

CHAPTER III

RESEARCH METHOD

This chapter describes the research design, population and sample, research instrument, data collection, and data analysis.

A. Research Design

In this research, the researcher used a quantitative approach. According to Creswell and Creswell (2018), quantitative research is a form of research that explains a problem by collecting numerical data and then analyzing it using statistical methods. In quantitative research, the empirical paradigm is strongly defended.

The purpose of this research was to determine the levels of students' speaking anxiety in public speaking class and the dominant level of students' speaking anxiety in public speaking class of the English Department at IAIN Kediri. Therefore, this research uses a survey design. According to Ary et al. (2010), a design survey is also known as descriptive research. A design survey is a non-experimental research method in which a researcher selects a representative sample, measures variables, then analyzes the results to determine general population trends (Clark and Creswell, 2015).

The main purpose of the survey is to describe the characteristics of a population, in other words, the researcher wants to know how individuals from a population distribute themselves on one or more variables. As in other types of research, the population as a whole is rarely studied. Instead, a carefully

selected sample of respondents is surveyed, and a population description is derived from what is found about the sample (Fraenkel et al., 2012).

B. Population and Sample

A population is an interesting group for researchers, a group that researchers want to generalize about their research results. While the sample is part of the population group whose information is needed by researchers Fraenkel et al. (2012). The population of this research is all the students in the 4th-semester of English department at IAIN Kediri in the 2021/2022 academic year who is taking public speaking course.

For the selection of samples in this research, the researcher chose samples using a simple random sampling technique. According to Fraenkel et al. (2012), random sampling is a technique where every member of the population has the same position and opportunity to be selected as a subject in research. The entire sampling procedure in the random sampling technique is completed in a single step, in which each subject will be selected independently of other members of the population. The total sample of this research are 102 students.

Table 3.1

The sample of the research

No.	Class	Total
1	B	23 Students
2	C	15 Students
3	D	34 Students
4	E	30 Students

Total	102 Students
--------------	--------------

C. Research Instrument

Instrument is a tool used to collect data. In this research, the researcher used a questionnaire. According to Fraenkel et al. (2012), the most used instrument in survey research is the questionnaire. Dörnyei (2003) defines a questionnaire as a written instrument that presents several questions or statements to respondents. In this case, respondents can write their answers or choose among several answers that have been provided. In this research, a questionnaire was distributed to find out student responses about the levels of students' speaking anxiety in public speaking class.

The questionnaire was adapted from the Foreign Language Classroom Anxiety Scale (FLCAS) by Horwitz et al. (1986). This questionnaire has been used and validated by many previous researchers. In the function, Foreign Language Classroom Anxiety Scale (FLCAS) is used to measure the level of anxiety felt by foreign language learners and has been used by several previous researchers. This shows its high validity and reliability. The questionnaire scores using the 5-point Likert's scale range from "Strongly Agree", "Agree", "Neither Agree nor Disagree", "Disagree", and "Strongly Disagree".

The results of the questionnaire that have been constructed are tested to determine its validity and reliability by taking 34 respondents. According to Fraenkel et al. (2012), validity is the extent to which the result enables researchers to draw accurate inferences about the characteristics of the persons investigated. It means a valid instrument is that it measures what it is supposed

to measure. Testing the validity of the questionnaire in this research is conducted by using IBM SPSS Statistics version 24. Based on the result of the questionnaire (try out) that is acquired from 33 items, there are 25 valid items and 8 invalid items. It can be seen as follows:

Table 3.2
The analysis of questionnaire validity

Item	r value	r table	Status	Information
1	,443**	0.349	Valid	Used
2	,242	0.349	Invalid	Not Used
3	,813**	0.349	Valid	Used
4	,520**	0.349	Valid	Used
5	,420*	0.349	Valid	Used
6	,288	0.349	Invalid	Not Used
7	,534**	0.349	Valid	Used
8	,489**	0.349	Valid	Used
9	,629**	0.349	Valid	Used
10	,709**	0.349	Valid	Used
11	,043	0.349	Invalid	Not Used
12	,518**	0.349	Valid	Used
13	,237	0.349	Invalid	Not Used
14	,545**	0.349	Valid	Used
15	,436**	0.349	Valid	Used
16	,752**	0.349	Valid	Used
17	,490**	0.349	Valid	Used
18	,445**	0.349	Valid	Used
19	,368**	0.349	Valid	Used
20	,789**	0.349	Valid	Used
21	,417*	0.349	Valid	Used
22	,266	0.349	Invalid	Not Used
23	,673**	0.349	Valid	Used
24	-,298	0.349	Invalid	Not Used

25	,609**	0.349	Valid	Used
26	,663**	0.349	Valid	Used
27	,763**	0.349	Valid	Used
28	,438**	0.349	Valid	Used
29	,538**	0.349	Valid	Used
30	,535**	0.349	Valid	Used
31	,742**	0.349	Valid	Used
32	-,015	0.349	Invalid	Not Used
33	,307	0.349	Invalid	Not Used

The data above are consulted with r_{table} at significant level of 5% ($\alpha = \text{alpha} = 0.05$). There are 34 students; meaning that $N=34$ with $df = N - 2 = 34 - 2 = 32$. This study takes df 32, so r_{table} acquired is 0.349. It can be concluded that items with r_{value} which are higher than r_{table} are used and items with r_{value} which are lower than r_{table} are not used. It means there are 25 items on the questionnaire used in this research.

According to Ary et al. (2010), reliability refers to the degree to which the instrument will produce consistent results every time it is applied. To measure the reliability of the questionnaire in this research, IBM SPSS Statistics version 24 was used as well and each item is analyzed by using Cronbach's alpha technique. The reliability of the questionnaire can be seen as follows:

Table 3.3
The analysis of questionnaire reliability

Reliability Statistics	
Cronbach's Alpha	N of Items
,917	25

From the table of reliability test results above, it can be seen that the value of Cronbach's Alpha is 0.917. Based on the test criteria, Cronbach's Alpha is higher than 0.8 or 0.917 is higher than 0.8, it can be interpreted that the research instrument is declared reliable.

D. Data Collection

In this research, the researcher used Foreign Language Classroom Anxiety Scale (FLCAS) questionnaire adapted by Horwitz et al. (1986) to collect the data. This research was conducted to determine the levels of students' speaking anxiety in public speaking class and the dominant level of students' speaking anxiety in public speaking class.

The Foreign Language Classroom Anxiety Scale (FLCAS) questionnaire was distributed to the 4th-semester students at the Department of English Education, Faculty of Tarbiyah, IAIN Kediri, who is taking public speaking course. Data was collected by distributing questionnaires in an online form, namely through google forms. Then, after the questionnaire is collected, the data from the Foreign Language Classroom Anxiety Scale (FLCAS) questionnaire was analyzed using IBM SPSS Statistics version 24 to categorize the levels of students' speaking anxiety in public speaking class.

E. Data Analysis

Data analysis is needed to answer the research questions. It includes the levels of students' speaking anxiety in public speaking class and the dominant level of students' speaking anxiety in public speaking class. The data for this

research was collected through a questionnaire. The survey does not require complicated data analysis. According to Ary et al. (2010), data analysis consists of determining the frequency and percentage of responses to the research question. To find out the percentage of data is calculated into a percentage table using the following formula:

$$P = \frac{f}{n} \times 100\%$$

P (percentage), f (frequency), N (number of the sample)

The Foreign Language Classroom Anxiety Scale (FLCAS) questionnaire adapted by Horwitz et al. (1986) consists of two types of statements, namely positive statements and negative statements. Positive statements in the questionnaire are listed at numbers 4, 6, 10, 14, and 22. Meanwhile, negative statements in the questionnaire are listed at numbers 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 23, 24 and 25. The Likert's scoring scale table was used to measure the levels of students' speaking anxiety. The positive statement scales from 1-5, while the negative statement scales from 5-1. The steps of data analysis used in this research are arranging the data, calculating the data, and categorizing the data.

The first step is arranging the data. In this step, positive statements and negative statements are arranged to avoid student misunderstandings when students fill out this questionnaire. Positive statements in the questionnaire are listed in numbers 4, 6, 10, 14, and 22. Meanwhile,

negative statements in the questionnaire are listed at numbers 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 23, 24 and 25.

The second step is calculating the data. After arranging the data, the next step is to calculate the data. The data that has been collected, is calculated using the IBM SPSS Statistics version 24. The score ranges from 33 up to 165.

The last step is categorizing the data. After the data is calculated, the next step is to categorize the data. The data are categorized into several levels ranging from “Very Anxious”, “Anxious”, “Mildly Anxious”, “Relaxed”, and “Very Relaxed”.

The Likert’s scoring scale table to measure students’ anxiety levels using Foreign Language Classroom Anxiety Scale (FLCAS) is shown below:

Table 3.4
Likert’s scoring table

Statements	Scoring				
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Positive	1	2	3	4	5
Negative	5	4	3	2	1

(Horwitz et al. (1986))

Table 3.5**FLCAS anxiety scale adapted from Oetting's scale**

Range	Level
124-165	Very Anxious
108-123	Anxious
87-107	Mildly Anxious
66-86	Relaxed
33-65	Very Relaxed

