

## **Chapter Three**

### **Research Methodology**

This chapter discusses the methodology that was used by the researcher in this study. This part includes the research design, research population and sample, data collection method, and data analysis. Moreover, the researcher also mentions the reasons why the researcher uses the methodology, the setting, the respondents, and the instruments. Afterwards, the researcher explains the data collection method and data analysis of this study.

#### **Research Design**

The researcher used quantitative research to conduct this study. According to Creswell (2012) quantitative research is a research which focuses on describing the research problem based on the trends to establish the overall tendency among people which is conducted by asking the specific and narrow questions to obtain measureable and observable data that will be analyzed statistically. Thus, the researcher investigated the research problem based on the students' attitudes and beliefs by asking them some specific questions. Quantitative research is the proper design of this study because this study aims to find out the trends of the levels of writing anxiety, types of writing anxiety, and factors causing writing anxiety.

The researcher employed the appropriate approach for this study which was survey research design. Creswell (2012) stated that survey research design is a procedure in quantitative research to investigate a sample or large population, to investigate their opinions, attitudes, or characteristic which is collected using questionnaire in numerical data. Thus, survey research design was suitable

approach for this study because it could be used to study large population, and it is used to investigate the students' attitudes and beliefs on writing anxiety. In addition, the researcher adopted a cross-sectional survey design for this study. "In cross-sectional survey design, the researcher collects data at one point in time" (Cohen, Manion, & Morrison, 2011, p. 377). It shows that the researcher investigated the research problem of study in current condition. It means that the researcher investigated the current condition and beliefs of students toward writing anxiety. In this study, the researcher conducted information about EED of UMY students' batch 2013 current conditions on level of writing anxiety, type of writing anxiety, and their beliefs about factors causing writing anxiety.

The researcher used descriptive statistics to analyze the data. It is supported by Cohen, Manion, and Morrison (2011) who defined that descriptive statistic is a statistic which show and describe the data, and then the researcher need to evaluate and analyze the meaning of description. Thus, this type of analysis is suitable for this study which aim to describe the level of writing anxiety, type of writing anxiety, and factors which cause writing anxiety in which the result of this study is presented in numerical and words description without making any prediction of the result.

### **Research Setting**

The researcher conducted this study at English Education Department of Universitas Muhammadiyah Yogyakarta (EED of UMY). The researcher chose this place as the setting of this study based on two considerations. The first is this institution provides some writing classes and most of lecturers at EED of UMY

usually give writing assignments to students. Second, the researcher is a student at EED of UMY; it eases the researcher in collecting data because the researcher knows a lot of people in this institution.

The researcher planned the time to conduct the data for this study and to report the result of this study. The researcher conducted to finish this study in a month, starting from September 22<sup>nd</sup> to October 22<sup>nd</sup> 2017. The first two weeks was used to make the questionnaire with Google Form and distributed the questionnaires to the students online. After that, the last two weeks is used to analyze the data and report the data obtained.

### **Research Population and Sample**

The important thing in a study is deciding the people who will be researched. In quantitative research it is usually known as population. Creswell (2012) proposed that “a population is a group of individuals having one characteristic that distinguishes them from other groups” (p. 381). In this study the populations were active students of EED of UMY batch 2013. The total numbers of active batch 2013 students are 130. Students’ batch 2013 was appropriate for this study because they are senior students, and they have learned English for the last four years. They have many experiences in writing English compositions. Thus, they may have many experience of anxiety in writing English compositions, and also they are still writing their final project. Thus, the EED students of UMY batch 2013 are suitable to be respondents of this study.

The researcher used random sampling to take the total number of respondents of this study. The researcher used random sampling because all

students of batch 2013 could be respondents for this study. According to Cohen, Manion, and Morrison (2011), in random sampling every people under study has a same opportunity for being selected to be respondent. In random sampling, the researcher only took 95 students as the fixed number of respondents which are known as the samples of study by looking t-table according to Cohen, Manion, and Morrison (2011). Creswell (2012) mentioned that sample is the real number of individual that will be studied. For choosing the sample, the researcher used Research Randomizer application, in this app the researcher input the number of population and the number of the samples. After that, this app showed output of the chosen respondents' data in form of list of random number. Then, the researcher asked the population data from administration staff and took the name of respondents based on the random number from app. Furthermore, the researcher asked personally to the respondents to answer the questionnaire online. This number of respondents could be used to represents the condition of entire population because the fixed number of samples is more than half of total population of this study. These respondents were asked to answer the questionnaires. The respondents range in age 20 to 25 years with mean of age of 22 years.

### **Data Collection Method**

Due to quantitative research is adopted for this study; the researcher used questionnaires as an instrument to obtain the data for this study. Moreover, the researcher did several steps in obtaining the data. The first step was preparing the instruments. For the instruments, which are questionnaires, the researcher

translated the adopted questionnaires into *Bahasa Indonesia* and revised the questionnaire based on the result of expert judgment. The second step was making the questionnaire with Google Form and distributing the questionnaires to the students through WhatsApp application. The questionnaires are in form of likert-scale starting from 1 to 5 (strongly disagree/*sangat tidak setuju* to strongly agree/*sangat setuju*). Thus, the students could choose the scale which can represent their beliefs. After that, the researcher analyzed the data obtained by using Ms. Excel and SPSS Statistics 17.0. Then, the researcher saw the mean score of each category, each question, and total score to evaluate the results. The results of data analyzed were reported by the researcher in numerical data and its word description.

### **Instruments of the Study**

This study was conducted to answer three research questions. The first question is to know the level of writing anxiety. The second question is to know the type of writing anxiety. And then, the third question is to investigate the factors which cause writing anxiety. To obtain the data for this study, the researcher needs to consider the instruments for this study. The appropriate instrument to obtain the data is a questionnaire. Questionnaire is mostly used and useful instrument to collect survey information. It provides structured questions and usually gets numerical data. Questionnaire can be spread without the presence of the researcher, and it is often being analyzed comparatively clear (Cohen, Manion, & Morrison, 2011). The type of questionnaire is close-ended questions.

To get the data for the first and second research questions, the researcher used adopted questionnaire from Cheng (2004) which is questionnaire of Second Language Writing Anxiety Inventory (SLWAI) consisting of 22 items. This questionnaire was developed by Cheng (2004) in order to measure the level anxiety of students when writing English and identify the type of the students' writing anxiety. SLWAI consists of three subcategories with its items, the subcategories and its items are mentioned in the table below.

Table 1	
<i>The three subcategories of SLWAI questionnaire</i>	
Categories	Items
Cognitive anxiety	1,3,7,9,14,17,20,21
Somatic anxiety	2,6,8,11,13,15,19
Avoidance behavior	4,5,10,12,16,18,22

SLWAI was selected as an instrument for this study because it has been proven as being highly reliable and valid by Cheng (2004), and it also used by many researchers which focus on writing anxiety. This questionnaire is in the form of likert-scale responses starting from 'strongly disagree' to 'strongly agree'. The questionnaire will be translated into *Bahasa Indonesia* in order to ease respondents in understanding the question items. In addition, there were 7 items in SLWAI which were positively worded. Thus, the researcher reworded the items into negative statements to ease the respondents in answering the questionnaire and also to ease the researcher in analyzing the data. The seven items were (1, 3, 7, 18, 19, 21, 22).

In order to collect the data of the third research question, the researcher used questionnaire called Causes of Writing Anxiety Inventory (CWAI) which consists of 10 items. This questionnaire was adopted from Younas et al. (2014). The researcher modified the questionnaire to reduce the ambiguous items. The questionnaire is in form of likert-scale responses starting from 'strongly disagree' to 'strongly agree'. This questionnaire was also translated into *Bahasa Indonesia* in order to make sure the respondents understand the questions.

Since the questionnaires was adopted, which means that the questionnaires have been proven valid and reliable, but the researcher needed to test the validity of the questions because the researcher translated the question items into *Bahasa Indonesia*. For testing the validity of the questionnaires, the questionnaires were checked through several steps. The first step was by checking its face validity. It aimed to make sure that the questionnaires are clear and well-structured to ease the respondents in filling in the questionnaires. The first thing that the researcher do is translated the question items into *Bahasa Indonesia*; after that the researcher asked three EED of UMY students to check its readability. Moreover, the researcher also asked them to read the questionnaire and gave their opinion whether the questionnaires were understandable or not. The next step of validity test was content validity. It was done by having expert judgment; the researcher asked three lecturers of EED of UMY to do expert judgment. It aimed to check whether the translation statements the same as the original statements, and can answer the research questions or not. The result of validity test to the experts is described in the table below. The first table below shows the validity counting of

SLWAI questionnaire which is used to measure the levels of writing anxiety and to identify the types of writing anxiety.

<u>Q item</u>	<u>Rater 1</u>	<u>Rater 2</u>	<u>Rater 3</u>	<u>s1</u>	<u>s2</u>	<u>s3</u>	<u>Σs</u>	<u>V</u>	<u>Validity</u>
Q 1	4	4	4	3	3	3	9	1.00	High
Q 2	4	4	4	3	3	3	9	1.00	High
Q 3	4	3	4	3	2	3	8	0.89	High
Q 4	4	3	4	3	2	3	8	0.89	High
Q 5	4	4	4	3	3	3	9	1.00	High
Q 6	4	4	4	3	3	3	9	1.00	High
Q 7	4	4	4	3	3	3	9	1.00	High
Q 8	4	4	4	3	3	3	9	1.00	High
Q 9	4	3	4	3	2	3	8	0.89	High
Q 10	4	4	4	3	3	3	9	1.00	High
Q 11	4	4	4	3	3	3	9	1.00	High
Q 12	4	3	4	3	2	3	8	0.89	High
Q 13	4	4	4	3	3	3	9	1.00	High
Q 14	4	3	4	3	2	3	8	0.89	High
Q 15	4	3	4	3	2	3	8	0.89	High
Q 16	4	4	4	3	3	3	9	1.00	High
Q 17	4	4	4	3	3	3	9	1.00	High
Q 18	4	4	4	3	3	3	9	1.00	High
Q 19	4	4	4	3	3	3	9	1.00	High
Q 20	4	4	4	3	3	3	9	1.00	High
Q 21	4	4	4	3	3	3	9	1.00	High
Q 22	4	4	4	3	3	3	9	1.00	High

According to the table based on Retnawati (2016) above, the validity score of all items were 0.89 to 1.00. Retnawati (2016) mentioned that the items can be called valid based on the score, if the score is less than 0.4, it means that items are not valid or low validity, the items with score between 0.4 to 0.8 means the items



have medium validity or mediocre, and the items' score more than 0.8 points that the items have high validity. It proved that all items above were valid because the scores of all items more than 0.4. Thus, all items in the Second Language Writing Anxiety Inventory (SLWAI) can be used. The table above shows the validity counting of CWAI questionnaire which is used to explore the factors causing writing anxiety.

<u>Q item</u>	<u>Rater 1</u>	<u>Rater 2</u>	<u>Rater 3</u>	<u>s1</u>	<u>s2</u>	<u>s3</u>	<u>∑s</u>	<u>V</u>	<u>Validity</u>
Q 1	4	4	4	3	3	3	9	1.00	High
Q 2	4	4	4	3	3	3	9	1.00	High
Q 3	4	4	4	3	3	3	9	1.00	High
Q 4	4	3	4	3	2	3	8	0.89	High
Q 5	4	4	4	3	3	3	9	1.00	High
Q 6	4	4	4	3	3	3	9	1.00	High
Q 7	4	3	4	3	2	3	8	0.89	High
Q 8	4	3	4	3	2	3	8	0.89	High
Q 9	4	3	4	3	2	3	8	0.89	High
Q 10	4	3	4	3	2	3	8	0.89	High

Based on the table above which is taken on Retnawati (2016), the validity score of all items were 0.89 to 1.00. According to Retnawati (2016) the score of validity has to be more than 0.4 to be categorized as valid questions. The table above showed that all items can be categorized as valid questions. Hence, all of the questions of Causes of Writing Anxiety Inventory (CWAI) could be used.

## **Data Analysis**

In this part, the researcher defined how the researcher analyzed the data by doing several steps and then reports the result of the data. As stated before, the researcher chooses to use descriptive statistic to analyze the data. Cohen, Manion, & Morrison (2011) defined that descriptive statistic is a statistic which show and describe the data, and then the researcher needs to evaluate and analyze the meaning of numerical data and define it into words description. This type of analysis is suitable for this study which aims to describe the levels and types of writing anxiety, and the factors which cause writing anxiety without making any prediction of the result.

The researcher analyzed the data by using measure of central tendency. “the central tendency of a set of scores is the way in which they tend to cluster round the middle of a set of scores, or where the majority of scores are located” (Cohen, Manion, & Morrison, p. 627). This means that the researcher described the data by looking at the mean score. To analyze the data for the first research question which is the levels of writing anxiety, the researcher looked at the frequency of the total score and the mean of the total score. The mean criteria for categorizing the levels of writing anxiety are the students with total score above 65 points indicate that the students having high level of writing anxiety. Besides, a total score between 65 – 50 points indicates students having moderate level of writing anxiety, and a total score below than 50 points indicates a low level of writing anxiety of students.

To describe the data of second research question, the researcher also looked at the mean score of each category. In the questionnaire, the items were grouped based on three types of writing anxiety. The types are somatic anxiety, cognitive anxiety, and avoidance behavior. Thus the researcher identified the type of writing anxiety which is mostly faced by students by looking at the highest mean of total score of category. Table below shows the mean criteria of questionnaire in order to analyze the data of the students' types of writing anxiety.

Table 4	
<i>Mean criteria for questionnaire of the EED of UMY students' type of writing anxiety</i>	
<u>Mean score</u>	<u>Criteria</u>
Highest score	The most common type
Moderate score	Second common type
Lowest score	Third common type

To analyze the data of the third research question, the researcher also analyzed them by using measure of central tendency. The researcher saw the mean score of each item to describe the data. Hence, the researcher is able to know the mean score of each question items of factors which cause writing anxiety by 95 students at EED of UMY batch 2013. Table below shows the mean criteria to analyze the data of students' factors causing writing anxiety.

Table 5	
<i>Mean criteria for questionnaire of EED of UMY students' factors causing writing anxiety</i>	
<u>Mean score</u>	<u>Criteria</u>
1 – 2	Never-faced
2,1 – 3	Rarely-faced
3,1 – 4	Moderately-faced
4,1 – 5	Frequently-faced

**Reporting.** After analyzing the data, the researcher has to report the results of the data. The researcher reported the data through numerical and words description to describe the results. Moreover, the researcher also provided review of previous study to support the results. The results are the level of writing anxiety, the type of writing anxiety faced by students of EED of UMY batch 2013 and the factors causing writing anxiety among students.