

CHAPTER III

METHODOLOGY OF THE RESEARCH

This part describes about the description of the research design, location of the research, variable of the research, population, sample, instrument of the research, and procedure of collecting data.

A. Design of the research

The design this research is survey method in quantitative. It can help the researcher to find out the levels of students speaking anxiety, the dominant type of students speaking anxiety and the differences levels speaking anxiety between male and female at the Second Year Students of Madrasah Tsanawiyah Negeri Parepare.

B. Location and Duration of The Research

The location of this research is at Madrasah Tsanawiyah Negeri Parepare That is the Second Year Students of Madrasah Tsanawiyah Negeri Parepare. And the duration of the research will take \pm one month, academic year 2020/2021.

C. Variable of The Research

There is only one variable in this research that is analyzing students speaking anxiety at the Second Year Students of Madrasah Tsanawiyah Negeri Parepare. Speaking anxiety as a variable in this research will see of the students' speaking anxiety when the students speak in the classroom.

D. Population and Sample

1. Population

The research population is the whole of research objects that can be human, animals, plants, air, symptoms, values, events, attitudes, and others. So, these

objects can be a research data source. The type of population is divided into two. They are finite population and infinite population. The finite population means the number of individuals is determined and the infinite population means the number of individuals is infinite or unknown with certainty.¹ The population of this research is the second year students of Madrasah Tsanawiyah Negeri Parepare academic year 2020/2021. The total populations are 156 students.

Table 3.1 : The total of the Second year students of MTsN Parepare.

No	Kelas	Jumlah	Gender	
			Male	Famale
1	VIII.1	26	7	19
2	VIII.2	28	16	12
3	VIII.3	28	14	14
4	VIII.4	26	14	12
5	VIII.5	25	13	12
6	VIII.6	23	13	10
Total		156	77	79

The data has taken from the administration of Madrasah Tsanawiyah Negeri Parepare.

2. Sample

¹Syofian Siregar, *Metode Penelitian Kuantitatif*, (Kencana, 2013).

In the sampling of a population can be distinguished into two categories of sampling techniques, namely probability sampling and nonprobability sampling. The probability sampling can be divided into types they are; simple random sampling, stratified sampling, cluster sampling and double sample and nonprobability sampling.²

In this research the researcher used simple random sampling. The sample of this research is from the population that is explained previously, in this research has been taken 10 from each class. The total sample in this research is 60 in the Second Year Students of Madrasah Tsanawiyah Negeri Parepare.

E. Instrument of the Research

The researcher used a questionnaire adopted from the (Foreign Language Classroom Anxiety Scale) as an instrument. The FLCAS has been the most widely used instrument to measure foreign language learners, general anxiety in foreign language classroom. This scale will provide five responses ranging from “Strongly Agree (SA)”, “Agree (A)”, “Neither Agree nor Disagree (NA)”, “Disagree (D)”, and “Strongly Disagree (SD)”.

F. The Procedure of Collecting Data

In collecting the data, the researcher have made questionnaire in goggle form to make it easy for the researcher and the respondents to send the questionnaire to the respondents because in this situations all the students are studying in their home and the researcher send the questionnaire to the students to fill in the questionnaire. After that the researcher analyzed the students speaking anxiety.

²Syofian Siregar, *Metode Penelitian Kuantitatif*, (Kencana, 2013).

G. Technique of Data Analysis

According to Hornby, test is an examination or trial to find its quality, value, composition etc. he also pointed out the other fields in test are knowledge, proficiency, comprehension, and understanding about the subject matter. Therefore, appropriate test is very crucial in process collecting data because there are many sub fields involved.³

After the researcher collecting the data, then the data will be analyzed by quantitative way. FLCAS has two forms of statements which are positive and negative. Positive statements in the questionnaire are in the number 2, 5, 8, 11, 14, 18, 22, 28, 32. While negative statements are in number 1, 3, 4, 6,7, 9, 10, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24,25, 26, 27, 29, 30, 31, and 33. The positive statements scale will be ranging from 1-5, on the contrary negative statements scale ranged from 5-1 as in the table below.

Table 3.2 : Positive and Negative statement of the questionnaire

Positive Statements	2	I don't worry about making mistakes in English class.
	5	It wouldn't bother me at all to take more English classes.
	8	I am usually at ease during tests in my English class.
	11	I don't understand why some people get so upset over English classes.
	14	I would not be nervous speaking the English with native speakers.
	18	I feel confident when I speak in English class.
	22	I don't feel pressure to prepare very well for English class.
	28	When I'm on my way to English class, I feel very sure and relaxed.
	32	I would probably feel comfortable around native speakers of the English.

³AS Hornby, *Oxford Advanced Learner's Dictionary of Current English*, (New York: Oxford University Press, 1974).

Negative Statements	1	I never feel quite sure of myself when I am speaking in my English class.
	3	I tremble when I know that I'm going to be called on in English class.
	4	It frightens me when I don't understand what the teacher is saying in English class.
	6	During English class, I find myself thinking about things that have nothing to do with the course.
	7	I keep thinking that the other students are better at English than I am.
	9	I start to panic when I have to speak without preparation in English class.
	10	I worry about the consequences of failing my English class.
	12	In English class, I can get so nervous I forget things I know.
	13	It embarrasses me to volunteer answers in my English class.
	15	I get upset when I don't understand what the teacher is correcting.
	16	Even if I am well prepared for English class, I feel anxious about it.
	17	I often feel like not going to my English class.
	19	I am afraid that my English teacher is ready to correct every mistake I make.
	20	I can feel my heart pounding when I'm going to be called on in English class.
21	The more I study for an English test, the more confused I get.	
23	I always feel that the other students speak the English better than I do.	
24	I feel very self-conscious about speaking the English in front of other students.	

25	English class moves so quickly I worry about getting left behind.
26	I feel more tense and nervous in my English class than in my other class.
27	I get nervous and confused when I am speaking in my English class.
29	I get nervous when I don't understand every word the English teacher says.
30	I feel overwhelmed by the number of rules you have to learn to speak English.
31	I am afraid that the other students will laugh at me when I speak the English.
33	I get nervous when the English teacher asks question which I haven't prepared in advance. ⁴

Some formula was applied in this research to process the data as follows:

Table 3.3 : The Classification of Students' Score on Questionnaire

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

The data were calculated manually with range of score started from 33 up 165. After the researcher found the result of each students' anxiety level, it will

⁴Horwitz, "Foreign Language Classroom Anxiety Scale (FLCAS)," *The Modern Language Journal*, vol. 70 no. 2, 1986), p.130-131. <http://www.jstor.org/stable/327317>. (Accessed on August 26, 2020).

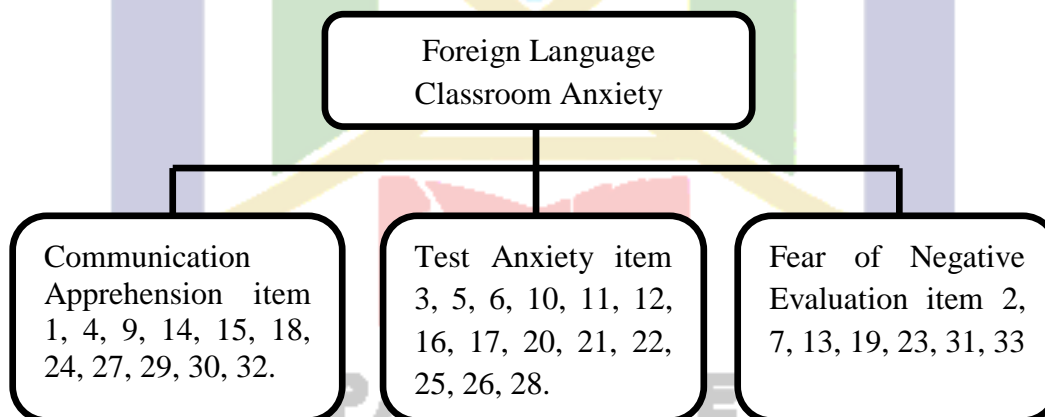
categorize onto some levels start from “very relaxed”, “relaxed”, “Mildly Anxious”, “Anxious”, and “Very Anxious”.⁵

Table 3.4: The classification score

RANGE	LEVEL
124-165	Very Anxious
108-123	Anxious
87-107	Mildly Anxious
66-86	Relaxed
33-65	Very Relaxed

In FLCAS, there are three main types of causes of foreign language classroom anxiety: communication apprehension, test anxiety, and fear of negative evaluation.⁶

Types of causes of foreign language classroom anxiety:



From the figure above show that Foreign Language Class there are Communication Apprehension : 1, 4, 9, 14, 15, 18, 24, 27, 29, 30, 32. Test Anxiety :

⁵ Sakinah Mawardah, “An Analysis of Foreign Language Reading Anxiety to EFL Learners,” *Professional journal of English Education* 2, no. 3, 2019).

⁶Horwitz, “Foreign Language Classroom Anxiety Scale (FLCAS),” *The Modern Language Journal*, 2, 1986).

3, 5, 6, 10, 11, 12, 16, 17, 20, 21, 22, 25, 26, 28. And Fear of Negative Evaluation : 2, 7, 13, 19, 23, 31, 33.

1. Rasch Model

To find out the level and dominant type of anxiety that the students occurred in the English classroom, the researcher used Rasch model to analyze the data. Rasch model is a psychometric model for analyzing categorical data, such as answers to questions on a reading assessment or questionnaire responses, as a function of the trade-off between the respondent's abilities, attitudes, or personality traits and the item difficulty. For example, they may be used to estimate a student's reading ability or the extremity of a person's attitude to capital punishment from responses on a questionnaire. In addition to psychometrics and educational research, the Rasch model and its extensions are used in other areas, including the health profession and market research because of their general applicability.

The purpose of the Rasch model is aims to analyze the data descriptive, converting ordinal data into intervals data, get the data that is standard and scientific and also from the Rasch model we can find out the average from the data that will be analyzed in the jamovi.⁷

a. Kriteria

Criteria score:

5 = very anxious	3 = Middly Anxious	1 = Very Relaxed
4 = anxious	2 = Relaxed	

⁷Wahyu Hidayat, Sri Mulianah, Mujahidah. "Analysis of The National Character Senior High School Students by Using Rasch Model". In Proceeding of the First International Conference on Religion and Education. 2019

$$N = \frac{R}{SM} \times 165$$

Keterangan:

N = nilai yang dicari atau di harapkan SM= Skor maksimum

R = skor yang diperoleh 165= bilangan tetap⁸

b. Frekuensi

c. Calculating the rate percentage of student language anxiety and the writer used formula as follow:

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

P = Percentage

F = Number of correct frequency

N = Number of Sample

d. Calculating the mean score by the formula:

$$\bar{x} = \frac{\sum x}{N}$$

Where:

\bar{x} = mean score of students' Language anxiety

$\sum x$ = total score of students' language anxiety

N = number of the sample

e. Standard Deviasi

Rumus standard deviasi:

$$S = \sqrt{\frac{n \sum_{i=1}^n x_i^2 - (\sum_{i=1}^n x_i)^2}{n(n-1)}}$$

⁸Sudirman, "Cara Menghitung Kriteria Obyektif (Hasil Ukur)", 30 Maret 2012. www.Sudirmanlira.com (Accessed, 06 october 2020).

Ket:

S^2 = Varian

S = Standar Deviasi (Simpangan Baku)

X_i = Nilai x ke $-i$

\bar{x} = Rata-rata

n = jumlah sampel⁹

2. Inferensial

To find out the differences level of speaking anxiety between male and female the researcher used jamovi to analysis the data. Jamovi is a free and open source statistical analysis software for windows. This software was built to make it easier for researchers and statisticians to perform various statistical analyzes. It is developed on top of the R statistical language to provided you the best and most accurate analysis results.

From the jamovi you can analyze the data using several other methods namely T-test (used to determine the probability of differences between populations taking into account the t-statistic, t-distribution, and degrees of freedom), ANOVA (used to determine whether there is any statistically significant difference between the means – reason of three or more independent groups), regression (used to test the relationship between one dependent variable and one independent variable), frequency (in this tab, you can perform a sample protein test and create a Contingency Table), and factors (you can do various analyze on data such as reliability analysis, exploratory factor analysis, etc).¹⁰

⁹Dosenpendidikan, “Rumus Standar Deviasi”, 06 Juni 2020. [Tps://www.dosenpendidikan.co.id](https://www.dosenpendidikan.co.id). (Accessed on 06 October 2020).

¹⁰Dwi Herawati 8 *software Analisis Statistik Gratis Terbaik*, (Brankaspedia.2020) <https://www.brankaspedia.com> (Accessed on November 25, 2020)

a. Independent T-Test

Independent T-test is one of the parametric tests to perform independent comparisons. An independent sample is a sample that produces data from different subjects. Independent comparative studies, for example, male-female comparison, control-treatment group comparison, firm a-b comparison, and others.

The T-Test is used to answer the hypothesis of the research.

- 1) Comparing the t statistical value with the critical point according to the table. If the calculated T statistical is higher than the T table value, we accept an alternative hypothesis which states that an independent variable individually affects the dependent variable.¹¹
- 2) If the significant value $t < 0.05$ then (H_0) is rejected means that there is a partial influence of the variable independent of the dependent variable. Whereas if significance value $t > 0.05$ then (H_0) is accepted which means that there is no different level of the independent variable on dependent variable.¹²

¹¹ Imam Ghozali, *Aplikasi Analisis Multivariate dengan Program IBM SPSS 21 Update PLS Regresi*. (Semarang: Badan Penerbit Universitas Diponegoro. 2013)

¹² Wiratna Sujarweni, *Statistika Untuk Penelitian*. (Yogyakarta: Graha Ilmu: 2012).