#### **CHAPTER III**

#### METHODOLOGY

## A. Research Design

This research used quantitative and qualitative method to analyze the data. The method of this study is Pre-experimental design consist of One-group pretest-posttest design. According to Sugiono (2010:109), it is one of experimental studies that only observe the treatment product in one object group without control group as a comparison object. It is the research that only look for the result of the treatment in one group object without any comparison group or control group. The pre-experimental reseach that is used in this research is Pre-experimental design consisting One-group pretest-posttest design.

In this study, the group will be given pre-test before given a treatment and post-test after a treatment. Therefore, the writer will get the product treatment after comparing between pre-test (score before treatment) and post-test (score after treatment).

To clarify the design model of this pre-experiment, the researcher tries to draw an illustration of One-group pretest-posttest study as follow:

One Group Pretest Posttest Study

O1 X O2

Note: O1: pretest score of students' speaking skill before treated using videotape technique.

X : Treatment of Videotape technique.

O2 : Posttest score of students' speaking skill before treated using videotape technique.

Descriptive qualitative method in this study is used for analyzing first semester students English speaking anxiety level based on Foreign Language Classroom Anxiety Scale questionnaire.

## **B.** Research Setting

This research takes place at fourteenth group at English class of Language Development center in UIN Antasari. This collage is located in jl. A. Yani KM 4,5 Banjarmasin, South Kalimantan. English lesson in PPB is given three times a week (Monday, Tuesday, Wednesday), and the duration is 2 x 50 minutes for each meeting that is from 06:40 am until 08:20 am. The teacher of this class is student who graduated from English Education Department of UIN Antasari. The lesson of this class mostly about speaking English, the teacher give students task to speak English in the classroom.

## C. Population and Sample

## 1. Population

Before the sample was collected, the researcher had to determine the population. Arikunto (2006: 108) says that a population is a set or collection of all elements processing one or more attributes of interest. The population that the researcher selected was the students of English class at Language Development Center academic year 2017/2018. The total populations were of 103 classes. Each class consisted 26 students.

## 2. Sample

The technique sample of this study is purposive sampling. A sample taken in accordance with the needs researchers and discuss with

teacher there. The sample in this research is all of students of fourteenth group at English class at Language Development Center in UIN Antasari Banjarmasin consist of 26 students.

According Sugiyono (2006, p.61) states that purposive sampling is a technique of determining the sample with certain considerations. Meaning in other words, the unit of the sample is adjusted according to certain criteria defined by the research objective.

#### **D.** Data collection Procedure

#### 1. Observation

This observation is used to observe detail information about the object directly that can complete this study. The writer do the observation for the English teacher too, there are some aspect will be observed as follow:

- a. Activity of students in learning English process in classroom.
- b. Interaction between teacher and students during English lesson

#### 2. Test

The test to know the effectiveness of videotape in reducing new students first semester speaking anxiety at language Development center (PPB) of UIN Antasari:

## 1. Giving pre-test

The writer as a researcher give students a speaking test face to face about their personality around three minutes. The test is students speak about their name, faculty and major, address, hobby, and what they want to be in the future. Students are also describe about some theme about hometown, family, hobby, favorite movie, singer, actor, hero, cartoon, and their favorite country in the world. Student chooses one theme and describe about that.

#### 2. Treatment

Resercher teach the students using cooperative learning approach and apply videotape technique for treat the students. Students with their group, their pair or alone make a video when speak English by theirself. Material for students doing the assignment is about my City. Stundents can promote their city at monolog in the video.

### 3. Post-test

In post test step, the researcher gives students a speaking test same as pre test step.

## 4. Analysing post-test result using instrument

The data will be submitted from pre-test before do a treatment (for detecting the effectiveness of using videotape for reducing new students first semester speaking anxiety), then it will be compared with test result of post-test after a treatment

## 3. Questionnaire

Questionnaire in this research for answer the English speaking anxiety level of first semester students .

Table 3.1. Table Likert's scoring

A Likert's scoring table adapted by Horwitz et al. (1986)

	SCORING				
STATEMENT	Strongly Agree	Agree	Nither Agree or Disagree	Disagree	Strongly Disagree
Positive	5	4	3	2	1
Negative	1	2	3	4	5

An adapted Oetting's scale was used to categorize the anxiety level of the participants. The results that the lecel of anxiety was based on the categorization of FLCAS scale below.

Table 3.2. Table of FLCAS anxiety scale range

FLCAS Anxiety scale

RANGE	LEVEL		
124-265	Very Anxious		
107-123	Anxiety		
86-106	Mildly Anxious		
65-85	Relaxed		
33-64	Very Relaxed		

Adopted from Anggraini, Rini (2015), Students' Speaking Anxiety in The First Grade of Junior High School In an English Language Classroom. Universitas Pendidikan Indonesia.

## E. Research Instrument

To find out the solution of the problem, the writer will need some data. The required data and information are obtained from the experiment and the writer will use two techniques for collecting data as follows:

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1. Test

Test technique is used to collect the data of student's speaking skill. The researcher will use two tests in this research, pretest and posttest. This pretest will be given to students in the class before they treated using videotape technique. The speaking test is students speak about their name, address, their faculty and major, hobby and what they want to be in the

future. Students are also describe about hometown, famity, hobby, favorite

movie, singer, actor, hero, cartoon, and their favorite country in the world.

Students choose of themes and describe about that.

For assessing students' speaking test based on four categories as follows:

Vocabulary : 25 point

Grammar : 25 point

Pronunciation : 25 point

Fluency : 25 point

Score maximal = 100 point

Furthermore, the posttest will be given to students after they treated using videotape technique.

2. Questionnaire

Questionnaire is used to find students' anxiety level. One research Instrument namely "Foreign Language Classroom Anxiety Scale" that translate into Indonesian is used to find students' anxiety level. The students' foreign language anxiety level is measured by the Foreign

Language Classroom Anxiety Scale (FLCAS) developed by Horwitz and Cope (1986). In the FLCAS there are 33 question items and a scale ranging from "strongly agree" to "strongly disagree" (five to one point). Students' anxiety score was gained by summing up rating of all the items. The theoretical range of this scale was from 33 to 165. There are two kinds of statements in this FLCAS, those are positive and negative statements. Positive statement point was ranging from 1-5 then the point for negative statement was ranging from 5-1. The positive statement were in questions number 2,5,8,11,14,18,22,25,28,32. And the negative statements were in questions number 1, 3, 4, 6, 7, 9, 10, 12, 15, 16, 17, 19, 20, 21, 23, 24, 26, 27, 29, 30, 31,33. (Anggraini, 2015).

## F. Data Analysis Procedure

In this research, the writer used a quantitative and qualitative method. The quantitative data of this research was analyzed by using the Statistical Packages for the Social Science (SPSS) version 22 and used the Microsoft Excel 2010.

1. How is the effectiveness of using videotape in reducing English speaking anxiety of the first semester students at the Language Development Center (PPB) of UIN Antasari Banjarmasin?

For getting research hypothesis from collected data, the writer calculates statistics and compares the score of students' speaking ability before and after. The statistics calculation are pre-requisite and hypothesis test. Pre-requisite test consists of normality and homogenity test.

# a. Normality test

It will test the normally data that will be tested in this study. This test used SPSS 22 program. The steps to get data as follows:

- a) Open file normality.
- b) Choose Analyze Nonparametric Test Legacy Dialogs –

  1-Sample K-S
- c) Input variable in Test Variable list
- d) On active check box on the *Test Distribution* and then choose *Normal*
- e) Click OK.

Kolmogorov Smirnov and Shapiro Wilk:

The criteria of SPSS:

- a) If respondents  $\geq$  50, the normality test uses Kolmogorov Smirnov.
- b) If respondents  $\leq$  50, the normality uses Shapiro Wilk.

The writer use of *Shapiro Wilk* because the respondent in this research there are 26 students.

Normality test is also given by criteria as follows:

a) Hypothesis

H<sub>o</sub>: If the data is normality so there is significance difference in students' speaking abilty before and after using videtape technique of the first semester students at the language Development center (PPB) of UIN Antasari Banjarmasin.?

H<sub>a</sub>: if the data is not normality so that there is no significance difference in students' speaking abilty before and after using videtape technique of the first semester students at the language Development center (PPB) of UIN Antasari Banjarmasin.?

# b) Test Criteria

If the value of probability  $> 0.05 \text{ H}_{o}$  is accepted.

If the value of probability  $< 0.05 \text{ H}_0$  is rejected.

# b. Homogeneity test

Homogeneity test sample to determine a homogenous whether or not the varience of samples taken from the same population (Sugiyono:2012, p.275).

Test of homogenity of variances by Levene statistics test. The steps as follows:

 a) Input students' score on the data view based on pretest and posttest.

- b) Choose Analyze-Compare Means-One Way Anova
- c) Input variables in Dependent list dan Factor list
- d) Click *Options* add in a mess mark on the box Homogeneity of variance test.
- e) Click Continue and Ok.

Homogeneity test same on the normality test is also given by criteria as follows:

a) Hypothesis

H<sub>o</sub>:if the data has a homogeneity variation so there is nosignificance difference in students' speaking abilty before and after using videtape technique of the first semester students at the language Development center (PPB) of UIN Antasari Banjarmasin.?

H<sub>a</sub>: if the data has not a homogeneity variation (not same) so there is nosignificance difference in students' speaking ability before and after using videtape technique of the first semester students at the language Development center (PPB) of UIN Antasari Banjarmasin.?

Test Criteria

If the value of probability  $> 0.05 \text{ H}_0$  is accepted.

If the value of probability  $< 0.05 \text{ H}_0$  is rejected.

#### c. T-Test

This two samples T Test under comparative test. This test purposes to compare is the sample has a real comparative with other sample.

The steps as follows:

- a) Input students' score pretest and posttest on variabel view.
- b) Fill up the data *view* which is name of pretest give code 1 and posttest give code 2.
- c) Analyze, choose Compare Means, and then Independent-Samples T Test
- d) Input students' score on Test Variabel (s) box.
- e) Input data on Grouping Variable box.
- f) Click Define Groups
- g) Fill up data 1 (pretest) by 1 and data 2 (posttest) by 2
- h) Click *Continue* and *Ok*.
- $H_o$ : there is no significance difference pretest and posttest in students speaking ability.
- H<sub>a</sub>: there is significance difference pretest and posttest in students speaking ability.

If the value of probability  $> 0.05 \text{ H}_0$  is accepted.

And If the value of probability  $< 0.05 \, H_o$  is rejected.

#### d. U-Test

According Sugiyono U-Test (*Mann-Whitney*) in function as employing alternative T test if T test parametric prsayarat is not completed. The steps as follows:

- a) Input students' score on variabel view.
- b) Fill up the data *view* which is name of male give code 1 and female give code 2.
- c) Analyze, choose Nonparametrik Tests, Legacy Dialogs, next
   2 Independent Samples
- d) Input students' score on Test Variabel List
- e) Input based on gender in Grouping Variable
- f) Click Define Groups
- g) Fill in Group 1 by 1 and *Group* 2 by 2
- h) Click Continue and Ok.

If the value of probability > 0,05  $\rm H_o$  is accepted. And If the value of probability < 0,05  $\rm H_o$  is rejected.

2. How is the English speaking anxiety level of the first semester students at the Language Development Center (PPB) of UIN Antasari Banjarmasin?

Result of students' response of questionnaire will be analysis by descriptive qualitative percentage used the Microsoft Excel 2010. FLCAS is the key instrument to gain the data. It employs Likert's scale which ranged from 1 to 5 or 5 to 1 point depending on whether statement is positive or

negative. There are two kinds of statements in this FLCAS, those are positive and negative statements. Positive statement point was ranging from 1-5 then the point for negative statement was ranging from 5-1. The Positive statement were in questions number 2,5,8,11,14,18,22,25,28,32. And The negative statements were in questions number 1,3,4,6,7,9,10,12,13,15,16,17,19,20,21,23,24,26,27,29,30,31,33.