

Chapter Three

Research Methodology

In this chapter, the description of the research methodology was explained. The first point is about the research design used by the researcher. The second point is about the population and sample of this research. The third point is the instrument for gathering the data, the validity, reliability and normality test, and the method of analyzing the data.

Research Approach and Design

To determine whether the researcher has to use quantitative research or qualitative research, it depends on some points such as the problems, the questions, and the literature review (Creswell, 2012). Based on the research question of this research, this research aimed to find out the correlation between the speech text writing habit and the students' writing skill. It means that this research aimed to find out the relation between the two variables. In addition, one of the characteristics of quantitative research is to describe the research problem through the description of the relationship among variables. As a result, this research used a quantitative research. Another characteristic of quantitative research is that there is a hypothesis in quantitative research and this research has a specific hypothesis. Moreover, this research also focused on collecting numerical data from population by using some instrument for collecting the data and that is actually one of the characteristics of quantitative research.

This research used quantitative research, so this research also used one of the research designs under quantitative research. The title of this research is the correlation between speech text writing habit and students' writing skill at Daar El Qolam Islamic Boarding School 2, so this research used the correlational design. The correlational design is used to find out whether there is a relationship between the two variables or not. Furthermore, the correlational design provides an opportunity to predict the score and find the relations by using the score itself (Creswell, 2012). It means that this research found the answer or the correlation between the variables after finding the scores of the variables.

Research Setting

This research was conducted at Daar El-Qolam Islamic Boarding School 2 (Excellent Class Program), Gintung, Jayanti, Tangerang, Banten. Daar El Qolam Islamic Boarding School is a six years school program, which is consisting of junior high school and senior high school program. The researcher conducted the research there because there is a special program for the students. It is a public speaking class for the students. This school obliges the students to join the public speaking class in order to improve the students' ability in writing and delivering the speech. It was absolutely related to the topic of this research that would like to find out the correlation between speech text writing and students' writing skill. The researcher chose Daar El Qolam 2 because it was more effective to conduct the research at excellent program and it was accessible. Moreover, this research conducted in second semester of senior high school on April 2017.

Population and Sample

This research needed some participants to be analyzed in order to get the result for answering the research questions. The participant was taken from the chosen population. As Rahmawati, Fajarwati & Fauziah (2013) stated that population is a complete set of elements or units that are used to become the research object. The population of this research was the students at Daar El-Qolam Islamic Boarding School 2 from the first grade of senior high school and it was about 160 students. The researcher choose the population from the first grade of senior high school students who had been joining the public speaking class for more than three years. It should be more than three years because the public speaking class program had begun from the first grade of junior high school. The population of this research also should not become the manager of the public speaking class, which was the second grade of senior high school because they only became the manager of public speaking class.

A sample is the subset of the population. The researcher determined the sample depending on the population of the research itself. This research used the sample because the population of the research is too large. Thus, there must be a subset of the population. Besides, because of the limitation of the time and accessibility of the research, this research has to take the sample. Then, this research used random sampling technique for determining the sample. The researcher used the formula from Notoadmojo (2010) and it is written as followed below.

$$n = \frac{N}{(1 + N \cdot d^2)}$$

Which:

n = Sample size

N = Population size

d = Level of confidence/accuracy desired (0,05)

$$n = \frac{N}{(1 + N \cdot d^2)}$$

$$n = \frac{160}{(1 + 160 \cdot (0,05)^2)}$$

$$n = \frac{160}{(1 + 160 \cdot 0,0025)}$$

$$n = \frac{160}{(1 + 0,4)}$$

$$n = \frac{160}{1,4}$$

$$n = 114,28$$

$$n = 114$$

As a result, according to Notoadmojo (2010) formula, the sample for this research was 114 students of first grade senior high school Daar El Qolam Islamic Boarding School 2 using random sampling technique. There were 120 questionnaires accepted by the researcher. However, there are three data eliminated by the researcher

since those data potentially will distract the whole data. As a result, the researcher took the sample from class A to class E randomly from 117 data.

Data Collection

This research used two instruments and used several procedures for gathering the data from the participants. These are the description of the instruments that were used in this research and the procedure of collecting the data.

Instruments. This research employed questionnaire and document for gathering the data. The first instrument used in this research was a questionnaire. According to Cohen, Manion and Morrison (2011), the questionnaire is widely used and useful instruments for collecting the data or information, providing structured, numerical data, being able to be administered without the presence of the researcher and often being comparatively straightforward to analyze. This research used the questionnaire for answering the first research question and it was about the students' speech text writing habit. These were some reasons of this research to use the questionnaire for collecting the data. First, the questionnaire was the suitable way for collecting the data since the result of the questionnaire can answer the first research question. Second, it was quite easy to administer and took a short time. Third, the opportunity of bias was less than any other instrument. Fourth, the result is consistent since it was a set of number. The researcher created the questionnaire that was distributed to the students and it consisted of 25 statements. It consisted of one statement of frequency in writing speech text, three statements of types of speech, seven statements of the steps in writing speech text, and 14 statements of the

strategies in writing speech text. The items of the questionnaire used rating scales which consisted of the option “Once in a month” “More than once in a month” “Once in a week” “More than once in a week” and “Everyday” and “Never” “Seldom” “Sometime” “Often” “Always.” The language that was used in the questionnaire was Bahasa Indonesia. There were 120 questionnaires received by the researcher after distributing the questionnaire, but the researcher used 114 questionnaires in this research. It was because the researcher eliminated the data, which potentially will distract the whole data and since the sample according to Notoadmojo’s (2010) formula was 114.

The Second instrument used by this research for gathering the data was the document. The document was used to answer the second research question, which was about the students' writing skill. This research used the document because writing skill can not be measured by using a questionnaire for knowing the students' writing skill. By using the document, this research was able take the students' writing score in order to know the students skill in writing. The document itself consisted of the students' score in speech text writing. In addition, the researcher got the document by asking the document to the language section of the school.

Nature of data. The researcher distributed the questionnaire which was consisted of 25 statements. The type of the questionnaire item was scale of data, and the kind of data that the researcher used was ordinal data. The researcher used the ordinal data because the option in the questionnaire was in order (Never, seldom, sometime, often and always). It is supported by Cohen, Manion and Morrison (2011)

who stated that “Ordinal data indicate order” (p 382). Besides distributing the questionnaire for collecting the data, the researcher also used the document. The score from the document itself is a nominal data.

Data collecting procedure. There are some procedures for administering the questionnaire. The first procedure was asking permission to the school for distributing the questionnaire. The second procedure was creating the questionnaire. The researcher created the questionnaire and asked the expert judgment. The third procedure was preparing the questionnaire such as printing the questionnaire. The last procedure was distributing the questionnaire to the students and the data was collected for about one week. Besides, the data from the document were gotten from the students’ result in their public speaking class by asking the document to the language section of the school. The document only consisted of the students’ speech text writing collected score of the students. The students’ scores itself were gotten from the students’ result in every writing speech text.

Validity and Reliability

In order to know whether the research conducted was effective or not, the researcher had to check the validity of the instrument that would be distributed. Such as stated by Cohen, Manion & Marrison (2011), “If a piece of research is invalid, then it is worthless” (p.179). Therefore, it was extremely important to check the validity of the instrument of the research itself. Three things should be checked in order to find the valid instrument, there were face validity, readability and content validity. The first validity test was face validity. According to Churchil, Jr and

		Not Relevant	Less Relevant	Fair	Relevant	Very Relevant	

After distributing the form, the researcher analyzed and determined whether the item was valid or not. The researcher determined the result based on Retnawati (2016), if the index was less than 0.4, then the validity was low. If the result is 0.4 – 0.8, then the validity was medium, and if the result was more than 0.8, then the validity was high.

Result of validity test. After doing the three kinds of the validity test by asking two experts for becoming the rater of the questionnaire, the researcher found the result of the validity test. The result was shown in the table below.

Item	Rater_1	Rater_2	s1	s2	SUM	Result	Category
001	4	5	3	4	7	0.875	High
002	3	4	2	3	5	0.625	Medium
003	3	4	2	3	5	0.625	Medium
004	3	4	2	3	5	0.625	Medium

005	5	5	4	4	8	1	High
006	5	5	4	4	8	1	High
007	5	4	4	3	7	0.875	High
008	4	3	3	2	5	0.625	Medium
009	5	5	4	4	8	1	High
010	5	4	4	3	7	0.875	High
011	3	3	2	2	4	0.5	Medium
012	2	4	1	3	4	0.5	Medium
013	5	4	4	3	7	0.875	High
014	5	3	4	2	6	0.75	Medium
015	5	4	4	3	7	0.875	High
016	5	4	4	3	7	0.875	High
017	5	3	4	2	6	0.75	Medium
018	5	4	4	3	7	0.875	High
019	5	4	4	3	7	0.875	High
020	5	4	4	3	7	0.875	High
021	5	4	4	3	7	0.875	High
022	5	4	4	3	7	0.875	High
023	3	4	2	3	5	0.625	Medium
024	5	3	4	2	6	0.75	Medium
025	5	3	4	2	6	0.75	Medium

According to the table of the result of the validity test, the 25 questions were valid. There was zero statement considered as not valid statement, 8 statements were considered as valid statements, and 12 statements were considered as high valid statement.

In addition, besides knowing the validity of the instrument, it was also important to know that the instrument was also reliable. According to Cohen, Manion & Morrison (2011), “Reliability is essentially a synonym for dependability, consistency, and replicability over time, over instruments and over groups of respondents. By checking the reliability, the researcher will know whether the instrument of the research is consistent or not. It can be shown from the result of Cronbach's Alpha of Reliability test in SPSS. The researcher tested the reliability of the questionnaire by asking the experts to rate the reliability of the item. As a result, the data from the rater was inputted to SPSS in order to check the reliability of the questionnaire. There are some categories of the reliability test according to Cohen, Manion and Morrison (2011) as shown below.

Table 3 <i>Category of Reliability</i>	
Score	Category
>0.90	Very Highly Reliable
0.80-0.90	Highly Reliable
0.70-0.79	Reliable
0.60-0.69	Marginally/Minimally Reliable

<0.60	Unacceptably Low Reliability
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Regarding to the table above, the result of the reliability test based on the data of the rater converted to the category above. The results of 25 statements were considered as reliable items since the result was 0.723, and the table was shown below.

Table 4 <i>Result of Reliability</i>	
Cronbach's Alpha	N of Items
.723	25

Data Analysis

There are two types of data analysis; descriptive statistic and inferential statistic. This research used both descriptive statistic and inferential statistic. First, this research used descriptive statistic to answer the first and the second research question. It was because the descriptive statistic was used to describe and present the data (Cohen; Manion & Marrison, 2011). In addition, this research also used descriptive statistic because there was no hypothesis in a descriptive statistic and that was actually why the first and second research question used the descriptive statistic to analyze the data. The researcher inputted the result of the questionnaire and the document to SPSS (Statistic Package for Social Science). After that, the researcher

analyzed the result of the questionnaire and the document from the SPSS (Statistic Package for Social Science) after converting the result into some categories by using the descriptive statistical analysis. This researcher determined some category in order to answer the first research question. There were five categories in this research. Those five categories were created in this research by doing some steps. The first step was by determining the interval for each category according to Rahmawati, Fajarwati & Fauziah (2013). The interval of the category was:

$$\text{Interval} = \frac{\text{Maximum value} - \text{Minimum value}}{n}$$

Which:

Maximum value = Maximum score of variable

Minimum value = Minimum score of variable

n = Number of category

$$\text{Interval} = \frac{5 - 1}{5}$$

$$\text{Interval} = 0.8$$

The result of the interval was 0.8. After knowing the interval of each category, the researcher determined the category into five categories. The table below showed the categories.

Tabel 5 <i>Speech Text Writing Habit Category</i>	
Mean	Category
1.00 – 1.80	Very Poor
1.81 – 2.60	Poor
2.61– 3.40	Fair
3.41 – 4.20	Good
4.21 – 5.00	Very Good

As same as the way to find the answer of the first research question, the way to find the second research question was also by determining the category. The researcher determined the category into five categories by using Rahmawati, Fajarwati & Fauziah's (2013) formula. The interval of the category was:

$$\text{Interval} = \frac{\text{Maximum value} - \text{Minimum value}}{n}$$

Which

Maximum value = Maximum writing score

Minimum value = Minimum writing score

n = Number of category

$$\text{Interval} = \frac{9.0 - 5.0}{5}$$

$$\text{Interval} = 0.8$$

The result shows that the interval was 0.8. After finding the interval, the researcher determined the category. The category was shown in the table below.

Table 6	
<i>Writing Skill Category</i>	
Score	Category
5.0-5.8	Very Poor
5.9 – 6.6	Poor
6.7 – 7.4	Fair
7.5 – 8.2	Good
8.3 – 9.0	Very Good

In contrast, to answer the third research question, this research used the inferential statistic. The inferential statistic used to make a prediction of the hypothesis that the research has (Cohen, Manion & Marrison, 2011). The third research question could be answered by using the inferential statistic because the third research question had a hypothesis and it was there was a positive correlation between speech text writing habit and the students' writing skill. As a result, the

inferential statistic was a suitable way to analyze the data in order to answer the third research question. Moreover, the researcher analyzed the result of the data by looking the result of Pearson correlation (r-value) or the result of (ρ -value) from the table in SPSS. If the result of (ρ -value) was lower than 0.05, it means that this research accepted the hypothesis. If the hypothesis was accepted, then it was continued by knowing the interpretation of the correlation coefficient. Cohen, Manion & Marrison, (2011) stated that “Low or near zero value indicate weak relationship, while those nearer to +1 or -1 suggest stronger relationship” (p. 635). The interpretation of correlation coefficient according to Borg (1963) was shown in the table below.

Tabel 7 <i>Correlation Coefficient Interpretation</i>	
Standard $r_{x,y}$	Interpretation
0.00 – 0.20	Very weak correlation
0.21 – 0.35	Weak correlation
0.36 – 0.65	Medium correlation
0.66 – 0.85	Strong correlation
> 0.85	Very strong correlation