## CHAPTER IV

## RESEARCH FINDINGS AND DISCUSSION

This chapter presents the research finding and the discussion. It provides the data found from the research field. In addition, it discusses data description and presentation, analyzes self-efficacy level and speaking skill, and the correlation between students' self-efficacy and speaking skill.

## A. Research Findings

From the research conducted, it was obtained some data. There are two kinds of data source which were obtained; the data from self-efficacy and speaking skill. The data is in the form of score, so it is included of interval data. After the data from self-efficacy and speaking test were obtained, it was used to calculate the correlation between both of them.

## 1. Normality test

Before it is decided to use parametric statistic to calculate the correlation, it should be tested by the normality test. ${ }^{1}$ Therefore, it has been test for the normality. The distribution of data is normal if sig (significance) is more than $0,05(>0,05)$ and the distribution of data is not normal if sig (significance) is less than $0,05(<0,05)$. Here is the result:

[^0]Table 4.1
Test of Normality

One-Sample Kolmogorov-Smirnov Test

|  |  | Unstandardized Residual |
| :--- | :--- | ---: |
| N |  | 98 |
| Normal Parameters ${ }^{\text {a,b }}$ | Mean | , 0000000 |
|  | Std. Deviation | 5,82698394 |
| Most Extreme Differences | Absolute | , 063 |
|  | Positive | , 063 |
|  | Negative | ,- 053 |
| Kolmogorov-Smirnov Z |  | , 623 |
| Asymp. Sig. (2-tailed) |  | , 832 |

a. Test distribution is Normal.
b. Calculated from data.

It can be seen from the table, based on the calculation of SPSS 18 by using kolmogorov-smirnov test, the data distribution is normal since the value of sig. presented in the table is 0,632 . It means more than 0.05 .

## 2. Descriptive Statistic

Descriptive statistics including validity test of questionnaire, Cronbach alphas, means and standard deviations was computed to summarize the validity of questionnaire and the students' responses to the self-efficacy questionnaire. Here is the result of questionnaire's validity test which is presented in the table 4.2:

Table 4.2
Validity Test of Questionnaire

| Number of <br> Item | Pearson Correlation | N |
| :---: | :---: | :---: |
| 1 | 0,454 | 98 |
| 2 | 0,511 | 98 |
| 3 | 0,580 | 98 |
| 4 | 0,508 | 98 |
| 5 | 0,562 | 98 |
| 6 | 0,544 | 98 |
| 7 | 0,484 | 98 |
| 8 | 0,639 | 98 |
| 9 | 0,411 | 98 |
| 10 | 0,588 | 98 |
| 11 | 0,552 | 98 |
| 12 | 0,451 | 98 |
| 13 | 0,376 | 98 |
| 14 | 0,385 | 98 |
| 15 | 0,528 | 98 |
| 16 | 0,611 | 98 |
| 17 | 0,639 | 98 |
| 18 | 0,629 | 98 |
| 19 | 0,718 | 98 |
| 20 | 0,682 | 98 |

Based on the calculation SPSS 18 by using Pearson formula, it was obtained the data presented in the table above. Pearson correlation (r) table for significance 0,05 and N 98 is 0,195 (see r table). From the table, we can see that r score for each item is more than 0,195 . This means that each item of this questionnaire is valid.

Besides calculated the validity test of questionnaire, the researcher also calculated descriptive statistic of the questionnaire. This test is aimed at summmarizing the students' responses to the self-efficacy questionnaire. Below is the result of descriptive statistic:

Table 4.3
Descriptive Statistic of the Self-Efficacy Questionnaire

|  | Number | Cronbach's | Mean | Standard |
| :---: | :---: | :---: | :---: | :---: |
| of items | Alfa |  | Deviation |  |
| Self-Efficacy |  |  |  |  |
| Questionnaire | 20 | , 875 | 72,31 | 9,047 |

As it is shown in table, the reliability of the self-efficacy questionnaire designed for this study was 0,875 . It means his reliability of research instruments was satisfactory. Means of self-efficacy questionnaire was 72,31 so it was respectively.

## 3. The Level of Students' Self-Efficacy

Based on the questionnaire that was given to the student, it was gained the students' response toward their self-efficacy in speaking (see Appendix F). The response is presented in the following table:

Table 4.4
Students' Questionnaire Result

| Indicator | Value Statement | Percentage | Conclusion |
| :---: | :---: | :---: | :---: |
| Students' Self- | 5 | $52,96 \%$ | Positive |
| Efficacy in | 4 | $38,57 \%$ |  |
| Speaking | 3 | $7,45 \%$ |  |
|  | 2 | $1,12 \%$ | Positive |
|  | Students' Social | 5 |  |
| Self-Efficacy | 4 | $33,67 \%$ |  |
|  | 3 | $4,42 \%$ |  |
|  | 2 | $0,34 \%$ |  |
| Students' | 5 | $71,77 \%$ | Positive |


| Emotional Self- | 4 | $24,49 \%$ |  |
| :---: | :---: | :---: | :---: |
| Efficacy | 3 | $3,40 \%$ |  |
|  | 2 | $0,34 \%$ |  |
| Students' Source of | 5 | $51,78 \%$ |  |
| Self-Efficacy | 4 | $38,77 \%$ |  |
|  | 3 | $9,44 \%$ | $3,06 \%$ |
|  |  |  |  |
|  | 2 |  |  |

From the table above, it can be seen that the students' response toward self-efficacy in speaking shows most of students strongly agree to their speaking, social, emotional, and source of self-efficacy.

The researcher also classified the data from questionnaire based on their range of score. Here is the data classification of self-efficacy score from the table presented in the Appendix A, based on the Likert scale that has been arranged. Here is the result:

Table 4.5
Level of Students' Self-Efficacy

| No. | Range of score | Level | Frequency | Percentage |
| :---: | :--- | :---: | :---: | :---: |
| 1. | $81-100$ | Very high | 15 | $15,3 \%$ |
| 2. | $61-80$ | High | 72 | $73,4 \%$ |
| 3. | $41-60$ | Average | 11 | $11,2 \%$ |
| 4. | $21-40$ | Low | - | - |
| 5. | $0-20$ | Very low | - | - |

It can be seen from the table that the score range 81-100 is 'very high' level in self-efficacy, in which 15 students or $15,3 \%$ of the students belong to this level. There are 72 students whose qualification between the score range 61-80. It means that $73,4 \%$ of the students have 'high' self-efficacy level.

Besides, there are 11 students have 'average' qualification which is between the score range 41-60, in which there are $11,2 \%$ of the students or 11 students are included into this level. However, there is no student has neither 'low' nor 'very low' level of self-efficacy whose score range is between 21-40 and 0-20.

From the data above, we can conclude that almost all of students have high self-efficacy that is most of them agree to have confidence in speaking English. For instance, they can participate in a conversation on familiar topics, they can participate in discussions or debate, and so on. Besides, through my observation most of students are able to describe processes or events in some detail and summarize stories e.g in recount text.

The researcher also included demography variable i.e gender in this study. This is as a purpose to know whether any differences for male and female to have self-efficacy. In other words, there is correlation between selfefficacy level and gender or not. The result is presented in the table below:

Table 4.6
Level of Self-Efficacy and Gender

|  | Male | Female |
| :---: | :---: | :---: |
| Total Self-efficacy <br> Score | 2719 | 4367 |
| N | 38 | 60 |
| Average | 71,55 | 72,78 |

The data above indicates that there is no significant correlation between self-efficacy's level and gender because their average score is almost the same.

## 4. The Level of Speaking Skill

Besides the level of students' self-efficacy which was found out, it was also carried out the test which was conducted to know the students' speaking skill. Here is the data classification based on the data presented in the table of speaking skill score of tenth grade students (see Appendix B):

Table 4.7
Level of Students' Speaking Skill

| No. | Range of Score | Level | Frequency | Percentage |
| :---: | :--- | :---: | :---: | :---: |
| 1. | $81-100$ | Very good | 11 | $11,2 \%$ |
| 2. | $61-80$ | Good | 88 | $89,8 \%$ |
| 3. | $41-60$ | Average | - | - |
| 4. | $21-40$ | Poor | - | - |
| 5. | $0-20$ | Very poor | - | - |

From the data presented in the table shows that there are 11 students or $11,2 \%$ of the students have 'very good' qualification, in which the score range is 81-100. $89,8 \%$ of the students are between the score range 61-80. It means that there are 88 students are included into 'good' qualification. Besides, there is no students between the score range 41-60, in which it is included 'average'
qualification. There is no student neither in 'bad' nor 'very bad' qualification which is between the score range 21-40 and 0-20.

Based on the findings above, we can conclude that most of the students have good qualification in speaking in which they can pronounce words without many mistakes or around two words. They also can speak fluently but sometime feel hesitate to continue their speaking. Besides, they speak without many grammatical errors or around 2-3 errors. Yet, they sometime still use wrong intonation.

## 5. The Correlation between Students' Self-Efficacy and English Speaking

 SkillData from the students' self-efficacy and English speaking skill was used to answer the last research question. It was used to analyze whether there is correlation between students' self-efficacy and English speaking skill.

From the data obtained, it was calculated by using SPSS 18 to know whether there is correlation between self-efficacy and speaking skill. The result of the calculation is as follows:

Table 4.8
The Value of Correlation

| Correlations |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Self_Efficacy | Pearson Correlation | Self_Efficacy | Speaking_Skill |  |
|  | Sig. (2-tailed) |  | 1 |  |
|  |  |  | , $762{ }^{* *}$ |  |
|  |  |  | , 000 |  |


|  |  | 98 | 98 |
| :--- | :--- | ---: | ---: |
| Speaking_Skill | Pearson Correlation | , $762^{* *}$ | 1 |
|  | Sig. (2-tailed) | , 000 |  |
|  | N | 98 | 98 |

**. Correlation is significant at the 0.01 level (2-tailed).

Based on the table, product moment correlation between students' selfefficacy and English Speaking Skill is 0.762. Meanwhile the value of sig. presented in the table is 0.000 . Furthermore, there are two stars at the value of correlation in which it shows that the correlation is significance at the level 0.01.

Besides calculating the correlation by using $\operatorname{SPSS} 18$, it is also calculated manually. Here are the calculations:

Students' Self Efficacy = X
English Speaking Skill $=Y$
To find out the coefficient correlation, it is used the formula:

$$
\begin{aligned}
& r_{x y}=\frac{n \sum x_{i} y_{i}-\left(\sum x_{i}\right)\left(\sum y_{i}\right)}{\sqrt{\left\{n \sum x_{i}^{2}-\left(\sum x_{i}\right)^{2}\right\}} \sqrt{\left\{n \sum y_{i}^{2}-\left(\sum y_{i}\right)^{2}\right\}}} \\
& \mathrm{r}
\end{aligned}=\frac{98 \times 544749,5-7086 \times 7494,5}{\sqrt{(98 \times 520320-50211396)(98 \times 574896,8-56167530,25)}}
$$

$$
\begin{aligned}
& =\frac{279424}{\sqrt{134431592178,6}} \\
& =\underline{279424} \\
& 366649,14 \\
& \mathbf{r}=\mathbf{0 , 7 6 2 1 0 1 9}
\end{aligned}
$$

Because $\mathrm{r}=0,7621019$ and r table with $\alpha=5 \%$ is 0.195 , so, it is more than the significance test.

After the value of the correlation was found out, then it was calculated the significance of correlation coefficient test. The steps are:

1. Developing hypothesis

Но : $\mathrm{r}=0$
На : $\mathrm{r} \neq 0$
2. Determining $\alpha$

The alpha used is 0,05 (5 \%).
3. Statistic test

The formula of T test:

$$
\begin{aligned}
& t=\frac{r x y \sqrt{n-2}}{\sqrt{\left(1-r^{2}\right)}} \\
& \mathrm{t}=\frac{0,7621019 \sqrt{9} 9-2}{\sqrt{(1-0,7621019)}} \\
& \mathrm{t}=\frac{7,467}{0,238} \\
& \mathrm{t}=31,374
\end{aligned}
$$

$\mathrm{t} 0.05 / 2,(98-1)=\mathrm{t} 0.025 ; 97=1,984$
t table $=1,984$
Because t test > table, so Ho is rejected and Ha is received.
4. Conclusion

Based on the calculation, it can be concluded that there is significant correlation between students' self-efficacy and speaking skill.

## B. Discussion

The research was conducted from July $7^{\text {th }}, 2014$ - November $20^{\text {th }}, 2014$.
Based on the research finding obtained from the test, then it is discussed the result of the finding. It covers the level of students' self-efficacy and English speaking skill, and the correlation between those two variables.

## 1. Interpretation of Normality Test and Descriptive Statistic

Since this research used parametric statistic to calculate the correlation between varible X and variable Y , the researcher tested the distribution of data. There are two kinds of test which we can use to know the distribution of the data i.e Kolmogorov-smirnov test if the sample more than 50 (> 50) and Shapiro-wilk test if the sample less than $50(<50)$. Since the sample of this research was 98 or more than 50 so the researcher used Kolmogorov-smirnov test by using SPSS 18. The result of Kolmogorov-smirnov test was 0,632 . This
means the distribution of the data is normal because the data is normal when the significance is more than 0,05 .

The researcher also conducted validity and realibility test of the questionnaire. This was aimed at knowing the validity of the questionnaire and also students' responses toward the questionnaire.

The researcher conducted validity test by using Pearson correlation in SPSS 18. The test indicated that each item has is valid because correlation coefficient (r) for each item is more than $r$ table (see table 4.2) for significance 0,05 i.e 0,195 . Besides reability test by using Cronbach Alpha's showed 0,875 and Means 72,31 . This means students' responses toward questionnaire is satisfactory. Through the observation and questionnaire's result, the researcher also can conclude that almost all of the students were agree to the questionnaire. This means students' response toward self-efficacy questionnaire is positive (see table 4.4).

## 2. The Level of Students' Self-Efficacy

In this study, the researcher used questionnaire consisted 20 items. This questionnaire was divided in four indicators, they are 10 speaking selfefficacy's items, 3 social sel-efficacy's items, 3 emotional self-efficacy's items, and 4 source of self-efficacy's items. Speaking self-efficacy was used to know how the students' speaking self-efficacy. Social self-efficacy is used to investigate how they interact with others, for example when they chat with
their friends or unfamiliar person. Emotional self-efficacy is used to summarize how the students maintain their emotional while speaking, for instance becoming nervous or giving a pep-talk to themselves.

Based on the result of research finding for each indicator, it indicated that the students have positive response toward those four indicators. As we can see in table 4.4 , there are $52,96 \%$ students strongly agree with speaking self-efficacy. In the social self-efficacy, there are $61,56 \%$ students strongly agree that they can socialize with others well. $71,77 \%$ students are strongly agree that they can control their emotional while speaking. The last, there are $51,78 \%$ students strongly agree with source of self-efficacy. This means that source of students' self-efficacy comes from their previous speaking experience, by comparing with others' competence and people say that they are competent in speaking. As explained before, student who have good experience in speaking English previously tends to have high self-efficacy and vice versa. Being in agreement with findings of other studies mentioned in the section of Literature Review, this finding supports Bandura's outline, four sources of information that individuals employ to judge their efficacy: performance outcomes (performance accomplishments), vicarious experiences, verbal persuasion, and physiological feedback (emotional arousal). ${ }^{2}$

[^1]Besides, it can be seen from the table 4.5 that the score range 81 to 100 tis 'very high' level in self-efficacy, in which 15 students or $15,3 \%$ of the students belong to this level. There are 72 students whose qualification between the score range 61 to 80 . This means that $73,4 \%$ of the students have 'high' self-efficacy level. Besides, there are 11 students have 'average' qualification which is between the score range 41 to 60 , in which there are $11,2 \%$ of the students or 11 students are included into this level. However, there is no student has neither 'low' nor 'very low' level of self-efficacy whose score range is between 21 to 40 and 0 to 20 . In other words, most of the students have high self-efficacy i.e $73,4 \%$ of the students or 72 students.

We can conclude from the data above that almost all of students have high self-efficacy that is most of them agree to have confidence in speaking English. For instance, they can participate in a conversation on familiar topics such as introduction, profession and unforgettable experience. They can participate in discussions or debate. For example they can participate when they had to work in group and discuss about kind of profession in land, water, and air. Besides, through my observation most of students are able to describe processes or events detailly and summarize stories e.g in unforgettable experience (recount text).

The researcher also included demography variable such as gender through this survey. This is used to know if any differences for male and
female to have high or low self-efficacy. From the data obtained, there were no significant correlation between gender and the level of their sel-efficacy. This finding proves other researchers who have studied sex and self-efficacy reported that the two factors are either unrelated or only moderately associated. ${ }^{3}$

## 3. The Level of Students' English Speaking Skill

As stated in research method, speaking test was conducted by the teacher. The topic and the rubric also came from the teacher. There were 3 classess which was observed i.e X IPA 1, X IPA 2, and X IPS 2. The researcher took this sample randomly. The score was taken from two tests. For the first test, the teacher asked them to work in a group. Every student in a group must introduce him/herself to others and tell about his/her occupation. When they worked in a group, the teacher monitored and evaluated how they work. In the end of the class, one representative of each group must tell about his/her members in front of the class. For the second test, the teacher asked the students to tell about unforgettable experience.they worked in pair. Firstly, they must tell their story in Indonesian to their partner. Next, they came forward by turns to retell their partner's unforgettable experience in English.

[^2]Aspects of speaking which are assessed by the teacher are pronunciation, intonation, and grammar and performance. Here is the speaking rubric:

Table 4.9
Speaking Rubric

|  |  | Scoring |  |  |
| :---: | :---: | :---: | :---: | :---: |
| No | Aspect of <br> Scoring | Poor (55-70) | Good (71-85) | Very good(86- <br> 100) |
| 1 | Pronunciation | Many wrong <br> pronunciation | 2 wrong <br> pronunciation | Pronounce word <br> precisely |
| 2 | Intonation | Many wrong <br> intonation | 2-3 wrong <br> intonation | Use right and <br> proper <br> intonation |
| 3 | Grammar | Many <br> grammatical <br> errors | Make around 2-3 <br> grammatical <br> errors | Use right <br> grammar |
| 4 | Performance | Speak <br> hesitantly | A little bit <br> hesitant in <br> speaking | Speak fluently |
|  | Total |  |  |  |
|  | Final Score $=$ <br> Total Score | 4 |  |  |

Based on the research findings, there are 11 students or $11,2 \%$ of the students have 'very good' qualification, in which the score range is $81-100$. $89,8 \%$ of the students are between the score range 61-80. It means that there are 88 students are included into 'good' qualification. Besides, there is no students between the score range 41-60, in which it is included 'average'
qualification. There is no student neither in 'bad' nor 'very bad' qualification which is between the score range 21-40 and 0-20.

Thus, we can conclude that most of the students have good qualification in speaking in which they can pronounce words without many mistakes or around two words. For instance word " live" refers to make one' home should be pronounced as /liv/ but some of the student still pronounced it as /laif/. They also can speak fluently but sometimes feel hesitate to continue their speaking. Besides, they speak without many grammatical errors or around 2-3 errors. For instance, "I am work.........." or when they had to tell about their unforgettable experience, they used present tense. Yet, they sometimes still use wrong intonation.

## 4. The Correlation between Students' Self-Efficacy and English Speaking Skill

After calculating the normality test, in which it shows that the data distribution is normal, it is calculated the correlation between students' selfefficacy and English speaking skill.

From the data calculated, it was found that the value of product moment correlation between students' self-efficacy and English speaking skill is 0,762 . It means that the change of self-efficacy level is positively followed by the ability of English speaking. Furthermore, after testing the significance, the correlation between those two variables is significance since the value of sig. is
0.000 or less than $\alpha$ that was put, which is $0.05(5 \%)$. It is also shown by two stars (**) at the value of correlation. The table below can interpret the correlation both of them.

Table 4.10
Interpretation of Correlation Coefficient (r)

| Correlation Coefficient (r) | Interpretation |
| :--- | :--- |
| $0,00-0,20$ | Very weak |
| $0,21-0,40$ | Weak |
| $0,41-0,70$ | Moderate |
| $0,71-0,90$ | Strong |
| $0,91-1,00$ | Very strong |

Product moment correlation between students' self-efficacy and English Speaking skill as it was obtained is 0.762 positive. This means the correlation between Students' self-efficacy and speaking skill is significant.

As results shown, the higher students' self-efficacy is the higher their English speaking skill (see Appendix C). It indicates that self-efficacy has significant effect in English speaking skill. It has been demonstrated by other researchers that self-efficacy is one of the main determining factors of success in learning foreign or second languages.

Moreover, the finding of this study support Bandura's claim that an individual's level of self-efficacy is thought to relate to the individual's choice of activities, effort in those activities, and diligence in the activities. For example, the choices of activities are group work or individual work.

Their effort in group work or individual work must be different. They tended to have great effort and diligent in individual work.

The finding also supports previous research by Rahimi \& Abedini. They found that self-efficacy is one significant predictor of learners' achievement besides intelligence, teaching method, or time spent learning the language. So, it can be concluded that self-efficacy is one of important factors in affecting academic achievement.


[^0]:    ${ }^{1}$ Sugiyono, Statistika untuk Penelitian... 75.

[^1]:    ${ }^{2}$ Francis Redmond, Brian - Carmona, Sergio Angel. Self-Efficacy and Social Cognitive Theories( wikispaces.psu.edu accessed on June $8^{\text {th }}, 2014$ at 11.01 A.M)

[^2]:    ${ }^{3}$ Javier Coronado-Aliegro.2006. The Effect Of Self-Assessment On The Self-Efficacy Of students Studying Spanish As A Foreign Language. 26

