CHAPTER III RESEARCH METHOD

A. Research Type

The research type was descriptive quantitative design because this study concerned with process. Norjenah states that descriptive research involved collecting data in order to test hypotheses or answer question relates to the current status of the object of the study¹. A descriptive study determined and reports the thing. It means that descriptive study, the research happened naturally, and the research has no control over the condition and the situation, and could only measure what already exist.

The quantitative approach to the study of social and behavioral phenomena holds that the aim and methods of the social sciences are, at least in principle, the same as the aim and methods of the natural or physical sciences. Quantitative research more typically relies on measurement tools such as scales, tests, observation checklists, and questionnaires².

B. Research Design

In this study, the design was mix method which used survey research with the classification according to focus and scope as a census intangibles and the focus information as attitudinal information because this study concerned with students' perception in process. Attitudinal information,

¹ Ibid, Norjenah, "The Students' Perception.....", p. 37.

² Donal Ary, et al, *Introduction to Research in Education*, (Eight Edition), Wadsworth: Wadsworth Cengange Learning, 2010, p. 420-421

attitudinal questions seek to find out more about the opinions, beliefs, or interests of teachers or learners. These questions are often used in needs analysis research when researchers want to gather information on such topics as what learning goals students have or what skill areas they are most interested in³. The data collected from the students' information. It mean the data were statistic data and written.

Survey research is a study that gathers data on the characteristics and views of informants about the nature of language or language learning through the use of oral interviews or written questionnaires⁴. In survey research, investigators ask questions about peoples' beliefs, opinions, characteristics, and behavior. A survey researcher may want to investigate association between respondents' characteristics such as age, education, social class, race, and their current attitudes toward some issue⁵. The data collections in this study were mostly in the form of description and explanation.

By the statements above, the writer concluded that survey research was a process of collecting information about the respondents of population. The writer described all of phenomena based on the facts in the field. In this case the writer used survey with descriptive quantitative design because the writer measure, describe, identify and explain the students' perception toward implementation of English speaking area at Ma'had Al-Jami'ah of

³ Sandra Lee Mc.Kay, *Researching Second Language Classroom*, Mahwah (New Jersey): Lawrence Erlbaum Associates Publishers, 2006, p. 35.

⁴ Ibid

⁵ *Ibid*, Donal Ary, et al, *Introduction to Research* p. 351.

STAIN Palangka Raya in academic year 2013/2014 and background behind them.

C. Population and Sampling

1. Population

Ary claims that population is the larger group about which the generalization is made. A population is defined as all members of any well-defined class of people, events, or objects⁶. Zoltan claims that population is a group of people whom the survey is about⁷. For example, in a study in which students in American high schools constitute the population of interest, you could define this population as all boys and girls attending high school in the United States⁸.

The population in this research was students who ever lived in English speaking area at Ma'had Al-Jami'ah of STAIN Palangka Raya in Academic Year 2013/2014. They were from English Education (TBI), Physic Education (TFS), Biology Education (TBG), and Syariah Economic (ESY). The amounts of the students who ever lived in Ma'had Al-Jami'ah of STAIN Palangka Raya in Academic Year 2013/2014 were 207 students, 161 female students and 46 male students.

⁶ *Ibid*, Donal Ary, et al, *Introduction to Research* p.148.

⁷ Zoltan Dornyei and Tatsuya Taguchi, *Questionnaire in Second Language Research*, (second edition), New York : 270 Madison Avenue, 2010, p.60

⁸ *Ibid*, Donal Ary, et al, *Introduction to Research...*, p.148. Zoltan Dornyei and Tatsuya Taguchi, *Questionnaire in...*, p.60.

2. Sample

Zoltan claims that sample is the group of people whom researchers actually examine⁹. The small group that is observed is called a sample. A sample is a portion of a population. For example, the students of Washington High School in Indianapolis constitute a sample of American high school students¹⁰. The samples are used to represent the population from which they are drawn¹¹.

Zoltan states that certain multivariate statistical procedures require more than 50 participants; for factor analysis, for example, we need a minimum of 100 subjects. Questionnaires typically attract an initial response rate of only around 30 %, and over 50 % can already be seen as a good response¹². The writer needed around 50 % participants of populations and for this research; I took the sampling 100 students who ever lived in English Speaking Area at Ma'had Al-Jami'ah of STAIN Palangka Raya in academic year 2013/2014.

The writer used purposive sampling. Ary states that purposive sampling is a non-probability sampling technique in which subject judge to be representative of the population are included in the sample¹³. Purposive sampling has been useful in attitude and opinion

⁹ Ibid, Zoltan Dornyei and Tatsuya Taguchi, Questionnaire in..., p.60.

¹⁰ *Ibid*, Donal Ary, et al, *Introduction to Research*...,p.148

¹¹ Del Siegle, Sampling - Educational Research, (Online) URL : http://www.gifted.uconn.edu /siegle/research/Samples/instructornotessamples.htm, (accesed on August 25th, 2014) ¹² Ibid, Zoltan Dornyei and Tatsuya Taguchi, Questionnaire in...., p.63-64. Del

¹² *Ibid*, Zoltan Dornyei and Tatsuya Taguchi, *Questionnaire in....*, p.63-64. Del Siegle, *Sampling....*

¹³ *Ibid*, Donald Ary, et al, *Introduction to* ..., p.648.

surveys¹⁴. Purposive sampling techniques are primarily used in qualitative (QUAL) studies and may be defined as selecting units (e.g., individuals, groups of individuals, institutions) based on specific purposes associated with answering a research study's questions¹⁵.

Purposive sampling techniques have also been referred to as non-probability sampling or purposeful sampling or "qualitative sampling." several specific types of strategies¹⁶:

- a) Sampling to achieve representativeness or comparability these techniques are used when the researcher wants to select a purposive sample that represents a broader group of cases as closely as possible or set up comparisons among different types of cases.
- b) Sampling special or unique cases employed when the individual case itself, or a specific group of cases, is a major focus of the investigation (rather than an issue).
- c) Sequential sampling uses the gradual selection principle of sampling when the goal of the research project is the generation of theory (or broadly defined themes) or the sample evolves of its own accord as data are being collected. Gradual selection may be defined as the sequential selection of units or cases

¹⁴ *Ibid*, p.156

¹⁵ Charles Teddlie and Fen Yu, "Mixed Methods Sampling: a Typology with Examples", Journal of Mixed Methods Research, Vol: 1 No.1, January 2007, p.77. ¹⁶ Ibid, p.80

based on their relevance to the research questions, not their representativeness.

 d) Sampling using multiple purposive techniques—involves the use of multiple QUAL techniques in the same study.

Therefore, the writer took 100 students as the sample to answer the first problem of the study by questionnaire, and he took 20 students as the respondents to answer second problem of the study by interview.

D. Research Instrument

1. Research Instrument

The data were very important in this study. They were needed to support and prove the study itself. Sandra claims that language survey is any studies "that gather data on the characteristics and views of informants about the nature of language or language learning through the use of oral interviews or written questionnaire"¹⁷. Then, the writer used interview and questionnaires to obtain the data in order to answer the problem of the study.

a) Questionnaires

Questionnaire is an instrument in which respondents provide written responses to questions or mark items that indicate their response¹⁸. Hornby states that questionnaire is a written or printed list of questions to be answered by a number

¹⁷ Ibid, Sandra Lee Mc.Kay, Researching Second...., p. 35.

¹⁸ *Ibid*, Donal Ary, et al, *Introduction to Research*... p.648.

of people especially as part of a survey¹⁹. Survey questions can take a variety of forms. The two main types of questions are open-ended and close-ended question²⁰. Therefore the writer used the closed-ended question toward this research. This type was suitable with the topic of the research which asked the students' perceptions about English speaking area at Ma'had Al-Jami'ah of STAIN Palangka Raya. By using this type of question the writer could measure the students' response of the Implementation of English speaking area at Ma'had Al-Jami'ah of STAIN Palangka Raya academic year 2013/2014.

In compiling the results of the research the writer did the coding. Because the writer used the likert-scale, the interval scales also used for coding the question. Each response gave a number for example Strongly Agree = 1, Agree = 2, Disagree = 3, and Strongly Disagree = 4^{21} . The questionnaire constructed in the form of likert-scale which consisted of 35 items. It administrated by using the student perception.

Zoltan states that questionnaire research makes the inherent assumption that the respondents can read and write well. The situation may be more serious when a questionnaire is administered in languages that the respondents are learning,

¹⁹ *Ibid*, A.S Hornby, *Oxford Dictionaries: Advanced Learner's...*, article "Questionnaire", p. 952.

²⁰ Ibid, Sandra Lee Mc.Kay, Researching Second...., p. 37

²¹ *Ibid*,...p.42

which the case is often in applied linguistic research. It is therefore understandable that for respondents with literacy problems or with limited L2 proficiency ²². So, the writer will use Indonesian language in questionnaire. The questionnaire design is available in appendix.

The writer focused on measuring the questionnaires to answer the problem study number 1, and find the problems exist in the clarity of the directions and which items might be confusing or difficult the writer did the pilot survey. The writer did the pilot study. The writer used the questionnaires both of the close-ended and the likert type scale. There was some procedures that writer carried out the pilot study as follow:

- 1) The writer did the simple random sampling
- 2) The writer prepared the pilot questionnaire.
- 3) The writer gave try out to the respondents.
- 4) The writer collected the responses.
- 5) The writer calculated the result of the pilot.
- 6) The writer analyzed the data obtained to know the instrument validity, instrument reliability and central tendency.

²² Ibid, Zoltan Dornyei and Tatsuya Taguchi, Questionnaire in..., p.7.

b) Interview

Interview is oral questioning of a subject²³. Interviews are used to gather data from people about opinions, beliefs, and feelings about situations in their own words. They used to help understand the experiences people have and the meaning they make of them rather than to test hypotheses²⁴. The question can be design to find out more about teachers' and learners' opinions and beliefs about various aspects of language learning, such as their feelings about the use of particular classroom activities or content of classroom materials²⁵. This interview was design to get more information, especially relate with the students' perception toward implementation of English speaking area at Ma'had Al-Jami'ah of STAIN Palangka Raya and analyzed background behind them.

In this research the writer conducted face to face interviews with participants. The informal conversational interviews used for gathering the data by interviewing the respondents. The success of an interview is related to the wording of the questions. One way to avoid the problems that can arise from students' lack of English proficiency is, if possible, to allow students to be interview in their first

²³ *Ibid*, Donal Ary, et al, *Introduction to Research...*, p. 644.

²⁴ Ibid, Donal Ary, et al, Introduction to Research..., p. 644

²⁵ Ibid, Sandra Lee Mc.Kay, Researching Second...., p.51

language.²⁶ Depending on the design, this research observed the data by the students who ever lived in English Speaking Area at Ma'had Al-Jami'ah of STAIN Palangka Raya Academic Year 2013/2014. 20 students gave interview which 10 students have highest GPA (Grade Point Average) and 10 students lowest GPA (Grade Point Average). The writer took it using purposive sampling. It was because the writer will get the different answer between two groups and analyzed background behind them. The function (Interview) was to answer the problem of the study number 2. The Indonesian language used for avoid the respondents' misunderstanding comprehension of the question.

2. Research Instrument Try Out

The writer tried out the test instrument before it applied to the real sample in the study. The writer analyzed the test instrument to gain the information about the instrument quality that consists of instrument validity and instrument reliability. The procedures of the try out as follows:

- a) The writer tried out the test instruments to some students.
- b) The writer gave score to the students' answer, then writer analyzed the obtain data to know the instruments validity, and instruments reliability.

²⁶ *Ibid*, p. 53

The initial piloting of the item pool usually consists of the following steps²⁷:

- a) Select three or four people who are motivated to spend some time to help you and whose opinion you value. Some of them should not be specialists in the field.
- b) Ask them to go through the items and answer them, and then to provide about their reactions and the answer they have given.
- c) You may ask for any general comment.

3. Research Instrument Reliability

The reliability of a measuring instrument is the degree of consistency with which it measures whatever it is measuring. This quality is essential in any kinds of measurement²⁸. On a theoretical level, reliability is concerned with the effect of error on the consistency of scores.

In designing a survey, as in all research, it is essential for researchers to strive for reliability. In order to assure the reliability of a survey, several measures can be used²⁹.

a) First, the same survey can be given on two occasions to the same individuals. Then the researcher can check to see how consistently the respondents gave the same response to the same item.

²⁷ Ibid, Zoltan Dornyei and Tatsuya Taguchi, Questionnaire in....,p.54-55

²⁸ Ibid, Donal Ary, et al, Introduction to Research..., p.236

²⁹ *Ibid*, Sandra Lee Mc.Kay, *Researching Second*...., p.41.

- b) The second way of assuring reliability is to have two forms of a survey and have individuals take both forms. The consistency of response on these two forms could again be checked.
- c) The final way to achieve reliability is to check the internal consistency of responses in a survey. In this case, if a survey contains several items that ask similar questions but in different forms, then the researcher can check to see how consistently the respondents have answered these questions.

The writer did the reliability by spss 16. The degree of alpha's cronbach's alpha is higher than r table (0.444).

Table 3.1

Result of reliable

Reliability Statistics			
Cronbach's Alpha	N of Items		
.906	35		

Item-Total Statistics

		Scale	Corrected	Cronbach's	Reliability
	Scale Mean if	Variance if	Item-Total	Alpha if Item	
	Item Deleted	Item Deleted	Correlation	Deleted	
Item_1	68.20	124.274	.576	.902	Reliable
Item_2	68.40	126.042	.535	.903	Reliable
Item_3	68.25	128.197	.311	.905	Not Reliable
Item_4	68.15	126.766	.409	.904	Not Reliable
Item_5	68.30	128.537	.168	.909	Not Reliable
Item_6	68.35	126.134	.333	.906	Not Reliable
Item_7	68.40	127.937	.359	.905	Not Reliable

	Scale Mean if	Scale Variance if	Corrected Item-Total	Cronbach's Alpha if Item	Reliability
	Item Deleted	Item Deleted	Correlation	Deleted	
Item_8	68.15	123.924	.644	.901	Reliable
Item_9	68.20	123.432	.642	.901	Reliable
Item_10	68.10	124.726	.629	.902	Reliable
Item_11	68.25	123.882	.576	.902	Reliable
Item_12	67.95	122.050	.545	.902	Reliable
Item_13	67.80	122.589	.648	.901	Reliable
Item_14	67.90	124.200	.582	.902	Reliable
Item_15	67.95	116.787	.738	.898	Reliable
Item_16	68.20	122.168	.743	.900	Reliable
Item_17	67.95	124.050	.474	.903	Reliable
Item_18	68.00	125.579	.397	.904	Not Reliable
Item_19	67.95	121.839	.618	.901	Reliable
Item_20	68.00	122.105	.513	.903	Reliable
Item_21	68.05	126.261	.551	.903	Reliable
Item_22	68.15	124.345	.518	.903	Reliable
Item_23	67.80	125.958	.354	.905	Not Reliable
Item_24	67.80	119.958	.672	.900	Reliable
Item_25	67.65	132.976	079	.915	Not Reliable
Item_26	67.45	134.155	130	.916	Not Reliable
Item_27	68.20	125.326	.601	.902	Reliable
Item_28	67.90	123.884	.421	.904	Not Reliable
Item_29	68.20	127.642	.386	.905	Not Reliable
Item_30	68.25	125.039	.585	.902	Reliable
Item_31	67.85	122.134	.709	.900	Reliable
Item_32	67.65	122.661	.690	.901	Reliable
Item_33	68.15	126.976	.391	.905	Not Reliable
Item_34	68.25	129.776	.120	.909	Not Reliable
Item_35	67.90	124.621	.379	.905	Not Reliable

4. Research Instrument Validity

Validity was defined as the extent to which an instrument measured what it claimed to measure³⁰. The writer did Face Validity to make sure that questionnaire was valid.

The writer did pilot study not only to know the students' difficulties in answering the questionnaire but also to measure the content validity of the questionnaire. The writer calculated the results of the pilot study using SPSS 16 Program. The total of the item was 35 items and the total of the respondents were 20 students. The correlation was significant in 5% and 1% degree. By comparing and analyzing between the pilot study results and the critical values of the Pearson Product Moment Correlation Coefficient as stated in Donald' book the data were found as follow:

Table. 3.2.

Results of Face Validity

No.	Item	Value	Critical Value (Df = N-2)	Validity
1.	Item 1	.609	.444	Valid
2	Item 2	.565	.444	Valid
3	Item 3	.352	.444	Invalid
4	Item 4	.448	.444	Valid
5	Item 5	.234	.444	Invalid
6	Item 6	.389	.444	Invalid
7	Item 7	.396	.444	Invalid

³⁰ Ibid, Donal Ary, et al, Introduction to Research..., p.225

No.	Item	Value	Critical Value (Df = $N-2$)	Validity
8	Item 8	.672	.444	Valid
9	Item 9	.655	.444	Valid
10	Item 10	.611	.444	Valid
11	Item 11	.682	.444	Valid
12	Item 12	.592	.444	Valid
13	Item 13	.679	.444	Valid
14	Item 14	.615	.444	Valid
15	Item 15	.773	.444	Valid
16	Item 16	.765	.444	Valid
17	Item 17	.522	.444	Valid
18	Item 18	.447	.444	Valid
19	Item 19	.656	.444	Valid
20	Item 20	.565	.444	Valid
21	Item 21	.579	.444	Valid
22	Item 22	.558	.444	Valid
23	Item 23	.407	.444	Invalid
24	Item 24	.709	.444	Valid
25	Item 25	.003	.444	Invalid
26	Item 26	044	.444	Invalid
27	Item 27	.628	.444	Valid
28	Item 28	.478	.444	Valid
29	Item 29	.422	.444	Invalid
30	Item 30	.614	.444	Valid

No.	Item	Value	Critical Value (Df = N-2)	Validity
31	Item 31	.735	.444	Valid
32	Item 32	.716	.444	Valid
33	Item 33	.432	.444	Invalid
34	Item 34	.179	.444	Invalid
35	Item 35	.439	.444	Invalid

The second was construct validity, the writer assessed construct validity by having some colleagues such as advisor and some lecturers who have credibility to judge the questionnaire. By the colleagues judgments the writer took the point the questionnaire was valid.

E. Data Collection Procedure

There are two basic data-gathering techniques in survey research: interviews and questionnaires.³¹ Instrument of the study was needed in the research. It was because the instruments were tools to get the data of study. In which the data were the important things to help the writer in answering the problem of study. Sandra claims that language survey are any studies "that gather data on the characterictics and views of informants about the nature of language or language learning through the use of oral interviews or written questionnaire"³².

In this study, the writer used content or document analysis design. Ary states that content or document analysis is a research method applied to

³¹ Ibid, Donal Ary, et al, Introduction to Research..., p.379.

³² Ibid, Sandra Lee Mc.Kay, Researching Second...., p. 35

written or visual materials for the purpose of identifying specified characteristic of the material. The materials analyzed can be textbooks, news paper, web pages, speeches, television programs, advertisement, musical composition, or any of a host of other types of documents. Content analysis is widely used in education."³³ The writer used this research design because the writer analyzed the students' responses product. And it was formed in a questionnaire and interview guideline.

In collecting the data for this research, the writer used interview and questionnaires to obtain the data in order to answer the problem of the study. To get collecting the objective data, the writer applied the steps as follows:

- 1. The writer prepared the questionnaire.
- 2. The writer gave questionnaire to the respondents.
- 3. The writer did interview to the respondents.
- 4. The writer collected the responses.
- 5. The writer calculated the result of the study.
- 6. The writer analyzed the data obtained using table, SPSS and to measure the central tendency.
- The writer concluded the students' perception toward implementation of English speaking area at Ma'had Al-Jami'ah of STAIN Palangka Raya academic year 2013/2014 and background behind them.

³³ Ibid, Donal Ary, et al, Introduction to Research..., p. 457. Ibid, Sandra Lee Mc.Kay, Researching Second...., p. 35

F. Data Analysis

1. Data Compiling

In this study, the writer used interval scale and collected the data by using the questionnaires both of the close-ended and likert types questions. This research was about students' perception which was known as attitudinal information³⁴. Often attitude scales on a questionnaire were also treated as interval scales. For example, frequently when Likert-scales are used, each response was given a number (e.g., strongly agree = 1, agree = 2, disagree = 3, and strongly disagree = 4) and these numbers are treated as interval scales³⁵.

The writer analyzed the data in three steps. There were item scores, the distribution of frequency, and then central tendency. To analyze the data, the writer applied the steps as follows :

- a. The writer collected the main data (item score/responses);
- b. The writer arranged the collected score into the distribution of frequency of score table.
- c. The writer calculated Mean using formula, Median, and Modus.
 - 1) Mean

$$\overline{X} = \frac{X}{N}$$

Where:

³⁴ *Ibid*, Sandra Lee Mc.Kay, *Researching Second....*, p. 35.

³⁵ *Ibid*, p. 42.

 $\overline{\mathbf{X}} = \mathbf{M}\mathbf{e}\mathbf{a}\mathbf{n}$ value = Sum of X = raw scoreN = Number of case. ³⁶

2) Median

The median is defined as that point in a distribution of measure which 50 percent of the cases lie³⁷. Example:

> 18 20 22 25 25 30

Median: any point from 22.5 to 24.5 fits definition

of the median. In this case, $\frac{22.5 + 24.5}{2} = 23.5$

3) The Modus / Mode

The mode is the value in a distribution that occurs

most frequently³⁸. Example:

14 16 16 17 18 19 19 21 22

The mode of this distribution is 19 because it is the most frequent score.

- d. The writer calculate the deviation score and standard deviation using the formula³⁹:
 - 1) **Deviation Score**

$x = X - \overline{X}$

³⁶ *Ibid*, Donal Ary, et al, *Introduction to Research...*, p.109.
³⁷ *Ibid*, p.110
³⁸ *Ibid*, p.111
³⁹ *Ibid*, p.115.

- x = Deviation Score
- X = raw score

 $\overline{\mathbf{X}} = \mathbf{M}\mathbf{e}\mathbf{a}\mathbf{n}$

2) Standard Deviation



Where =

 $\sum x^2 = \text{sum of the squares of each score (i.e., each score is first squared, and then these squares are summed)}$

 $(\sum X)^2$ = sum of the score squared (the scores are first

summes, and then this total is squared)

N = Number of cases

- e. The writer interpreted the analysis result.
- f. The writer gave a conclusion.

2. Data Displaying

In compiling survey results the first thing a researcher needs to do was to decide on coding categories. The writer assigned a numerical code to the data, the data needed to be recorded in some fashion. The best way to do this was in some type of a table in which the writer identified the respondents in the left-hand column and used the rows in the table to list the participant's response to each item⁴⁰.

The writer adopted the Fukuda's way to display data results⁴¹. Fukuda display her result in table. The table summarize show many respondents selected *always*, *usually*, *sometimes*, *occasionally*,and *never* in answer to the questions listed earlier. The table also includes the percentage of respondents for each response and finally theme an for the question⁴².

The writer used questionnaire with the close ended questions and likert type scale (strongly agree, agree, disagree, strogly disagree) as the instrument for collecting the data. Sandra stated that once the information is compiled in a table, it needs to be displayed in some way. There were several possible alternatives⁴³.

a. One is to simply report the *frequency* of each response. Hence, in the example of having students rank the importance of each skill, one could simply describe how many students ranked

⁴⁰ Ibid, Sandra Lee Mc.Kay, Researching Second...., p.42

⁴¹ *Ibid*, p.44

⁴² *Ibid*, p.45

⁴³ *Ibid*, p.42

writing as one, and how many ranked listening as one, and so on.

b. A second alternative is to describe the results in *percentages*. If researchers choose to describe the results in terms of frequency or percentages they could also display these results in a figure using a bar graph or pie chart. Visually displaying results in this way often makes it easier to highlight the results of the survey.

Finally, with interval scales one could describe the data in terms of *central tendency*. As mentioned earlier, attitude scales are often treated as interval scales so that the central tendency of Likert-scale questions is sometimes calculated. The most common types of central tendency are the mean, mode, and median. The *mean* or average is calculated by adding up the scores and dividing by the number of participants. The *median* is the number in a set of numbers that represents the point at which 50% of the items are above and 50% are below. The *mode* is simply the most common number.