

CHAPTER III

RESEARCH METHOD

A. Research Design

The researcher uses quantitative method and correlational study. The correlational study is done to determine the relationship and the level of relationship between two or more variables without any attempt to influence these variables. The existence of relationship and the level of this variable are important because by knowing the level of the relationship, the researcher can develop it according to the research objectives.

Correlation research refers to study in which the purpose is to discover relationship between variables through the use of correlation statistics (Gall and Borg, 2003, p. 320). They further explain that the basic design of correlation research is very simple, involving nothing more than collecting data on two or more variables for each individual in a sample and computing a correlation coefficient.

In this case, the researcher wants to correlate students' grammar and listening ability of Simple Past Tense.

B. Research Setting

The location of this research was at Fourth Semester students of English Department UIN Antasari Banjarmasin. Ahmad Yani Street Km 4.5 Sub district East Banjarmasin, Banjarmasin. This study had been conducted about two months.

C. Research Variable

In this research there are two variables, they are: independent variable (X) and dependent variable (Y). Independent variable is a variable that is presumed to influence another variable. Dependent variable is a category that is influenced by another category or that is the consequent (Kerlinger, 1979, p. 21).

In this research the dependent variable is students' ability in listening the simple past tense (X) and the independent variable is students' grammar ability on past tense (Y).

D. Population and Sample

1. Population of Research

In this study the researcher took the fourth semester students of English Department UIN Antasari Banjarmasin as the population. They are divided into five classes that is A,B,C,D, and E with the characteristics : 1) they had already passed Grammar I 2) they had already passed Listening I and II. The number of students at the fourth semester is 160 students.

Table 3.1 Number of the fourth semester students of English Department UIN Antasari

The number of students	
Male	40 students
Female	120 students
Total	160 students

b. Sample of Research

According to Sugiono, “sample is a small group that observed and it is part of characteristic which had by the population”. In this research, the researcher will uses simple random sampling which is

a simple sampling technique that chose randomly without determine the starata/level in population in the result. This sampling technique will be given the same oppurtunity of number population. To determine how many sample are needed, the researcher uses Isaac and Michael table with level of error 5%, that is:

Table 3.2 Isaac and Michael Sample Table

N	Signifikasi			N	Signifikasi		
	1%	5%	10%		1%	5%	10%
10	10	10	10	280	197	155	138
15	15	14	14	290	202	158	140
20	19	19	19	300	207	161	143
25	24	23	23	320	216	167	147
30	29	28	28	340	225	172	151
35	33	32	32	360	234	177	155
40	38	36	36	380	242	182	158
45	42	40	39	400	250	186	162
50	47	44	42	420	257	191	165
55	51	48	46	440	265	195	168
60	55	51	49	460	272	198	171
65	59	55	53	480	279	202	173
70	63	58	56	500	285	205	176

75	67	62	59	550	301	213	182
80	71	65	62	600	315	221	187
85	75	68	65	650	329	227	191
90	79	72	68	700	341	233	195
95	83	75	71	750	352	238	199
100	87	78	73	800	363	243	202
110	94	84	78	850	373	247	205
120	102	89	83	900	382	251	208
130	109	95	88	950	391	255	211
140	116	100	92	1000	399	258	213
150	122	105	97	1100	414	265	217
160	129	110	101	1200	427	270	221
170	135	114	105	1300	440	275	224
180	142	119	108	1400	450	279	227
190	148	123	112	1500	460	283	229
200	154	127	115	1600	469	286	232
210	160	131	118	1700	477	289	234
220	165	135	122	1800	485	292	235
230	171	139	125	1900	492	294	237
240	176	142	127	2000	498	297	238
250	182	146	130	2200	510	301	241
260	187	149	133	2400	520	304	243
270	192	152	135	2600	529	307	245

From the table above, the sample of the research is 110 of male and female students.

E. Research Instrument

Research instruments are simply devices for obtaining information relevant to the research project (Wilkinson and Birmingham, 2003, p. 3). In this research, the researcher only uses test as the instrument of the study. In doing this research, the researcher uses objective test. The objective test is for measuring students' grammar and listening ability which focuses on a grammatical category; that is Simple Past Tense. Then these type of tests were chosen because the aim of this study was to find out the possible correlation between students' grammar and listening ability in simple past tense. To find out the required data for the researcher's analysis, the researcher conducted some tests of grammar and listening.

F. Technique of Collecting Data

Collecting data is the most important step in conducting the research. Before conducting the real test, the researcher conducts a try out test and then analyzes the test to get its validity and reliability.

1. Grammar Test

To measure students' grammar ability, the researcher decides to use:

- a. Limited-Production Task, Gap-Filling task, where the language is presented in the form of a sentence, dialogue, or passage in which a number of words are deleted and clues are given. The deletions are made to test one or more areas of grammatical knowledge, such as vocabulary knowledge and grammatical ability. This kind of task can be used to test the knowledge of grammatical form and meaning (Brown and Abeywickrama, 2011, p. 299).
- b. Selected-Response Task Types, Multiple-Choice and Error Identification, where in this task students are presented with an item and required to select one appropriate response. It assesses

students' ability to recognize correct or incorrect grammatical structures.

Also, the researcher adjust the test based on the level of students which the level of students is in (Brown, 2007, p. 125), the syllabus of Grammar I of English Education Department UIN Antasari Banjarmasin, and the number of questions.

The final score for grammar was calculated by students' correct answer x 2.5. See the table below.

Table 3.3 Grammar Test Description

No	Types of Test	Task	F	Number of item	Score
1	Selected-Response Task Type	Multiple Choice	10	1,2,3,4,5,6,7,8,9,10	25
2	Selected-Response Task Types	Error Identification	10	11,12,13,14,15,16,17,18,19,20	25
3	Limited-Production Task	Gap – Filling Task	20	21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40	50
	Total		40	40	100

2. Listening Test

The listening test given to the students in order to have them to answer the test. Narrative text is given to the students with blank space (also known as Listening Cloze or Fill-in the Blank), and they have to fill certain verbs heard from the audio. It requires the test-taker to listen to a story, monologue, or conversation and simultaneously read the written text in which selected words or phrases have been deleted. In its generic form, the test consists of a passage in which every *n*th word (typically every seventh word) is deleted and the test-taker is asked to supply an appropriate word. In listening cloze task, test-takers see a transcript of the passage they are listening to and fill in the blanks with the words or phrases that they hear (Brown and Abeywickrama, 2011, p. 68)

The researcher adjust the test based on the level of students which the level of students is in (Brown, 2007, p. 125), the syllabus of Listening II of English Education Department UIN Antasari Banjarmasin, and the number of questions. The final score for listening test was calculated by students' correct answer x4. See table below.

Table 3.4 Listening Test Description

No	Type of Test	Task	F	Number of Item	Score
1	Selective Listening	Listening Cloze or Fill-in the Blank	25	1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15, 16,17,18,19,20,21, 22,23,24,25,26,27 28,29,30	100
	Total		25	25	100

G. Data Analysis

Before going to analyze the data, the researcher did a tryout to test the validity and reliability each item of test. After trying out the data, the researcher decides the hypothesis by using bivariate correlation analysis and Pearson's r correlation analysis. SPSS 22 program will be used to help the researcher in the analysis.

1. Try out

Before the test is used as an instrument to collect the data, it had been tried out first. The test will be tried out to the students. This

test has been tried out to the 38 English Department students at UNISKA Banjarmasin. The main purpose of conducting the try out is to measure the validity, reliability and the effectiveness of the test. If the test had low validity and reliability, they had to be revised or omitted.

2. Validity of the test

A test is considered to be a good test if it has validity. Validity of a test is the extent to which it measures what it is supposed to measure and nothing else (J.B Heaton, 1975, p. 153). An instrument of the study is called valid if it measures what should be measured. A valid instrument has high validity. There are six kinds of validity i.e. content validity, construct validity, empirical validity, concurrent validity and predictive validity (Heaton, 1975, p. 154). Arikunto (2002: 146) claimed that there is a kind of validity which is called item validity. Item validity calculates the index of validity of each item. To measure the validity of the test, the researcher used SPSS 22 for computing the data.

(Analyze> Correlate> Bivariate > Click Pearson; Two Tailed; Flag > OK)

Criteria of validity if " $r_{xy} > r_{table}$."

3. Reliability of the test

The test is considered to be reliable if it shows the consistency in its measurements. Reliability denotes the extent to which the same marks or grades are awarded if the same test papers are marked by (1) two or more different examiners or (2) the same examiners on different occasions (J.B Heaton, 1975, p. 155). Reliability of the test is of primary importance in the use of achievement test, proficiency test and classroom test. To measure the reliability of the test, the researcher will use *alpha cronbach* formula by using SPSS 22 to calculate the data.

(Analyze> Scale> Reliability Analysis> OK)

Criteria of reliability (Hair et al, 2010, p. 125)

Table 3.5 Criteria of Reliability

Value of Cronbach's Alpha	Criteria
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0.0- 0.20	Very Low
>0,20 – 0.40	Low
>0.40-0.60	Medium
>0.60-0.80	Good
>0.80-1.00	Very Good

4. Hypothesis test

Measuring the hypothesis test is to find out the significant correlation between variable X dan variable Y by using SPSS 22 to calculate the data.

(Analyze > Correlate > Bivariate > Insert Variables > Korelasi Pearson > Two tailed > Option > Means and Standard Deviation > OK)

Table 3.6 Interpretation of r Product Moment, (Sugiyono, 2007)

r_{xy}	Interpretation
0,00-0,199	There is a very low correlation between variable X and Y
0,20-0,399	There is a low correlation between variable X and Y
0,40-0,599	There is a medium correlation between variable X and Y
0,60-0,799	There is a strong correlation between variable X and Y
0,80-1,000	There is a very strong correlation between variable X and Y

H_a accepted and H_0 rejected, If $t_{xy} > t_{tabel}$ Sig. $\leq \alpha$ (it is significant)

H_0 accepted and H_a rejected ,If $t_{xy} \leq t_{tabel}$, Sig. $> \alpha$ (it is no significant)

H. Design of Measurement

To understand the level of students' grammar and listening ability based on their score, the researcher uses the categorization table written by David P. Harris, 2007 as follows:

Table 3.7 Table of Categorization

Score	Category	Level
80-100	Excellent	Very High
70-79	Good	High
60-69	Fair	Moderate
50-59	Low	Low
0-49	Poor	Very Low

