CHAPTER III METHODOLOGY

3.1. Research Design

In this research, quantitative methods are used in correlational research (Tridinanti et al., 2020). Quantitative research tests the correlation between variables because the quantitative approach is concerned with statistical analysis. for data to be obtained from questionnaires and multiple regression correlation used to analyze data. The aim of this research is to examine the relationship between three variables, namely selfconfidence, speaking anxiety and speaking performance. (Leedy & Ormrod, 2010) Correlation occurs if the independent variable speaking anxiety and self confidence represented (X) increases and the variable is speaking performance (Y) also increases for students at Muhammadiyah University of Gresik, especially in the English Department.

3.2. Population and sample

The population of this study were students at the Muhammadiyah University of Gresik majoring in English Education semester 3rd to semester 9th. The sampling method used in this research was a voluntary sample design. Therefore, voluntary sample design is a type of sampling method that researchers use non-random sampling. respondents must be with the criteria. For example, I have taken speaking subject 1.

3.3. Data collection

To collect the data, the writer used , there were; the questionnaire to the students of the English Department in the 3rd-7th semesters at Universitas Muhammadiyah Gresik with their speaking score, the frist questionnaire will be create on a Google Form, sec distribute the link of the questionnaires on google form by sending to personal message or any leader class and obtain speaking scores gain from the lectures

3.3.1. Research Instrument

In conducting this research the author used an instrument in the form of a questionnaire for the Speaking Anxiety variable which consists of 17 statement items. then mixed with the Self-Confidence variable from 13 statement items.So this research instrument is feasible to use, it is first tried out to respondents who have the same

characteristics as the respondents who will be used as research samples. , the researcher gave instructions or asked about the questionnaires that would be carried out at the answer. Then for the speaking will be by scores, which were assessed by the lectures.

3.3.2. Questionnaire

Questionnaire for Students' Anxiety

Questionnaires are the most commonly used research methods, as they are considered to be quick and simple when collecting data from a large group (Cohen, Manion, and Morrison, 2011). The first instrument was the questionnaire to know the level of students' speaking anxiety. The writer used the Foreign Language Speaking Anxiety Scale (FLSA) from Horwitz and Cope (E.K. Horwitz, 1986) and also from Young. FLSA measures the level of foreign language speaking anxiety in a classroom setting through a paper-based questionnaire filled by students. The statements of the questionnaire include three components of anxiety; communication apprehension, fear of negative evaluation, and test anxiety that was adapted from Huang (2004)) and Horwitz, et.al 1986, p. 129 Foreign Language Speaking Anxiety Scale. The FLSA Questionnaire

No.	Classification	Total	Key Number
1.	Communication Apprehension	4	1, 2, 7, 14,
2.	Fear of Negative Evaluation	5	3, 5, 8, 11, 16.
3.	Test Anxiety	8	4,6, 9, 10, 12, 13, 15, 17.
	Total Item	17	

The questionnaire consists of 17 items on Five-point Likert type scale to allow the students to convey the degree to which they agree or disagree with the statements provided: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly Disagree (SD).

Questionnaire for Self-Confidence

The researcher employed speaking ability tests and questionnaires to collect data for this study. Arikunto (2010) states that a questionnaire consists of a series of written inquiries intended to elicit information from respondents regarding their backgrounds, personalities, and knowledge.

The questionnaire which researcher used in this research was self-confidence questionnaire by Finch (2004). The questionnaire consists of 20 items and the form of Likert-Scale with five options they arenever, seldom, sometimes, often and always. The Confidence Questionnaire

Blueprint of Self-Confidence Indicator

No	Indicators	Number Question
1	Believe in your own abilities	1, 4, 13
2	Act independently in making decisions	5, 7, 9, 8,
3	Have a positive self-concept	2, 6, 10,
4	Dare to express an opinion	3, 11, 12

The first step and the frist questionnaire about self-confidence. Through the use of questions or by asking students to respond to statements in a questionnaire, a sample of their opinions is obtained. The questionnaire for this research has positive and negative statements with four options for each statement. They strongly agree (SA), agree (A), disagree (DA), and strongly disagree (SDA). The score for each choice is 4, 3, 2, 1 for positive statements and negative statements. students' self-confidence scores will be collected using a 13-item questionnaire adapted from (Finch, 2004).

Likert scale

The respondents express their perspectives on English-speaking anxiety by responding to either (5) Never, (4) Seldom, (3) sometimes, (2) often, or (1) Always

- Students' Speaking Scores

Students' speaking course grades served as a metric of research performance. An accurate measure of a student's performance in a speaking course is their speaking score. The researcher did not obtain students' speaking subject scores but obtained third, fifth and seventh semester lecturers who did. The criteria used by lecturers in assessing student work are included in the score to ensure its validity.

3.4. Data Analysis

To find out the validity of the questionnaires, a panel of experts validated the instruments. The researcher will be conducted hypothesis testing in the following method with the IBM SPSS 26 program.

3.4.1. Validity Test

Validity refers to the degree to which a research instrument accurately measures what it is designed to measure. The validity test is applied to figure out the degree of validity of a questionnaire. A questionnaire can be considered valid if the questions are able to accurately assess the goal of the measurement.

3.4.2. Reliability Test

Reliability is a metric that shows the reliability of an instrument used for data collection, showing that it works. The reliability of the questions can be measured by the consistency of the respondents' answers over time. Cronbach's alpha formula can be applied for checking reliability. The interpretation of the value of correlation coefficient is as follows:

Table 3.1 Table of the interpretation of the value of correlation coefficient

Cronbach's Alpha	Level of Reliability
0.9 – 1.0	Very High
0.6 – 0.8	High
0.4 – 0.6	Suffcient
0.2 – 0.4	Low
0.0 – 0.2	Very Low

3.4.3. Prerequisite Analysis

In order to start the first and second hypothesis testing (correlation test), the following must be completefiled. The tests conducted are the normality test and the linearity test.

3.4.3.1. Normality Test

The normality test is applied to figure out whether the residual value in multiple linear regression is normally distributed. Kolomogorov smirnov test can be applied for checking normality.

The result value of the test can be seen from the value of significant. If the significance value > 0.05, then the residual value is normally distributed. Contrarily, If the significance value < 0.05, then the residual value is not normally distributed.

3.4.3.2. Linearity Test

The linearity test is applied to figure out whether the relationship between speaking anxiety and self confidence with speaking Performance is linear or not.

The result value of the test can be seen from the value of significant deviation from linearity. If the significance value of deviation from linearity > 0.05, then there is a linear relationship between the variables. Contrarily, If the significance value of deviation from linearity < 0.05, then there is no linear relationship between the variables.

In order to start the third hypothesis testing (correlation test and multiple regression test), the following conditions must be fulfilled. The tests conducted are the normality test, heteroscedasticity test and the multicollinearity test.

3.4.4. Hypothesis Testing

3.4.4.1. Pearson Product-Moment Correlation Coefficient

The correlation test is applied to figure out the level of connection among the variables in research. The Pearson product-moment correlation test provides a correlation coefficient that indicates the relationship, the amount of relationship, and direction (positive or negative) of the relationship among the variables.

The result value of the test can be seen from the value of significance. If the significance value > 0.05, then there is no significant relationship between the variables of the research. Contrarily, If the significance value < 0.05, then there is a significant relationship between the variables of the research. The Pearson Correlation value can be used to figure out the amount of connection among variables. The interpretation of the Pearson Correlation value is as follows:

Table 3.2 Table of the interpretation of the Pearson Correlation value

The Pearson Correlation value (r)	Level of Correlation
0.0 – 0.20	No Correlation
0.21 – 0.40	Low Correlation
0.41 – 0.60	Medium Correlation
0.61 – 0.80	Strong Correlation
0.81 – 1.00	Very Strong Correlation

3.4.4.2. Multiple Linear Regression Analysis

Multiple linear regression analysis is applied to figure out the effect of independent variables (more than one variable) on the dependent variable. In order to figure out the independent variable that has the most impact on the dependent variable, it can be known

from the calculation result of effective contribution (EC). The formula of The Effective Contribution (EC) is:

$$EC(X)\% = Beta_x \times r_{xy} \times 100\%$$

EC (X)% = The Effective Contribution of variable X $Beta_x$ = The standardized coefficient beta of variable X r_{xy} = The pearson correlation values of variable X

If one of the independent variables has a greater result of effective contribution (EC) than the other independent variable, then it can be concluded that the independent variable has a major impact on the dependent variable.

3.4.5. The Statistical hypothesis

The statistical hypothesis consists of two components: H_0 (Null Hypothesis) and H_a (Alternative Hypothesis). The hypothesis are:

1. H_0 (Null Hypothesis) : There is no correlation between speaking anxiety with speaking performance in EFL class.

   H_a (Alternative Hypothesis) : There is some correlation speaking anxiety with speaking performance in EFL class.

2. H_0 (Null Hypothesis) : There is no correlation between speaking performance with self- confidence in EFL class.

   H_a (Alternative Hypothesis) : There is some correlation between self-confidence with speaking performance in EFL class.

3. H_0 (Null Hypothesis) : Speaking anxiety/speaking performance has no major impact on speaking performance in EFL class.

   H_a (Alternative Hypothesis) : Speaking anxiety self confidence has a major impact on speaking performance in EFL class.