CHAPTER III
METHODOLOGY

This chapter discusses things related to the way this study is conducted. Research design, data collection methods which consist of population, sample and setting, research instruments, procedure of collecting the data, and data analysis and interpretation are explained in this chapter.

3.1 Research Design

The central issue of the research was to know the correlation between Emotional Intelligence and students' English speaking ability. This study applied the descriptive method with an ex-post facto design. Gay,L.R (1987) states that a descriptive method is a method of research that involves collecting the data in order to test hypothesis or to answer questions concerning the status of the subject of the study. Moreover, an ex-post facto design was used because it was suitable to investigate attributive variables which mean a kind of characteristics that should be possessed by the participants of study before a researcher began her study (Ary, et.al, 2010, p.331). In this study, the attributive variable was students' Emotional Intelligence, so that the variable could not be manipulated since it has been occurred in nature.

3.1.1 The Nature of Correlational Research

Correlational research involves collecting data to determine whether, and to what degree, a relationship exists between two or more quantifiable variables (Gay, 1987, p. 191). In line with Gay, Brown (1990) states that correlational studies are designed to investigate the mature and the strength of functional relationships among of the variables of interest to the researcher. Therefore, the purpose of this study was to determine the mature and the strength of relationships between emotional intelligence and students' English speaking ability and to use these relationships to make predictions.

Correlational research is one of the descriptive research types which describe the existing condition (Brown, 1990). Thus, it describes what exists at the moment such as conditions, prac 45 rocesses, structures etc. It also means that correlational approach investigates the relationship between unmanipulated variables and does not use random assignment. Random assignments of participants and the manipulation of variables are absent in correlational research because the events of interest have already occurred or naturally occurring (Gay, 1987). Furthermore, random assignment is not used since there are no control conditions in this study. Students' emotional intelligence and their English speaking ability are something that cannot be manipulated. The level of emotional intelligence that the students possess is the condition of their recent capacity to utilize and understand emotion in the self and others. Moreover, the level of emotional intelligence is also the product of some connected factors, such as gender, age, life experience, environment, and educational background (Goleman, 2001; Tridhohanto, 2009 in Purnama, 2010). Therefore, the level of students' emotional intelligence cannot be manipulated since it is naturally occurring and the researcher did not give the students any treatment before.

Furthermore, variables to be correlated should be selected on the basis of some rationale (Gay, 1987). Gay further adds that the relationship to be investigated should be a logical one, suggested by theory or derived from experience. There are some rational reasons of choosing Emotional Intelligence and speaking skill as the variables in this study. Truthfully, this study is so much inspired by many previous studies on the role of EI in human life. In addition, it is also based on the researcher's experience who feels the effect of emotions in English language learning especially in speaking skill. Language anxiety sometimes hinders the researcher to speak English and there is always pressure of performing oral English presentation which results negative effects like awkward feeling, 'blank' state, persistence worries, trembling, sweating, high heart rate and

dizziness. Therefore, it is believed that there is something that connects EI with speaking ability.

Theoretically, Salovey &Mayer (1990,p. 188) state that emotionally intelligent people will be able to deal with stress, predict consequences, communicate feelings, solve relationship problems, motivate themselves and even inspire others. According to Schutte, Schuettpelz & Malouffi (2001), people with higher emotional intelligence will perform better on cognitive tasks and they will be able to deal with frustration or helpless that may result from encountering very difficult task. In addition, prior studies have demonstrated that emotional intelligence has something to do with the success of foreign language learning (Pisghadam, 2009; Zarezadeh, 2013). Therefore, it can be assumed that emotional intelligence can help students to reduce their negative emotions that hinder them to speak English at class.

3.2 The Population, Setting and Sample of Research
3.2.1 Population and Setting

Population in this research was all fourth semester students in one of Private Universities located in Cimahi, Bandung. All students were majoring in English education study program. Moreover, the total population in this study was 156 students. The population was taken because of its accessibility and the research site was basically chosen because it was open to researcher who wanted to conduct the research there. Since the researcher was one of the teaching staffs there, the permission to do the research in this University was obtained.

3.2.2 Sampling and Sample

Sample was chosen purposively in this study. The respondent should have the same knowledge capacity toward learning English as foreign language. Then, choosing students who have the same English learning background is essential to do. Therefore, this study can examine the relationship between emotional

intelligence and students' English speaking ability without any intervention of other moderator variables such as English learning experience and so forth. The research sample was selected based on some criteria. The criteria of choosing the research sample were as follow:

1. **English Learning Experience.**

   Students should have the same length of time in studying English with the assumption that the longer students study English, the better their English language proficiency will be. In relation to speaking qualification, students who have been learning English for 13 years are assumed to have better speaking performance than those who have just learnt English for 5 years. Therefore, students who have been learning English for 13 years are highly not compatible to students who have been learning English for 10 years. In this study, all of samples were students who have been learning English for 10 years and 6 months.

2. **Length of Living in English Speaking Country.**

   Students should have the experience of staying in English speaking country. If not, all chosen students should never have any experience of living in English speaking country.

3. **English Achievements.**

   Students should have any achievements in English study. If not, all chosen students should never get any achievements in English study.

4. **English Teaching Background.**

   Students should have any experience of teaching English. If not, the chosen ones should never have any English teaching background.

5. **Studying English in Courses**

   Students should ever study English language in non-formal education such as English courses. If not, the chosen ones should never study English language in course before.

In addition, of 156 students study in this private university only 45 chosen students in this study were found to have the same background in studying English (See appendix. 10). Those 45 students have been learning English for ten years and six months in formal education. Moreover, they never take English courses before, never get any English achievements, never teach English before and never stay in English speaking country. Thereupon, the 45 students were assumed to have the same capacity and ability to speak English language. Furthermore, for a correlational study, 45 students were an acceptable sample size (Gay, 1987).

3.3 Research Instruments

Before applying two main research instruments, the sample had been selected based on some criteria. To know this aspect, a paper sheet had spread to 156 fourth semester students in order to gain their information about their length of English learning experience, their educational background, their experience in teaching English and their achievement in English subject. Then, two main instruments were used in this study. The following were the instruments which had been used to gain the data:

3.3.1 Questionnaire

This study used mixed model of Emotional intelligence as the basis of theory to measure students' emotional intelligence. Researchers in the mixed model tradition have typically used questionnaires to assess emotional intelligence (Schutte, et.al, 1998). The approach is based on the assumption that people have sufficient insight into their own emotions and real-life functioning for self-report to be valid (Zeidner, et.al, 2009, p.26).

There were some reasons of using questionnaire in this research. First, the use of questionnaire provides a straightforward and economical means for measuring individual differences in emotional intelligence (Schutte, Malouff & Bhullar, 2009). Moreover, It relates to administration method (Van Rooy &

Viswesvaran, 2007). Given the brevity of the questionnaire, it is quick and simple to administer and score within one class session and it takes less time to administer than the MSCEIT (see Chapter 2 Section 2.2.3.1) (Gardner, 2008). The second one relates to administration costs (Van Rooy & Viswesvaran, 2007). The use of self-report EI test is generally inexpensive and requires few resources for administration.

The questionnaire used in this study was Emotional Intelligence Scale which was originally constructed in Indonesian language by Daryono (2011). Therefore, it was not necessary to translate it to Indonesian language. This questionnaire had been tested its reliability and validity and had been confirmed as reliable and valid instrument. Further, the EI scale was in the form of a five-point likert scale ranging from 'very seldom or not true of me' (1) to 'very often true of me or very true of me' (5). The likert scale was chosen for some reasons. The likert scale is the most universal method for survey data collection which is easily understood (LaMarca, 2011). The responses were easily quantifiable and subjective to computation of some mathematical analysis (Bertram, 2007). It was also efficient to be used in terms of the researcher's time, effort and cost.

The instrument covers five dimensions of Emotional intelligence such as, self-awareness, self-control, self-motivation, recognizing emotion in others (empathy), and social skill.

Table.3.3 Five Dimensions of Emotional Intelligence

No	Dimensions	Indicators	Items
1.	Self-Awareness	• Recognizing one's emotions and their effects.	1,2,3,4,5
		• Knowing the influence of emotions towards the actions	6,7,8
		• Being aware of the effect of emotion to the action	9,10
2.	Self-Control	• Being tolerance to the frustration	11, 12
		• Being able to handle anger effectively	13,14,15,16,17
		• Having positive feelings in the self and others	18,19
		• Being able to handle stress	20, 21
		• Being able to build social relationship	22, 23, 24
		• Accepting oneself	25, 26
		• Not being a victim mentality	27, 28

		• Being able to handle negative emotion e.g regret	29, 30
3.	Self-Motivation	• Being total to reach the goal of learning	31, 32, 33
		• Being optimist	34, 35, 36
		• Being responsible	37, 38
4.	Recognizing emotions in others (Empathy)	• Being tolerant to others' opinions	39, 40
		• Being sensitive to others' emotions	41, 42, 43, 44, 45
		• Willing to listen others' opinions	46, 47, 48
5.	Social skill (Handling relationship)	• Having good understanding about the importance of social relationship with others	49, 50,51
		• Being able to solve the social conflict	52, 53, 54
		• Having good communication ability	55,56
		• Being friendly and easily in socializing with others	57, 58, 59
		• Being needed by others	60, 61
		• Caring to others	62, 63
		• Love to share and help others	64, 65, 66

(Daryono, 2011)

Regarding an Emotional Intelligence Scale employed in this study, several clear instructions were given in both oral and written way before asking the participants to fill in the questionnaire.

3.3.1.1 Validity and Reliability of Emotional Intelligence Questionnaire

An EI questionnaire used in this study should be valid and reliable. It is because a research must employ a valid and reliable instrument (Sugiyono, 2013, p.169). By using the valid and reliable instruments in collecting data, it is highly expected that the result of the study will be valid and reliable too.

In terms of validity, Hatch & Lazaraton (1991) explain that validity is divided into three types; content validity, criterion-related validity and construct validity. Content validity concerns with how well the test represents the content or behavior to be tested. Criterion-related validity concerns with whether or not the test can describe the psychological factors related to the test performance. Dealing with construct validity, Sugiyono (2013) explains that construct validity like validity by definition. Therefore, an instrument can be stated for having construct validity if it can be used to measure the phenomenon as its definition is. It is the degree to which an instrument measures theoretical construct that it is intended to measure (Miller, n.d).The used instrument must be supported by relevant theories.

The instrument which is based on the appropriate theory written on the literature review can be stated as a valid instrument (Sugiyono, 2013). This instrument has been constructed based on five dimensions of Emotional Intelligence in Goleman. Goleman (1996) states that there are five dimensions of Emotional Intelligence; self-awareness, self-control, self-motivation, recognizing emotions in others (empathy), and social skill. Therefore, this instrument is constructively valid.

Moreover, to test the construct validity, the judgments from experts had already employed in this study. The judgment was done by three experts and had already reviewed by the supervisors from Educational Psychology and Guidance Program (Daryono, 2011, p.104). Three experts were three master students majoring in the same program as the supervisors come from.

Furthermore, the reliability refers to the extent to which measurements are consistent. According to Green (2005), valid instrument is always reliable but a reliable instrument may not always be valid. Based on this assumption, Emotional Intelligence scale is considered to be reliable. Additionally, this questionnaire had been tested its validity and reliability statistically. Besides, three experts had been asked by Daryono to review and judge all items on this questionnaire.

3.3.2 Speaking test

Speaking test was used to know students' English speaking ability. Speaking test was important to be conducted as an attempt to know the students' ability to comprehend the meaning in a variety of tasks. Therefore, the students received a single score reflecting their performance (Douglas in Hughes, 2002, p. 83).

Moreover, speaking test used in this study was monologue speaking test with partially interactive speaking situation. Partially interactive speaking situation is speaking activity when giving a speech to a live audience where the audience cannot interrupt the speech (Nazara, 2011, p.29). The students can see the audience and judge from their expression whether or not their speech is being

understood. The type of speaking test was speech and students were asked to deliver an English speech in front of the class. The reason of choosing this speaking test type was because this research intended to see whether students' emotional state has any connection with their speaking performance. The main topic was given to students and they should be able to perform it in front of the class. To measure the students' speaking ability, the researcher used analytic scoring rubric.

3.3.2.1 Validity and Reliability of Speaking Test

Speaking test implemented in this research should be valid and reliable. A valid test is measured what is intended to measure accurately (Hughes, 1990,p.76 as cited in Sak,2008,p.14). Thus, the assessment becomes valid when the test assesses what it claims to assess and tests what has been taught.

Face and content validity were used in this study to find out the validity of the assessment. Face validity is concerned if the test appears to test what the name of the test implies (Dick & Hagerty, 1971 as cited in Sak, 2008,p.18). The test must relevant to the students' speaking needs. Meanwhile, students' level should become the basic of the assessment. Delivering an English speech was one of course's objectives that needed to be mastered by fourth semester students in this private university. Then, to check the content validity, the task should be appropriate with the students' level of proficiency. Students in this study had already learnt speaking for general purposes and professional context. On fourth semester, they were expected to be able to speak in front of public, to deliver academic speech and to speak English during the seminar and conference. Therefore, this test had already met content validity because the task was appropriate with students' level. Furthermore, in terms of reliability, it could be done by choosing the topic and genre, giving clear instruction and ensuring the assessment is familiar for the students.

3.4 Procedure of Collecting Data

The procedures of data collection including the administration and scoring procedures are presented as follows:

The data were collected in two sections. The first section was spreading the Emotional Intelligence scale. In order to re-determine the validity of the instruments used, the researcher asked the supervisor to check whether the statements of the questionnaire were really designed in accordance to the research questions. Furthermore, in order to motivate students to join to this research, the objective of the study had been explained to them both in oral and written way. In avoiding the misunderstanding, all the instructions were given in *Bahasa Indonesia*. It took 20-25 minutes or more to complete, although there was no formal time limit. The samples were asked to answer all questionnaire items carefully.

The second section was administering English speaking test. The researcher collaborated with the English speaking lecturer had prepared the students to face the speaking test. Students were told to deliver an English speech with "Education in Indonesia" as the main theme. They had a week to prepare all the things and they were allowed to bring their speech outline. Furthermore, students only had 5 to 10 minutes to deliver their English speech. In the research, Two qualified relevant lecturers had helped the researcher to assess the students' speaking performance (see Appendix.8 for the assessors' profile). It was for avoiding the subjectivity of the researcher to gain the data.

3.5 Scoring Procedures

The procedures of scoring for the EI and speaking test are as follows:

The students were assessed on their Emotional Intelligence by using the questionnaire of emotional intelligence. The participants needed to fill every single items with responses ranging from 'very seldom or not true of me' (1) to 'very often true of me or very true of me' (5). Each response had its value ranging

from 1 to 5. Therefore, the measure yielded the global score ranging from 66 to 330. It means that the highest score was 330 while the lowest score was 66.

On the other hand, students' speaking performance was assessed based on speaking scoring rubric with the score ranging from 6 to 30. Hence, the lowest score was 6 while the highest score was 30. Furthermore, the students' performances were recorded and assessed later by the examiners. This method has some advantages and disadvantage. The disadvantage of the taped test is that it is less personal, the examinee is talking to a video and not to a person (Cartier, 1980 in Fulcher, 1993). Moreover, the taped test is inflexible. It means that if something goes wrong during the recording , it is virtually impossible to adjust for it.

However, taped speaking test has some advantages. Cartier (1980, as quoted in Fulcher, 1993, p. 76) states that taped test is very practical when it comes to test a large number of students. It is also more objective since each student receives identical stimuli (ibid.p.76). The scoring can be performed at the most convenient or economical time and location.

3.6 Data Analysis and Interpretation
3.6.1 The Data Analysis

The findings of this study are presented in three parts. They are (1) the data description which include the description of students' emotional intelligence and their English speaking ability, (2) The relationship between emotional intelligence and English speaking ability , and (3) The dimensions of Emotional intelligence as a predictors of students' English speaking ability. Moreover, in this part, it will be explained how to analyze the data based on those three data presentations.

3.6.1.1 Analyzing Students' Emotional Intelligence and their English Speaking Ability

This study described the present condition of students' emotional intelligence level and their English speaking ability. The taken data such as students' emotional intelligence and their speaking ability will be presented and described in detail in chapter IV. In order to present the data in the first part, the researcher analyzed the questionnaire of emotional intelligence and students' English speaking ability by using the appropriate formula.

The questionnaire of Emotional Intelligence comprised 66 brief items and employed a 5 points likert scale. It rendered a total EQ score, consisting of five aspects of emotional intelligence, namely (1) self-awareness (2) Self-control or managing emotions in the self, (3) self-motivation, (4) managing others' emotions (empathy), and (5) social skills or handling social relationship. To get the total EQ score, all the scores (factors 1 to 5) had to be added. The maximum score was 330 and the minimum score was 66. Furthermore, each dimension had to be scored and classified as high, average and below average (Daryono, 2011). The formula used to categorize the level of emotional intelligence was as follow.

1. The high level   : If $X > HM + SD (1.25)$

2. The average level   : If $HM + SD (0.25) < X < HM + SD(1.25)$

3. The low level   : If $X < HM+SD(0.25)$

(Daryono, 2011,p.112).

HM stands for hypothetical mean or ideal mean. HM was obtained by multiplying the total valid item to three. In addition, standard deviation was done by dividing the range (the difference between the highest score and the lowest score) with six (please see appendix.3).

Therefore, after calculating the data, the categorization of emotional intelligence was as follow.

Table.3.4 Categorization of Emotional Intelligence

Total Score (EQ)	Interpretation

Above 253	High
209 – 253	Average
Below 209	Low

Meanwhile, every single dimensions of emotional intelligence was also categorized by using the above formula. Table.3.5 below explains the categorization of self-awareness as the first dimension in emotional intelligence.

Table.3.5 The Categorization of Self-Awareness

Total Score (SA)	Interpretation
Above 38.32	High
31.66 – 38.32	Average
Below 31.66	Low

Furthermore, the second dimension of emotional intelligence had been classified as follow.

Table.3.6 The Categorization of Self-Control

Total Score (SC)	Interpretation
Above 76.6	High
63.32 – 76.6	Average
Below 63.32	Low

The third dimension in Emotional Intelligence is self-motivation. The categorization of each level was presented in the following table.

Table.3.7 The Categorization of Self-Motivation

Total Score (SM)	Interpretation
Above 30,66	High
25,33 – 30,66	Average
Below 25,33	Low

Then, the fourth and fifth dimensions in Emotional intelligence are empathy and social skill which had already been calculated their categorization. The following table presents them.

Table.3.8 The Categorization of Empathy

Total Score (Empathy)	Interpretation
Above 38,32	High
31,66 – 38,32	Average
Below 31,66	Low

Table.3.9 The Categorization of Social Skill

Total Score (EQ)	Interpretation
Above 69	High
57 – 69	Average
Below 57	Low

Therefore, students' answer on emotional intelligence questionnaire was classified as the above categorization. The next step was the researcher scored the students speaking test by using speaking scoring rubric. Analytic speaking scoring schemes were preferred over holistic schemes by many speaking specialists for some reasons. The advantages of using scoring rubric are related to timing, standard credibility, objectivity and consistent grading (Kitao & Kitao, 1996). Rubric demonstrates clearly how assignments are evaluated, the evaluation criteria that are established by putting language elements and expectations for

assignment (Nakamura & Valens, 2001 as cited in Rahman, 2010). Besides, using rubrics in speaking will reduce grading time. Teacher does not need to think repeatedly to give the score towards the students' speaking ability (Kitao & Kitao, 1996).

Table 3.9 presents the criteria of scoring students' speaking performance.

Table.3.9 Speaking Scoring Rubric

Element of language	Marks				
	Excellent: 5 marks	**Very Good: 4 marks**	**Good: 3 marks**	**Fair: 2 marks**	**Poor: 1 mark**
a. Fluency	Able to speak without any hesitation or break in a sentence	Hesitation or pause at a few sentences but fluency is not seriously affected	Hesitation is shown in almost every sentence half away and then repeats it	Hesitation a lot that message is not clear. A lot of hesitation that speech is not clear	Shows a lot of hesitation that speech is not clear
b. Grammatically accuracy	Grammar is always correct	A few grammatical errors. Meaning is not affected	One or two major errors which affect meaning	Almost every sentence contain a grammatical error	A l ot of grammatical errors are made that meaning of message is not clear
c. Pronunciation	All words are clearly and correctly pronounced	One or two words are incorrectly pronounced but meaning is not affected	A few word are incorrectly pronounced but meaning is not affected	One or two words which are mispronounced because meaning to be affected	Most of the words are not correctly pronounced
d. Comprehensibility	Could understand everything what the students said	Could understand most of what student said	Could understand short sentence	Could understand only isolated words	Most of the words are not correctly pronounced and this is difficult to comprehend what the students said
e. Vocabulary	Uses extensive vocabulary	Uses varied vocabulary	Uses adequate vocabulary some word usage irregularities	Uses limited vocabulary	Uses functional vocabulary
f. Confidence	Speaks confidently with proper intonation to show felling	Speak quite confidently and able to show emotion appropriately at times	Show some signs of nervousness and hence speech becomes fairly monotones	Lack confidence. Speech is monotones	Nervous an unable to speak coherently at times

(Nurcholis,2007 p.67)

Moreover, the result of the test was analyzed by using descriptive statistics because the data cannot be used for generalizing results beyond the context and research participants. This study used this following formula :

$$M_y = \frac{\sum y}{n}$$

Where:

M_y = Average score y (speaking ability)

$\sum y$ = The sum of y score

N = The number of students

Based on students' average score on speaking test, their speaking performance would be categorized into five classifications of speaking performance, namely:

Table.3.10 Classification of Students' Speaking Performance

Mean	Classification
1 – 1.9	Poor
2 – 2.9	Fair
3 – 3.9	Good
4 – 4.9	Very Good
5	Excellent

3.6.1.2 Analyzing the Existence of Relationship between Emotional Intelligence and English Speaking Ability

A correlation analyses was used to determine the correlation between two variables. To show the correlation between two variables more easily, as suggested by Hatch and Lazaraton (1991, p.427), the values of variable should be plotted against the other variable's value. In this study, the students' Emotional Intelligence level was the variable X, whereas their speaking performance was the variable Y.

Furthermore, to be more specific, this study also tried to find out the relationship between five dimensions in emotional intelligence and six elements in speaking test (fluency, grammatical accuracy, comprehensibility, pronunciation, vocabulary, and confidence). It is interesting to know which one of five dimensions in emotional intelligence has the highest relationship with each six elements in speaking ability.

To determine which correlation formula would be used, the distribution data were tested its normality. The researcher used the "Statistical Package for Social Sciences" (SPSS for windows) version 20 to test the normality of data.

Table.3.11 Tests of Normality

One-Sample Kolmogorov-Smirnov Test

		emotional_intelligence	speaking_ability
N		45	45
Normal Parameters[a,b]	Mean	224,9778	224,2444
	Std. Deviation	14,18785	17,46705
Most Extreme Differences	Absolute	,108	,095
	Positive	,108	,095
	Negative	-,095	-,071
Kolmogorov-Smirnov Z		,721	,637
Asymp. Sig. (2-tailed)		,676	,812

a. Test distribution is Normal.

b. Calculated from data.

As it is seen in Table.3.11, the significance value on emotional intelligence and speaking ability (0.676 and 0.812) were much greater than 0.05. According to Pallant (2011, p.63), if the significant value is more than 0,05, it means that the data are normally distributed. Therefore, both on speaking score and EI score were normally distributed. Since the distribution of data were normal, thus, Pearson product moment formula was used to calculate the relationship between Emotional intelligence and speaking ability.

3.6.1.3 Analyzing which dimensions of Emotional Intelligence can mostly Predict English Speaking Ability

To know which dimension of Emotional Intelligence can mostly predict the students success in English speaking, multiple regression analysis with stepwise method was also employed through SPSS statistic software as well. Multiple stepwise regression analysis was applied when the researcher wanted to determine which of all the independent variables best predicts performance on the dependent variable (Hatch & Lazaraton, 1990 p.480).

Moreover, independent variables used to predict dependent variable in this study were five dimensions of emotional intelligence. They are self-awareness, self-control, self-motivation, empathy, and social skill. Dependent variable was students' English speaking ability.

3.7 The Data Interpretation

The data can be interpreted after the value of the observed r is consulted to the value of the critical r table). In other words, the result of correlation coefficient between X and Y is consulted to Pearson Product Moment table on the level of significant 5%. If the observed r is higher than the critical r at the significant level of 5 %, it means that there is positive correlation between two variables. A coefficient near + 1.00 has a high size and a positive direction (Gay, 1987, p.193). It represents a high degree of relationship and can be interpreted that a person with a high score on Emotional Intelligence test is likely to have a high score on speaking test and vice versa.

However, if the observed r is lower than the critical r at the significant level of 5 %, it means that there is no correlation between Emotional intelligence and students' English speaking ability. In other words, a coefficient near -1.00 has a high size and a negative or inverse direction (Gay, 1987 p.13). It means that students with a high score on Emotional Intelligence test is likely to have a low score on speaking test.

Furthermore, Gay (1987) gives more explanation in interpreting the data as the following criteria:

    a. If the coefficient is near +1.00, the variables are positively related

    b. If the coefficient is near .00, the variables are not related

    c. If the coefficient is near -1.00 the variables are inversely related.

Colton as cited in Yusuf (2003) explains that the strengths of two variables can be interpreted quantitatively into four interpretations:

1. If r value = $0.00 - 0.25$ means there is no relationship / the relationship is weak.

2. If r value = $0.26 - 0.50$ means the relationship is moderate

3. If r value = $0,51 - 0.75$ means the relationship is high

4. If r value = $0.76 - 1.00$ means the relationship is so high and almost perfect.

In addition, Emra (1998) as cited in Darmawan (2009) explains a detail interpretation of correlation coefficient in the following table:

Table. 3.12 The Interpretation of Correlation Coefficient

Correction Value	Approximate Interpretation
-1.0	Perfect negative correlation
-.8 to -1.0	Very high degree of negative correlation
-.6 to -.8	High degree of negative correlation
-.4 to -.6	Medium degree of negative correlation
-.2 to -.4	Low degree of negative correlation
+.2 to -.2	Probably no correlation
+.2 to +.4	Low degree of positive correlation
+.4 to +.6	Medium degree of positive correlation
+.6 to +.8	High degree of positive correlation
+.8 to +1.0	Very high degree of positive correlatin
+1.0	Perfect positive correlation

Furthermore, the above interpretation was also used to test the hypothesis by using the following criteria :

1. If the observed *r* is bigger than the critical *r* at the significant level of 5 %, H0 is rejected and Hi is accepted. Thus, there is positive correlation between variable X and Y.

2. If the observed *r* is lower than the critical *r* at the significant level of 5 %, H0 is rejected and Hi is accepted. Hence, there is no correlation between these two variables.

3.8   Concluding Remark

This chapter explains how the data in this study were collected and analyzed. It includes research design, research setting and participant, research instrument, procedure of collecting data, and data analysis and interpretation. Furthermore, the primary data were taken from Emotional Intelligence scale and speaking test which were employed in the classroom from 5th April 2014 to 24th April 2014. Henceforth, a correlation analyses was used to identify the degree of correlation between students' emotional intelligence and their English speaking ability. Regarding to this data analysis, the Statistical Package for Social Sciences (SPSS) version 20.0 was used to analyze and calculate the data. In addition, to answer the second research question, a multiple linear regression analysis with stepwise method was applied to know which dimensions of Emotional Intelligence can mostly predict the students' English speaking ability. Moreover, data presentation and discussion will be described in detail in chapter IV.