CHAPTER 4

RESEARCH FINDING AND DISCUSSION

This chapter is going to present the data description of this research. It covers the two major parts, they are findings and discussions. Each part discuss about all of the data that is obtained during the treatment and analysis. Those descriptions are used to answer the problem statement which is stated before, namely “Can popular songs improve the students’ ability in pronouncing /θ/ and /ð/?”

4.1. Research Findings

In this part, I would like to discuss about the data that consists of pre-test and post-test. In the research findings, I gave some results that consist of pre-test result, post-test, and analyzing data. The data of this research was collected by using a script as the instrument. The script was included with the oral test. Also I recorded the students’ pronunciation when pronouncing the songs.

4.1.1. The Description of the Pre-Test Data

I would like to explain the result of the pre-test data with more details. Based on my explanation in methodological chapter, that in the pre-test, I recorded all of the students’ pronunciation of both consonants sounds which is based on the songs’ script.
After I analyzed the pre-test, I found the score as follow:

a. The students with the highest score are 54
b. The students the lowest score are 3
c. The mean score is 30
d. The standard deviation is 17
e. The range of interval class is 51
f. The amount of interval class is 6
g. The wide of interval class is 9

(See appendix 12 page xxxii)

The table above is showed us that the result of the students’ pronunciation ability in pre-test was unstable. It is because of their ability in pronunciation were various between one with the other. It can be inferred that the highest score are 54 and the lowest score are 3 students. Then they are divided into 6 interval classes. The students’s score in each interval class can be described in percentage. The students who obtained score between 3-19 were 12 students with the percentage were 37,5%. The students who obtained score between 20-36 were 6 students with the percentage were 18,75%. The students who obtained score between 37-53 were 13 students with the percentage were 40,625%. And for the students that obtained score between 54-70 were 1 students with the percentage were 3,125%. By looking at the explanation of score and percentage above, I can conclude that most of the students got score between 37-53 with the percentage 40,625%. (See appendix 13 page xxxiv)
4.1.2. The Description of the Post-Test Data

In the post-test, I gave treatments. The explanation of post-test data which is analyzed after I found some scores as follow:

a. The students with the highest score are 68
b. The students with the lowest score are 3
c. The mean score is 41
d. The standard deviation is 21
e. The range of interval class is 65
f. The amount of interval class is 6
g. The wide of interval class is 11

(See appendix 15 page xxxvi)

Furthermore, the table above showed us that the result of the students’ pronunciation ability in post-test is stable. It is because of their ability in pronunciation were improved after I gave treatments. It can be inferred that the highest score are 68 and the lowest score are 3. And they were divided into 6 interval classes. The students’s score in each interval class can be described in percentage. The students who obtained score between 3-23 were 8 students with the percentage were 25%. The students who obtained score between 24-44 were 3 students with the percentage were 9,375%. The students who obtained score between 45-65 were 14 students with the percentage were 43,75%. While for the students who obtained score between 66-86 were 7 students with the percentage were 21,875%. By looking at the explanation of score and
percentage above, I can conclude that most of the students were in score between 45-65 were 14 students with the percentage 43.75%, I concluded that it was gained by their ability in pronouncing /θ/ and /ð/ by using popular songs in this research. (See appendix 16 page xxxvii)

4.2. Homogenity Analyzing

Analysis of the criteria is homogenity if \( \chi^2_{\text{count}} \) is smaller than \( \chi^2_{\text{table}} \) \((\chi^2_{\text{count}} \leq \chi^2_{\text{table}}\) means that it is homogenity. I found that \( \chi^2_{\text{count}} \) is -0.32. In comparing the \( \chi^2_{\text{count}} \) to \( \chi^2_{\text{table}} \) it is based on the chi-quadrant table in opportunity \((1 - \alpha)\) and \(dk = (n - 1)\), which the total of sample \((n) = 32\). So, the calculation become \((1 - 0.05 = 0.95)\) and \((32 - 1)\). (See appendix 17 page xxxix)

The criteria analysis is accepted if \( \chi^2_{\text{count}} \) is smaller than \( \chi^2_{\text{table}} \). After I analyzed, I found that \( \chi^2_{\text{count}} \leq \chi^2_{\text{table}} \) \((-0.32 \leq 43.8)\). It was gained by comparing the \( \chi^2_{\text{count}} \) or \( \chi^2_{\text{chi}} \) (chi-quadrant) with \( \chi^2_{\text{table}} \). From the explanation above, it concluded that the data of pre-test and post test are homogenity. (See Appendix 17 page xl)

4.3. Hypothesis Verification

The hypothesis verification of this research was “Popular Songs can improve students’ ability in pronouncing /θ/ and /ð/.” After I got the data in homogenity analysis of the students’ score at pre-test and post-test was used to
complete the value hypothesis verification. I found the values and below were the steps of hypothesis verification.

\[ H_0 : \mu_1 = \mu_2 \] which is equivalent to test \( H_0 : \overline{D} = 0 \)

\[ H_a : \mu_1 < \mu_2 \] (as we want to conclude that the popular songs is effective)

Note : Reject \( H_0 \) \( t_{\text{count}} > t_{\text{list}} \)

: Receive \( H_0 \) \( t_{\text{count}} < t_{\text{list}} \)

The critical above used significant \( \alpha = 0.05 \) with degree of freedom (df) = \( n - 1 \). I applied the formula paired t-test as follows:

\[
\overline{D} = \frac{\sum D_i}{n} \longrightarrow \sigma_{\text{diff}} = \frac{\sum D_i^2 - (\overline{D})^2 n}{n - 1} \longrightarrow t = \frac{\overline{D} - 0}{\sigma_{\text{diff}} / \sqrt{n}}
\]

Where : \( \overline{D} \) = Mean of differences

\( \sigma_{\text{diff}} \) = Standard deviation of differences

\( n \) = Number of matched pairs

\[
\sum D_i = -338
\]

\[
\sum D_i^2 = 11898
\]

\( n = 32 \)
And then I calculated the mean of differences as following:

\[ \overline{D} = \frac{\sum D_i}{n} \]

\[ = \frac{-338}{32} \]

\[ = -10.6 \]

After calculated the mean of differences, I gained the standar deviation of pre-test and post-test as following:

\[ \sigma_{diff} = \sqrt{\frac{\sum D_i^2 - (\overline{D})^2 \ n}{n-1}} \]

\[ = \sqrt{\frac{11898 - (-10.6)^2 \ 32}{32 - 1}} \]

\[ = \sqrt{\frac{11898 - (21.2 \times 32)}{31}} \]

\[ = \sqrt{\frac{11898 - 678.4}{31}} \]

\[ = \sqrt{362} \]

\[ = 19.02 \]
Based on the calculation above, I found that the standard deviation of pre-test and post test is 19.02. Furthermore, I analyzed the hypothesis by using paired t-test formula as below:

\[ t = \frac{D - 0}{\sigma_{\text{diff}} / \sqrt{n}} \]

\[ = \frac{-10.6 - 0}{19.02 / \sqrt{32}} \]

\[ = \frac{-10.6}{19.02 / 5.7} \]

\[ = \frac{-10.6}{3.3} \]

\[ = -3.2 \]

The result of testing the hypothesis (t\text{count}) is -3.2 while the value of t\text{list} from the list of distribution with the degree of freedom df = (n – 1) is 31 and t\text{list} is 1,697. Because t\text{count} is smaller than t\text{list} (-3.2 < 1,697). (See appendix 20 page xli

So, I concluded that the hypothesis is acceptable. The data above can be presented in the table of paired t-test as follows:

<table>
<thead>
<tr>
<th>N</th>
<th>Df</th>
<th>t\text{count}</th>
<th>t\text{list}</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>31</td>
<td>-3.2</td>
<td>1,697</td>
</tr>
</tbody>
</table>

Notes:

n = Total of sample (32)

df = The degree of freedom (n – 1)
\( t_{\text{count}} \) = The value obtained from the computation result of paired t-test analyzing

\( t_{\text{list}} \) = The value obtained by looking up at the table of t distribution at the level significance \( \alpha = 0.05 \)

### 4.4. Discussion

Pronunciation is one of the aspects in speaking skill which focuses on the students’ fluency in producing a clearer language when they speak. It deals with the phonological process that refers to the component of a grammar that is made up of the elements and principles that determine how sounds vary and pattern in a language. So, pronunciation is an important element for the students.

Thus, the students have to follow the English course and listen to the music everyday to be success in pronunciation. In this research, I found they pronounce the sounds \(/\theta/\) and \(/\delta/\) was the same, so that is why I used songs to improve the students’ ability in pronouncing \(/\theta/\) and \(/\delta/\) sounds.

According to Djiwandono, et al, it is a short sound whereas English fricative \(/\delta/\) is a voiced sound. The vocal cords vibrate when we make this sound. It is a slightly longer sound than \(/\theta/\). Thus, Dale, et al (2005: 137) says that pronouncing \(/\delta/\) is tongue tip between the teeth, airstream is continuous without interruption, and vocal cords are vibrating.

Furthermore, in pre-test, students had bad pronounce. When I gave songs of both sounds, nearly half the students had bad pronounce. For examples, sample 1, the first word *together* \(/\text{to}\'\text{gether}/\), the pronounce to gether
[tuˈɡeðə(r)]. The second word something /ˈsʌmθɪŋ/, the pronounce something [ˈsʌm əθɪŋ]. The third word with /wɪθ/, the pronounce with [wɪθ]. Sample 11, the first word together /təˈɡeðə(r)/, the pronounce together [tuˈɡeðə(r)]. The second word something /ˈsʌmθɪŋ/, the pronounce something [ˈsʌmðɪŋ]. The third word with /wɪθ/, the pronounce with [wɪθ]. Sample 32, the first word together /təˈɡeðə(r)/, the pronounce together [tuˈɡeðə(r)]. The second word something /ˈsʌmθɪŋ/, the pronounce something [ˈsʌmðɪŋ]. The third word with /wɪθ/, the pronounce with [wɪθ].

Moreover, popular song is a media to make the students easier in exercising their ability, especially pronunciation. Because the students become more enjoy while listened and learned the songs, it makes the songs as a good media in teaching pronunciation which is designed to elicit a word.

The results of students after got eight-times for treatments. In post-test, sample 1, the first word together /təˈɡeðə(r)/, the pronounce together [tuˈɡeðə(r)]. The second word something /ˈsʌmθɪŋ/, the pronounce something [ˈsʌmθɪŋ]. The third word with /wɪθ/, the pronounce with [wɪθ]. Sample 11, the first word together /təˈɡeðə(r)/, the pronounce together [təˈɡeðə(r)]. The second word something /ˈsʌmθɪŋ/, the pronounce something [ˈsʌmθɪŋ]. The third word with /wɪθ/, the pronounce with [wɪθ]. Sample 32, the first word together /təˈɡeðə(r)/, the pronounce together [tuˈɡeðə(r)]. The second word something /ˈsʌmθɪŋ/, the pronounce something [ˈsʌmθɪŋ]. The third word with /wɪθ/, the pronounce with [wɪθ].
In addition, the songs made the students become more relax, and it proved when I did this research, they are enthusiastic to follow the steps by steps of this research. That is the reason why I choose the popular songs in improving the students’ ability in pronouncing /θ/ and /ð/ sounds.

4.4.1. Condition of Pre-test

In fact, the students who have the middle score in pronunciation were the students that are difficult to change their pronunciation. Furthermore, for pre-test that I did in one meeting to record all of the students’ pronunciation, and I got the data of the students’ pronunciation ability by using script of songs as the instrument. I recorded all of the students’ pronunciation, both sounds of consonants, based on script of songs. But unfortunately, some of them can not pronounce well and clearly. So, I can conclude that the students’ pronunciation ability in the pre-test was still low and it is still very intrude in pronunciation.

4.4.2. Condition of Treatment

For the treatments, I did in eight meetings. Before it, I explained about the English pronunciation with both sounds of consonants based on the first song. And then, one until four meetings, I played one by one song to the students then they repeated both sounds. Then, five until eight meetings, I gave fill in the blank type of song script for them while I played one by one song to the students then they repeated both sounds. So, after the students learned and understood about the sounds, the students know about how to pronounce both sounds of consonants based on the songs. The students not only could learn from their mistakes but also practice their pronunciation easier than before.
4.4.3. Condition of Post-test

For the post-test is similar with the pre-test, I did it in one-meeting to record all of the students’ pronunciation, and I got the data of the students’ pronunciation ability by using the script of songs. I recorded all of the students’ pronunciation, both sounds of consonants, based on script of songs.

Based on the result of post-test, the data showed that the students’ ability had improved from the pre-test. The students can have a good and clear pronunciation. Although, just some of the students have a bad pronunciation. So, I can conclude that the students’ pronunciation ability can improved by using popular songs especially in pronouncing /θ/ and /ð/ sounds.

The success of teaching English is indicated by the students’ achievement in the evaluation. Moreover, the teacher’s style in teaching which uses the method when teaching English has a meaningful influence to the success. In the real life, as the students, all of us will find many problems in speaking or singing an English song. The most complicated problem is the students feel difficult to speak especially to be brave in pronouncing the words. They are shy and embrace in pronouncing the words when they sing a song. When they sing an English song, they always have a bad pronunciation. Sometimes, they pronounce word by word was just the same.