

## **CHAPTER IV**

### **RESEARCH FINDING AND DISCUSSION**

In this chapter, the researcher provided description of the data which discussed the characteristics of each variable, the testing of the hypothesis which explains the result of the static computation and also the discussion of this research.

#### **A. Description of the Data**

The purpose of this research was to know the correlation between negative reinforcement and student's speaking ability. The research was taken in Islamic Boarding School Gontor 5 (Kulliyatu-l-Mu'allimat Al-Islamiyyah) Kandangan–Kediri. The subject of this research were the students of B class and C class of the fourth grade students of Gontor 5 (*Kulliyatu-l-Mu'allimat Al-Islamiyyah*) which consist of 18 students for B class and 15 students for C class. After the researcher distributed the questionnaire about the negative reinforcement to the students, the researcher came again to give a test of speaking ability in order to know their ability in speaking.

The description of the data presented the results of the research that were described by providing number of graph, chart, and tables. This subchapter also discussed about the data of each variable and reports after being computed using descriptive statistic like histogram, mean, standard deviation, etc. The results of the statistic computation were as follows:

### **1. The Questionnaire about the Negative Reinforcement theory related to student's speaking ability**

In the process of investigating the student's ability in speaking, the questionnaire of Negative Reinforcement was given to the students of B class and C class in Gontor 5 (*Kulliyatu-l-Mu'allimat Al-Islamiyyah*) which consists of 33 students. In this case, the students seemed very enthusiasms and pay more attention to the explanation about the questionnaire given by researcher. Before distributing, the researcher explained early about the questionnaire related to the negative reinforcement clearly in order to avoid a misunderstanding by the students. So that, the students could join the class very well.

After giving the explanation about the questionnaire about the negative reinforcement, the researcher distributed the questionnaire to the students and asked them to answer directly. They were very diligent and obeyed what the researcher said like asking the students to pay attention to the instruction and to do the questionnaire directly although there were few of students who did not pay attention to the researcher.

After submitting the questionnaire, the researcher asked a question to the students about the disciplines of language related to the questionnaire. Almost students were responded and answered the researcher's question enthusiastically.

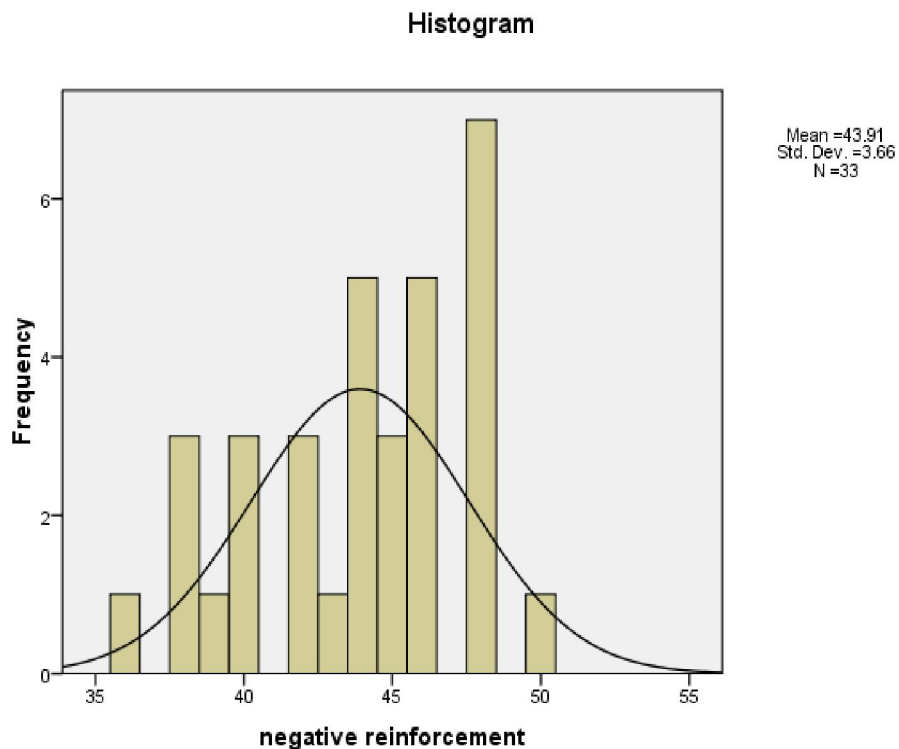
By this questionnaire, the researcher got the data from the students in the form of scores. To get the scores, the researcher distributed the questionnaire

early. The results of the questionnaire about the negative reinforcement were presented below:

#### 4.1 Table Frequency of Questionnaire about Negative Reinforcement

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 36	1	3.0	3.0	3.0
38	3	9.1	9.1	12.1
39	1	3.0	3.0	15.2
40	3	9.1	9.1	24.2
42	3	9.1	9.1	33.3
43	1	3.0	3.0	36.4
44	5	15.2	15.2	51.5
45	3	9.1	9.1	60.6
46	5	15.2	15.2	75.8
48	7	21.2	21.2	97.0
50	1	3.0	3.0	100.0
Total	33	100.0	100.0	

The researcher also elaborate the data through histogram to make the data clear. The histogram of the result of giving questionnaire about the negative reinforcement was presented below:



*Figure 4.1. Histogram of a questionnaire about the negative reinforcement*

Based on the table above showed that score minimum is 36 and score maximum is 50. Score 36 has 1 frequency (3,0%), score 38 has 3 frequencies (9,1%), score 39 has 1 frequency (3,0%), score 40 has 3 frequencies (9,1%), score 42 has 3 frequencies (9,1%), score 43 has 1 frequency (3,0%), score 44 has 5 frequencies (15,2%), score 45 has 3 frequencies (9,1%), score 46 has 5 frequencies (15,2%), score 48 has 7 frequencies (21,2%), and score 50 has 1 frequency (3,0%).

Besides showing the frequency and the histogram of the result of a questionnaire about the negative reinforcement the researcher also showed the maximum and minimum score, range, mean and standard deviation by using SPSS software 16.0 version. The data can be seen below:

#### 4.2 Table Statistic Data of a questionnaire about the negative reinforcement

<b>Statistics</b>		
negative reinforcement		
N	Valid	33
	Missing	0
Mean		43.91
Std. Error of Mean		.637
Median		44.00
Mode		48
Std. Deviation		3.660
Variance		13.398
Range		14
Minimum		36
Maximum		50
Sum		1449
Percentiles	15	39.10
	25	41.00
	45	44.00
	50	44.00
	75	47.00

From the result above, the researcher analyzed the data by using SPSS 16.0 version which could be seen that the highest score is 50 and the lowest score

is 36, while the range is 14. Besides, the mean of the variable is 43, 91 the median of variable is 44, 00 the standart deviation is 3, 660 and the mode is 48.

The number of students is 33 students, and the researcher made a categorization of the questionnaire score. It can be seen below:

#### 4.3 Table categorization score of questionnaire about the negative reinforcement

Intervals	Frequency	Categorization	Percentage
46-60	13	Very good	39%
31-45	20	Good	61%
16-30	0	Fair	0%
0- 15	0	Poor	0%

The researcher also elaborate a chart to make the data clear. The chart of the result of questionnaire about the negative reinforcement was presented below:

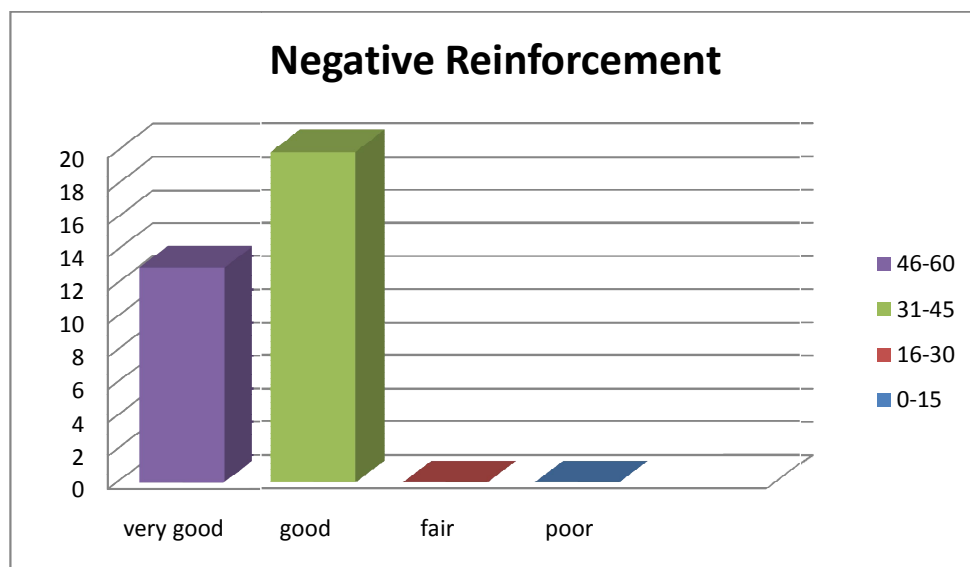


Figure 4.2 chart categorization of questionnaire about the negative reinforcement

Based on the table and chart above, we know that zero students or 0% got score between 0-15 in poor categorization, zero students or 0% got score 16-30 in fair categorization, 20 students or 61% got score between 31-45 in good categorization, and 13 students or 39% got between 46-60 in a very good categorization. It means that the response of the students about the questionnaire of the negative reinforcement theory was in good category because 61% of students got 46-60 score.

## **2. The Results of the Student's Speaking ability**

After distributing the questionnaire about the negative reinforcement, the researcher came the next day to conduct a test of speaking ability. In the process of giving test about the student's speaking ability, the researcher gave the instruction about the test. The test was given orally one by one, because the researcher wanted to know their ability in speaking. Besides, the researcher wanted to see how their speech was when they were asked by several questions. The speaking test was aimed to see whether the negative reinforcement correlated to the student's ability or not. In this case, the researcher found that most of the students were able to answer the questions given by the researcher fluently, but some of them did not answer the questions fluently do to their less enthusiasm toward English. While the researcher giving a test, some of the students were converse each other in order to prepare the answer when they were going to tested, and some of them were studying because they were in examination week.

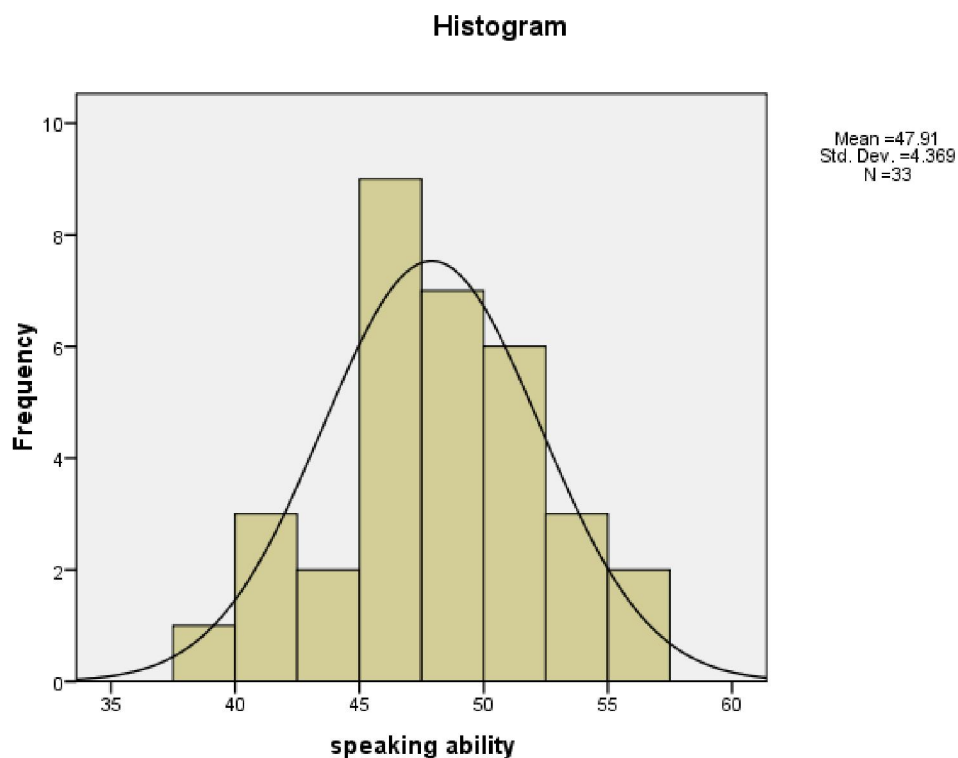
After giving a test of speaking ability, the researcher took the score from the students that stated by the scoring guide which has been made, and the results of the test of speaking ability were presented below:

#### 4.4 Table Frequency of speaking ability's test

		speaking ability			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	38	1	3.0	3.0	3.0
	40	1	3.0	3.0	6.1
	42	2	6.1	6.1	12.1
	43	1	3.0	3.0	15.2
	44	1	3.0	3.0	18.2
	45	3	9.1	9.1	27.3
	46	3	9.1	9.1	36.4
	47	3	9.1	9.1	45.5
	48	3	9.1	9.1	54.5
	49	4	12.1	12.1	66.7
	50	3	9.1	9.1	75.8
	51	2	6.1	6.1	81.8
	52	1	3.0	3.0	84.8
	53	1	3.0	3.0	87.9
	54	2	6.1	6.1	93.9
	56	1	3.0	3.0	97.0
	57	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

The researcher also elaborated a histogram to make the data clear. The histogram of the result of speaking ability test was presented below:





*Figure 4.3 Histogram of speaking ability test*

Based on the table and histogram above, the score minimum is 38 and score maximum is 57. Score 38 has 1 frequency (3%), score 40 has 1 frequency (3%), score 42 has 2 frequencies (6,1%), score 43 has 1 frequencies (3%), Score 44 has 1 frequency (3%), score 45 has 3 frequencies (9, 1%), score 46 has 3 frequencies (9,1%), score 49 has 4 frequencies (12,1%), score 50 has 3 frequencies (9,1%), score 51 has 2 frequencies (6,1%), score 52 has 1 frequency (3%), score 53 has 1 frequency (3%), score 54 has 2 frequencies (6,1%), score 56 has 1 frequency (3%), and 57 has 1 frequency (3%) .

Besides showing the frequency and the histogram of the result of speaking ability test, the researcher also showed the maximum and minimum score, range,

mean and standard deviation by using SPSS software 16.0 version. The data could be seen at the table 4.5 below:

**4.5 Table Statistic Data of the speaking ability test**

<b>Statistics</b>		
speaking ability		
N	Valid	33
	Missing	0
Mean		47.91
Std. Error of Mean		.760
Median		48.00
Mode		49
Std. Deviation		4.369
Variance		19.085
Range		19
Minimum		38
Maximum		57
Sum		1581
Percentiles	15	43.10
	25	45.00
	45	47.30
	50	48.00
	75	50.50

From the result above, the researcher analyzed the data by using SPSS 16.0 version that can be seen the highest score is 57 and the lowest score is 38, while the range is 19. Besides, the mean of the variable is 47,91, the median of the variable is 48, 00 and the mode is 49.

The numbers of students were 33 students, and the researcher made categorization of the speaking ability score. It can be seen below:

#### 4.6 Table Categorization Score of speaking ability test

Intervals	Frequency	Categorization	Percentage
46-60	24	Very good	73%
31-45	9	Good	27%
16-30	0	Fair	0%
0- 15	0	Poor	0%

To make easy the reader read the detailed information, the researcher provided the chart. It can be seen below:

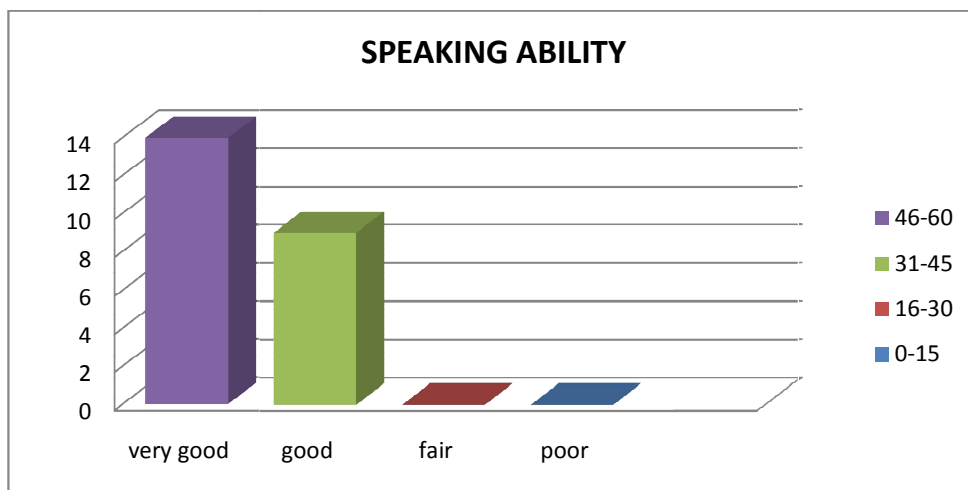


Figure 4.4. Histogram Categorization of speaking ability test

Based on the table and the score above, we knew that zero students or 0% get score between 0-15 in poor categorization, 0 students or 0% get score 16-35 in fair categorization, 9 students or 27% get score between 36-45 in good categorization, and 24 students or 73% get score between 46-60 in very good categorization.

### **3. The Correlation Between Student's Negative Reinforcement and Speaking Ability**

There were many students who thought that learning speaking is very difficult. Therefore, they did not want to learn English more. In fact, as the EFL learner, they demanded to be able to speak English due to the importance of speaking as one of the English skill. Speaking is one of the four language skills besides the language components in English lesson that has to be mastered by students. In the process of learning to speak English, some students were frequently felt throb. They felt afraid of making mistake, because they did not know much about the grammar rules which sometimes influenced in speaking. They also afraid of guessing the appropriate vocabularies when they were having conversation. Regarding to these problem, some of the students preferred to keep silent rather than to speak in English for they felt afraid of making mistakes. Those were the problems which blocked their learning process and made them felt difficult to confess what were going to talk.

To avoid that, the negative reinforcement theory such as: obeying the language rules, following all the activities like morning vocabularies, public speaking and morning conversation that often done in the boarding school might be able to help the students in learning English especially the speaking ability. In other hand, when they were in boarding school, they asked to speak English everyday when they were in English week. It showed the obligation of the students to obey the language rules. The theory can correlates to their speaking ability or not depend on the teacher and the students themselves. Based on this

reason, teacher should give the theory to the students and the students were able to apply in their daily activity. Here, the researcher used the theory of negative reinforcement to know the correlations between negative reinforcement and student's speaking ability.

In this research, the alternative hypothesis ( $H_a$ ) states that *there is a significant correlation between negative reinforcement and student's speaking ability*. It proved by the  $H_0$  or zero hypothesis in the analysis is rejected. In other words, at a 0,01 level of significance using  $r_{table}$  the zero hypothesis between X and Y is rejected.

To know the correlation coefficient between negative reinforcement and student's speaking ability of the fourth grade students of Gontor 5 (*Kulliyatu-l-Mu'allimat Al-Islamiyyah*), the researcher analyzed the result of the computation about the correlation. In this data analyzation, the researcher first used the descriptive statistic to know the maximum and minimum score, range, mean and standard deviation of the two variables. After knowing the statistic score, the researcher analyzed the data used the Pearson product moment technique to know the correlation coefficient of the two variables. In term of this computation, the researcher used r-test and the result of them is consulted with r-table.

**4.7 Statistic of the correlation between negative reinforcement and student's speaking ability.**

		Statistics	
		negative reinforcement	speaking ability
N	Valid	33	33
	Missing	0	0
Mean		43.91	47.91
Std. Error of Mean		.637	.760
Median		44.00	48.00
Mode		48	49
Std. Deviation		3.660	4.369
Variance		13.398	19.085
Range		14	19
Minimum		36	38
Maximum		50	57
Sum		1449	1581
Percen	15	39.10	43.10
tiles	25	41.00	45.00
	45	44.00	47.30
	50	44.00	48.00
	75	47.00	50.50

From the table above, the researcher got the data between the questionnaire about the negative reinforcement and the test of speaking ability. It showed from the mean score of negative reinforcement is 43,91 and the mean score of speaking ability test is 47, 91. The standard error score of negative reinforcement is 0, 637 and speaking ability test is 0, 760 . The median score of negative reinforcement is 44,00 and speaking ability test is 48,00. The mode of

negative reinforcement is 48 and speaking ability test is 49. The standard deviation of negative reinforcement is 3,660 and speaking ability test is 4,369. The variance score of negative reinforcement is 13,398 and speaking ability test is 19,085. The range score of negative reinforcement is 14 and speaking ability test is 19. The minimum score of negative reinforcement is 36 and speaking ability test is 38. The maximum score of negative reinforcement is 50 and speaking ability test is 57. The total score of negative reinforcement is 1449 and speaking ability test is 1581.

In this thesis the researcher correlate the student's score after the researcher distributed the questionnaire about negative reinforcement and giving a test of speaking ability. The table can be seen in table below:

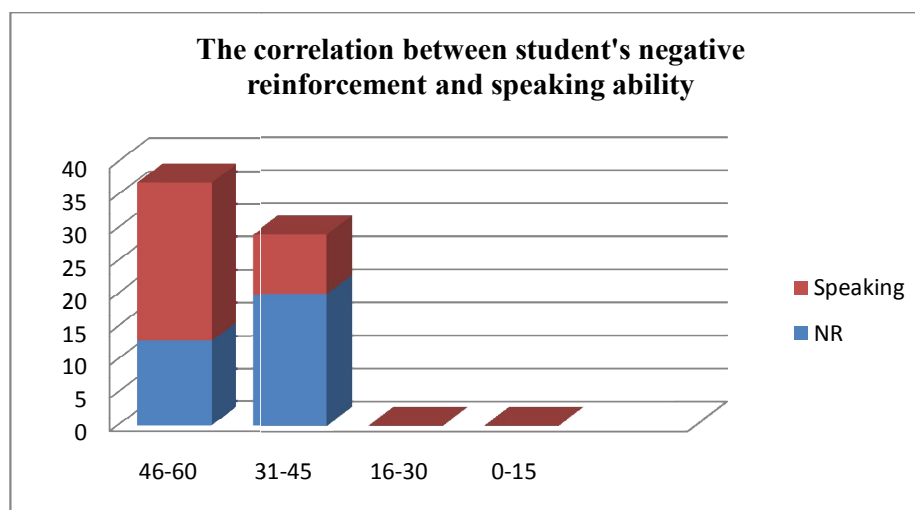
**Table 4.8 The student's score of the questionnaire about negative reinforcement and speaking ability test**

No	Name	The score of	
		Negative reinforcement	Speaking ability
1	AR	45	54
2	RHF	48	49
3	FF	44	46
4	II	42	47
5	FME	48	51
6	FNBR	38	49
7	FK	46	48
8	VYA	44	46
9	ART	39	42
10	MRM	38	40
11	DPS	44	45
12	FN	40	48
13	AFH	45	46
14	MFK	44	45
15	LA	42	43
16	SD	38	44
17	FS	36	38
18	DPS	46	48

*continued*

19	AS	46	57
20	NA	48	52
21	MRN	40	42
22	IR	45	47
23	AK	48	50
24	DA	43	49
25	DL	44	45
26	ANE	48	50
27	AFDP	50	53
28	DI	46	51
29	NAA	46	47
30	RA	48	50
31	RRD	40	49
32	SNH	42	56
33	NWFH	48	54

To make easy the identification, the researcher provided a chart about the correlation between negative reinforcement and student's speaking ability. It can be seen in the chart below:



*Figure 4.5. Histogram categorization of the correlation between negative reinforcement and student's speaking ability*

From the table above was shown the result of the correlation after distributing the questionnaire about the negative reinforcement and giving a test of



speaking ability. In this research, the subjects were from B class and C class which consist of 18 students for B class and 15 for C class. The result of the student's speaking ability was higher than the questionnaire about negative reinforcement. It showed that most of students got higher score for the speaking ability test. There were 20 students who got 31-45 and 9 students from the speaking ability test. there were 23 students who got 46-60 from the questionnaire and 24 students from the speaking ability test.

**Table 4.9 Table of descriptive statistic**

Descriptive Statistics			
Variable	Mean	Std. Deviation	N
negative reinforcement	43.91	3.660	33
speaking ability	47.91	4.369	33

The table descriptive statistic R-Test above showed that N (count the students of B class and C class in Gontor 5 (*Kulliyatu-l-Mu'allimat Al-Islamiyyah*) kandangan-Kediri). The variables were negative reinforcement and speaking ability. The mean of the negative reinforcement is 43.91 and the mean of the speaking ability is 47.91. The standard deviation of the negative reinforcement is 3.660 and the standard deviation of speaking ability is 4.369.

**Table 4.10 Table of the correlation**

		Correlations	
		negative reinforcement	speaking ability
negative reinforcement	Pearson Correlation	1	.637**
	Sig. (2-tailed)		.000
	N	33	33
speaking ability	Pearson Correlation	.637**	1
	Sig. (2-tailed)	.000	
	N	33	33

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

The analysis of correlational significance aimed to test the correlation between two variables which did not show the functional relationship (it is not a cause – effect relationship). While the characteristic of the correlation will determine the direction from the correlation it self. The correlation value can be grouped as follow:

- 0, 00 – 0, 20 : the correlation is very weak
- 0, 21 – 0, 40 : the correlation is weak
- 0, 41 – 0, 70 : the correlation is strong
- 0, 71 – 0, 90 : the correlation is very strong
- 0, 91 – 0, 99 : the correlation is extremely strong
- 1 means the correlation is perfect.

From the table above, it showed that the result of the analysis about the correlation between negative reinforcement and student's speaking ability is

0.637. In this case, the value of the  $r_{\text{count}}$  is bigger than  $r_{\text{table}}$  in a 0, 41 – 0, 70 group. While in the table of the sig. (2-tailed) which often used to test hypothesis, if the  $r_{\text{count}} > r_{\text{table}}$ , or the p-value in sig. 2-tailed) column  $<$  level of significant ( $\alpha$ ) then  $H_a$  is accepted. According to the sig. (2-tailed) value 0, 000 is lower than the level of significant ( $\alpha$ ) 1% then  $H_a$  is accepted. It means that there is a significant correlation between student's negative reinforcement and speaking ability.

## B. Hypothesis Testing

There are two hypothesis testing in this study, namely:

### 1. The Null Hypothesis ( $H_0$ )

There is no correlation between Negative Reinforcement and Student's Speaking Ability.

### 2. The Alternative Hypothesis ( $H_a$ )

There is a Correlation Between Negative Reinforcement and Student's Speaking Ability.

Based on the computation above, it can be concluded that there is significant correlation between negative reinforcement and student's speaking ability of the fourth grade students of Gontor 5 (*Kulliyatu-l-Mu'allimat Al-Islamiyyah*). It showed from the result of the  $r_{\text{count}}$  stated 0, 637. Meanwhile, if the result compatible to the rough or simple interpretation of correlation index number, 0, 637 matched with the rough correlation index number. So, there is a correlation between X variable and Y variable. Because of the the correlation is positive

The testing hypothesis is done by using Pearson Product Moment technique through SPSS 16.0 version. Whether the null hypothesis ( $H_0$ ) is rejected or accepted, it will be proved under the interpretation of the output on the coefficient correlation from Pearson product moment.

The interpretations to test the hypotheses are stated as follow:

1. If the value of  $r_{\text{count}}$  is higher than  $r_{\text{table}}$  with the significant level 1 %, the  $H_0$  (Null hypothesis) is rejected and  $H_a$  (Alternative hypothesis) is accepted. It means that there is significant correlation between negative reinforcement and student's speaking ability.
2. If the value of  $r_{\text{count}}$  is lower than  $r_{\text{table}}$  with the significant level 1 %, the  $H_0$  (Null hypothesis) is accepted and  $H_a$  (Alternative hypothesis) is rejected. It means that there is no significant correlation between negative reinforcement and student's speaking ability.

Based on column of the coefficient correlation on table 4.10 above showed that  $r_{\text{count}}$  is 0, 637. To prove it, the researcher provided the formula as follow:

$$r = \frac{\sum xy}{\sqrt{(\sum x)^2 (\sum y)^2}} = r = \frac{15.99054}{\sqrt{(13.3956)(19.088161)}} = 0,637$$

With this formula it can be read that  $r_{\text{count}}$  is 0,637. So, it can be concluded that  $r_{\text{count}}$  (0, 637) is higher (>) than  $r_{\text{table}}$  (0, 442 at 1%) so  $H_0$  is rejected. Consequently, the alternative hypothesis ( $H_a$ ) which states that there is significant correlation between negative reinforcement and student's speaking ability is accepted.

### C. Discussion

According to the statement that stated in the previous chapter, the objective of this study is to find the correlation between student's negative reinforcement and speaking ability of the fourth grade students of Gontor 5 (*Kulliyatu-l-Mu'allimat Al-Islamiyyah*) in the academic year 2013/2014. In order to achieve the objectives of the research, the researcher did some steps to collect the data. The first step was distributing questionnaire to know the student's opinion about the questionnaire that related to the daily activity of the students. After distributing the questionnaire, the researcher gave a speaking test to the students. The test was in the form of oral test, it was intended to measure the student's speaking ability and their fluency of speaking.

As Yusuf & Nurihsan (2007: 32) stated "The Negative Reinforcement happens when a response or behavior is strengthened by stopping, removing or avoiding a negative outcome or aversive stimulus. This reinforcement plays a role in the disposition to refuse (avoid) that developed". The benefits of the negative reinforcement for the students are that the students would obey the language rules. They also could decrease the frequencies of getting punishment, because punishment often made them being unmotivated. Through negative reinforcement, students tend to be discipline. They enjoyed joining the activities, and also could try to communicate each other easily without frightening of making fault. As the daily activity of the students where they asked to speak English language every

day, the negative reinforcement can be the suitable theory to be given to the students for their learning English especially in speaking. Based on the benefit mentioned before, the students were tried to obey the language rules by speaking English and do activities related to language as enjoy as possible. It was done in order to avoid a negative outcome for they would be given a punishment when they known to speak without English and didn't join the language activity.

In this research, the researcher correlate the student's negative reinforcement and speaking ability by first distributing the questionnaire to the students about the negative reinforcement. Second, the students were given a test of speaking ability and then it analyzed by using Pearson product moment technique. From the presentation and the student's analysis of the correlation between student's negative reinforcement and speaking ability, the researcher has found the result of the student's ability in speaking. The result of the test was computed by Pearson product moment technique through SPSS 16.0 version that can be seen the lowest score of the questionnaire about negative reinforcement is 36 and the lowest score of the speaking ability is 38, while the highest score of the questionnaire about negative reinforcement is 50 and the highest score of speaking ability is 57. There were 1 student who got the lowest score of the questionnaire about negative reinforcement and 1 student of speaking ability test. Besides, there were 1 student who got the highest score of the questionnaire about negative reinforcement and 1 student of speaking ability test.

As the result of the correlation between the two variables, it showed that the result of the analysis about the correlation between student's negative

reinforcement and speaking ability is 0.637. In this case, the score of the  $r_{\text{count}}$  is bigger than  $r_{\text{table}}$  in a 0, 41 – 0, 70 group. While in the table of the sig. (2-tailed) which often used to test hypothesis, if the  $r_{\text{count}} > r_{\text{table}}$ , or the p-value in sig. 2-tailed) column  $<$  level of significant ( $\alpha$ ) then  $H_a$  is accepted. According to the sig. (2-tailed) value 0, 000 is lower than the level of significant level of significant ( $\alpha$ ) 1% then  $H_a$  is accepted. It means that there is a significant correlation between student's negative reinforcement and speaking ability.

Regarding on the result of the analysis and the theory above, where the  $r_{\text{count}}$  is bigger than  $r_{\text{table}}$  showed the significant correlation between the two variables, it is strongly related to some benefits of negative reinforcement given to the students. Through the negative reinforcement, students were able to improve their speaking ability and tried to apply the theory in their daily activity. The significant correlation was also proven by showing the different score between the negative reinforcement and speaking ability where the mean of negative reinforcement is 43.91 and speaking ability is 47.91.

All in all, the benefit above implies that the use of student's negative reinforcement theory gives positive correlation towards their speaking ability. It has been proven by the result of data analysis that there is significant correlation between students' negative reinforcement and speaking ability. Thus, it can be concluded that the negative reinforcement is suitable theory to be used by the fourth grade students of Gontor 5 (Kulliyatu-l-Mu'allimat Al-Islamiyyah) to their speaking ability especially.