# CHAPTER IV

# FINDING AND DISCUSSION

This chapter presents the findings and discussions of using dictation technique on listening ability of the first grade students in MTsN 2 Tulungagung. In this chapter presented in three parts, they are the description of data, hypothesis testing, and discussion.

## A. The Description of Data

After dictation technique applied in teaching learning process, the researcher measures the effectiveness of dictation technique on listening ability of the first grade students in MTsN 2 Tulungagung which the samples was VII G class, consists of 35 students. To know the dictation technique on listening ability effective or not the researcher gave pre-test and post-test to the students.

Pre-test and post-test was given to the students; they had to answer the questions. Both of pre-test and post-test consists of 20 items which in the form of 10 cloze tests, 5 multiple choices, and 5 completions. In the cloze test, the students asked to write down the certain verbs based on the audio. Then, in the multiple choice there were four choices in every items, there were A, B, C, and D. The last was completion test, in this test, the students asked to complete the sentences based on the audio that they have heard. The samples of

this research was VII G class consisting of 35 students; but, only 31 students who have done both of pre-test and post-test. Four of them were absent when the researcher conducted the tests.

The followings are the numeric data resulted from both testing, pre-test and post-test. The presentation of data includes:

**1. Raw-score**

Raw score is an individual's achievement score of test. The students' results of pre-test and post-test presented on the table 4.1.:

**Table 4.1. The students' score of pre-test and post-test**

| No. | Pre-test Score ($X_1$) | Post-test Score ($X_2$) |
|---|---|---|
| 1. | 80 | 90 |
| 2. | 55 | 75 |
| 3. | 75 | 90 |
| 4. | 60 | 50 |
| 5. | 65 | 95 |
| 6. | 75 | 75 |
| 7. | 60 | 60 |
| 8. | 70 | 85 |
| 9. | 75 | 60 |
| 10 | 60 | 80 |
| 11. | 80 | 85 |
| 12. | 70 | 90 |
| 13. | 85 | 95 |
| 14. | 65 | 100 |
| 15. | 80 | 90 |
| 16. | 30 | 40 |
| 17. | 75 | 75 |
| 18. | 70 | 90 |
| 19. | 75 | 65 |
| 20. | 35 | 80 |
| 21. | 80 | 85 |
| 22. | 45 | 65 |
| 23. | 75 | 75 |
| 24. | 40 | 65 |
| 25. | 55 | 85 |
| 26. | 75 | 85 |
| 27. | 65 | 80 |
| 28. | 55 | 60 |
| 29. | 50 | 55 |
| 30. | 75 | 80 |
| 31. | 65 | 90 |
| N= 31 | $\sum X_1$= 2020 | $\sum X_2$= 2395 |

**Table 4.2. The statistical result**

| No. | Pre-test Score ($X_1$) | Post-test Score ($X_2$) | $X_1^2$ | $X_2^2$ | D ($X_2$ -$X_1$) | $D^2$ |
|---|---|---|---|---|---|---|
| 1. | 80 | 90 | 6400 | 8100 | 10 | 100 |
| 2. | 55 | 75 | 3025 | 5625 | 20 | 400 |
| 3. | 75 | 90 | 5625 | 8100 | 15 | 225 |
| 4. | 60 | 50 | 3600 | 2500 | -10 | 100 |
| 5. | 65 | 95 | 4225 | 9025 | 30 | 900 |
| 6. | 75 | 75 | 5625 | 5625 | 0 | 0 |
| 7. | 60 | 60 | 3600 | 3600 | 0 | 0 |
| 8. | 70 | 85 | 4900 | 7225 | 15 | 225 |
| 9. | 75 | 60 | 5625 | 3600 | -15 | 225 |
| 10 | 60 | 80 | 3600 | 6400 | 20 | 400 |
| 11. | 80 | 85 | 6400 | 7225 | 5 | 25 |
| 12. | 70 | 90 | 4900 | 8100 | 20 | 400 |
| 13. | 85 | 95 | 7225 | 9025 | 10 | 100 |
| 14. | 65 | 100 | 4225 | 10000 | 35 | 1225 |
| 15. | 80 | 90 | 6400 | 8100 | 10 | 100 |
| 16. | 30 | 40 | 900 | 1600 | 10 | 100 |
| 17. | 75 | 75 | 5625 | 5625 | 0 | 0 |
| 18. | 70 | 90 | 4900 | 8100 | 20 | 400 |
| 19. | 75 | 65 | 5625 | 4225 | -10 | 100 |
| 20. | 35 | 80 | 1225 | 6400 | 45 | 2025 |
| 21. | 80 | 85 | 6400 | 7225 | 5 | 25 |
| 22. | 45 | 65 | 2025 | 4225 | 20 | 400 |
| 23. | 75 | 75 | 5625 | 5625 | 0 | 0 |
| 24. | 40 | 65 | 1600 | 4225 | 25 | 625 |
| 25. | 55 | 85 | 3025 | 7225 | 30 | 900 |
| 26. | 75 | 85 | 5625 | 7225 | 10 | 100 |
| 27. | 65 | 80 | 4225 | 6400 | 15 | 225 |
| 28. | 55 | 60 | 3025 | 3600 | 5 | 25 |
| 29. | 50 | 55 | 2500 | 3025 | 5 | 25 |
| 30. | 75 | 80 | 5625 | 6400 | 5 | 25 |
| 31. | 65 | 90 | 4225 | 8100 | 25 | 625 |
| N= 31 | $\sum X_1$= 2020 | $\sum X_2$= 2395 | $\sum X_1^2$= 137550 | $\sum X_2^2$= 191475 | $\sum D$= 375 | $\sum D^2$= 10025 |

## 2. Mean Score

Mean is the sum value of all data values divided by the total number of values (Choyimah, 2014:13). To find out the mean score of pre-test ($\overline{X1}$) and the mean score of post-test ($\overline{X2}$) the researcher used formula as follows:

$$\overline{X1} = \frac{\sum X1}{N}$$

$$\overline{X2} = \frac{\sum X2}{N}$$

Where:

$\overline{X1}$ : mean of pre-test

$\overline{X2}$ : mean of post-test

$\sum X1$ : total score of pre-test

$\sum X2$ : total score of post-test

$N$ : total number of students

a. finding the mean of pre-test ($\overline{X1}$)

$$\overline{X1} = \frac{\sum X1}{N}$$

$$\overline{X1} = \frac{2020}{31}$$

$\overline{X1}$= 65.1613

b. Mean of post-test ($\overline{X2}$)

$$\overline{X2} = \frac{\sum X2}{N}$$

$$\overline{X2} = \frac{2395}{31}$$

$\overline{X2}$ = 77.2581

**3. Mean of differentiate pre-test and post-test**

After getting the results of mean score, the researcher also calculated the Mean of differentiate pre-test and post-test. The researcher calculated the mean of differentiate pre-test and post-test to know the different mean between pre-test and post-test, the formula used is follow:

$$Md = \frac{\sum d}{N}$$

$$Md = \frac{375}{31}$$

$$Md = 12.097$$

Where:

Md : the mean of differential pre-test and post test

$\sum d$ : sum of different between post-test and pre-test

N : total number of students

Based on the table 4.2, there were 31 students who conducted pre-test and post-test. The highest score of pre-test is 85 and the lowest score is 30. After getting the treatment, they conducted the post-test. The highest score of post-test is 100 and the lowest score is 40. The mean of pre-test is 65.1613 and the mean of post-test is 77.2581. From that, it can be found that the different mean is 12.097.

**4. Standard Deviation**

Standard deviation is a way to dividing up a data set by how widely distributed the data set is. This statistical test used to know the effectiveness of dictation technique on students' listening ability. The result of standard deviation can be seen below:

$$SD = \sqrt{\frac{\sum X1^2 - \frac{\sum (X1)^2}{N}}{N-1}}$$

$$SD = \sqrt{\frac{\sum X2^2 - \frac{\sum (X2)^2}{N}}{N-1}}$$

Where:

SD : standard deviation

$\sum X_1^2$ : sum of pre-test quadrate score

$\sum X_1$ : sum of pre-test score

$\sum X_2^2$ : sum of post-test quadrate score

$\sum X_2$ : sum of post-test score

N : number of students

a. Standard deviation of pre-test:

$$SD = \sqrt{\frac{\sum X1^2 - \frac{\sum (x1)^2}{N}}{N-1}}$$

$$SD = \sqrt{\frac{137550 - \frac{2020^2}{31}}{31-1}}$$

$$= \sqrt{\frac{137550 - \frac{4080400}{31}}{30}}$$

$$= \sqrt{\frac{137550 - 131625.806}{30}}$$

$$= \sqrt{\frac{5924.194}{30}}$$

$$= \sqrt{197.473133}$$

= 14. 05251

b. Standard deviation of post-test

$$SD = \sqrt{\frac{\sum X2^2 - \frac{\sum (X2)^2}{N}}{N-1}}$$

$$SD = \sqrt{\frac{191475 - \frac{2395^2}{31}}{31-1}}$$

$$= \sqrt{\frac{191475 - \frac{5736025}{31}}{30}}$$

$$= \sqrt{\frac{191475 - 185033,065}{30}}$$

$$= \sqrt{\frac{6441.935}{30}}$$

$$= \sqrt{214.731167}$$

= 14. 65371

To proving the manual statistical results, the researcher used SPSS 16.0. The results of SPSS 16.0 as presented on the table 4.2.:

**Table 4.3. Paired samples statistics**

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | Pretest | 65.1613 | 31 | 14.05251 | 2.52391 |
| | Posttest | 77.2581 | 31 | 14.65371 | 2.63188 |

The results show the students' score before and after being taught by using dictation technique on listening ability. The statistic shows that the mean score of pre-test and post-test are different. Mean score of pre-test is 65.1613 and mean score of post-test is 77.2581. Mean score of post-test higher than mean score of pre-test. Then, standard deviation of pre-test is 14. 05251 while standard deviation of post-test is 14. 65371. The number items of pre-test and post-test were 20 questions which consists of 10 cloze tests, 5 multiple choices and 5 completions. The number of students who have done both of pre-test and post-test is 31 where pre-test was given by the researcher before giving treatment and post-test was given after giving treatment. Mean of post-test higher than mean of pre-test it can be conclude that after being taught by using dictation the students' score improved. It means that the

students' listening ability before and after taught by using dictation technique are different.

**Table 4.4. Paired samples correlations**

**Paired Samples Correlations**

| | | N | Correlation | Sig. |
|---|---|---|---|---|
| Pair 1 | Pretest & Posttest | 31 | .557 | .001 |

Based on table 4.4. output of paired samples correlations shows that the correlation between pre-test and post-test is 0.557 and significance value is 0.001. If the significance value less than 0.05, means that $H_0$ rejected. While, if the significance value greater than 0.05 means that $H_0$ accepted. Based on table above, the significance value is less than 0.05. It means that $H_0$ rejected and Ha accepted. So, there is significant difference between the students' listening ability before and after being taught using dictation technique.

**5. T-test**

T-test is used in experimental research design to test the difference mean when the samples are taken from normally distributed. Based on the result of normality testing, the data of pre-test and post-test score were in

normal distribution, so, the researcher used T-test to compare two kinds of data samples. The steps of t-test as follows:

a. Before find out the $t_{count}$, the researcher calculate the total number of quadrate deviation ($\sum X^2 d$) first,

$$\sum X^2 d = \sum d^2 - \frac{(\sum d)^2}{N}$$

$$= 10025 - \frac{(375)^2}{31}$$

$$= 10025 - \frac{140625}{31}$$

$$= 10025 - 4536.29032$$

$$= 5488.70968$$

Where:

$\sum X^2 d$ = total number of quadrate deviation

$\sum d$ = sum of different between post-test and pre-test

N = number of students

b. After the researcher getingt the result of total number of quadrate deviation, the researcher can start to find the value of $t_{count}$:

$$t_{count} = \frac{Md}{\sqrt{\frac{\sum x^2 d}{N(N-1)}}}$$

$$= \frac{12.097}{\sqrt{\frac{5488.70968}{31(31-1)}}}$$

$$= \frac{12.097}{\sqrt{\frac{5488.70968}{930}}}$$

$$= \frac{12.097}{\sqrt{5.90183837}}$$

$$= \frac{12.097}{2.42936995}$$

$$= 4.979$$

To know the degree of freedom, the researcher used formula below:

df = N-1

= 31-1

= 30

Where,

df : degree of freedom

N : number of students

After got the manual results, the researcher used SPSS 16.0 to prove the manual statistic above. The output of SPSS 16.0 as presented below:

**Table 4.5. Paired samples test**

**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 | -1.209E1 | 13.52616 | 2.42937 | -17.05821 | -7.13534 | -4.979 | 30 | .000 |

The computation above shows that df is 30 and $t_{count}$ is 4.979, and to know whether it is significant or not, the researcher used $t_{table}$. It can be seen that $t_{table}$ with significant level 5% and df 30 is 2.042. So, it can be said that $t_{count}$ is greater than $t_{table}$. ($t_{count} > t_{table}$). If $t_{count}$ is greater than $t_{table}$ means that $H_0$ is rejected and $H_a$ is accepted. In contrary, if $t_{count}$ is less than $t_{table}$ means that $H_0$ is accepted and $H_a$ is rejected.

From that, $t_{count}$ is greater than $t_{table}$. So, the Null Hypothesis ($H_0$) is rejected and Alternative Hypothesis ($H_a$) is accepted. So, there is significant difference between the students' listening ability before and after being taught using dictation technique.

**B. Hypothesis Testing**

From the analysis data above, the hypothesis of the research which used in SPSS 16.0 are:

1. If $t_{count}$ is greater than $t_{table}$, the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_a$) is accepted.

   Alternative hypothesis ($H_a$) is accepted, means that there is significant difference between the students' listening ability before and after being taught using dictation technique.

2. If $t_{count}$ is less than $t_{table}$, the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_a$) is rejected.

   Null hypothesis ($H_0$) is accepted, means that there is no significant difference between the students' listening ability before and after being taught using dictation technique.

In this research, $t_{count}$ is greater than $t_{table}$ (4.979 > 2.042). So, the Null Hypothesis ($H_0$) is rejected and Alternative Hypothesis ($H_a$) is accepted. So, there is significant difference between the students' listening ability before and after being taught using dictation technique. It can be conclude that dictation technique is effective to teach listening in the first grade of MTs N 2 Tulungagung.

## C. Discussion

Based on data analysis, it have shown that there is significant difference between the students' listening ability before and after being taught using dictation technique of the first grade in MTs N 2 Tulungagung.

The finding showed that the mean score of pre-test was 65.16; while in the post-test was 77.25. Based on the mean of pre-test and post-test, it has known that the mean score of post-test higher than the mean score of pre-test. It means that the students' listening ability after taught by using dictation technique was improved. Then, to know the effectiveness the researcher analyses the data used t-test in SPSS 16.0. The result of $t_{count}$ was 4.979 and df was 30. Then, the researcher used $t_{table}$ with significant level 5% and 30 degree of freedom. The result of $t_{table}$ was 2.042. Hence, it is known that $t_{count}$ is greater than $t_{table}$.

$T_{count}$ was greater than $t_{table}$ means that the Null Hypothesis ($H_0$) is rejected and Alternative Hypothesis ($H_a$) is accepted. So, there is significant difference between the students' listening ability before and after being taught using dictation technique. According to Nation and Newton (2009:65) "Dictation has listening input and written output".

> Ur (2009: 128-129) also states as follow:
> Dictation is technique that ask students to write down what they have heard instead of saying aloud; the written versions can be checked later either by the teacher or, perhaps more productively, by the students themselves using a correct version.

From the definitions, it can be concluded that dictation is a teaching technique that asks the students to hear and write down what have said to them. The mean score of post-test that showed higher than mean score of pre-test, it

indicates that the students listening ability were improved after being taught by dictation technique. The improvement of students' listening ability after being taught by using dictation technique, it makes that dictation technique become effective to teach listening. It is agree with the previous studies in this research done by Dita Sari (2013), Yonezaki (2014) and Fatimah Mulya Sari (2013) that stated "Using dictation technique on listening students' ability was effective. Dictation technique was effective because by using dictation the students can produce both of writing and listening, besides that the students also can check their ability in understanding the foreign language pronunciation. As stated by Alkire (2002) that dictation gives practice in correct forms of speech.

When the students doing dictation activity, they needed longer time to listen and think how they should write in the correct written form. In the first practice or first dictation activity, the researcher used guided dictation. Before dictation activity started, the researcher wrote down some verbs or specialized words within dictation and gave the example how to pronounce its words. Here, most of the students got incorrect written form. In the next dictation activity, they were able to write down some words in the correct form. To write down in the correct written form the students needed more focus of the speaker. Because listening is not passive skill but listening is interactive skill. It was in line with Bachman (1990) in O'malley (1996: 58) "Listening is not a passive or receptive skill. Listening is an interactive, dynamic, interpretive process in which the listener engages in the active construction of meaning". Usually the students get difficult in understanding the speaker's pronunciation. The speaker's pronunciation might

unclear for the students or the students did not unfamiliar yet with the words which have been speak by the speaker. According to Boyle (1984:34) there are speaker's factors that can influence the students' in listening activity, (1) language ability of the speaker: native speaker - beginner-level non-native speaker, (2) speaker's production: pronunciation, accent, variation, voice, etc., (3) speed of delivery, and (4) prestige and personality of the speaker.

Many students of foreign language feel that they can listen and understand the speaker well. But, factually they cannot recognize all what the speaker said. After applying dictation technique in teaching learning process, now, the students can improve their pronunciation of foreign language and also they can write what they have heard in the correct written from. This is in line with the argument of previous study done by Sari (2013) that stated "Using dictation technique in listening could make the students more aware and curious about the correct sentences and it made the students more active." Dictation was effective to teach listening because the technique given on dictation can help the students to understanding the word dictated, they can listen the speaker clearly because the pronunciation on dictation technique was given not only once but also more than one.

Besides that, dictation technique can also invite the students to active during and after the dictation, during the dictation the students should memorize what they have heard. It seems in line with the statement given by Nation (19991: 12) that dictation as a technique where the learners receive some input, hold this in their memory for a short time, and then write what they heard. Dictation helps to

develop short-term memory. Students practice retaining meaningful phrases or whole sentences before writing them down (Alkire, 2002).

Dictation was effective also proven by Dita Sari (2013) in her research entitle: "*Teaching Listening through Dictation using Song to the Eight Grade Students of SMP Negeri 14 Cirebon".* She used Quasi-experimental, so there were two classes (experimental and control class). In her research, she found that dictation technique using song improves the students' comprehension in listening at eight grade of SMPN 14 Cirebon. It proved by the result of $t_{account}$ (2.26) was higher than the $t_{table}$ (2.093). Therefore, the use of dictation technique using song is effective in teaching listening at the eighth grade of SMPN 14 Cirebon. To compare with Dita Sari's research, the researcher should state first that the findings of this research also stated that dictation is effective to teach listening. But, this research used pre-experimental research design while Dita Sari's research used quasi-experimental design. Looked from the result, the result $t_{count}$ of Sari Dita's research was smaller than this research ($2.26 < 4.979$), nevertheless the finding of this research and Dita Sari's research were same, that is dictation was effective in teaching listening.

Then, the second one was YONEZAKI (2014) conducted the research with the title: *Effectiveness of Dictation in Improving English Listening Ability of Japanese High School Student*. He also conducted research used two classes (experimental and control class). In the experiment, dictation was given eight times as treatment. Based on the data, an independent *t*-test was conducted. The difference in gains between the two groups was statistically significant ($p<0.05$)

even though the effect size was small ($r$ > 10). The result was the treatment of dictation practices had a statistically significant effect. In this research, dictation technique also gave significant effect of students' listening ability.

The third was from Fatimah Mulya Sari (2013) also conducted the research about improving students' listening ability through dictation. The research was conducted in first year students of SMA Negeri 1 Tanjungbintang. She used two classes as the experimental class and the try-out class. The test was conducted in 60 minutes. The mean of students' pre-test and post-test score increased from 57.44 up to 72.00 with gain score 14.56. The result of the hypothesis testing which showed that the Sig. < α (p<0.05, p=0.000). It can conclude that there was a significant improvement of students' listening ability after being taught through dictation technique at SMA Negeri 1 Tanjungbintang. The mean score of post-test in Fatimah Mulya Sari's research also greater than the mean of pre-test, it was same with the result of mean score of this research. The mean score of post-test in this research also was greater than mean score of pre-test. The gain score of Fatimah Mulya Sari research was greater than the gain score of this research (14.56 < 12.097) but the finding both of researches were same, that is dictation technique given significant effect and effective to teach listening.

Three of them were agreed with this research which stated that dictation technique was effective to improve the students' listening ability in teaching listening. The result of research finding was proven that dictation technique was effective to drill and to improve students' listening ability. This research was conducted in the first grade of Junior high school. Dita Sari (2013) also conducted

dictation technique in junior high school in the second grade. But, Fatimah Mulya Sari (2013) and Yonezaki (2014) was conducted dictation technique in senior high school level. All of them, the results were dictation technique was effective. It means that dictation technique can be used for any level.

To strengthen the dictation technique, there were some advantages mentioned by Patel and Jain (2008:132), they are: (1) it trains students to reproduce in writing what they listen. (2) it gives good aural practice to the students. It develops the habit of listening attentively in students. (3) it enables students to understand the part of each sentence and word phrases. (4) it enables student to write at good reasonably speed. (5) it enables students to understand spelling and punctuation. (6) it enables student to write-to use capital letters. (7) it enables students to develop the habit of listening spoken language.

Theories above was accepted by the researcher, dictation technique can used to improve the students' listening ability especially for the students of first grade in MTsN 2 Tulungagung. Based on analyses data $t_{count}$ is greater than $t_{table}$ means that the Null Hypothesis ($H_0$) is rejected and Alternative Hypothesis ($H_a$) is accepted. So, there is significant difference between the students' listening ability before and after being taught using dictation technique. Therefore, dictation technique is effective to improve listening ability of the students of the first grade in MTsN 2 Tulungagung.