

### **CHAPTER III**

### **RESEARCH METHODOLOGY**

In her study, the writer applied mixed method. Mixed method is a combination of quantitative and qualitative method. The mixed method used in this research was Sequential Explanatory Approach. It is defined as the quantitative method is followed by qualitative method (Ivankova, Cresswell, & Stick, 2006). The purpose of this methodology is to find out how college students perceived social media as the tool of learning English as their foreign language.

As stated by Muijs (2004), quantitative research has a numerical symbol to represent and manipulate the observation in the studies. These numerical symbols are intended to describe and explain those phenomena which are already collected and reflected. The writer decided to collect the quantitative data from the questionnaires which had been distributed to the active students in Faculty of Language and Arts Soegijapranata Catholic University Semarang. This technique was aimed at addressing what students' perception of using social media to learn English as their foreign language was. To address the second and the third research questions which were what social media that they usually used the most to learn English and how they used their social media in their learning process, the writer employed qualitative study whose purpose was to explore and understand the meaning of individual's thoughts about human problems (Miller & L., 2000). Therefore, the writer

collected the qualitative data to get in-depth the information about students' thoughts about this study.

### **3.1 Method of Data Collection**

#### **3.1.1 Participant**

Faculty of Language and Arts has 260 active students from batch 2014-2017. Using convenient sampling (Cohen, Manion, & Morrison, 2005), the writer recruited 130 from 260 students to participate in this study with the level of confidence was 90%. The reason why the writer chose Faculty of Language and Arts students was because the writer had access to the participant. The writer knew them well and had already established good rapport with them. Therefore, the writer was able to obtain good data, especially qualitative data. Qu & Dumay (2011) stated that qualitative researchers need to build rapport with their participants so that they could get rich and in-depth the data. Moreover, the students in Faculty of Language and Arts are social media users and have gadgets. Hence, they had a lot of experiences in using social media for learning.

#### **3.1.2 Instruments**

In this study, the writer used two instruments to collect the data:

##### **1. Questionnaire**

As written in Bulmer's book about questionnaire (2004), he defined questionnaire as a tool which is well-designed within social science research to obtain and acquire information about participants' opinions based on their

characteristics, behavior, attitudes, and their beliefs towards the topics and phenomenon which are conducted by the researchers. The first part of the questionnaire was the background questions and designed to obtain demographic data of the participants. The second part contained the statements to elicit people's perception of the use of social media for language learning.

In this study, the writer used close-ended questionnaire. Close-ended questionnaire was aimed to obtain the responses based on the statements or survey questions. The respondents chose the appropriate answers which closely represented their opinion or perception (Siniscalco & Auriat, 2005). The respondents could choose an answer among a possible set of answers and the responses that most closely represented their viewpoint. The close-ended questionnaire consisted of 24 statements. The results of the questionnaire were analyzed on the basis of frequency, means, and standard deviation.

The writer adapted **Likert Scale** for her close-ended questionnaire. The **Likert Scale** has five categories in each construct in questionnaire (Siniscalco & Auriat, 2005), they are Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. The scores of the options range from 5 to 1 respectively.

## **2. Interview**

For qualitative data collection, the writer interviewed five selected students. Two students were in sophomore year, two students were in junior year, and a student was in senior year. The interviewees were social media users and students in Faculty of Language and Arts. Therefore, they learned English as the

foreign language. They also got online when they had spare time since they were interested in social media. They also had compatible devices to get online.

In this interview session, the writer delivered the questions based on the instrument. The result of the interview was aimed at answering the second and third research question and also to strengthen the data of the first research question.

### **3.2 Research Procedure**

To conduct her study, the writer had several steps to collect the data:

1. Designing the questionnaire

First, the writer designed the questionnaire.

2. Conducting pilot study

Before she distributed the questionnaires, the writer did a pilot testing to the fifteen selected Faculty of Language and Arts students to check the validity and reliability of the instrument. Morse, Barrett, Mayan, Olson, & Spiers (2002) stated that the invalid statements in the questionnaire were able to be dropped. Hence, the writer decided to drop them. Some of those questions were modified and used for the interviews.

3. Analyzing the questionnaire validity and reliability

In pilot testing section, the writer analyzed the result of the pilot study using SPSS 24 to check the reliability and validity of the instrument. The writer used the formula to count the  $R_{table}$  and  $R_{value}$ . The instrument has two parts of close-ended questionnaire. The first one was about the general statement of social media and the second one was about the English skills that could be possibly improved by

learning using social media. The statements were declared 'valid' if the value of significance was higher than the value in r-table ( $R_{\text{value}} > R_{\text{table}}$ ). The formula used for data validity was:

$$df = N - 2, df = 15 - 2 = 13 \text{ (N means the participants of pilot study)}$$

*Figure 1.* Formula for data validity

The value of significance was 5% (0.05). The writer concluded that the validity value of 15 respondents is 0.514. To see the valid statements in the questionnaire, the value of  $R_{\text{value}}$  should be higher than 0.514. For checking the data reliability, the writer used the Cronbach's Alpha. Based on Figure 2, the reliability level of the instruments should be more than 0.60.

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

*Figure 2.* Cronbach's Alpha Reliability Level

In the tables below, the writer presents the result of the validity and reliability test.

Table 3.2.1

*Validity Table Result*

*Questionnaire Part One*

<u>Statements</u>	<u>R<sub>value</sub></u>	<u>R<sub>table</sub></u>	<u>Information</u>
Social media makes English learning easier	0.522	0.514	VALID
Social media motivates me to communicate in English with other speakers	0.626	0.514	VALID
Learning English using social media helps me become an independent learner	0.638	0.514	VALID
Learning English using social media is fun	0.784	0.514	VALID
Social media provides rich resources such as quotes, caption, photos, and other types of resources to learn English.	0.748	0.514	VALID
I will keep on using social media to learn English in the future	0.617	0.514	VALID
I will recommend my friend to learn English using social media	0.768	0.514	VALID
Social media is one of the most important tools in learning language.	0.799	0.514	VALID
Learning English using social media is wasting time	0.456	0.514	INVALID

Social media helps boost students' confidence in learning English.	0.731	0.514	VALID
Social media does not help me improve all of my English language skills at all.	0.329	0.514	INVALID
I still need my lecturers to assist me when there are certain aspects of language that I cannot clearly understand on social media such as grammar and vocabularies.	0.214	0.514	INVALID

Table 3.2.2

*Reliability Table Result**Questionnaire Part One*

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
0.805	12

Cronbach's Alpha was used to test the reliability of the questionnaire. The minimum value of the data reliability is more than 0.60. Based on table 3.2.2, the writer concluded that she had three invalid statements in the first part of close-ended questionnaire. She decided to drop the invalid statements and would not use them when she distributed the questionnaire. However, she would use them as the questions in the interview session. The writer also concluded that the statements were reliable because the Cronbach Alpha's value was 0,805. It was within the normal range of 0.8 – 0.9.

Table 3.2.3

*Validity Table Result**Questionnaire Part Two*

<u>Statements</u>	<u>R<sub>value</sub></u>	<u>R<sub>table</sub></u>	<u>Information</u>
Social media helps me improve my grammar, writing, listening, and reading skills	0.741	0.514	VALID
Through social media I am able to practice my writing skill	0.921	0.514	VALID
Social media helps me apply grammar rules	0.750	0.514	VALID
It is easy for me to recognize some grammatical errors in social media	0.555	0.514	VALID
I read English news delivered in social media	0.637	0.514	VALID
I can learn a correct grammatical use by reading some sentences on social media	0.499	0.514	INVALID
I can improve my reading skill by reading some tweets or captions in English	0.767	0.514	VALID
I can learn new words from social media	0.576	0.514	VALID
I mostly use English to write captions, tweets, or status updates on social media	0.413	0.514	INVALID
I like reading tweets from celebrities which are written in English	0.815	0.514	VALID
I often speak through video calls with my friends.	0.577	0.514	VALID

Through videos I can practice my listening skill	0.355	0.514	INVALID
I often write messages in English in <i>WhatsApp</i> or LINE	0.385	0.514	INVALID
I listen to a lot of videos in English in <i>YouTube</i> .	0.662	0.514	VALID
Listening to authentic videos in <i>YouTube</i> helps me learn English pronunciation	0.645	0.514	VALID
Listening to authentic videos in <i>YouTube</i> helps me learn new linguistic expressions such as idioms and collocations	0.590	0.514	VALID
<i>Pinterest</i> provides a lot of pictures that make learning English more interesting	0.634	0.514	VALID
<i>Instagram</i> captions help me understand the grammatical pattern in sentences	0.662	0.514	VALID
I listen to various short videos in English in <i>Instagram</i>	0.574	0.514	VALID
I often write comments in English in <i>Instagram</i> .	0.435	0.514	INVALID
I learn new words through memes in <i>Instagram</i> .	0.442	0.514	INVALID
I often read English comments in <i>Instagram</i>	0.502	0.514	INVALID

Table 3.2.4

*Reliability Table Result**Questionnaire Part Two*

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
0.912	22

Based on the validity data table in table 3.2.3, the questionnaire had 10 invalid statements which would be dropped by the writer. It was shown by the  $R_{\text{value}}$  which was lower than 0.514. She would use them as the questions in the interview session. However, the Cronbach's Alpha level showed 0.912 which was classified as excellent and reliable. Therefore, it could be concluded that the questionnaire was reliable.

#### 4. Distributing the questionnaire

In this step, the writer collected the data from the participants. The participants of this study were the active students in Faculty of Language and Arts, Soegijapranata Catholic University. The respondents were not taken from those who already did the pilot testing. The writer asked the participants to fill out the online questionnaire.

#### 5. Analyzing the result of the questionnaire

To analyze the result of the questionnaire, the writer used SPSS 24 to find the means and the standard deviation. The means were used to examine students' perception.

#### 6. Interviewing selected students

The writer chose five selected students from different class standing. She interviewed students based on the interview guide. She conducted the interview session in Bahasa Indonesia.

## 7. Transcribing and interpreting the findings

This was the last step of the research procedure. The writer interpreted the data from the questionnaire and interview results. She counted the means for quantitative data. She also transcribed the interview to find emerging themes from the data.

### **3.3. Method of Data Analysis**

#### **3.3.1 Quantitative Data**

The students read the statements in the questionnaire and decided their opinions based on the choices which were provided. After that, the writer collected the data from the close ended questionnaire and counted the simple statistics to find out the percentage and the mean. The perception would be declared “positive” if the mean value was more than three (3) and less than that would be declared “negative”.

#### **3.3.2. Qualitative Data**

For qualitative analysis, the writer recorded and transcribed to analyze the data. The questions of the interview were used to elicit information that students might miss from the survey. The writer then transcribed and coded the interview. Coding is a process in which a researcher assigns a code to facilitate qualitative data analysis. A code is a word or a short phrase that are assigned in data to capture the most salient information or keyword. Coding helps researchers find conversation patterns in their transcripts in order to summarize and categorize each student’s responses according to Saldana (2009).

Charmaz (2006) also mentioned in her book about simple coding in qualitative data analysis. She defined that coding was the process about finding and figuring out what data was about. She also stated that actually coding was giving understandable labels to the data collected to categorize and summarize the qualitative findings. Coding was also used to separate, sort, and select the raw qualitative data. Below are short examples of coding in qualitative data.

### Short Examples about Simple Coding

#### The Raw Data

#### The Manual Coding

1. *Belajar menggunakan social media itu sangat membantu.* <sup>1</sup> HELPFUL  
*<sup>2</sup>Tetapi, kita tetap membutuhkan guru untuk mengajari kita materi bahasa Inggris yang belum bisa didapat dan dijelaskan di social media.* <sup>2</sup> TEACHER  
*<sup>3</sup> Overall, social media dapat digunakan untuk belajar bahasa Inggris dengan baik.* <sup>3</sup> HELPFUL

Basically, there was no fixed formula to create the codes. It was based on each researcher's level of understanding of the data to identify the key findings. The example above was taken from the interview data and the writer only needed to take a conclusion in each sentence. After that, she had to give a label next to the transcription. In the end, she should analyze those labels from each participants' transcript to the themes or the patterns.