

CHAPTER 3

METHOD OF DATA COLLECTION AND ANALYSIS

Type of Research

The writer used quantitative research to analyze this study. According to Alversia (2011), quantitative research is a research that should collect numerical data to obtain specific results. This is closely connected to the final part of the definition using mathematical analysis. In order to be able to use mathematically based methods, the data collected have to be in numerical form. The respondents were given five possible responses for each statement ranging from Strongly Agree, Agree, Neutral, and Disagree to Strongly Disagree.

3.1 Data Collection

Data collection is an important step to conduct research. The method that the writer used in this research is quantitative research. According to Creswell (2002), quantitative research means using the approach of investigatory which primarily using postpositive claims for developing knowledge. Quantitative research employs strategies of inquiry such as experiments and surveys and collects data on predetermined instruments that yield statistic data. The writer used a closed-ended type of questions. Closed-end question according to Reja, Manfreda, Hlebec, & Vehovar (2003) is a

type of questionnaires that have a limited number of answers, leaving no room for additional information to be volunteered. They require only recognition and a choice from among answer options.

3.1.1. Population and Sample

The participants of this research are students of UNIKA Soegijapranata. The identification of the individual respondents in this research are chosen by:

- a. Respondent is an active student of Faculty Language and Art
- b. Respondent is in 18 – 25 ages (young adult)
- c. Respondent is a student who often wears T-shirts for their activity on the campus
- d. Respondent is from 2014 – 2018 batch

There are 293 active students in the Faculty of Language and Arts Soegijapranata Catholic University, so the writer chose 10% of students from 293 students, or in other words, 30 students. The research is categorized as a new study because there was no previous study. Thus, for all these limitedness, the writer took only 10% sample. Obtaining a random sample is also known as probability. The first step is to define the population from which it is to be drawn. This population is known as the sampling frame Mathers, Fox, & Hunn (2010). Before that, the writer distributed the questionnaire to 11 students to do a pilot study to find validity statement for the questionnaire.

3.1.2. Instrument

The questionnaire offered five options which were arranged based on the Likert scale. It can be described as:

5 = strongly agree

4 = agree

3 = neutral

2 = disagree

1 = strongly disagree

The subjects answered the questionnaire by giving marks on google form.

3.1.3 Procedure

This study used quantitative research. The following are the steps.

1. The writer designed the questionnaire in a close-ended type of questionnaire. The questionnaire consists of 13 statements with 5 options. The writer used the statement if the statement was valid.
2. The writer distributed the questionnaire to 11 respondents to do a pilot study. These respondents were students of Faculty of Language and Arts to test the reliability and validity of the statements.
3. The writer analyzed the validity of the questionnaire by using SPSS 20. The formula is $df = \text{total of a sample} - 2$ with significance two-tailed level of 20%.

Picture I Table r Pearson

Tabel nilai kritis untuk r Pearson Product Moment								
dk=n-2	Probabilitas 1 ekor							
	0,10	0,05	0,025	0,01	0,005	0,0025	0,001	0,0005
	Probabilitas 2 ekor							
	0,20	0,10	0,05	0,02	0,01	0,01	0,002	0,001
1	0,951	0,988	0,997	1,000	1,000	1,000	1,000	1,000
2	0,800	0,900	0,950	0,980	0,990	0,995	0,998	0,999
3	0,687	0,805	0,878	0,934	0,959	0,974	0,986	0,991
4	0,608	0,729	0,811	0,882	0,917	0,942	0,963	0,974
5	0,551	0,669	0,754	0,833	0,875	0,906	0,935	0,951
6	0,507	0,621	0,707	0,789	0,834	0,870	0,905	0,925
7	0,472	0,582	0,666	0,750	0,798	0,836	0,875	0,898
8	0,443	0,549	0,632	0,715	0,765	0,805	0,847	0,872
9	0,419	0,521	0,602	0,685	0,735	0,776	0,820	0,847
10	0,398	0,497	0,576	0,658	0,708	0,750	0,795	0,823
11	0,380	0,476	0,553	0,634	0,684	0,726	0,772	0,801
12	0,365	0,458	0,532	0,612	0,661	0,703	0,750	0,780
13	0,351	0,441	0,514	0,592	0,641	0,683	0,730	0,760
14	0,338	0,426	0,497	0,574	0,623	0,664	0,711	0,742
15	0,327	0,412	0,482	0,558	0,606	0,647	0,694	0,725

The valid statement can be known as follows:

- $R_{value} > R_{table}$, the statement is valid
- $R_{value} < R_{table}$, the statement is not valid

4. The valid statements of the questionnaire were distributed to 30 respondents (10% of 293 active students) on the Faculty of Language and Art UNIKA Soegijapranata via a google form.

5. The results were explained one by one with a descriptive statistic.

The validity level of 11 respondents of the pilot study was 0.4187. The table below shows the result of the pilot study:

Table I validity of piloting data result

Question	Rvalue	Rtable	Information
SO1	0.532	0.419	Valid
SO2	0.435	0.419	Valid
SO3	0.758	0.419	Valid
SO4	0.332	0.419	Invalid
SO5	0.556	0.419	Valid
SO6	-0.27	0.419	Invalid
SO7	0.530	0.419	Valid
SO8	0.728	0.419	Valid
SO9	0.660	0.419	Valid
SO10	0.308	0.419	Invalid
SO11	0.439	0.419	Valid
SO12	0.264	0.419	Invalid
SO13	0.735	0.419	Valid

Based on the result above, there are 4 statements which are invalid, so the writer dropped those statements. The statements dropped are S4, S6, S10, S12. After that, the writer decided to distribute the questionnaire to 30 students of the Faculty of Language and Art in UNIKA Soegijapranata. The writer distributed the questionnaire to the respondents on October 3, 2018.

3.1.4 Method of Data Analysis

The writer used descriptive statistics and made summaries of all data using SPSS to determine the degree of respondent's perception about English words printed on T-shirt. The data were classified and identified based on five options.

