

**DEVELOPING STUDENT-TEAM ACHIEVEMENT DIVISION (STAD)
TECHNIQUE TO ENCOURAGE STUDENT READING COMPREHENSION
ACHIEVEMENT BASED ON EXTROVERT AND INTROVERT
PERSONALITY**

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Abstrak: Penelitian ini bertujuan untuk mengetahui perbedaan hasil belajar siswa dalam membaca bahasa Inggris bagi siswa ekstrovert dan introvert setelah diajarkan dengan menggunakan metode STAD. Penelitian ini menggunakan metode campuran kuantitatif dan kualitatif dalam menganalisa data penelitian. Instrumen penelitian menggunakan tes, koesioner, dan lembar observasi. Hasil penelitian menunjukkan bahwa hasil rata-rata siswa dalam posttest di kelas eksperimen (72,57) lebih tinggi dari pada kelas kontrol (60,41). Hasil ini menyimpulkan bahwa teknik STAD secara efektif dapat meningkatkan hasil belajar membaca bahasa Inggris. Selain itu, STAD juga terbukti dapat meningkatkan keaktifan siswa di dalam kelas yakni dengan mengikutsertakan seluruh siswa dalam kegiatan dan tugas kelompok. Teknik ini juga cukup efektif dalam meningkatkan kemampuan siswa dalam menentukan ide utama dalam bacaan sehingga para siswa akan dapat meningkatkan kemampuan berfikir kritis dalam kegiatan diskusi di kelas.

Kata kunci : student-team achievement division (STAD), keterampilan membaca, ekstrovert dan introvert

Abstract: The objective of this research is to investigate the difference of reading comprehension achievement between students who are categorized extrovert and introvert before and after being taught through STAD technique. This research used the mixed methods of quantitative and qualitative method in collecting and analyzing the data. The research instruments were test, questionnaire, and observation. The result showed that the students' mean score of post test in experimental class (72.57) was higher than that in the pre test (60. 41) with the t-test revealed that the result was significant ($p=000$). It means that STAD technique is effective to increase the students' reading comprehension achievement. Moreover, STAD technique can be used to improve the students' activities in reading since it is an interesting technique that can involve the students to work in groups. This technique is also more effective to help students determine the main idea of the text since they could build their critical thinking during the discussion process.

Keywords: student-team achievement division (STAD), reading achievement, exstrovert dan introvert

INTRODUCTION

Reading is crucial language skill since it enables students to read textbook or other references written in English, since the students' success and failure in school depends on the ability to read (Brown, 2001: 185). In this case, reading should provide readers with meaningful messages. Therefore, the students are expected to increase their knowledge which is mostly written in textbook (Depdiknas, 2006).

One of the factors which have much influence in language learning is psychological factor which relates to the students' personality within a person that contributes in some way to one's success in language learning. There are three general categories of personality factors; egocentric factors, transactional factors, and motivational factors (Suparman, 2010:64). Furthermore, Transactional factor is influenced by some variables which come up on language learning, such as imitation, modelling, identification, extraversion, aggression, and styles of communication.

As one of personality classification, Brown (2007) says that extrovert is type of people whose attention is directed outside himself. Whereas introvert type belongs to people whose attention are focused on themselves that is toward his ego. Extrovert type has the ability to socialize better than the introvert type due to the ability to build a communication.

In relation to both variables, English classroom practice may consist of students who belong to both personalities. According to Wood

(1987), one of learning strategies which enables students to display more positive attitudes and helps them to increase motivation to learn is cooperative learning. One of the cooperative learning techniques supposed to be useful in teaching reading is STAD.

Newman and Thompson (1987) pointed out that STAD is one of the most successful cooperative learning techniques to increase students' academic achievement. Slavin (1995) also added STAD is a cooperative learning method for mixed-ability groupings involving team recognition and group responsibility for individual learning. Students are assigned to four or five member learning teams that are mixed in performance level, gender, and ethnicity. The teacher presents a lesson, and then students work within their teams to make sure that all team members have mastered the lesson. Finally, all students take individual quizzes on the material, at which time they may not help one another.

Based on the assumption above, it is believed that STAD can facilitate the students who belong to introvert and those who belong to extrovert. It can also motivate students in reading activities because it can be an interesting activity in which the students work within their teams. It is assumed that if the students have been already motivated in reading activity, they may like reading and may enjoy the activity. Therefore, if they enjoy reading activity, it may be easy for them to comprehend the text. At last, in relation to the aforementioned issue, the writer will attempt to find out

whether there is any significant difference of students' reading comprehension achievement between introvert and extrovert students before and after being taught through STAD. This research may uncover the design of learning model that fits to both categories of student through STAD technique.

METHODS

This research is carried out based upon mixed method. The first research question about whether there is any significant difference of reading comprehension achievement between extrovert and introvert students after they are taught through STAD has been analyzed using *control group pretest-posttest* design with two experimental classes are employed. while the second research question related to the process of teaching reading through STAD in both group of students has been analyzed using descriptive qualitative approach.

The population of this research was students in the first semester of the second grade, academic year 2015-2016, at SMA Mulia Plus, Tanjung Sari, South Lampung which consists of 30 students each class. The data were collected through test, questionnaire, and observation. The validity of the test was done by the construct validity in making the test and comparing the result of the test with the table of specification. The reability of the test

was analyzed by Cronbach Alpha formula. In order to analyse the mean score of students' reading comprehension achievement, t-test is mainly used. The research hypotheses are as follows:

H_0 : There is no significant difference of reading comprehension achievement between extroverted students and introverted students

H_1 : There is a significant difference of reading comprehension achievement between extroverted and introverted students

RESULTS

The pre-test and post-test then were administrated to analyze how significant the improvement of their reading comprehension was in learning English through STAD technique.

Result of Pre-Test and Post-Test

There were 20 items of objective reading test in 45 minutes with four option alternative answers for each. The total score of the pre test was 2235. The mean score of pre test was 60.41; the highest score was 80; the lowest score was 30; the median is 60.00, and the mode is 50. The distribution of the students' score of pre test in experimental class can be seen in Table 1.

Table. 1 Distribution of Students Score of Pre Test

N	Valid Missing	37 0
Mean		60.41
Median		60.00
Mode		50 ^a
Std. Deviation		11.630
Variance		135.248
Range		50
Minimum		30
Maximum		80
Sum		2235

Table 1 shows that 24 students (64.8%) in experimental class got score lower than the minimal mastery criterion (KKM) of SMA Mulia plus Tanjung Sari which requires the students getting score 68 and 13 students (35.2%) score ≥ 68 . It indicated that students' reading comprehension achievement was poor.

The total score of post test was 2685. The mean score of the post test was 72.57; the highest score was 95; the lowest score was 50; the median was 75, and the mode was 85. The distribution of students' score of post test in experimental class can be seen in Table 2.

Table 2. Distribution of Students Score of Post Test

Statistics		
N	Valid	37
	Missing	0
Mean		72.57
Median		75.00
Mode		85
Std. Deviation		12.836
Variance		164.752
Range		45
Minimum		50
Maximum		95
Sum		2685

Table 2 shows that in the post test, there were 24 students (64.8%) got score ≥ 68 and 13 students (35%) got score ≤ 68 . It means that students' reading comprehension achievement increased after being taught through STAD technique. Based on the result of post test, it can be concluded that there is a difference of students' reading comprehension achievement

before and after being taught through STAD technique and the students' achievement increased significantly. In other words, STAD technique gave positive effect in increasing students' reading comprehension achievement.

Based on the elements of reading comprehension, there were four elements which were measured in this

research, such as determining the main idea, supporting detail, inference, and feature of the text. Overall, the

students' result of elements of reading comprehension can be seen on the table below:

Table 3. Result of Elements of Reading Comprehension

No.	Elements of Reading Comprehension		Pre-test (%)	Post-test (%)	The Increase (%)
1.	Comprehension	Determining the main idea	78(42.16%)	116(72.70%)	38(30.54%)
2.		The supporting detail	192(60.86%)	211(71.28%)	19(10.42%)
3.		Inferences	109(73.65%)	125(84.46%)	16(10.81%)
4.		Feature of text	68(61.26%)	85(76.58%)	17(15.30%)

Based on Table 3 above, it can be stated that teaching reading using STAD technique increased the students' reading comprehension achievement in all elements of reading comprehension, such as determining the main idea (30.54% increased), the supporting detail (10.42% increased), inferences (10.81% increased), and feature of the text (15.30% increased). Moreover, STAD technique mostly increased the students' reading comprehension in determining the main idea, in which their ability in that element was 30.54% increased. By STAD technique, it could be easier for the students to find the main idea of the text because during the group discussion process, they could build

their ability in finding the main idea. Thus, their reading comprehension of elements of reading was increase, especially in determining the main idea which increased significantly.

According to the result of pre test and post test in class XI A, it can be stated that there was a difference of students' reading comprehension achievement before and after being taught through STAD technique. In other words, STAD could significantly increase students' reading comprehension achievement. This can be seen from the total score of the pre test to the post test, from 2235 up to 2685. The mean score was 60.41 increased to 72.57, and the gain is 12.16.

Graph 1. Increase of Pre Test and Post Test Score

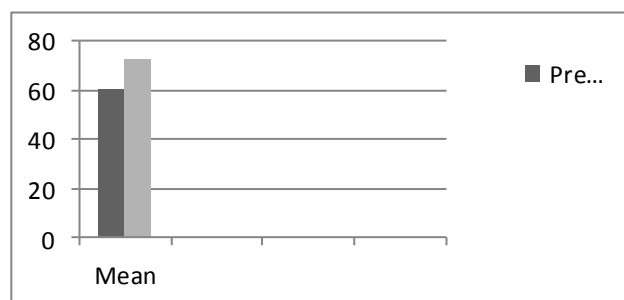


Table 4. Increase of Pre Test and Post Test Score

	The Score of Pre Test	The Score of Post Test	The Increase
Mean (m)	60.41	72.57	12.16

The computation of the score of pre test and post test shows that there is a difference of students' reading comprehension achievement before and after being taught through STAD technique. The increase of students' achievement in experimental class is significant. It can be concluded that STAD is an effective technique in increasing students' reading comprehension achievement.

Result of Questionnaire and Observation

The questionnaire item was distributed to the students to classify the sample into groups based on their types of personality. The questionnaire was distributed in the first meeting in each of sample class. It consisted of 28 items and was administered in 10 minutes. Based on the result of the questionnaire, the writer analyzed the score then grouped the sample. Out of

27 students who followed the test, 17 students are classified into extrovert group and 10 students into introvert.

The observation was conducted in class XI A to observe the students' activities in teaching learning process during the treatment of teaching reading comprehension through STAD technique. As has been mentioned in Chapter III, the indicator of the students' activities is, if at least 75% of students did activities that was given during the teaching learning process, it means that the implementation of a technique can be categorized in the good level.

Based on the data from observation, there was an increase of students' activities in the teaching learning process from the first till the third meeting. The increase of students' activities during three meetings can be presented in the following graph:

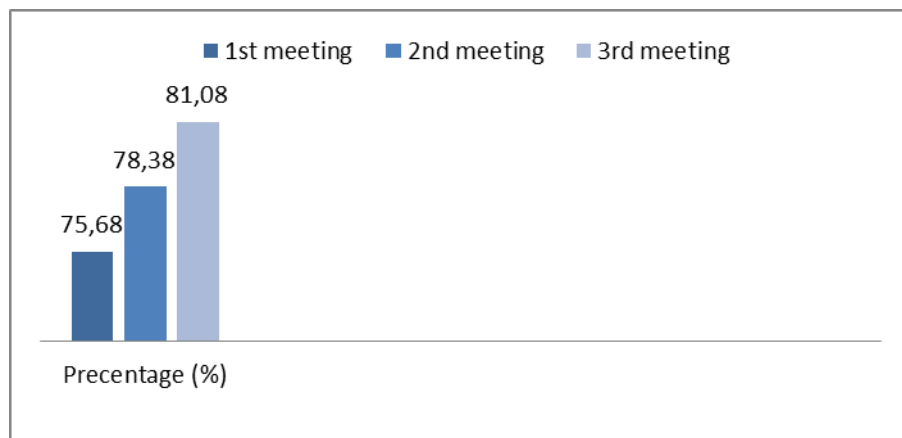
Graph 2 Increase of The Students' Activities in Teaching Learning Process Observed by Observer 1

Graph 2 shows that in the first meeting, there were only 24 of 37 students (64.86%) who were able to conduct more than 75% activities targeted in the class. It means that the teaching learning process could not fulfill the indicator of good level because the number of active students is still less than 75% from the total students in the class. During the observation of the second meeting, there were 28 students (75.68%) who

reached more than 75% activities targeted in teaching learning process. The increase was also found in the third meeting, there were 30 students (81.08%) who did more than 75% activities targeted.

Meanwhile, observation was also done by the observer II that there was also increase of students' activities during three meetings. The increase can be presented as follows:

Graph 3. Increase of Students' Activities in Teaching Learning Process Observed by Observer 2



Graph 3 indicates that there was an increase in the students' activities from the first until the third meeting. In the first meeting, there were 28 of 37 students (75.68%) who could fulfill the activities targeted in teaching learning process more than 75%. Then, the observation in the second meeting also shows a positive effect of STAD technique in the teaching learning process. There were 29 active students (78.39%) who did more than 75% students' activities targeted. Moreover, the good level of teaching learning process can also be seen in the third meeting that there were 30 students

(81.08%) who were active in doing activities targeted more than 75%.

From the data of observer I and II above, it can be concluded that the indicator of good level in teaching learning process had been achieved at almost in the whole meetings. The observation of students' activities in the class got a lower percentage ($< 75\%$) only in the first meeting observed by Observer I. if more than 75% students are actively involved in teaching learning activities, it can be categorized as a good level. In conclusion, it can be stated that the implementation of STAD technique is

applicable to improve the students' activities in teaching learning process especially in reading comprehension.

Hypothesis Testing

The hypothesis of this research is that there is difference in students' reading comprehension achievement before and after being taught through STAD technique. In testing the hypothesis,

Repeated Measures t-test was used to analyze the data whether it was significant or not, in which the significance was determined by $p < 0.05$. This means that the probability of error in the hypothesis was only 5%. The result of *t-test* is shown in the following table:

Table 5. Analysis of the Hypothesis
Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	60.41	37	11.630	1.912
	Posttest	72.57	37	12.836	2.110

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest & Posttest	37	.821	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-12.162	7.411	1.218	-14.633	-9.691	-9.983	36	.000

From the mean score of pretest and posttest in the experimental class, we can see that there is a difference of students' reading comprehension achievement before and after being taught through STAD technique. Meanwhile, the result of the computation shows that t-value is -9.983 and the two tail significance show that $p < 0.05$ ($p = .000$). Referring to the criteria, that is, H_1 is accepted if $t_{critical} > t_{tabel}$ and $p < 0.05$. Meaning that H_1 was accepted and H_0 was rejected.

Besides that, according to the observation result of students'

activities in teaching learning process, it can be seen that there was improvement of students' activities when they were taught through STAD technique. It is assumed that, if the students' activities in the class have been improved, the students' achievement can also be increased. It can be concluded that STAD technique can be used to increase students' reading comprehension achievement.

DISCUSSION

This research reveals that the difference of students' reading

comprehension achievement between pretest and posttest of STAD has positive effect toward the students score. It might be the case because during group working, the students got their motivation and enjoyed the learning process. They also felt more comfortable to share their difficulties with the other students in the group. So, the higher achievers in the group could help the lower achievers to master the material. It supported Slavin (2000) who states that in class setting, students much more get learning from another friend than the teacher.

Meanwhile, from the observations of students' activities that were conducted by two observers during the three meetings, we could see that the students' activity in teaching learning process was in a good level. The data observation showed that students' activities in STAD could fulfil the criteria of good level in which the number of active students was more than 75% from the total students in the class. In addition, from the observation during teaching learning process, it was found that the female students were more active than male students. Most of female students dominated in almost all activities in the class, especially during the group discussion process. They were looked easier in expressing their critical thinking and also did the task enthusiastically.

The activities from all the three meetings above showed that the students were less dependent upon the teacher as they learned from other students. It gave a chance to each student in groups to be more

responsible for their own learning. Those activities in teaching learning process reinforced Slavin (2008) study that several benefits of STAD for students are: (1) creating conditions leading to positive achievement outcomes by directly teaching students structures methods of working with each other or teaching strategies closely related to the instructional objective (especially for teaching reading comprehension skills); (2) increasing self-esteem and improve ethnic relation; (3) and leading to higher achievement, especially for low achiever.

After conducting treatments and observation, it can be seen that STAD technique has the following uniqueness: First, STAD technique has heterogeneous grouping principle that the group should consist of different ability and gender. In the group, there must be higher and lower achiever, so it can creates an academic traffic. Second, in STAD, students mostly dominate the activities during teaching learning process. Students feel more comfortable to share their difficulties or express their critical thinking since they work with their friends. And third, there are individual and group scoring system in which group scoring can improve the individual score. So, this scoring system can motivate students to work harder in their groups in order to achieve a higher score.

Based on the results of this research, some problems are found related to the students' learning activities and teaching learning process in STAD technique as follows: (1) During group working, the students were easy to

chat turned the atmosphere into noisy. It made other students felt disturbed and difficult to concentrate. (2) Applying STAD technique in the class might be time consuming when the process could not run well. The teacher should be able to give some rules and controlled the teaching learning process well.

The finding of this research also confirmed the previous study (Slavin, 1995; Newman and Thompson, 1987) that STAD technique can be used to increase students' reading comprehension achievement significantly. This technique is very effective because can be applied to deal with a heterogeneous student ability, in which students are given the opportunity to collaborate with peers in the form of group discussions to solve a problem each group member.

CONCLUSION

Considering all the data gathered after finishing the research which was conducted in Thai Students, some conclusions were taken. There was a difference of students' reading comprehension achievement before and after being taught through STAD technique. Thus, STAD technique is effective to increase the students' reading comprehension achievement. STAD technique can be used to improve the students' activities in reading since it is an interesting technique that can involve the students to work in groups. Meanwhile, this technique is more effective to help students determine the main idea of the text. It happened since they could build their critical thinking during the discussion process.

Based on the result of the research and the conclusion stated previously, the researcher would like to propose some suggestions. The teachers are supposed to make classroom atmosphere more comfortable and enjoyable to encourage students to participate in the class. The teacher should also give attention to the reading material, especially in learning supporting detail of the text. The future researchers who will replicate the similar research should consider the time allocation for the treatments. Because of the limitation of time, the target material may not be explained fully when the class is in crowded.

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