

CHAPTER III

RESEARCH METHODOLOGY

In this study, the writer examined the students' acceptance towards Vlog and analyze the correlation between students' technology comfort level and the use of vlogs to learn English. To address those three problem research questions, the writer used a quantitative method. The quantitative method is defined as numerical data collected through questionnaires or polls (Almalki, 2016). The quantitative method uses variables that usually appear in statistical results. Therefore, those variables can be analyzed using statistical procedures. As stated by Muijs (2004), quantitative analysis is the numerical representation and manipulation of observations for the purpose to describe and explain the phenomenon that those observations reflect. The writer decided to collect the quantitative data by distributing a questionnaire to sixty students of the Faculty of Language and Arts.

3.1 Method of Data Collection

3.1.1 Participant

In this research, the writer recruited students in the Faculty of Language and Arts to participate in this study based on convenient sampling with a 90% level of confidence (Cohen, Manion, & Morrison, 2005 as cited in (Navarro and Maldonado, 2007). The minimum standard in quantitative research is 30. Thus, there are 298 active students in the Faculty of Language and Arts and the writer chose 60 students as the participants. The reason why the writer chose the Faculty

of Language and Arts students is because the writer will have easy access to meet the participants and the writer could obtain good data.

3.1.2 Instrument

The instrument that was used to collect the data was a questionnaire. A questionnaire is a document containing a question that distributed to the respondents in order to collect the data. A questionnaire is a numerical symbol that is used to represent the observation in this study. The writer adopted the close-ended questionnaire. In the questionnaire, there were fifteen questions about students' perceived ease of use, perceived usefulness, and attitude towards vlogs. Afterward, the writer analyzed the correlation among the variables.

The writer adopted the Likert Scale. The Likert Scale has four categories in each questionnaire, they are Strongly Agree, Agree, Disagree, Strongly Disagree. Each option was then assigned a score ranging from 4 to 1. The questionnaire has three steps. The first step is Perceived Ease of Use, there were three statements in this part, whether vlogs were easy to access and the students had the ability to use it. The second part is Attitude Towards Usage. There were nine statements in this part. They were used to find out whether vlogs were useful to help the students acquire knowledge and make them more excited to learn English. The last part is Intention to Use. There were three questions in this part to find out whether the students used vlogs as a tool in learning English and whether they would agree if vlogs were included to be a part of education.

3.2 Research Procedures

To conduct her study, the writer has several steps to collect quantitative data.

1. Selecting the participants of the study

First, the writer selected the participants to fill out the questionnaire. The writer chose the students of the Faculty of Language and Arts.

2. Adapting the questionnaire

The questionnaire was adapted from TAM (Technology Acceptance Model)

3. Conducting a pilot study

To make sure that the questionnaire is valid and reliable, the writer conducted a pilot study. There were fifty students whom the writer chose to participate in a pilot study. This pilot study was used to determine which items were not reliable and should be deleted.

4. Analyzing the questionnaire reliability and validity

After collecting the data, the writer analyzed the result of a pilot study using SPSS to check the reliability and validity of the questions. The statements were valid if the value of significance was higher than the value in r-table (Rvalue-Rtable). The writer counted the Rtable and Rvalue by using the formula. The formula is,

$$df = N - 2, df = 20 - 2 = 18 \text{ (N means the participants of pilot study)}$$

Figure 2 Formula of Data Validity

The value of significance is 5% (0.05); and the Rvalue of 15 participants is 0.254. Thus, the statements in the questionnaire will be

valid if the Rvalue is higher than 0.254. The writer also used Cronbach's Alpha to check the data reliability. Based on Cronbach's Alpha table, the Alpha level of the instruments should be more than 0.6.

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 3 Cronbach's Alpha Table

In the table below, the writer presents the results of validity and reliability test.

Table 1

Validity Table Result

Statements	Variables	Rvalue	Rtable	Information
Vlogs are easy to access	P1	0.352	0.254	VALID
I can access vlogs anytime	P2	0.45	0.254	VALID
I can use vlogs well	P3	0.595	0.254	VALID
Vlogs makes language learning fun	A1	0.647	0.254	VALID

Vlogs are useful to improve my listening skill	A2	0.581	0.254	VALID
Vlogs are useful to improve my speaking skill	A3	0.632	0.254	VALID
Vlogs are useful to improve my reading skill	A4	0.635	0.254	VALID
Vlogs are useful to improve my writing skill	A5	0.704	0.254	VALID
I can use vlogs to learn vocabulary	A6	0.689	0.254	VALID
Using vlogs allow me to learn specific terms used in another culture	A7	0.689	0.254	VALID
Vlogs can motivate learners	A8	0.71	0.254	VALID
I learn grammar through vlogs	A9	0.623	0.254	VALID
I would like to use vlogs in the future	I1	0.754	0.254	VALID
Vlogs can be implemented in language classes	I2	0.611	0.254	VALID
I will recommend the use of vlogs to other students	I3	0.619	0.254	VALID

Table 2

Reliability Table Result

Reliability Statistics	
Cronbach's Alpha	N of Items
0.888	15

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 1 and 2, the writer concluded that the questionnaire statements were valid and reliable. The total value of Cronbach's Alpha in this research is 0.888. Thus, the writer concluded that the statements were reliable because they can be considered with consistency acceptable. the Cronbach's Alpha value. It was within the normal range of 0.8-0.9.

5. Distributing the questionnaire

In this step, the writer collected the data through the questionnaire. The population of the study was 298 active students. The writer recruited participants through social media such as WhatsApp and Line. Out of 298 students, 60 students agreed to participate in the study.

6. Analyzing the questionnaire result

The writer then analyzed the questionnaire result using SPSS 24. The writer used descriptive statistics to determine the means and the standard deviation of the responses. The writer also uses Pearson's correlation to answer the research questions.

3.3 Method of Data Analysis

3.3.1 Quantitative Data

The students had to respond to the statements and selected the options according to their own situation. The writer collected the data from the questionnaire and found the mean and the percentage. The perception would be declared "positive" if the mean value was 2.5 or more. Likewise, if the mean was less than 2.5, it would be declared "negative".

3.3.2 Pearson's Correlation

Pearson's correlation is a statistical test that is used to measure a linear relationship between two variables. 0 means no correlation and 1 means perfect correlation. It means if the score is close to 1 or -1 it means the correlation between two variables are strong, while if the score is r or close to 0 it means the correlation between two variables are weak. Two variables are said to be correlated if the change of one variable affects another variable. The value $r = 1$ means a perfect positive correlation and the value $r = -1$ means a perfect negative correlation. In general, the correlation expresses the degree that, on average, two variables change correspondingly. If one variable increases when the second one increases, then there is a positive correlation. However, if the correlation coefficients are more than 0.5

it shows a strong correlation, otherwise, if the correlation coefficients are less than 0.5 it shows weak correlation.

In this study, the writer calculated the scores of each variable and tried to look for correlations between variables.

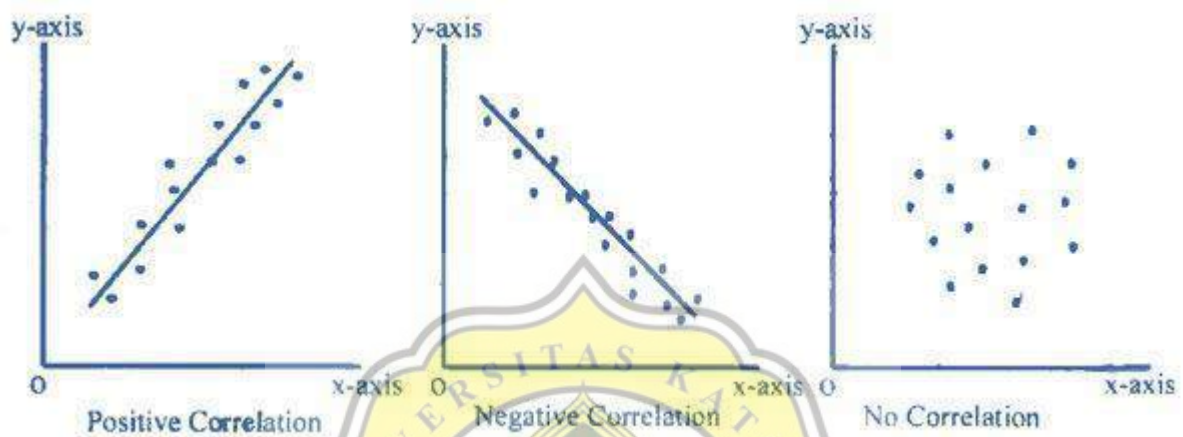


Figure 4 Pearson's Correlation Scatterplots

Scatterplots are a type of data that shows between two numerical variables. Each of the data gets plotted as an (X,Y) coordinates that relate to its value for two variables. The scatterplots above show 3 types of correlation.

Positive Correlation can be seen when the (Y) variables tend to increase as the (X) variables increases or vice versa. The dots will spread into the line which signifies that the correlation is strong (synergistic).

Negative Correlation can be identified when (Y) variables tend to decrease as the (X) variables increases (antagonist).

No Correlation will be shown when there is no clear relationship between two variables and the dots will spread irregularly.