teaching reading comprehension and help the students make significant improvements.

V. Conclusion

In conclusion, this research was an attempt to investigate the effect of STAD on tenth grade students at Islamic Senior High School in Indonesia in terms of reading comprehension. Thus, the research results show that the implementation of STAD on EFL learners has an effect. It means that STAD is effective in enhancing students' reading comprehension, especially for those who take the English subject.

Hopefully, if the future researcher wants to conduct the next research that is still related to the effectiveness of STAD and students' reading comprehension, it can be better, clearer, and more detail. It means that the future researcher should not focus on one area and the scope of the subject as a sample can be larger than this research because in this research, the researcher limits the number of students as a sample.

References

[1]. Blachowicz, C., & Ogle, D. (2017). Reading Comprehension: Strategies For Independent Learners. Guilford Publications.
[2]. Grabe, W., & Stoller, F. L. (2019). Teaching And Researching Reading. Routledge.
[3]. Andik, A. (2013). Improving Reading Comprehension By Using Think Pair Share Technitue. JP3, 1(12), 28-33.
[4]. Degeng, I. N. S. (2013). Learning Sciences Classification Variables For Development Theory And Research. Bandung: Publisher Kalam Hidup.
[5]. Slavin, E. R. (1995). Cooperative Learning: Teory, Research And Practice. Massachusetts: Allyn & Bacon.
[6]. Ugwu, E. O. (2019). Effect Of Student Teams Achievement Division And Think-Pair-Share On Students' Achievement In Reading Comprehension. African Journal Of Teacher Education, 8, 218-237.
[7]. Jacobsen, D. A., Eggen, P. D., & Kauchak, D. P. (2009). Methods For Teaching: Promoting Student Learning In K-12 Classrooms. Prentice Hall.
[8]. Peterson, A. T. (2023). Asynchrony And Promotive Interaction In Online Cooperative Learning, International Journal Of Educational Research Open 100300(5), 1-16.