

---

## The Effectiveness of Snowball throwing technique in teaching Grammar at Eighth Grade Students in SMP N 1 Gandrungmangu

Riza Afifah, Khairunnisa Dwinalida

*UIN Prof. K.H. Saifuddin Zuhri Purwokerto, UIN Prof. K.H. Saifuddin Zuhri Purwokerto*  
rizaseducation@gmail.com, khdwinalidadonal@gmail.com

### Abstract

According to curriculum 2013 at eighth grade junior high school level, English learners are able to speak English and use grammar in the conversation. However, there were some students' difficulties in mastering grammar at eighth grade students of SMP N 1 Gandrungmangu because of monotonous activity and limited time to study. Snowball throwing technique was proposed as a strategy to teach grammar. The goal of this study is to find out whether or not there is a significant effect of snowball throwing technique in teaching grammar at eighth grade students in SMPN 1 Gandrungmangu. This study used quasi-experiment and quantitative approach. The population of this study was the eighth grade students in SMPN 1 Gandrungmangu in academic year 2021/2022 which consists of 255 students. The sample was selected by purposive sampling with VIII G as experiment class and VIII H as control class. IBM SPSS V25 for windows was used to help analyze the data in this research. This study used pre-test and post-test with multiple choice to collect data. The result of independent sample t-test showed that there was improvement in learning achievement of the students who were taught using snowball throwing technique and it can be assumed that snowball throwing technique was used in teaching grammar is effective.

**Keywords:** Snowball Throwing Technique, Teaching Grammar.

### INTRODUCTION

According to curriculum 2013 at eighth grade junior high school level, English learners are able to speak English and use grammar in the conversation, although

ugh there are still errors in the vocabulary (Kemdikbud, 2014). However, based on the preliminary research in SMPN 1 Gandrungmangu on January 14<sup>th</sup>, 2022 there were some students' difficulties in mastering grammar at eighth-grade students of SMP N 1 Gandrungmangu because of various factors. The result of interviewing the eighth grade English teacher in SMP N 1 Gandrungmangu on March 23<sup>rd</sup>, 2022 said that the students have low ability in mastering grammar because when the students were given the questions related to the grammar material, they are not

able to answer properly. Indeed, one of the causes is they have limited time in offline class. Because it is still a pandemic, the time for learning English in the class which should be 2x45 minutes is now 2x35 minutes. Consequently, the strategy of teaching-learning was monotonous and the students felt boring in the class.

Some experts have proposed several strategies to attract students' interest in learning grammar, one of them is snowball throwing technique (Suprijono, 2013). In fact, this technique has been implemented in English learning but there were the English teachers in SMP N 1 Gandrungmangu did not know this technique. In accordance with the answers of English teachers' of SMP N 1 Gandrungmangu when asked about this technique, they did not recognize snowball throwing technique and have not implemented in the class. It is important for the teacher to provide interesting strategies and activities in the class to motivate the students in learning English (Sartika, 2014). Even though, Snowball throwing is one of models learning innovative in 2013 curriculum which is very pleasant in making free concepts in teaching grammar (Afiska, 2014). Ani argued that the snowball throwing technique is used to train the students to be more responsive to receive messages from other students in the form of snowballs made of paper and to convey messages to friends in their group (Rosidah, 2017). This method focuses on discussion and interaction between students in the class and they could share different situations for the same material. Moreover, Diyah and Yuli in 2020 stated in their research previously that there are several benefits of using snowball throwing; improving the students' comprehension in learning grammar, creating an enjoyable and lively classroom atmosphere, developing students' abilities, and increasing the students' participation in the class (Andriani et al, 2020).

There are several studies that have examined about snowball throwing technique in several skills. As stated by Ani Rosidah in 2017 with the title "Penerapan Model Pembelajaran Kooperatif Snowball Throwing untuk Meningkatkan Hasil Belajar Siswa pada Pembelajaran IPS". The goal of the research was to improve the learning outcomes of students in Social subject with the material about The History of Hindu-Budha and Islam era. The using of snowball throwing technique was effective and it was proved by the fifteen students that have got the scores more than minimum in Cycle I. Indeed, in Cycle II there were 18 students that have succeeded with average score 78.09 (Rosidah, 2017).

Then, the other research conducted by Yanuarti, Indra, and Gian in 2019 investigated students' perception of snowball throwing in teaching grammar. The research used qualitative descriptive

research method and the participants of the research were second grade of SMPN 2 Padalarang. The data were obtained from questionnaire and interview. The result shows that the implementation of snowball throwing technique in teaching grammar can help students learn English grammar. They showed some improvement on their participation of learning activities, their creativity, and their cooperative skill when learning with this technique (Apsari et al, 2019).

Based on review above, several studies have succeeded in implementing snowball throwing technique in several skills. However, so far it is not found any study report the effectiveness of the snowball throwing technique in teaching grammar at eighth grade students in SMP N 1 Gandrungmangu. To know the effectiveness of the snowball throwing technique in teaching grammar, it needs experiment research. Therefore, this research will examine the effectiveness of snowball throwing technique in teaching grammar at eighth grade students, entitled: “The Effectiveness of Snowball Throwing Technique in Teaching Grammar for Eighth Grade Students in SMP N 1 Gandrungmangu.”

## **REVIEW OF LITERATURE**

Referring to the several sources related to this research, there are some journals and previous research that correlates with this topic of the research. They were:

First, Yanuarti Apsari has conducted research entitled “Snowball Throwing in Teaching Grammar” in 2018. The aim of this study is to describe the implementation of snowball throwing in teaching grammar and investigate the benefits of applying snowball throwing (Apsari, 2018). The result of the research, there are seven stages in implementing snowball throwing in teaching grammar, there are; preparing teaching material, forming group, re-explaining the material to the member of the group, formulating question, tossing the ball, answering questions and evaluating teaching and learning process. The similarity with this research is the focus on snowball throwing technique in teaching grammar. Meanwhile, the difference is on the method. The research by Yanuarti used descriptive-qualitative, while this research using quasi-experiment design.

The second study was stated by Siti Aisyah in 2012 also as a previous research, entitled “The Effect of Snowball Throwing Type (ST) Strategy to Improve Students Reading Ability in Narrative Text at The Second Year Students of Islamic Boarding Junior High School Darussakinah XII Koto Kempar Regency.” After analyzing the data, there is significant effect of using Snowball Throwing Type strategy to improve students’ reading ability in narrative text at the second year students’ at

Islamic Boarding Junior High School Darussakinah XIII Koto Kampar Regency with the result of t-count was  $4.20 < 4.20$  (Aisyah, 2012). It can be assumed that  $H_a$  is accepted and  $H_0$  is rejected. The similarity with this research is used quasi-experimental research design and the object of the research is second grade of Junior High School. The difference is on the focus that this research using STT in teaching grammar, while Aisyah's research using STT to improve students reading ability in narrative text.

Then the other research was conducted by Yuli and Diyah in 2020 entitled "Teaching Grammar Through Snowball Throwing in EFL Classroom". The aims of this study are to describe the implementation of snowball throwing technique in teaching grammar, the student's response towards the implementation of the snowball throwing technique, and the benefits of applying the technique. According to the result of the research there were some benefits in teaching grammar using snowball throwing technique, such as improving students' comprehension in learning grammar, creating enjoyable learning atmosphere, developing students' cooperation skill, and increasing students' participation in the class ( Yuli, etc. 2020). The similarity of this research was using qualitative descriptive research method while this research is using quantitative research and the object is second grade of junior high school. Besides that, the differences were the place of the research which Yuniarti, etc did the research in SMPN 2 Padalarang, whereas this research in SMP N 1 Gandrungmangu.

The fourth is a thesis that has been done by Fitri Nur Laily in 2018 entitled "Developing Students' Speaking Ability by Snowball Throwing Technique at English Language Education Department of Brawijaya University." This research aims to develop students' speaking ability through snowball throwing technique at English Language Education Department ( Fitri, 2018). Based on the data of post-test showed that the average score of the experimental group was higher (78.1383) than the control group (59.9920), it can be seen that the result of post-test was significant. The research by Fitri has similarities with this research; both use quantitative research and using snowball technique. The difference is located on focus, that the research by Fitri focuses on speaking ability, while this research focus on teaching grammar.

The fifth is a research that has been conducted by Afiska in her research entitled the snowball throwing method towards students' speaking ability that conducted in 2018, she used a quasi-experimental research design and the population of the research was the ninth grade of SMP Yasmida Ambarawa consisting of two classes. The conclusion of Afiska's research is there is a

significant influence in using the snowball throwing method towards students' speaking ability at the first semester of the ninth grade SMP Yasmida Ambarawa in the academic year of 2018/2019 (Afiska, 2018).

## **METHOD**

### **Type of Research**

The type of research used in this study was quasi-experiment research applied to eighth grade students in SMP N 1 Gandrungmangu using a control class and experimental class. The control class was without any treatment, while experimental class was treated with snowball throwing technique. The quasi-experiment research was conducted using a quantitative approach to analyze the effectiveness of snowball throwing technique in teaching grammar at eighth grade students in SMP N 1 Gandrungmangu.

### **Time and Location of the Research**

This research was conducted at SMP N 1 Gandrungmangu, located in Kebanaraan Street, Gandrungmangu. The research was held on April 27<sup>th</sup> until June 4<sup>th</sup> 2022, in the academic year 2021/2022.

### **Population and Sample of the Research**

The population of the research was the eighth grade students of SMP N 1 Gandrungmangu in the academic year 2021/2022 which consists of 255 students from VIII A until VIII H. In this study, the sample was chosen by purposive sampling with the classes that have average scores that are relative the same. The reason to choose this method because this research was conducted in the school so that it was considered much easier to gain the data. The first group as the experimental class consisted 32 students in VIII G, and the other one as control class which consisted of 32 students in VIII H.

**Table. 1 Sample of the Research**

| <b>No.</b>   | <b>Class</b> | <b>Sample</b> | <b>Description</b> |
|--------------|--------------|---------------|--------------------|
| 1            | VIII G       | 32            | Experiment Class   |
| 2            | VIII H       | 32            | Control Class      |
| <b>Total</b> |              | 64            |                    |

## Variable of the Research

There are two variables that were used in this study: independent and dependent variables. The independent variable (X) in this research is snowball throwing technique, while the dependent variable (Y) is the effectiveness.

## Techniques of Data Collection

To answer the research question, the instruments employed to collect the data in this research used pilot test, pre-test and post-test. Based on those instruments, the collected data were analyzed the effectiveness of snowball throwing technique.

The pilot-test was conducted in VIII B that was different from the experimental class and control class to examine the validity, reliability, and the difficulty of the items. This activity was held on Tuesday, 27 April 2022.

The pre-test in the form of a multiple-choice test that consists of 20 questions which adopt from middle-term examination and national examination, and the time allocation was 25 minutes. Pre-test activity was held on 27 April 2022 in the control class (VIII-H) at 07.15 a.m until 07.40 a.m. Then the experimental class (VIII -H) did the pre-test on 27 April 2022 start from 07.50 a.m until 08.15 a.m.

After conducting the pre-test, the experimental group were given the treatments in 10 meetings and they studied about these materials in every meeting:

| Meeting    | Material             |
|------------|----------------------|
| Meeting 1  | Verb                 |
| Meeting 2  | Verb                 |
| Meeting 3  | Adjective            |
| Meeting 4  | Adjective            |
| Meeting 5  | Preposition          |
| Meeting 6  | Preposition          |
| Meeting 7  | Possessive Pronoun   |
| Meeting 8  | Possessive Pronoun   |
| Meeting 9  | Simple Present Tense |
| Meeting 10 | Simple Present Tense |

The post-test was given to both experimental and control groups after the treatments. Time allocation was 25 minutes with the same worksheet as in pre-test. Post-test activity was held on 04 June 2022 in the control class (VIII-H) at and the experimental class (VIII -G) at 07.30 a.m. until 07.55 a.m.

## Techniques of Data Analysis

Data pre-test and post-test are used to analyze the effectiveness of snowball throwing technique in teaching grammar.

This research also helped by IBM SPSS V 25 for windows to help with the data analysis technique. The data analysis technique that are used in this study are:

### 1. Normality Test

The normality test is used to see whether the distribution of the instrument's response is oral or not ( Sugiyono, 2012). Indeed, the normality test is used to graphical normality assessment that can be found in the IBM SPSS V 25.

### 2. Homogeneity Test

Homogeneity test is used to determine the similarity of the population and to find out before compare the several groups (Arikunto, 1993). IBM SPSS V 25 is used to calculate the homogeneity test.

### 3. Hypothesis Test

To know the significant difference score between snowball throwing technique and conventional method is comparing the result from the data pre-test and post-test. The hypothesis will be stated as the following: The Effectiveness of Snowball Throwing in Teaching Grammar at Eighth Grade Students in SMP N 1 Gandrungmangu.

Paired sample T-test was applied to compute to know the differences between the result of pre-test and post-test of the experimental group. Indeed, the use of T-test is to determine whether or not there is a significant difference in the post-test results for both groups.

According to Singgih Santoso, the basis of decision Paired Sample T-Test is divided into two (Santoso, 2014):

1. If the value of Sig. (2-tailed) < Research Alpha (0.05), then  $H_0$  is rejected and  $H_a$  is accepted.
2. If the value of Sig. (2-tailed) > Research Alpha (0.05), then  $H_0$  is accepted and  $H_a$  is rejected.

## **FINDINGS AND DISCUSSION**

### **Data description**

In finding section presents the data that have been collected during the research. The aimed of this study was to find out the effectiveness of snowball throwing technique in teaching grammar. This research was quasi-experimental research conducted at SMP N 1 Gandrungmangu. The population in this study were students of class VIII, and the sample was done by purposive sampling technique. The research subjects were 32 students from VIII G as an experimental class, and 32 students from VIII H as a control class. To know the effectiveness of snowball throwing technique, the results that have to be identified from the score of pre-test, the score of post-test, the differences of students' achievement between the students who are taught by using snowball throwing technique and the students who are not taught by using snowball throwing technique.

Data collection techniques were carried out by pre-test and post-test. The pre-test has given to the both experimental and control class before the treatment. Pre-test in control class was held on April 29th, 2022. Then they were given treatment in ten meetings, where the experimental class used the snowball throwing technique while the control class used the lecture method. Later, the post-test was given after the treatment which was held on June 4th, 2022. The obtained the scores of pre-test and post-test was analyzed by using IBM SPSS V 25 for windows to find the mean, the standard deviation, the minimum score, the maximum score, Paired Sample T-test and Independent Sample T-test. According to the data that have been collected during the research, here are the results of data pre-test and post-test.

### **Data Analysis**

#### ***Validity Test***

The validity test conducted in SMP N 1 Gandrungmangu and was tested on 32 students of class VIII-B with 30 multiple choice items. The reason to choose this class to do pilot test, because they have received grammar material first and VIII-B has the average score that is relative the same with control class (VIII-H) and experimental class (VIII-G). To know the items were valid or not, validity test should be compared with  $r_{table}$ , which the value of  $r_{table}$  for 22 students with significance value 0,05 value is 0,423. Product-moment formula from Pearson was used in validity test of the items.

The results of the validity test that have been carried out using the formula of *product-moment* with the help of IBM SPSS V 25. From the calculation of the validity, it shows that 30 items of



the multiple choice questions related to grammar material there are five items are invalid because the value of  $r_{value} < r_{table}$ . The invalid items that can be erased are 4, 6, 10, 16, 23, 24, 25, 26, 28, and 30. So that, the 25 items of valid items can be used as the test instrument to the respondents.

**Reliability**

A reliability test is used to see the determination of instrument in revealing the respondents' phenomenon even though it is carried out at different times (Arikunto, 1993). The formula of alpha can be used to compute the reliability tests:

$$r_{11} = 1 - \frac{V_s}{V_r}$$

$r_{11}$  = instrument reliability

$V_r$  = variant of respondent

$V_s$  = leftover variant

The value of  $r_{11}$  obtained was consulted with  $r_{table}$  with a level significant 5%. The instrument is reliable if the value of  $r_{11} > r_{table}$ . For the multiple choices of grammar material test,  $r_{table}$  were obtained from 22 respondents with a significance level of 005 is 0,349.

**Table. 2 The Result of Reliability Test**

| $r_{hitung}$ | $r_{table}$ | Description |
|--------------|-------------|-------------|
| 0,83         | 0,349       | Reliable    |

Based on the table the result of Reliability test, it can be concluded that the instrument of grammar in the form of multiple choice in this study is reliable, because the value of  $r_{hitung} > r_{table}$ . It means that the instrument was reliable because  $0,83 > 0,349$ .

**Requirements of Testing T-test**

**Normality Test**

In this study, the normality test was analyzed using IBM SPSS V 25 software for windows. The hypotheses for the normality test will formulated as follow:

$H_0$  : the data are normally distributed

$H_a$  : the data are not normally distributed

The criteria of acceptance or rejection of hypotheses for normality test are as follow:

$H_a$  is accepted if  $\text{Sig.} \alpha > 0.05$

$H_a$  accepted if  $\text{Sig.} \alpha > 0.05$

The result of normality test was analyzed with Kolmogorov-Smirnov and Shapiro-Wilk Test in program computer SPSS V 25 for windows, as follow:

**Table. 3 The Result of Normality Test**

| Tests of Normality |                                 |    |       |              |    |      |
|--------------------|---------------------------------|----|-------|--------------|----|------|
|                    | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|                    | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Pretest EC         | .123                            | 32 | .200* | .975         | 32 | .648 |
| Pre Test CC        | .098                            | 32 | .200* | .965         | 32 | .381 |
| PostTest EC        | .217                            | 32 | .100  | .847         | 32 | .140 |
| Post Test CC       | .186                            | 32 | .060  | .906         | 32 | .090 |

In the normality test above, it showed that the probability value of t-statistics  $>$  significant level = 0,05. Therefore, the data meet assumption of normality and can be used for the next test.

### ***Homogeneity Test***

Homogeneity test used values of the pre-test result in experiment class and control class (Arikunto, 2018).

**Table. 4 Result of Homogeneity Test**

| Test of Homogeneity of Variances |                                      |                  |     |        |      |
|----------------------------------|--------------------------------------|------------------|-----|--------|------|
|                                  |                                      | Levene Statistic | df1 | df2    | Sig. |
| Learning Outcomes                | Based on Mean                        | 1.633            | 1   | 60     | .206 |
|                                  | Based on Median                      | 1.486            | 1   | 60     | .228 |
|                                  | Based on Median and with adjusted df | 1.486            | 1   | 59.864 | .228 |
|                                  | Based on trimmed mean                | 1.606            | 1   | 60     | .210 |

Because the value of F-statistic  $>$  significant level = 0.05, then the data meet the homogeneity assumption. Based on the data, it can be assumed that the population being studied has similarities.

## Hypothesis Testing

### *Paired Sample T-test of Control Class*

Singgih Santoso argued that the basis decision Paired Sample T-test is divided by two (Santoso, 2018):

1. If the value of Sig. (2-tailed) < Research Alpha (0.05), the  $H_0$  is rejected and  $H_a$  is accepted.
2. If the value of Sig. (2-tailed) > Research Alpha (0.05), the  $H_0$  is accepted and  $H_a$  is rejected.

The results of Paired Sample T-test calculated by IBM SPSS V 25 software for windows are presented in this table below:

**Table 5 Result of Paired Sample Statistics in Control Class**

| Paired Samples Statistics |              |       |    |                |                 |
|---------------------------|--------------|-------|----|----------------|-----------------|
|                           |              | Mean  | N  | Std. Deviation | Std. Error Mean |
| Pair 1                    | Pre Test CC  | 41.09 | 32 | 15.295         | 2.792           |
|                           | Post Test CC | 83.28 | 32 | 11.647         | 2.127           |

The Result of Paired Sample Statistics in control class table, shows the descriptive value of each variable in the Paired Samples. The average score (mean) of pre-test was 41.09 from 32 data, and the distribution of data (Std. Deviation) obtained was 15.295 with a standard error mean of 2.792.

Meanwhile, the average score (mean) of post-test is 82.28 from 32 data, and the distribution of data (Std. Deviation) obtained is 11.647 with a standard error mean of 2.127. Hypothesis testing with Paired Sample T-test can be conducted by comparing sig. (2-tailed) with an alpha of 0.05%. It can be assumed that the post-test on the data is higher than pre-test.

**Table 6. Result of Paired Sample Test in Control Class**

| Paired Samples Test |                            |                    |                |                 |   |         |         |    |                    |
|---------------------|----------------------------|--------------------|----------------|-----------------|---|---------|---------|----|--------------------|
|                     |                            | Paired Differences |                |                 |   |         | T       | df | Sig.<br>(2-tailed) |
|                     |                            | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |         |         |    |                    |
|                     |                            |                    |                |                 | Lower                                     | Upper   |         |    |                    |
| Pair 1              | Pre Test CC - Post Test CC | -40.000            | 12.526         | 2.287           | -44.677                                   | -35.323 | -17.491 | 29 | .000               |

Based on the analysis results above, it can be seen that Sig. (2-tailed) < Alpha. The result of Sig. (2-tailed) is 0.000 < 0.05, it means that  $H_a$  is accepted and  $H_0$  is rejected. There was an increase in the control class in learning grammar from pre-test and post-test.

Through Paired Sample T-test, it shown that t-count was -17.49, but from this numbers, only absolute values or numbers are needed by ignoring negative symbols. So that, the t-count was 17.49 from the value of  $df = 29$ , with an alpha 0.05%. Meanwhile, the t-table value was in the column 0,05% row  $df = 29$  was 0.36.  $T\text{-count} > t\text{-table}$ ;  $17.49 > 0.36$ . It can be concluded that there was a significant difference in the pre-test and post-test scores in the control class because  $H_0$  is rejected and  $H_a$  is accepted.

However, SMP N 1 Gandrungmangu have set the indicators of student learning success in minimum score of 75 (according to KKM). Based on the following calculations, the results of the control class before and after treatments are as follow:

**Table 7. Percentage Score of Pre-test and Post-test in Control Class**

| Class   | Pre-test  |             | Post-test |             | N  |
|---------|-----------|-------------|-----------|-------------|----|
|         | Completed | Incompleted | Completed | Incompleted |    |
| Control | 2<br>6%   | 30<br>94%   | 29<br>91% | 3<br>9%     | 32 |

The data on the table showed that the result of learning grammar in the control class, there was a significant increase percentage in completeness from 6% in pre-test and in post-test reaching

91% completeness. In contrast to the incompleting column, the score of students who were originally categorized as incompleting was 94% to 9%.

***Paired Sample T-test of Experiment Class***

**Table 8. Result of Paired Sample Statistics in Experiment Class**

| Paired Samples Statistics |             |       |    |                |                 |
|---------------------------|-------------|-------|----|----------------|-----------------|
|                           |             | Mean  | N  | Std. Deviation | Std. Error Mean |
| Pair 1                    | Pretest EC  | 41.09 | 32 | 12.997         | 2.298           |
|                           | Posttest EC | 88.75 | 32 | 6.222          | 1.100           |

The Result of Paired Sample Statistics in experiment class table, shows the descriptive value of each variable in the Paired Samples. The average score (mean) of pre-test is 41.09 from 32 data, and the distribution of data (Std. Deviation) obtained is 12.997 with a standard error mean of 2.298.

Meanwhile, the average score (mean) of post-test is 88.75 from 32 data, and the distribution of data (Std. Deviation) obtained is 6.222 with a standard error mean of 1.100. It means that the post-test on the data is higher than pre-test.

Through Paired Sample T-test, it shown that t-count was -23.735, but from this numbers only absolute values or numbers are needed by ignoring negative symbols. So that, the t-count was 23.735 from the value of  $df = 31$ , with an alpha 0.05%. Meanwhile, the t-table value was in the column 0,05% row  $df = 31$  was 0.36.  $T\text{-count} > t\text{-table}$ ;  $23.735 > 0.36$ . It can be concluded that there was a significant difference in the pre-test and post-test scores in the control class because  $H_0$  is rejected and  $H_a$  is accepted.

**Table 9. Result of Paired Sample Test in Experiment Class**

| 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 EC - PostTest EC | -47.656            | 11.358         | 2.008           | -51.751                                   | -43.561 | -23.735 | 31 | .000            |

Based on the analysis results above, it can be seen that Sig. (2-tailed) < Alpha. The result of Sig. (2-tailed) is 0.000 < 0.05, it means that H<sub>a</sub> is accepted and H<sub>0</sub> is rejected. There was an increase in the control class in learning grammar from pre-test and post-test.

However, SMP N 1 Gandrungmangu set indicators of student learning success in minimum score of 75 (according to KKM). Based on the following calculations, the results of the control class before and after treatments are as follow:

**Table 10. Percentage Pre-test and Post-test in Experiment Class**

| Class      | Pre-test  |             | Post-test  |             | N  |
|------------|-----------|-------------|------------|-------------|----|
|            | Completed | Incompleted | Completed  | Incompleted |    |
| Experiment | 0<br>0%   | 32<br>100%  | 32<br>100% | 0<br>0%     | 32 |

The data on the table showed that the result of learning grammar in the experiment class, there was a significant increase percentage in completeness from 0% in pre-test and in post-test reaching 100% completeness. In contrast to the incompleted column, the score of students who were originally categorized as incompleted was 100% to 0%.

### ***Independent Sample T-test of pre-test***

The basis of decision Independent Sample T-test is divided by two:

- 1.If the value of Sig. (2-tailed) < Research Alpha (0.05), the  $H_0$  is rejected and  $H_a$  is accepted.
- 2.If the value of Sig. (2-tailed) > Research Alpha (0.05), the  $H_0$  is accepted and  $H_a$  is rejected.

The results of Result of Group Statistics of pre-test calculated by IBM SPSS V 25 software for windows are presented in this table below:

**Table 11 Result of Group Statistic of Pre-test**

| <b>Group Statistics</b> |            |    |         |                |                 |
|-------------------------|------------|----|---------|----------------|-----------------|
|                         | Class      | N  | Mean    | Std. Deviation | Std. Error Mean |
| Learning outcomes       | Experiment | 32 | 41.0938 | 12.99717       | 2.29760         |
|                         | Control    | 32 | 43.9063 | 16.20107       | 2.86397         |

The paired sample group statistics table describes the descriptive analysis of the processed data. The mean table showed the average value of each variable. According to the table above, it can be seen that the mean of control class was 41,0938 and the mean score of experiment class was 43.9063. N indicates the amount of data as many as 32. The standard deviation was used to measure the level of risk, which in the pre-test of experiment class was 12.99717 and the standard deviation in the control class was 16.20107. Standard Error Mean was used to determine how well the average data from the sample data for each variable can estimate the population means. Because the data was normally distributed, the std. Error mean can be ignored. The mean difference between this both classes has a little different, it can be inferred that the understanding of the students in learning grammar are relative the same because both classes are homogeneous or have the same level of ability.

**Table 12. Result of Independent Samples Test of Pre-test**

| Independent Samples Test |                             |   |      |                              |        |                 |                 |                       |   |         |
|--------------------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|---------|
|                          |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                       |   |         |
|                          |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |         |
|                          |                             |   |      |                              |        |                 |                 |                       | Lower                                     | Upper   |
| Learning Outcomes        | Equal variances assumed     | 1.952                                   | .167 | -.766                        | 62     | .447            | -2.81250        | 3.67169               | -10.15210                                 | 4.52710 |
|                          | Equal variances not assumed |   |      | -.766                        | 59.216 | .447            | -2.81250        | 3.67169               | -10.15897                                 | 4.53397 |
|                          |                             |   |      |                              |        |                 |                 |                       |   |         |

In Levene's Test for quality of column variances have significance value of 0.167 ( $p > 0.05$ ). It showed that the two of variances were homogeneous, then the use of variance to compare the population mean (t-test for Equality of Means) in t-test must be based on equal variance assumed.

In relation on the table above, the equal variances assumed that known the sig value is 0.447  $> 0.05$ , as the basis for decision making in the independent t-test, it can be concluded that  $H_0$  is accepted and  $H_a$  is rejected. Therefore, it can be said that there was no difference between the average students' learning outcomes in pre-test in the control and the experimental class.

***Independent Sample T-test of post-test***

**Table 13. Result of Group Statistics of Post-test**

| Group Statistics  |            |    |         |                |                 |
|-------------------|------------|----|---------|----------------|-----------------|
|                   | Class      | N  | Mean    | Std. Deviation | Std. Error Mean |
| Learning outcomes | Experiment | 32 | 88.4375 | 6.53002        | 1.15435         |
|                   | Control    | 32 | 83.2813 | 11.68190       | 2.06509         |



The paired sample group statistics table describes the descriptive analysis of the processed data. The mean table showed the average value of each variable. According to the table above, it can be seen that the mean of control class was 88.4375 and the mean score of experiment class was 83.2813. N indicates the amount of data as many as 32. The standard deviation was used to measure the level of risk, which in the pre-test of experiment class was 6.53002 and the standard deviation in the control class was 11.68190. Standard Error Mean was used to determine how well the average data from the sample data for each variable can estimate the population means. Because the data was normally distributed, the std. Error mean can be ignored. Therefore, this means that learning outcomes in learning grammar in the experiment class are higher than in the control class.

**Table 14. Result of Independent Samples Test of Post Test**

|                   |                             | Independent Samples Test                |      |                              |        |                 |                 |                       |   |         |
|-------------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|---------|
|                   |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                       |   |         |
|                   |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |         |
|                   |                             |   |      |                              |        |                 |                 |                       | Lower                                     | Upper   |
| Learning Outcomes | Equal variances assumed     | 13.210                                  | .107 | 2.179                        | 62     | .063            | -2.81250        | 5.15625               | .4270410                                  | 9.88546 |
|                   | Equal variances not assumed |   |      | 2.179                        | 48.650 | .064            | -2.81250        | 5.15625               | .40108                                    | 9.91142 |
|                   |                             |   |      |                              |        |                 |                 |                       |   |         |

In Levene's Test for quality of column variances have significance value of 0.167 ( $p > 0.05$ ). It showed that the two of variances were homogeneous, then the use of variance to compare the population mean (t-test for Equality of Means) in t-test must be based on equal variance assumed.

On the report of the table above, the equal variances assumed that known the sig. value is  $0.447 > 0.05$ , as the basis for decision making in the independent t-test, this indicates that  $H_0$  is

accepted and  $H_a$  is rejected. Thus, there was significance difference between the average students' learning outcomes in post-test in the control and the experiment class.

## **Discussion**

From the data analysis, the objective of the study is to know if there is significant effect of snowball throwing technique in teaching grammar at eighth grade students in SMP N 1 Gandrungmangu. The use of Paired Sample T-test is to know there is significant difference result in students' learning outcomes after learning grammar materials between before and after receiving treatment using snowball throwing technique in learning activity. The descriptive analysis of the processed data was described with the paired sample statistic. The average score was shown in the mean table, which is in the control class was 40,09 and the post-test 83,28. N indicates the amount of data obtained in the control class as many as 32 respondents.

The average (mean) of the experiment class in the paired sample statistics table pre-test was 41,09 and the post-test was 88,75 with 32 data. The standard deviation of the pre-test was 12,997 and the post-test was 6,222. Based on the explanation of the two statistical tables of paired samples in the both class, experiment class and control class, they have almost the same pretest value of the average score which are 40,09 and 41,09. Therefore, the mean 41 of the pre-test and post-test can be assumed that there was a difference. It can be seen that the increase in class experiment is 47,34 while the increase in control class is 39,91. In other words, there was an increase in mean score for both classes and the mean difference is 7,43, which is the mean of the experiment class is higher than control class. In conclusion, the use of snowball throwing technique in teaching grammar is more effective to improve students' learning outcomes. It is line with the statement by Yanuarti that the purpose of snowball throwing technique is to teach the children how to be more receptive to receive and sent messages to other students in the form of paper snowballs and how to communicate with their group. So that, based on this activity can make the students' learning outcomes can improve ( Yuniarti, 2019). The result of the descriptive analysis was confirmed by hypothesis testing with Paired Sample T-test. In the control class and experiment class were obtained sig. (2-tailed) of  $0,000 < 0,05$ , it can be said that  $H_a$  is accepted and  $H_0$  is rejected. So that, there're was a significant difference between average score before the treatment and the average score after treatment in the experiment and the control class. The difference between t-count and t-table in control class and experiment class found a difference or effect was seen in the experiment class that was higher than the control class. It can be inferred that the class which have

received the treatment had an effect than the class that did not receive any treatment, even the improvement was not very significant.

In relation to some experts, snowball throwing technique is indeed suitable to be applied in teaching grammar. This statement can be proven in this research by increasing student learning outcomes. As mentioned before that the students in experiment class were incomplete the minimum score, after applied snowball throwing technique they were complete the minimum score.

Meanwhile, the output of Independent Sample T-test that has obtained the value of sig. Levene's Test for Equality of variances. T-count is higher than t-table;  $2,179 > 0,167$ . It can be said that  $H_a$  is accepted, so there was a difference in average in the post-test scores in the control class and the experiment class.

The result of the research about the effectiveness of snowball throwing technique in teaching grammar indicated the improvements in students' learning outcomes. It was showed the significant post-test score in the experiment class. It is related with the theory that was proposed by Diyah and Yuli in their study which stated that snowball throwing technique can improve the students' comprehension in learning grammar (Andrian et al, 2020).

In this research, it was also found that the implementation of snowball throwing technique in teaching grammar made the students motivated in learning activity, because during the lessons they were enthusiast dan active to finish their groupwork. As it explained by Dwinalida and Setiaji in their research that there was the correlation between learners' motivation and language learning strategies (Dwinalida et al, 2020). The use of strategy in learning target language can be an aspect to influence students' the motivation. Moreover, it is lined with the theory stated by Yanuarti that snowball throwing was very helpful in providing the students with more enjoyable activities in teaching and learning process ( Yanuarti, 2019).

By using the snowball throwing technique, the teacher will get the easier way to teach English. Basically, the use of snowball throwing technique make the teacher can deliver the subject matter in the form of a game. In addition, the teacher also does not take too much time to prepare the media used in learning (Fatimah, 2021). However, the snowball throwing technique use a piece of paper where the teacher or students can use paper that has been used. Thus, the snowball throwing technique not only as an effective strategy, but also an act of recycling used goods.

In this research, there were some disadvantages that have found when applying snowball throwing technique in teaching grammar at eighth grade students in SMP N 1 Gandrungmangu. With the limited time, the teacher could not explain the materials widely and make the students could not do the assignments maximally. Then, the classes were often noisy due to the group consists of 5 students when they discussed about the questions and the answers.

## CONCLUSION

This study investigated the effect of snowball throwing technique in teaching grammar at eighth grade students in SMP N 1 Gandrungmangu. The quantitative data show that the students have good achievements in post-test result. The data was gained by comparing the mean score of pre-test and post-test, then calculated by using IBM SPSS V 25 for Windows. By comparing the result of control and experiment class, it displayed that the students' comprehension in learning grammar was significantly improved. Although the value of both classes have increased, the value of experiment class was higher than control class. According to the findings and discussion, it can be assumed that there was a significant improvement score among the class that was taught using snowball throwing technique and the class that was not taught using snowball throwing technique. It can be inferred that snowball throwing technique was effective in teaching grammar to the students. In addition, the result of t-test shows that t-count was higher than the t-table ( $2,179 > 0,167$ ) with degree freedom 62 and level of significance 0.05. In other word, the probability ( Sig. 2 tailed) was lower that the level of significance (  $0,000 < 0.05$ ). Because  $t_{count} > t_{table}$  and  $p < 0.05$ , it can be assumed that the null hypothesis of no difference was rejected. This result indicated that after the snowball throwing technique was used to teach grammar, the obtained of post test scores were significantly different with pre-test scores. In other words, teaching grammar using snowball throwing technique is effective for the students.

In regard to the findings of this research it recommended that the teacher be able to apply snowball throwing technique in teaching English which can improve students' achievement and motivations to learn English. For other researcher, hopefully this report can be additional reference which is able to show some feedbacks in the hope that English grammar will be an interesting subject and taught better in the future.

## REFERENCES

- A.Rasul, Subahnudin, R. Sonda. 2022. *Statistika Pendidikan Matematika*. CV Kreator Cerdas Indonesia: Kediri
- Afiska. (2018). *The Influence of Snowball Throwing Method Towards Students' Speaking Ability at The first Semester of Ninth Grade of SMP Yasmida Ambarawa in The Academic Year of 2018/2019*, Thesis. Lampung: Raden Intan State Islamic University.
- Aisyah, Siti. (2012). *The Effect of Snowball Throwing Type (ST) Strategy to Improve Students Reading Ability in Narrative Text at The Second Year Students of Islamic Boarding Junior High School Darussakinah XII Koto Kempar Regency*. Thesis. Pekanbaru: UIN Sultan Syarif Kasim Riau.
- Andriani, D.I., & Wahyuni, Y., (2020). *Teaching Grammar through Snowball Throwing Technique in EFL Classroom*, *Humanika: Jurnal Ilmu Sosial, Pendidikan, dan Humaniora*. 3(2).
- Apsari, Yanuarti., et al. (2019). *Students' Perception of Snowball Throwing Teaching Grammar*, *PROJECT (Project Professional Journal of English Education)*. 2.(2)
- Apsari, Yanuarti. (2019). *Snowball Throwing in Teaching Grammar*", *Lingual: Journal of Language and Culture*. 5(1), 23.
- Arikunto, Suharsimi. (1993). *Prosedur Penelitian Suatu Pendekatan Praktik*(2nd revision). Jakarta: PT Rineka Cipta. P.280
- Dwinalida, K & Setiaji, S. (2020). *The Correlation Between Learners' Motivation and Language Learning Strategies in EFL Context*, *JEPAL: Journal of English Pedagogy and Applied Linguistics*. 1(1), 45.
- Fatimah, Ahmadi. (2021). *Snowball Throwing Technique and Its Impacts on Students' Reading Achievement*. *J-EMAIL (Journal of English as a Modern and International Language)*. 1(1), 24
- Kemdikbud. 2014. *Konsep dan Implementasi Kurikulum 2013*. Jakarta: Kemdikbud.
- Laily. F. N. (2018). *"Developing Students' Speaking Ability by Snowball Throwing Technique at English Language Education Department of Brawijaya University"*. Thesis. Malang: Brawijaya University
- Muxamedove Gulmira Ismoilovna. (2020). *"Innovative Techniques for Teaching Grammar"*. *JournalNX-A Multidisciplinary Peer Reviewed Journal.*, Vol. 6 Nunan, David. 2003. *"Practical English Language Teaching"*. International Edition Singapore: Mc Graw Hill

- Rosidah, Ani. (2017). Penerapan Model Pembelajaran Kooperatif Snowball Throwing untuk Meningkatkan Hasil Belajar Siswa pada Pembelajaran IPS”. *Jurnal Cakrawala Pendas*. 3(2), 29.
- Santoso, S. (2018). *Menguasai SPSS Versi 25*. PT Elex Media Komputindo: Jakarta.
- Sartika, Endang. 2014. “ The Effectiveness of Round Table Technique to Improve Students’ Speaking Skill in the First Grade Students of SMA N 3 Salatiga in the Academic Year of 2013/2014,” Thesis. Salatiga: IAIN Salatiga.
- Sugiyono. (2012). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D)*. Penerbit Alfabeta: Bandung. 241
- Suprijono, A. (2013). *Cooperative Learning: Teori dan Aplikasi PAIKEM (10th ed)*. Yogyakarta: Pustaka Pelajar. P.8
- Syams, Kusumaningrum. et al. (2020). “Snowball Throwing: An English Learning Method to Improve Vocabulary Mastery and Psychomotor Ability”. *IJOLAE*. 2(1), 11.

## APPENDICES

### Result of Validity

| Number of Old Items | Number of New Items | Value of $r_{table}$<br>( $n=22, \alpha=0,423$ ) | Value of $r_{hitung}$ | Description    |
|---------------------|---------------------|--|-----------------------|----------------|
| 1                   | 1                   | 0,423  | 0,521                 | Valid          |
| 2                   | 2                   | 0,423  | 0,522                 | Valid          |
| 3                   | 3                   | 0,423  | 0,629                 | Valid          |
| 4                   |                     | 0,423  | -0,267                | <b>Invalid</b> |
| 5                   | 4                   | 0,423  | 0,495                 | Valid          |
| 6                   |                     | 0,423  | -0,149                | <b>Invalid</b> |
| 7                   | 5                   | 0,423  | 0,652                 | Valid          |
| 8                   | 6                   | 0,423  | 0,610                 | Valid          |
| 9                   | 7                   | 0,423  | 0,573                 | Valid          |
| 10                  |                     | 0,423  | -0,295                | <b>Invalid</b> |
| 11                  | 8                   | 0,423  | 0,625                 | Valid          |
| 12                  | 9                   | 0,423  | 0,485                 | Valid          |
| 13                  | 10                  | 0,423  | 0,610                 | Valid          |
| 14                  | 11                  | 0,423  | 0,521                 | Valid          |
| 15                  | 12                  | 0,423  | 0,767                 | Valid          |
| 16                  |                     | 0,423  | -0,061                | <b>Invalid</b> |
| 17                  | 13                  | 0,423  | 0,717                 | Valid          |
| 18                  | 14                  | 0,423  | 0,760                 | Valid          |
| 19                  | 15                  | 0,423  | 0,609                 | Valid          |

|    |    |       |        |                |
|----|----|-------|--------|----------------|
| 20 | 16 | 0,423 | 0,675  | Valid          |
| 21 | 17 | 0,423 | 0,825  | Valid          |
| 22 | 18 | 0,423 | 0,675  | Valid          |
| 23 |    | 0,423 | 0,220  | <b>Invalid</b> |
| 24 |    | 0,423 | 0,127  | <b>Invalid</b> |
| 25 |    | 0,423 | -0,200 | <b>Invalid</b> |
| 26 |    | 0,423 | 0,005  | <b>Invalid</b> |
| 27 | 19 | 0,423 | 0,748  | Valid          |
| 28 |    | 0,423 | 0,415  | <b>Invalid</b> |
| 29 | 20 | 0,423 | 0,748  | Valid          |
| 30 |    | 0,423 | -0,393 | <b>Invalid</b> |