# THE EFFECT OF GROUP INVESTIGATION METHOD TOWARDS STUDENTS SPEAKING COMPETENCE BASED ON STUDENTS SELF-CONFIDENCE AT SMAN 1 SAKRA TIMUR IN ACADEMIC YEAR 2017/2018 

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#### Abstract

This research aimed to find out the eeffect of group investigation method towards students speaking competence based on students' self-confidence at SMAN 1 SAKRA TIMUR In Academic Year 2017/2018. This research was designed as experimental research by employing two way anova as the method of analyzing the data. The population of the study was the eleventh grade students at SMAN 1 Sakra Timur that consist of 2 classes, all of the classes were chosen as the samples, those were XI IPA 1 as experimental group that treated by using group investigation method and control group treated by using direct method. The data of the research were gathered from pre-test and post-test and the data analysis used TWO WAY ANOVA. Based on analysis of the data, it was found that the value of DK between coloum with the value of $\mathrm{Fh}=11,92>\mathrm{F}$ table $=3,23$,coloum DK within group with the value of $\mathrm{Fh}=4,19>\mathrm{F}$ table $=4,09$, and the coloum of DK interaction with the value of $\mathrm{Fh}=19,85>\mathrm{F}$ table $=3,23$. It means Ha was accepted. It can be concluded that Group Investigation was effective towards students speaking competence based on students self-confidence at SMAN 1 SAKRA TIMUR.


Key Words: Group Investigation, Speaking and Self-confidence.

## INTRODUCTION:

Based on the preliminary observation and interview conducted to the English teacher at SMAN 1 SAKRA TIMUR, it is also found that the students don't speak English well. The major cause to this problem is that the students have low self confidence. Regarding to the problems above, the researcher is interested in conducting a research on students speaking skill and selfconfidence by using Group Investigation (GI) method. It is expected that by using this method, the students can build their speaking skill and self-confidence because GI method requires the student to form small interest groups, plan and implement their investigations, synthesize the group member findings, and make a presentation to the entire class.

Group investigation is the student's cooperative planning to guide the material of their teacher and how the student's to investigate a problem and in speaking a foreign language and some factors influence the learners. As known students have many problems, one of the factors is selfconfidence, self-confidence inspires the students to reach their goals. Students
admitted nervous, fearfull, less confident when asked or express an idea in English. In addition, self-confidence and speaking occur simultaneously.

One of the four skills which plays a significant role in mastering English is speaking. As a skill, speaking is the most used skill by people rather than the three others. According to Thornburry (2005: 1), speaking is so much a part of daily life that we take it for granted. The average person produces ten of thousands of words a day, that is why we have to learn how to do it all over again in a foreign language.

Brown (2004: 140) states that speaking is a productive skill that can be directly and empirically observed; those observations are invariably collared by the accuracy and fluency. While, they also started that speaking is the product of creative construction of linguistic strings, the speakers make choices of lexicon, structure, and discourse.
a. Indicators of Speaking

In this part, the researcher wants to show the indicator of speaking. According to Brown (2004: 140) There are five indicators of speaking they are:

1) Pronunciation

Pronunciation is the way for students to produce language they speak. It deals with the phonological proccess that determine how sounds vary and pattern in a language.
2) Grammar

It is needed for students to arrange a correct sentence in conversation, or the student's ability to manipulate structure and to distinguish appropriate ones. The utility of grammar is also to learn the correct way to gain expertise in a language in oral and written form.
3) Vocabulary

One cannot communicate effectively or express their ideas both oral and written from if they do not have sufficient vocabulary. So, vocabulary means the appropriate diction which is used in communication.
4) Fluency

Fluency can be defined as the ability to speak fluently and accurately. Fluency in speaking is the aim of many language learners. Signs of fluency include a reasonable fast speed of speaking and only a small number of pauses and 'ums' or 'ers'. These signs indicate that the speaker does not have to spend a lot of time searching for the language items needed to express the message.
5) Comprehension

For oral communication certainly requires a subject to respond speech as well as to initiate it.

## RESEARCH METHOD:

This research was designed as experimental research by employing two way anova as the method of analyzing the data. According to Sugiyono (2017: 183) two way anova is used to test the comparative hypothesis of sample that include two category or more. The research design that used in this study is experimental design in the form of quasi experimental design, control group. The test was given to both of classes; for experimental group treated by using Group Investigation and control group treated by using Direct Method.The research was conducted at SMAN 1 SAKRA TIMUR. The data were gathered from 2 groups, experiment and control group through pre test and post test.

Table 3.1 Scheme of the Research


## Where:

X1 : Control Group
X2 : Experimental Group
Y : Self-Confidence
Y1: Students who have high self-confidence
Y2 : Students who have low self-confidence
The population of this research was the eleventh grade students of SMAN 1 SAKRA TIMUR. There were 2 (two) classes, consisted of 23 for XI. IPA 1 and 23 for XI. IPA 2.

To determine the sample of this research, the researcher used total sampling technique because all of the population as sample.

According Sugiyono (2011: 137) technique of data collection is one of category to find out data with statistic, this study; data means all of information that is directly gathered from the subject. The technique of data collection that the researcher used:

## 1. Pre-test

At the first meeting the researcher gave the same pretest to both of groups (experimental group and control group) as the sample of research. The purpose of pretest was to know the students' self-confidence in speaking skills, before giving a treatment. The researcher give a test.

## 2. Pos-test

The next procedure was posttest. This test was conducted after pretest and treatment were given to students. The result of the test counted for the data. Finally, the result of this test showed us the students' capability after the different treatments given. The researcher gives the same test. The result of post-test is used as the speaking score of the calculation in the two way anova.
3. Questionnaire

There was questionnaire sheet for student self-confidence. The researcher gave
student a sheet of paper and then they cicrled the statement. The researcher provided 20 items of questionare. The score of questionaire is used to devided the students high and low self-confidence in the table of two way anova.

## 1. Descriptive Analysis

Descriptive statistic is applied only to the members of a sample or population from which data had been collected. Descriptive statistic is divided into:
a. Mean

Mean is a group explanation technique based on the average value of the group, it can be formulated as the following formula:

$$
\mathrm{M}=\frac{\sum f i x i}{n}
$$

Where:
M : Mean score of post-test
$\sum$ fixi : The total student's score of post-test
$\mathrm{N} \quad$ : The total number of students
(Sugiyono, 2016: 53)
b. Median

Median is value in middle. Identification of median score was being calculated by using formula as follows:

$$
\mathrm{Me}=\mathrm{L}+i\left(\frac{\frac{n}{2}-c f b}{f w}\right)
$$

Where:
Me = Median score
$\mathrm{L}=$ The lower limit of the interval within which the median
Lies.
$i \quad=$ Interval
$\mathrm{n} \quad=$ The total number of students
$c f b=$ The cumulative frequency in all interval below the interval containing the median
fw $=$ The frequency of case within the interval containing the median
c. Mode

The value in a set of data which appears frequently. Identification of mode score was being calculated by using formula as follows:

$$
\begin{gathered}
\text { Mo }=\mathrm{L}+i\left(\frac{f i}{f i+f 2}\right) \\
\text { Mo } \quad=\text { Mode score }
\end{gathered}
$$

$\mathrm{L}=$ The lower limit of the interval within which the mode lies
i $\quad$ Interval
$\mathrm{f}_{\mathrm{i}} \quad=$ The frequency of interval containing mode reduced by that of previous interval $\mathrm{f}_{2} \quad=$ The frequency of interval containing mode reduced by that of following interval. d. Standard Deviation

To find out the standard deviation the researcher was used the following formula:
$\sigma=\sqrt{\frac{\sum\left(\mathrm{x}_{i}-\overline{\mathrm{x}}\right)^{2}}{\mathrm{n}}}$
Where:
o : Standar Deviation
$\begin{array}{ll}\mathrm{x}_{i} & \text { : total of students in one group } \\ \mathrm{x} & : \text { Mean }\end{array}$
n : total sample
(Sugiyono, 2011: 57)
2. Inferential Analysis

Before analyzing data to find out whether or not, Normality and Homogeneity should be sought first:
a. Normality

According to Sugiyono (2011:75) State the use of parametric statistics, works with the assumption that the data of each research variable to be analyzed form a normal distribution. If not normal, then the parametric statistical technique cannot be used for the analysis

Formula of Normality:

$$
z=\frac{x-\bar{x}}{s}
$$

Where:
z : standard deviation for the normality
$x_{i}$ : Data to I from a group data $x^{-}$: Average of the group s : standard deviation

## b. Homogeneity

According Sugiyono (2011:175) before variance analysis is done for hypothesis testing it is necessary to test homogeneity of variance first. Testing using F test.

$$
F=\frac{\text { High Variians }}{\text { Low Varians }}
$$

3. Analysis of variant

According to Sugiyono (2011: 166), analyze of Varian is parametric inferential technique statistic, that use for hypothesis comparative test.

Table 3.3 Two Way Anova

| SV | Dk | Jumlah Kuadrat (JK) | MK | Fh | Ft | Kep |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|} \hline \text { Ant } \\ \text { kol } \end{array}$ | $\begin{array}{ll} \text { kol } & - \\ 1 & \end{array}$ | $\begin{aligned} & \sum \frac{\left(\sum \text { Xkol }\right)^{2}}{\text { nkol }} \\ & -\frac{\left(\sum \text { Xtot }\right)^{2}}{N} \end{aligned}$ | $\frac{\text { JKkol }}{\text { kol }-1}$ | $\frac{\text { MKdal }}{\text { MKdal }}$ | $\begin{aligned} & \text { Tab } \\ & \mathrm{F} \end{aligned}$ | $\mathrm{Fh}>\mathrm{Ft}$ <br> На <br> Received |
| Ant <br> bar | m-1 | $\begin{aligned} & \sum \frac{\left(\sum \mathrm{Xbar}\right)^{2}}{\mathrm{nbar}} \\ & -\frac{\left(\sum \mathrm{Xtot}\right)^{2}}{\mathrm{~N}} \end{aligned}$ | $\frac{\text { MKbar }}{\text { m }-1}$ |  |  |  |
| Int | M x 1 | JKbag- (JKkol + JKbar) | $\frac{\text { MKint }}{M \times 1}$ |  |  |  |
| Dal | $\begin{aligned} & \mathrm{N}-\mathrm{m} \\ & \mathrm{x} \mathrm{kol} \end{aligned}$ | $\begin{aligned} & \hline \text { JKtot - (JKkol + } \\ & \text { JKbar + JKint) } \end{aligned}$ | $\frac{\text { MKdal }}{\text { DK }}$ |  |  |  |
| tot | N-1 | $\begin{aligned} & \sum X t o t^{2} \\ & -\frac{\left(\sum X t o t\right)^{2}}{\mathrm{~N}} \end{aligned}$ |  |  |  |  |

Where:
SV = Sources of variation
Tot = Total
Ant = Between Groups
Int = Interaction
Dal = In Groups
Tab F = Table f For 5\%
(Sugiyono, 2017: 190)

## RESEARCH FINDING AND DISCUSSION:

it discussed the result of the research in the effect of Group Investigation (GI) method towards students' speaking competence based on students self-confidence of SMAN 1 SAKRA TIMUR.
the researcher gave pre-test to both of group (experimental group and control group). The second meeting on 10 February 2018 the researcher treated the experimental group by using Group Investigation method and the researcher treated the control group by using Direct Method. On $17^{\text {th }}$ February 2018 the researcher gave post-test to the experimental group and control group. On $24^{\text {th }}$ February 2018 researcher gave questionnaire to experimental group and control group to know the respons of Group Investigation and Direct method were significant or not towards students speaking competence based on students selfconfidence.

The researcher calculated the result of post-test of the students in speaking skill to prove that the research had strength to stated which is more effective between group investigation or direct method towards students' speaking competence.

After gave the treatment the researcher got the result of pre-test and post-test towards students' speaking competence in experimental group used Group Investigation and Control group used Direct Method. The following table is the result of the students' speaking score of pre-test and post-test in detail:
Table 4.1 the Students' Speaking Score of Pre-Test and Post-Test of Experimental group.

| No. | Name | Pre-test <br> $\mathbf{X}_{\mathbf{1}}$ | Post- <br> test $\mathbf{X}_{\mathbf{2}}$ | Deviation <br> $\left(\mathbf{X}_{\mathbf{2}} \mathbf{X}_{\mathbf{1}}\right)$ | Deviation <br> of <br> (quare <br> $\mathbf{( X )}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | AGR | 55 | 80 | 25 | 625 |
| 2 | AP | 50 | 90 | 40 | 1600 |
| 3 | BS | 68 | 80 | 12 | 144 |
| 4 | DPA | 63 | 82 | 19 | 361 |
| 5 | DAR | 55 | 80 | 25 | 625 |
| 6 | EG | 59 | 75 | 16 | 256 |
| 7 | EW | 60 | 83 | 23 | 529 |
| 8 | ED | 50 | 90 | 40 | 1600 |
| 9 | FS | 69 | 85 | 16 | 256 |
| 10 | HS | 65 | 85 | 20 | 400 |
| 11 | HG | 50 | 90 | 40 | 1600 |
| 12 | JQ | 70 | 75 | 5 | 25 |
| 13 | JA | 58 | 90 | 32 | 1024 |
| 14 | MMT | 60 | 85 | 25 | 625 |
| 15 | MR | 62 | 85 | 23 | 529 |
| 16 | MHI | 50 | 75 | 25 | 625 |
| 17 | NHS | 60 | 80 | 20 | 400 |
| 18 | RA | 60 | 90 | 30 | 900 |
| 19 | RH | 55 | 85 | 30 | 900 |
| 20 | RH | 55 | 89 | 34 | 1156 |
| 21 | SA | 70 | 90 | 20 | 400 |
| 22 | SHP | 56 | 90 | 34 | 1156 |
| 23 | SO | 60 | 85 | 25 | 625 |
|  | Total | 1360 | 1939 | 579 | $\mathbf{1 6 3 6 1}$ |

## a. The Result of Pre-Test

The researcher calculated result of pretest of the students in experimental group. The data showed that.

1. The highest score $=70$
2. The lowest score $=50$
3. Range is $70-50=20$
4. The number of class is $=1+3,3 \log 23=$ $1+3,3(1,3617)=5,863$ Used 5 or 6
5. Class width (interval) is $=\frac{20}{5}=$ used 4

The data description of experimental group showed that for pre-test, the highest score was 70 and the lowest score was 50 . Then the mean score was 60.04 , the value of mode was 72.05. the value of median was 66,5 ,range was 20 and the value of standard deviation was 4.52 . For detail information can be shown in appendix 8. Then, the frequency distribution of the data are shown in table below:

Table 4.2 Frequency Distribution

| No | Class limit | Class <br> Boundaries | Mid-point | Tally | Frequency | Percentage |
| :---: | :---: | :---: | :---: | :--- | :---: | :---: |
| 1 | $50-54$ | $49.5-42.5$ | 52.5 | IT | 5 | $21.73 \%$ |
| 2 | $55-59$ | $54.5-59.5$ | 57.5 | ITHI | 6 | $26.08 \%$ |
| 3 | $60-64$ | $59.5-64.5$ | 62.5 | IWII | 7 | $30.43 \%$ |
| 4 | $65-69$ | $64.5-69.5$ | 67.5 | II | 3 | $13.04 \%$ |
| 5 | $70-74$ | $69.5-74.5$ | 72.5 | II | 2 | $8.69 \%$ |

Graphic 4.01 Histogram and Polygon of Pre-test


The graphic above was used for convey the data from pre-test and post test of students in speaking skill. The graphic histogram and polygon showed that the high score of students in pre-test was 70 and the lower score is 50 .

## b. The Result of Post-Test

The researcher calculated result of post-test of the students in experimental group. The data showed that.

1. The highest score $=90$
2. The lowest score $=75$
3. Range is $90-75=15$
4. The number of class is $=1+3,3 \log 23=$ $1+3,3(1,3617)=5,863$ Used 5 or 6
5. Class width (interval) is $=\frac{15}{6}=2.5$ used 3

The data description of experimental group showed that for post-test, the highest score was 70 and the lowest score was 50 . Then the mean score was 84.48 , the value of mode was 88.75 . The value of median was 84.76, range was 15 and the value of standard
deviation was 6.21 . For detail information can be shown in appendix 8.Then, the frequency distribution of the data are shown in table below:
Table 4.3 Frequency Distribution

| No | Class limit | Class <br> Boundaries | Mid-point | Tally | Frequency | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $75-77$ | $74.5-77.5$ | 76 | III | 3 | $13,04 \%$ |
| 2 | $78-80$ | $77.5-80.5$ | 79 | IIII | 4 | $17,39 \%$ |
| 3 | $81-83$ | $80.5-83.5$ | 87 | II | 2 | $8,69 \%$ |
| 4 | $84-86$ | $83.5-86.5$ | 85 | WI | 6 | $26,08 \%$ |
| 5 | $87-89$ | $86.5-89.5$ | 88 | I | 1 | $4,35 \%$ |
| 6 | $90-92$ | $89.5-92.5$ | 91 | HH II | 7 | $30,43 \%$ |

Graphic 4.02 Histogram and Polygon of Post-test


The graphic above was used for convey the data from pre-test and post test of students in speaking skill. The graphic histogram and polygon showed that the high score of students in pre-test was 90 and the lower score is 75 .

The researcher calculated the result of pre-test and post-test in control group. The data showed that:

Table 4.4 The Students' Speaking Score of Pre-Test and Post-Test of Control Group.

| No. | Name | Pre- <br> test $\mathbf{X}_{\mathbf{1}}$ | Post- <br> test $\mathbf{X}_{\mathbf{2}}$ | Deviation <br> $\left(\mathbf{X}_{\mathbf{2}} \mathbf{X}_{\mathbf{1}}\right)$ | Deviation <br> of Square <br> $(\mathbf{X})^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | HS | 40 | 75 | 35 | 1225 |
| 2 | DSS | 55 | 75 | 20 | 400 |
| 3 | DAS | 45 | 75 | 30 | 900 |
| 4 | DR | 52 | 80 | 28 | 784 |
| 5 | EAD | 57 | 75 | 18 | 324 |
| 6 | GI | 50 | 70 | 20 | 400 |
| 7 | HH | 45 | 80 | 35 | 1225 |
| 8 | HH | 59 | 79 | 20 | 400 |
| 9 | IH | 43 | 80 | 37 | 1369 |
| 10 | IPD | 59 | 70 | 11 | 121 |
| 11 | KW | 48 | 80 | 32 | 1024 |
| 12 | LDR | 55 | 70 | 15 | 225 |
| 13 | LAF | 60 | 80 | 20 | 400 |
| 14 | MHT | 50 | 75 | 25 | 625 |
| 15 | MHA | 60 | 80 | 20 | 400 |
| 16 | MHI | 40 | 75 | 35 | 1225 |
| 17 | MZA | 56 | 70 | 14 | 196 |
| 18 | RZ | 55 | 76 | 21 | 441 |
| 19 | RU | 45 | 75 | 30 | 900 |
| 20 | RCL | 49 | 80 | 31 | 961 |
| 21 | SH | 58 | 80 | 22 | 484 |
| 22 | ZZ | 56 | 75 | 19 | 361 |
| 23 | RH | 47 | 80 | 33 | 1089 |
| Total |  | 1184 | 1755 | 571 | 15479 |

a. The Result of Pre-Test

The researcher calculated result of pretest of the students in control group. The data showed that.

1. The highest score $=60$
2. The lowest score $=40$
3. Range is $60-40=20$
4. The number of class is $=1+3,3 \log 23$ $=1+3,3(1,3617)=5,863$ Used 5 or 6
5. Class width (interval) is $=\frac{20}{5}=$ used 4

The data description of control group showed that for pre-test, the highest score was 60 and the lowest score was 40 . Then the mean score was 51.04, the value of mode was 56.82 , the value of median was 56.54 , range was 20 and the value of standard deviation was 3.34. For detail information can be shown in appendix 9. Then, the frequency distribution of the data are shown in table below:
Table 4.5 Frequency Distribution

| No | Class limit | Class <br> Boundaries | Mid-point | Tally | Frequency | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $40-43$ | $39.5-43.5$ | 42 | III | 3 | $13.04 \%$ |
| 2 | $44-47$ | $43.5-47.5$ | 46 | IIII | 4 | $17.39 \%$ |
| 3 | $48-51$ | $47.5-51.5$ | 50 | IIII | 4 | $17.39 \%$ |
| 4 | $52-55$ | $51.5-55.5$ | 54 | IIII | 4 | $17.39 \%$ |
| 5 | $56-59$ | $55.5-59.5$ | 58 | III | 6 | $26.08 \%$ |
| 6 | $60-63$ | $59.5-63.5$ | 62 | II | 2 | $8.69 \%$ |

Graphic 4.03 Histogram and Polygon of Pre-test


The graphic above was used for convey the data from pre-test and post test of students in speaking skill. The graphic histogram and polygon showed that the high score of students in pre-test was 60 and the lower score is 40 .

## b. The Result of Post-Test

The researcher calculated result of post-test of the students in control group. The data showed that.

1. The highest score $=80$
2. The lowest score $=70$
3. Range is $80-70=10$
4. The number of class is $=1+3,3 \log 23$ $=1+3,3(1,3617)=5,863$ Used 6
5. Class width (interval) is $=\frac{10}{6}=1.6$ use 2

The data description of control group showed that for post-test, the highest score was 80 and the lowest score was 70 . Then the mean score was 76.91 , the value of mode was 78.06 , the value of median was 76.5 , range was 10 and the value of standard deviation was 6.68 . For detail information can be shown in appendix 9. Then, the frequency distribution of the data are shown in table below:

Table 4.6 Frequency Distribution

| No | Class limit | Class <br> boundaries | Mid-point | Tally | Frequency | Percentage |
| :---: | :---: | :---: | :---: | :--- | :---: | :---: |
| 1 | $70-71$ | $69.5-71.5$ | 71 | IIII | 4 | $17,39 \%$ |
| 2 | $72-73$ | $71.5-73.5$ | 73 |  | 0 | $0 \%$ |
| 3 | $74-75$ | $73.5-75.5$ | 75 | HW III | 8 | $34,78 \%$ |
| 4 | $76-77$ | $75.5-77.5$ | 77 | I | 1 | $4,35 \%$ |
| 5 | $78-79$ | $77.5-79.5$ | 79 | I | 1 | $4,35 \%$ |
| 6 | $80-81$ | $79.5-81.5$ | 81 | WH IIII | 9 | 39,13 |

Graphic 4.04 Histogram and Polygon of Post-test


## Class Limit

The graphic above was used for convey the data from pre-test and post test of students in speaking skill. The graphic histogram and polygon showed that the high score of students in pre-test was 80 and the lower score is 70 .
2. Test of Normality and Homogeneity
a. Test of Normality

## Table 4.5 Test of normality

Tests of Normality

| group |  | Kolmogorov-Smirnov ${ }^{\text {a }}$ |  |  | Shapiro-Wilk |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Statistic | df | Sig. | Statistic | df | Sig. |
| pretest experimental control |  | . 144 | 23 | 200 | 961 | 23 | 479 |
|  |  | . 138 | 23 | 200' | . 972 | 23 | . 735 |

*. This is a lower bound ofthe tue significance.
a. Lilliefors Significance Correction

Based on the output of SPSS, the researchers looked at the data analysis using Shapiro-Wilk because the researcher had the total number of students was 46 people, where

Shapiro-Wilk data analysis was used if the population was less than 50 . The data would has a Normal distribution if significant of table $\geq 0.05$.

The result in the table above, sig. for experimental has a value of 0.479 while sig. for control has a value of 0.735 , it is means that the data was normally because each of data is $\geq 0.05$.
b. Test of Homogeneity

Table 4.6 Test of Homogeneity
Test of Homogeneity of Variance

|  |  | Levene <br> Statistic | dif | df2 | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| POSTTEST | Based on Mean | . 248 | 1 | 44 | . 621 |
|  | Based on Median | 267 | 1 | 44 | . 608 |
|  | Based on Median and with adjusted df | . 267 | 1 | 43.921 | . 608 |
|  | Based on trimmed mean | 254 | 1 | 44 | . 617 |

Based on the SPSS output table Homogeneity of Variance test in the sig column obtained a significant score is 0.617 , where this data $>0.05$ means that the data was homogeneity, has the same variance between used Group Investigation in experimental group and Direct method in control group.
3. Two ways anova

In this study, the researcher used the formula of two way anova or univariate to analyze the comparative hypothesis. For detail information, such as the value of DK between coloum, DK within group and DK interaction can be shown in appendix 10 . Then the table of two way anova as the end calculation of the data are shown in the table below:
Table 4.7 Two Way Anova

| Source of varians | Dk | Total of <br> kuadrat <br> (Jk) | Average <br> of <br> kuadrat <br> (Mk) | Fh | Ft. <br> $\mathbf{5 \%}$ <br> (sig.) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Between coloum | $3-1=2$ | 628,26 | 314,13 | $3.745,76: 314,14$ <br> $=11,92$ | 3,23 |
| Between of line | $2-1=1$ | 893,48 | 893,48 | $3.745,76: 893,48$ <br> $=4,19$ | 4,09 |
| Interaction <br> (coloum and line) | $2 \times 1=2$ | $148.708,6$ <br> 8 | $74.354,34$ | $74.354,34:$ <br> $3.745,76=19,85$ | 3,23 |
| Within group | $46-$ <br> $3 \times 2=4$ <br> 0 | $149.830,4$ |  |  |  |
| 2 | $3.745,76$ |  |  |  |  |
| Total | $46-1=$ <br> 45 | 1.400 |  |  |  |

Table of two way anova is the end of the calculation used as determination analysis of the hypothesis to be accepted or rejected. To found out if the value of Fh was significant or not the researcher was compare between F table. In this case the hypothesis to be tested are:
a. For between of coloum to found out the value of F table the researcher looked based on coloum of DK, while the value of DK between coloum $=2$ and DK of within group $=40$, (2.40) with significant of F table $=3,23$ for $5 \%$ while the value of $\mathrm{Fh}=$ $11,92>\mathrm{F}$ table $=3,23$. It is means Ha was accepted and Ho was rejected. In conclusion there is significant difference between students high and low self confidence towards students speaking competence at the eleventh grade students of SMAN 1 SAKRA TIMUR.
b. For coloum between of line the researcher got value of F table based on coloum of DK=1 and coloum DK within group= 40 $(1,40)$ with significant F table $=4,09$. While the value of $\mathrm{Fh}=4,19>4,09$ it means Ha was accepted and Ho was rejected. In conclusion there is significant difference between Group Investigation and Direct method toward students speaking competence at the eleventh grade students of SMAN 1 SAKRA TIMUR.
c. For the interaction, the researcher got the value of F table based on coloum of DK Interaction (Coloum $x$ Line) $=2$ and coloum DK of within group $=40(2,40)$ with significant $=3,23$, while the value of $\mathrm{Fh}=19,85>3,23$. It is mean Ha was accepted and Ho was rejected.

Based on the statement on previous chapter. The researcher found that:
4. There is any significant difference between students with high and low selfconfidence towards students speaking competence.
When the researcher conducted the research. The fact that the students with high self-confidence was more active in speaking, aspecially when they come infront of class to present their result of observation finding. They can speak with loudly and their can express about their idea without feel worried of their mistaken. Taylor (2014: 50-64) Self-
confidence is not a talent, but it is a mental quality. It means that self-confidence is a accomplishment that come from the education or empowerment. Research indicates that people with greater self-confidence are likely to be able to exert greater influence over peer's behaviour (Gecas, 1989). A person with low self-confidence, would be far less predictable to those around them. Having high self-confidence can help students in expressing idea. So that, having selfconfidence can set the students iv every single situation. In most societies, self-confidence is widely regarded as a valuable individual asset (Rolland Banebeu \& Jean Tirole, 2001). From these examples, people with low selfconfidence can be self-destructive, and it often manifest it self as negativity. Confident people are generally more positive, they believe in themselves and their abilities, and they also believe in living life to the full.
2. There is significant difference between Group Investigation and Direct Method towards students speaking competence.
Based on the researcher finding when conducted the research, the cooperative learning model type Group Investigation can develop students' conceptual knowledge. This was also because the cooperative learning model type Group Investigation had several advantages, among which are able to build students' ability in terms of investigating a concept by doing the task so that students are expected to understand about the concept. The next advantage is that it can increase the level of participation in group discussions to solve problems encountered while conducting investigations. So students are trained in thinking logically about the concepts learned. In other hand DI method just focus to how the teacher teach the student with used the native language, without any presentation or task that make student more active in class. Fie Et Al (2008) have done a research entitled "Using Group Investigation for Chemistry in Teacher Education" based on the result of that research, the used of group investigation method not only build the process of consideration but also build social interaction each individual in the group. This is the underlying reason why students who are taught using Group Investigation cooperative
learning models are better than students who are taught by Direct method. In the cooperative learning model of Group Investigation type (GI) students were formed into several small groups consisting of four to five people. In the small group the students will interact to find answers to the problems given by the teacher. Students will find their own answers to the problems given, this makes learning fun and meaningful as in. This is in accordance with the advantages of group investigation learning model, namely training students to develop their thinking ability or cognitive ability by building their own information needed in the learning process, to train students to grow independent thinking, active student involvement from The first stage until the final stage of learning, and this model makes students happy and feel enjoy the learning process as in. This has resulted in the Group Investigation cooperative learning model having an effect on the conceptual knowledge of the students.
5. There is any interaction between teaching method and self-confidence towards students speaking competence.

Based on the researcher's observation, the improvement in the experimental class is higher than the control class. This is because students in the experimental class are more active in the learning process. Ralph L. Rosnow \& Robert Rosenthal (1989. 143-146) when an interaction effect is present, the impact of one factor depends on the level of the other factor. As we know that interaction is a kind of action that occur as two or more objects that have an effect upon one and another.
Interaction is a effect from the independent variabel to one of category sample in dependent variabel. If with the used of group investigation method can increase the students speaking competence. So then it has an interaction.

From the explanation above, it can be seen that. There is interaction between teaching method and self confidence towards students speaking competence.

After done the research and obtained the data statistically, the researcher taken some conclusion as follows:

1. There is significant difference between students high and low self confidence towards students speaking competence. The researcher found that the value of $F$ table the researcher looked based on coloum of DK, while the value of DK between coloum $=2$ and DK of within group $=40$, (2.40) with significant of F table $=3,23$ for $5 \%$ while the value of $\mathrm{Fh}=$ $11,92>\mathrm{F}$ table $=3,23$. It is means Ha was accepted and Ho was rejected
2. There is significant difference between Group Investigation and Direct Method towards students speaking competence. The researcher got value of F table based on coloum of $\mathrm{DK}=1$ and coloum DK within group $=40(1,40)$ with significant F table $=4,09$. While the value of $\mathrm{Fh}=4,19$ > 4,09 it means Ha was accepted and Ho was rejected.
3. There is interaction between teaching method and self confidence towards students speaking competence. The researcher got the value of F table based on coloum of DK Interaction (Coloum x Line $)=2$ and coloum DK of within group $=40(2,40)$ with significant $=3,23$, while the value of $\mathrm{Fh}=19,85>3,23$. It is means Ha was accepted and Ho was rejected.

As the end of this research, the researcher would like to give some suggestions for students, teachers, and other research as follows:
1 . For the students
a. The students should practice their speak English everyday which can help them to improve their speaking ability.
b. The students should be braver in sharing their opinion even though they cannot speak English fluently.
2. For the teachers
a. The teacher should be sure that the students have understood and mastered the material when they teach their students.
b. The teacher should consider selectively the suitable teaching method which will be used in teaching English for all stages of education.
3. For other researchers, it can be their reference in conducting their research related with this researcher.
4. For the school, it will become consideration to improve students' speaking ability.

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