Chapter Three

Research Methodology

This chapter begins with an explanation of the research design, research setting, about the research population, research sample and sampling technique and the last point explains data gathering, data collecting procedure, and data analysis.

Research Design

The characteristic of the quantitative research is identified the research problem based on trends, (Creswell 2012). In this research, the researcher intended to see the issue or trend among the students. According to the aims of this research, the researcher used quantitative research. By using quantitative research, the researcher got the information about the students' perspective, and also the student's view of the trend about the anxiety in foreign language learning. This research used survey design. According to Creswell (2012) survey design is used for identifying the trend in attitude, opinions, behaviors or characteristics of the population.

This research used a cross-sectional survey design. Creswell (2013) stated that "cross-sectional survey design, the researcher collects the data at one point in times" p.377. With a cross-sectional survey design, the researcher got the information quickly. After the students completed the survey and the researcher got the data of the present view among students. The issue or trend of this research was about anxiety in foreign language learning of first year student in English language education department.

Research Setting: Place and Time

This study conducted in an English Language Education Department in Yogyakarta, Indonesia. There are three reasons why the researcher chooses this population. The first reason is the student got the new environment in learning a foreign language. Facing the new environment, the student has to adapt to new people and new society, sometime students will get nervous and unconfident in producing the language in front of new people. The second reason is most of the first year student are coming from many different majors in high school, and most of them lack of English language knowledge. When the students lack English language knowledge, it will affect their language learning in term of producing the language. For instance, the students who have it, they will feel anxious about learning English. And for third reason is the researcher will have an easier time for gathering data because of familiarity with the university. The researcher was conducted research data in Mei 2019. After got the data the researcher analyzed the data in July 2019. Moreover, this research completed in July 2019, and this research was conducted in the academic year 2018/2019.

Research Population, Sample technique and Research Sample.

In this part, the researcher explains about the research populations, research sample and sampling technique. For more detailed explanation, each part is explained in the following paragraphs.

Research Population. The population of this study was first year student in English language education department batch 2018. There are 6 classes of the first year student. Those are class A, class B, class C, Class D, Class E, and Class F. Each class has a different number of students. The total number of the first year

students' batch 2018 are 263. The researcher captured the data from those classes. The researcher chosen first year student batch 2018 as the target population because they have been studying English for years. Moreover, the first year student faced a new environment, which is the first year students have to adapt to the environment. Therefore, the first year students highly likely have obstacles to learn English. With those reasons, the researcher wants to investigate the level of anxiety that students have after studying English for many of those years.

Sampling Technique. This research used cluster sampling as the sampling technique. Cohen, Manion and Morrison (2011) asserted that cluster sampling is researcher selected the specific number of the schools and test all the students that had been selected. In this research, the researcher chose all of the classes as a population of this research. Based on the table at sample sizes, the 168 students were chosen in this study.

Research Sample. The population of this study were the whole students in ELED of Batch 2018. The researcher selected the number of populations based on the tables at sample sizes by Cohen, et al (2011). The total population of the students is 263 based on Cohen, et al (2011) the tables at simple sizes, if the total populations were 263 students, and the confidence interval was 5%. The target populations of this research included 168 students. Moreover, the population that obtained in this research were 168 students.

Research Instrument

In this part, the researcher explained about the instrument that used in this research. For more detailed explanation, each part is explained in the following paragraphs.

Questionnaire. For measuring the degree of student's foreign language anxiety level, this research used a questionnaire adopted from the Foreign Language Classroom Anxiety Scale (FLCAS) by Horwitz et al (1986). Also, the questionnaire had been used in the previous study thus the questionnaire should be more valid and reliable to be used in this study. There are 33 questions in this questionnaire. There are three domains categories of this questionnaire. Each number of item categorization in the questionnaire was adopted from Subekti (2018). The number of each item from categorization of anxiety are shown in the table below.

Table 1.

The categorization of the anxiety

Communication Apprehension	1, 4, 9, 14, 15, 18, 24, 27, 29, 30, and 32.
Test Anxiety	3, 5, 6, 8, 10, 11, 12, 16, 17, 20, 21, 22, 25, 26, and 28
Fear of Negative Evaluation	2, 7, 13, 19, 23, 31, and 33.

Those items of the questions were intended to answer the overall of anxiety. And for the categories were intended to answer the level of each factors of anxiety. For the sake of the research, the researcher replaced the word "foreign language" in the questionnaire become "English language" in line with the focus of the present study, because the researcher focuses on English language anxiety. All items of the questionnaire were translated into the Indonesian Language,

because the Indonesian language is the native language of the researcher and respondents. So, it makes the respondents easier to answer the questionnaire. Afterward, the researcher gave the questionnaire to the expert judgement and the expert judgement gave a few suggestions to improve and adjust the questionnaire. The first and the second experts suggested changing the positive statement from the questionnaire into the negative statement to make easy practicality in calculating the data. The positive statement of the questionnaire was items number 5, 8, 11, 14, 18, 22, 28, and 32. Third expert did some adjustment of the translation words for the items number 3, 11, 20, 21, 22, 26, and 27.

Data Collection

This research used a questionnaire for capturing the data. By using the questionnaire as an instrument, the researcher got valid data and no bias data because all of the answers are numerical data from the population. According to Wilson and Mclean (1994), the questionnaire is the most used and useful instrument of collecting survey information, provided structured and numerical data. The researcher has used a structured questionnaire for gathering the data and by using a structured questionnaire; the questionnaire is organized.

The researcher used dichotomous questions and scale as types of questionnaire items. The questions used by the researcher of dichotomous questions were name, gender, and the class. Cohen et al,. (2011) stated that the dichotomous question is useful for forcing the respondent to 'come off the fence' toward an issue. Moreover, it provided a clear, obvious answer. It is possible for the respondent to answer the question quickly. Therefore, the researcher used scale for the question in the questionnaire. According to Cohen, K., Manion and

Morrison, K (2011) for the researcher scale is a useful device, as they build in a degree of sensitivity and differentiation. The type of responses for the questionnaire about anxiety in foreign language learning is on the table below.

Table 2.

Types of Responses

The Level of Anxiety	
Strongly Disagree	→ Sangat Tidak Setuju
Disagree	→ Tidak Setuju
Agree	→ Setuju
Strongly Agree	→ Sangat Setuju

Validity and Reliability

In data analysis the researcher wanted to investigate the instrument by using expert judgment. By using expert judgment, the researcher could determine whether the instrument is valid or not. According to Cohen et al,. (2011) test validity is an essential key to effective research. For testing the instrument in the validity test, the researcher used Aiken test by using Microsoft Excel. Based on the view that validity was essentially a demonstration that an instrument in fact measures what it purports to measure, or that is intended to describe or explain (Winter, 2000 p.1). In this case, a direct survey used by the researcher in order to ask the validator for filling out the validity test in checking the instrument. After that, the researcher will use Aiken test in Ms.Excel and input the score of validity test that has been filled out by expert judgement.

The first step is asked the validator (expert judgment) to fill the validity form. The validator of this research is lecturer from English language learning

Department in one of the universities in Yogyakarta. There are 3 lecturers that become a validator. There are four –rating scale from 1 to 4 that the validators have to rate.

Table 3.

Four-Point Rating Scale

The Level of Anxiety
(1)   Not Relevant
(2)   Quite Relevant
(3)   Relevant
(4)   Very Relevant

The formula was from Aiken (1990) in the following:

$$\text{Value} = \frac{SUM}{(\sum \text{validator} \ \ x \ \ (Nmax - Nmin))}$$

If the score of the result from Aiken test in Microsoft excel is < 0.4, it means that the validity test is low, if the score is < 0.8, it means that the validity test is moderate, and if the score > 0.8 means that the validity test is high.

As seen in Table 4, the results of the validity Aiken Test showed that there were 28 items with high validity, because the value was more than 0.8, and 5 items with medium validity, because the value was more than 0.4 but less than 0.8. Therefore, the validity of the questionnaire in this research was acceptable since the overall validity in this questionnaire were high and medium according to

the classification of Cohen et al (2011). All item of this questionnaire is used in this research.

Table 4.

The Result of the Validity of the Questionnaire

Questionnaire Items	Value	Validity
Q1	0,89	High
Q2	1.00	High
Q3	1.00	High
Q4	1.00	High
Q5	0,78	Medium
Q6	0,56	Medium
Q7	1.00	High
Q8	1.00	High
Q9	1.00	High
Q10	1.00	High
Q11	0,56	Medium
Q12	0,89	High
Q13	0,89	High
Q14	1.00	High
Q15	0,44	Medium
Q16	1.00	High
Q17	0,78	Medium

Q18	0,89	High
Q19	1.00	High
Q20	1.00	High
Q21	0,89	High
Q22	0,78	Medium
Q23	1.00	High
Q24	1.00	High
Q25	1.00	High
Q26	1.00	High
Q27	1.00	High
Q28	1.00	High
Q29	1.00	High
Q30	0,67	Medium
Q31	1.00	High
Q32	1.00	High
Q33	1.00	High

The next step was to check the reliability of the data instrument. For checking the reliability of the instrument, the researcher used SPSS. 22.0 and used Cronbach's Alpha in reading the result of the reliability test. The data questionnaire was inputted in SPSS. 22.0, then the researcher checked whether the questions of the questionnaire reliable or not. The valid question items are processed through this test.

Brymen and Cramer (1990 p.71) suggested that the reliability level is acceptable at 0.8. The criteria of reliability test based on a Cronbach's Alpha are shown below.

Table 5.

Cronbach's Alpha Table	
> 0.90	Very Highly Reliable
0.80-0.90	Highly Reliable
0.70-0.79	Reliable
0.60-0.69	Marginally/Minimally Reliable

The result of validity was inputted to SPSS. 22.0 to check the reliability of the items. Cohen et al. (2011) remarked that the reliability level is acceptable at 0.8. Therefore, the reliability of the questionnaire in this research was acceptable since the overall alpha in this questionnaire was 0.938, which was higher than 0.8. Then, the results showed that all the items of the questionnaire in this research was reliable shown in the following table.

Table 6.

Reliability Statistics

Cronbach's Alpha	N of Items
.938	33

Moreover, as seen in table 7, it shows that all items in the questionnaire were categorized to " Very highly reliable " because the score was more than 0.90. Therefore, the questionnaire items were all reliable as seen from the overall

Cronbach's alpha and each item of the Cronbach's alpha. Then, the results showed that each number of items of the questionnaire in this research was very highly reliable shown in the following table.

Table 7.

The Result of the Reliability for each Item of the Questionnaire

Items	Cronbach's Alpha if Item Deleted	Reliability
Q1	.937	Very highly reliable
Q2	.936	Very highly reliable
Q3	.936	Very highly reliable
Q4	.936	Very highly reliable
Q5	.939	Very highly reliable
Q6	.936	Very highly reliable
Q7	.936	Very highly reliable
Q8	.935	Very highly reliable
Q9	.936	Very highly reliable
Q10	.939	Very highly reliable
Q11	.935	Very highly reliable
Q12	.936	Very highly reliable
Q13	.935	Very highly reliable
Q14	.938	Very highly reliable
Q15	.935	Very highly reliable
Q16	.937	Very highly reliable
Q17	.934	Very highly reliable

Q18	.936	Very highly reliable
Q19	.935	Very highly reliable
Q20	.937	Very highly reliable
Q21	.936	Very highly reliable
Q22	.935	Very highly reliable
Q23	.934	Very highly reliable
Q24	.935	Very highly reliable
Q25	.935	Very highly reliable
Q26	.934	Very highly reliable
Q27	.936	Very highly reliable
Q28	.935	Very highly reliable
Q29	.935	Very highly reliable
Q30	.935	Very highly reliable
Q31	.936	Very highly reliable
Q32	.934	Very highly reliable
Q33	.937	Very highly reliable

Data Collecting Procedure

For gathering the data, the researcher used online survey to distributed the questionnaire. The researcher was present in the class while the distributing the questionnaire. Moreover, the researcher presents in the class to help the respondent to understand about the purpose of the questionnaire and also to help the respondent to fill out the questionnaire. Thus, it makes the answer of the respondents in the questionnaire are completely filled with no empty answer.

Cohen et al,. (2011) stated that the presence of the researcher is helpful by enabling any queries or uncertainties to be addressed immediately with the questionnaire design. Then, the online survey that the researcher used is Google-form with the link:

https://forms.gle/A1usNDHBJ5oK9oLd7

Data Analysis

The researcher collected the questionnaire and start to analyze the data. First, the researcher analyzed the data by using Microsoft excel. The Second is the researcher moved the data to the SPSS 22.0. The researcher started to find the answer to the research questions about the level of students' anxiety and student's level of each categories of anxiety by using SPSS 22.0.

This research is a cross-sectional survey design, which means this research design has to find out a trend/issue from the population. In this case, the researcher only used descriptive statistic to investigate the issue. In the descriptive statistic, the researcher should investigate the missing values, data outlier, dominant, and range by using SPSS 22.0.

The researcher made a range score to classify the result of the mean score of the level of anxiety and also of three domains categories. The formula to make the range of categories was from Supranto (2000) in the following:

Range: c : $\frac{Max-Min}{n(Category)}$

Details:

c   : the range prediction

n category   : number of class that the researcher wants

Xn   : the maximum value / score of variable

X1   : the minimum value / score of variable

   In this study, the maximum score of the overall of anxiety was 132.00, and the minimum score was 33.00. Meanwhile, the maximum and minimum score of communication apprehension, test anxiety and fear of negative evaluation was different from each other. The maximum score of communication apprehension was 44.00, and the minimum scare was 11.00. Then, the maximum score of test anxiety was 60.00, and the minimum scare was 15.00. And the maximum score of fear of negative evaluation was 28.00, and the minimum scare was 07.00. Then, the researcher calculated the category using Suprapto's formula. Thus, the calculating for overall of anxiety and three domain categories mentioned below.

The calculating for overall of anxiety

$$c : \frac{132-33}{4}$$

$$c : \frac{99}{4} = 24.75$$

The calculating for communication apprehension was

$$c : \frac{44-11}{4}$$

$$c : \frac{33}{4} = 8.25$$

The calculating for test anxiety was

$$c : \frac{60-15}{4}$$

$$c : \frac{45}{4} = 11.25$$

The calculating for fear of negative evaluation was

$$c : \frac{28-7}{4}$$

$$c : \frac{21}{4} = 5.25$$

The range of the overall level of anxiety was classified into four levels. Here are the intervals of the overall level of anxiety:

Table 8.

The Overall of Anxiety

Interval	The Overall Level of Anxiety
Very Low	33.00 – 57.75
Low	57.76 – 82.50
High	82.51 – 107.25
Very High	107.26 –132.00

The range interval of communication apprehension was classified into four levels. For details, here are the intervals of communication apprehension.

Table 9.

Communication Apprehension

Interval	Communication Apprehension
Very Low	11.00 – 19.25
Low	19.26 – 27.50
High	27.51 – 35.75
Very High	35.76 – 44.00

The range interval of test anxiety was classified into four levels. For details, here are the intervals of test anxiety.

Table 10.

Test Anxiety

Interval	Test Anxiety
Very Low	15.00 – 26.25
Low	26.26 – 37.50
High	37.51 – 48.75
Very High	48.76 – 60.00

The range interval of fear of negative evaluation was classified into four levels. For details, here are the intervals of fear of negative evaluation.

Table 11.

Fear of Negative Evaluation

Interval	Fear of Negative Evaluation

Very Low	07.00 – 12.25
Low	12.26 – 17.50
High	17.51 – 22.75
Very High	22.76 – 28.00