

CHAPTER III

RESEARCH METHOD

This section presents a Research Method. The parts of this proposal are Research Design, Population and Sample, Research Instrument, Data Collection, and Data Analysis.

3.1 Research Design

In general, the research method is defined as planned scientific activities, structured, systematic, and has specific objectives both practical and theoretical. It is called as 'scientific activity' because of research with aspects of science and theory. 'Planned' because research must be planned with due regard for time, funding, and accessibility to places and data.¹

This research conducts a quantitative research method. Quantitative research methods is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. Quantitative research methods involve the processes of collecting, analyzing, interpreting, and writing the results of a study.² This study has a non-experimental research that does not manipulate situations, circumstances or study participants. To conduct the research the researcher used design of the *ex post facto designs by Setiyadi* in Syamsuddin and Damaianti. Ex post facto means retrace from what is

¹ Raco, *Metode Penelitian Kualitatif*. (Jakarta: PT Gramedia Widiasarana Indonesia, 2010), 5.

² John W. Creswell & J. David Creswell, *Research Design (Qualitative, Quantitative, and Mixed Methods Approaches)* (fifth Edition, 2018), 91.

done after the fact.³ It aims to find out the significantly different impact on speaking skill of students' having different confidence level and grammar mastery at Islamic Boarding School Al-Kautsar Banyuwangi.

The reasons of choosing this ex post facto design is because the data that occurred or real cannot be manipulated in the event and then this research allows investigation of variables that can be in a non-experimental manner. Confidence level and Grammar mastery may give impact on speaking skill. This research produces information that benefits the true nature of phenomena, if found positively through analyzed the data. The research description can be seen in the table bellow.

Table 3.1
Relation description with two independent variables

Confidence Grammar	High	Low
High	A	C
Low	B	D

Note:

A: Student's having high confidence and high grammar

B: Students' having high confidence and low grammar

C: Students' having low confidence and high grammar

D: Students' having low confidence and low grammar

³ Syamsuddin and Vismaia Damaianti, *Metode Penelitian Pendidikan Bahasa*, (Bandung: PT. Remaja Rosdakarya, 2009), 164.

This table give relation description between two independent variables are Grammar Mastery (X_1) and Confidence Level (X_2) with dependent variable is Speaking Skill (Y).

3.2 Population and Sample

In this research, researcher took population and sample from the students eight grade in Islamic Boarding School Al-kautsar.

3.2.1 Population

The population of this research is *santri* or students of Islamic Modern Boarding School Al-Kautsar Banyuwangi. The total responses of this research are 191 students. It consist of 57 students which still in Senior High School of Al-Kautsar Banyuwangi and 134 students which still in Madrasah Tsanawiyah of Al-Kautsar Banyuwangi.

Table 3.2
Total students population of Islamic Modern Boarding School Al-Kautsar Banyuwangi

No.	Class	School	Population
1.	XII	SMA	13
2.	XI IPA	SMA	12
3.	XI IPS	SMA	16
4.	X IPA	SMA	9
5.	X IPS	SMA	7
Total SMA			57
6.	IX A	MTs	23
7.	IX B	MTs	23
8.	VIII A	MTs	21
9.	VIII B	MTs	22
10.	VII A	MTs	23
11.	VII B	MTs	22
Total MTs			134
Total			191

3.2.2 Sample

The researcher took minimal 20% sample from the total number of population. According to Arikunto said that “if the subjects are more than 100 respondents, they can be taken 10-15% or 20-25% or more than it”.⁴ The sample of this research is the eighth grade students at MTs Al-kautsar. There were two classes, class VIII A and VIII B. So, 20% sample from 191 students are 41 students. In this study, the researcher took the total sample of respondents are 43 students.

The researcher took eighth grade because this class had learned English enough. For seventh grade they are still in the beginning grade and have just graduated from elementary school. While for ninth grade, the school does not allow research to be carried out because there will be many exams.

Table 3.3
Total students sample of Islamic Modern Boarding School Al-Kautsar
Banyuwangi

No.	Class	School	Population
3.	VIII A	MTs	21
4.	VIII B	MTs	22
Total			43

3.3 Research Instrument

Instrument used in this research is defined into two kinds. Instrument and data needed are explained in the table:

⁴ Suharsimi Arikunto, *Metode penelitian* (Jakarta: Rineka Cipta, 2010), 211.

Table 3.4
Instrument and Data Needed

Objective	Data Needed	Instument
To understand students' confidence level	confidence level	Questionnaire
To measure students' speaking performance	Speaking performance	Test
To measure students' grammar mastery	Grammar	Test

3.3.1 Speaking Test

The researcher asked the students' for oral test (2-3 minutes) for each students. The researcher give topics factual report of things, animal, or items. The speaking result was evaluated by concerning five components such as; accuracy, vocabulary, fluency, communicative, and pronunciation and each component has level. The speaking test can be seen in appendix 2 and 3.

3.3.2 Grammar Test

The researcher used grammar test to know different grammar of each students. Grammar test is multiple choice consists of 41 items and essay consist of 9 items. The scoring of multiple choice was 2 point to every item correctly answered, and 0 point to every item incorrectly answered. The total score was obtained by summing all the correct items. A try out will be done to some students outside the sample at the same level and will be analyze by SPSS to check validity of the items. The complete grammar mastery test can be seen in appendix 4.

Table 3.5
The Blue Print of Grammar Mastery

No	Indicator	Number of Question
1.	The students are able to designate the correct verb (the use of V2) in sentences (Simple past tense)	1, 2, 3, 4, 5, 6, 7, 8, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41
2.	The students are able to designate the correct verb using past continuous tense in sentences (was/were + Ving) (Past continuous tense)	9, 10, 11, 12, 27
3.	The students are able to designate the correct verb using past perfect tense in sentences (had + V3) (Past perfect tense)	13, 14, 15, 28, 29, 30
4.	The students are able to complete the blanks in a simple recount text using correct verb (Simple past tense)	16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26
5.	The students are able to designate the correct verb (the use of V2) in sentences (Simple past tense)	42, 43, 44, 45, 46, 47, 48, 49 50
Total		50

3.3.3 Confidence level

An instrument of questionnaire used to collect data of students confident in applying Speaking adapted by Akhmad Maulana⁵. The researcher adapted all of items to know how students confident in applying speaking skill. In addition, the researcher modified the questions were written in Indonesian to the respondents better understanding and responding to questionnaire items. The questionnaire of confidence level can seen in appendix 1. The number of questions used in this study as follows:

⁵ Akhmad Maulana, *Students' Self-Efficacy In Speaking Clas* (UIN Antasari Banjarmasin, 2020).

Table 3.6
Questionnaire of Students' confidence level

Variable	Number	Dimension	Number of items
Students' Confidence level in Speaking Performance	1	Situational Confidence	5, 6, 13, 18, 28, 29
	2	Communication Confidence	8, 11, 12, 14, 19, 27, 30
	3	Language Potential Confidence	1, 2, 7, 9, 17, 20, 26
	4	Language ability Confidence	3, 4, 10, 15, 16, 21, 22, 23, 24, 25

Researcher only make 4-point scale start from “strongly agree” to “strongly disagree”. After that the questionnaire will give a score that 1 = strongly disagree, 2 = disagree, 3 = agree and 4 = strongly agree.

3.4 Reliability and Validity

3.4.1 The Validity

Gronlund said that validity referred to the appropriateness of the interpretations of test results. There were three ways to look at the validity, construct validity, and criterion related validity.⁶ In this research, the writer used construct validity to know the validity of the questioner. Siregar described that construct validity means the validity that is related to the ability of instrument to measure the concept of being measured. Non-test instrument is used to measure the attitude in construct validity.⁷

With regard to the type of validity selected, then in calculating using the product moment correlation formula from Karl Pearson to analyze the validity of the instrument, then SPSS 20.0 will use to analyze it. The researcher adapted 30

⁶ Gronlund and Waugh, *Assessment of Student Achievement* (Pearson, Upper Saddle River, 2008).

⁷ Syofian Siregar, *Metode Penelitian Kuantitatif* (Jakarta: PT. Fajar Interpratama Mandiri, 2013), 77.

items of grammar test from Ghasella Makhpirokh Haucsa⁸ and 20 items of grammar test from Sri Ekawati.⁹ A try out will be done by some students outside the sample at the same level to check validity of the test.

The basic for making the decision of the instrument is valid or not using the following criteria:

3.4.1.1 If the value of r count is greater than the value of r table ($r \text{ count} > r \text{ table}$), then the questionnaire is declared valid.

3.4.1.2 If the value of r count is less than the value of r table ($r \text{ count} < r \text{ table}$), then the questionnaire is invalid. If the results of the validity test of the responsibility attitude variable of each item that use the product moment formula based on the provisions/criteria above are declared invalid, then it can be continued by testing the reliability of the instrument to determine whether the instrument is reliable or not.

3.4.2 Content validity

Gay explained that logical validity includes content validity and it was also named because validity was determined primarily through judgment, they are item validity and sampling validity.¹⁰ In this research, the researcher used content validity, content validity is talk about the content of the test. The content of the test should suitable for the material and also see the test according to the purpose. Besides, it is to guarantee the test is suitable for all aspects or not.

⁸ Ghasella Makhpirokh Haucsa, *The Relationship among Grammar Mastery, Self-efficacy and Students' Writing of Recount Text* (Thesis: Syarif Hidayatullah State University Jakarta, 2021)

⁹ Sri Ekawati, *Students Mastery of Simple Past Tense and Their Achievement in Writing Recount Texts of Eight Grader of SMPN 2 Mlati* (Thesis: Sanata Dharma University, 2017).

¹⁰ Gay, L.R., Mills, Geoffrey E., Peter, Airasian, *Educational Research (competencies for Analysis and Application)*. USA: Pearson, 2009), 55.

The validity of this test was validated an English teacher in who appropriate with grammar and accustomed to teaching grammar, the teacher is Ms.Rima Rohmatul Bariroh. Researcher choose her as validator because Ms. Rima often get lesson about grammar in the class, she has many experienced to taught grammar and how to Ms. Rima taught can improve grammar level of students step by step. So, the researcher strongly believes in Ms. Rima's skill in grammar. The content validity check by online because the distance between the researcher and the validator is quite far. The content validity can be seen in appendix 5.

3.4.3 The Reliability

Brown stated that a reliable test is consistent and dependable. If you give the same students or matched students on two different occasions, the test should yield similar result. He also said that there are four types of reliability, they are students-related reliability, rater reliability, test administration reliability and test reliability.¹¹

To test the reliability of the instrument used Cronbach's Alpha technique. Alpha formula Cronbach quoted from Sugiyono, then SPSS 20.0 will use to analyze it. ¹² A try out will be done to some students outside the sample at the same level to check reliability of the test. The table below is the category of reliability test used in determining the level of reliability of the tests from Cohen, Manion, & Morrison.¹³

¹¹ H. Douglas Brown, *Language assessment: Principles and classroom practices* (Pearson Education, 2003), 20.

¹² Sugiyono, *Metode Penelitian Pendidikan* (Bandung: Alfabeta, 2010), 365.

¹³ Louis Cohen, et al, *Research Method in Education* (London: Routledge, 2002)

Table 3.7
The Level of Reliability

No.	Reliability	Level of Reliability
1	0.81-1.00	Very High reliable
2	0.61-0.80	High reliable
3	0.41-0.60	Moderate reliable
4	0.21-0.40	Low reliable
5	0.00-0.20	Very Low reliable

The criteria or rules in determining instrument reliability are:

3.4.3.1 If the Alpha value is greater than the value of r table (alpha value > r table),

then the questionnaire items used are declared reliable or consistent, on the contrary

3.4.3.2 If the alpha value is less than the r table value (alpha value < r table), then

the questionnaire items used are declared unreliable or inconsistent.¹⁴

3.5 Data Collection

The researcher collected the data by using those instruments. Students will be given a questionnaire to know their confidence level towards Islamic Boarding school, and they will get a test to learn grammar mastery and speaking skills. The first step, the researcher asked permission to do the research. After getting permission, the researcher collaborated with the teachers to gather students in a hall to make it easier for the researcher to give them information. Then, the researcher explains the primary purpose of compiling students in a gallery. After that, the researcher briefly explains the questionnaire and test. Then asked, the students from junior high school to follow the rules of the speaking and grammar test and asked

¹⁴ Sahid Raharjo, Cara Uji Normalitas Kolmogorov-Smirnov dengan SPSS, 2014, diakses dari <https://spssindonesia.com/2014/01/uji-normalitas-kolmogorov-smirnov-pss.html?m=1> pada 26 Mei 2022

the students to fulfill the questionnaire to know the impact of confidence level and grammar mastery on the speaking skills of the students at Islamic Boarding School.

3.6 Data Analysis

The data of this research are obtained from the confidence level questionnaire scores and students' oral test scores. Then, to get a conclusion from this research, the data that has been obtained must be analyzed.

3.6.1 Speaking test

After knowing the result, the researcher concludes whether confidence level and grammar mastery give significantly different impact or not for speaking skill. The researcher analyze the data through audio recording from each students, which record in the form of an individual monologue. Some training at least a good describing is required to make accurate assessments oral production in the six categories, the six categories are grammar, vocabulary, comprehension, fluency, pronunciation, and task.¹⁵ In this research, researcher use five categories to assess the students such as accuracy, vocabulary, fluency, communicative, and pronunciation. The scoring rubric can be seen in appendix 3. After getting score from each categories, the researcher will total the scores then calculate the final score as formula bellow.

$$\text{Final score} = \frac{\text{Obtained score}}{\text{Max. Score}} \times 100\%$$

¹⁵ H. Douglas Brown, *Language Assessment Principle and Classroom Practice* (New York: Prentice Hall, 2003), 172-173.

Table 3.8
Scoring Rubric of speaking test

Accuracy	4	The student is able to speak with correct grammar, appropriate diction, and clear message.
	3	The student is able to speak with a few incorrect grammar and diction but does not bother the message.
	2	The student is able to speak with a lot of incorrect grammar and inappropriate diction that hinder the message.
	1	The student speaks with all incorrect grammar and inappropriate diction so that the message cannot be understood.
Vocabulary	4	Use of vocabulary and expressions
	3	Use of vocabulary and expressions but sometime errors in word choice
	2	Using wrong vocabulary and it is difficult to understand the others
	1	Uses limited vocabulary
Fluency	4	The student is able to speak continuously without apparent hesitation/pauses, the message is clear.
	3	The student is able to speak with few hesitations, but the message is still clear enough.
	2	The student is able to speak with some hesitations, the message is unclear
	1	The student speaks with a lot of hesitations, the message cannot be understood
Communicative	4	The student is able to speak with very clear and understandable message
	3	The student is able to speak with mostly understandable message.
	2	The student is able to speak with few understandable message
	1	The student is not able to speak clearly to convey the message.
Pronunciation	4	Pronunciation is almost always very clear
	3	Pronunciation is usually clear
	2	Pronunciation errors someties make it difficult to Understand
	1	Very hard to understand because of pronunciation Problems

After getting final score from each students, researcher will devide level of speaking test to be two categories to know ability of each students based on the table below.

Table 3.9
Level of Speaking Skill

No	Score	Categories
1	80-100	High
2	0-79	Low

3.6.2 Grammar test

The researcher analyze data from the scoring of multiple choice and essay based on the data gained from the result of grammar instruments test after validating. There are 41 items multiple choise and 9 items essay. After getting score, the researcher will calculate the final score as formula bellow.

Table 3.10
How to calcuate grammar test

No	Question Type	Total item	Formula	Total
1	Multiple choise	41	correct item x 2	82
2	Essay	9	correct item x 2	18
Total score				100

After getting final score from each students, researcher will devide level of grammar test to be two categories to know ability of each students based on the table bellow.

Table 3.11
Level of Grammar Mastery

No	Score	Categories
1	60-100	High
2	0-59	Low

3.6.3 Confidence level

The questionnaires of confidence level consist of 30 items. The participants are mostly asked to react on four points with 4= strongly agree, 3= agree, 2= disagree, 1= strongly disagree.

Meanwhile, the analysis in this research is quantitative (*ex post facto*). For analyzed the data, the researcher checking the normality data. If all the data is normally distributed, this study uses a two-way ANOVA test. Conversely, if there is one of the data that is not normally distributed, this study uses a non-parametric test, namely the Friedman test. After the normality test was carried out, it turned out that there were two data that were not normally distributed, grammar and speaking. This test was to know the significantly different impact of confidence level and grammar mastery on speaking skill of students at Islamic Boarding School Al-Kautsar Banyuwangi.

Table 3.12
Level of Students' Confidence

No	Score	Categories
1	80-100	High
2	0-79	Low