CHAPTER 3

METHOD OF DATA COLLECTION AND ANALYSIS

3.1 Type of research

The writer used a mixed method to collect, and analyze the data from the targeted subjects or respondents. The quantitative analysis is being used to understand the customers' perception on the use of airbrush method for makeup based on the opinions collected from questionnaire. Quantitative method is one component of reviewing the literature is to determine what theories might be used to explore the questions in a scholarly study. In quantitative research, researchers often test hypotheses stemming from theories. The inquirer may generate a theory as the final outcome of a study and place it at the end of a project, such as in grounded theory. In other qualitative studies, it comes at the beginning and provides a lens that shapes what is looked at and the questions asked (Creswell, 2009). This study is trying to look at the customers' perception on the use of airbrush method.

3.2 Data Collection

In mixed methods research, researchers may both test theories and generate them. Moreover, mixed methods research may contain a theoretical framework within which both quantitative and qualitative data are collected.

Some qualitative studies do not employ any explicit theory. However, the case can be made that no qualitative study begins from pure observation and that prior conceptual structure composed of theory and method provides the starting point for all observations. It inquirers attempt to build the essence of experience from participants by observation, open ended questions or interview (Creswell, 2009). In this study, the writer used open-ended questions in an interview with the customers to support the data got from quantitative approaches.

3.2.1 Participants

The writer collected the data from 30 girls of 20 to 35 years as 30 is the minimum number of participants. Besides, the writer also distributed the questionnaire to 30 women around 36 to 50 years old. The writer used them as the participants because the writer wanted to know whether there is a different' perception among teenagers and elderly women.

For the qualitative data, the writer interviewed five teenagers and 5 elderly women.

3.2.2 Instrument

1. Questionnaire

Quantitative method was used a close ended questionnaire as the first instrument to collect the data. All of the information were about participants' perception on the use of airbrush method in makeup.

The questionnaire uses Likert scale method. The measurement scale of Likert scale iusing numerical scaling from one to five. The write only used four out of five points of the Likert scale to prevent the invalidity of the data.

1 = Strongly disagree

2 = Disagree

3 = Agree

4 = Strongly Agree

The data can be concluded into a positive or negative based on the mean of the data. If the mean score is < 3, the writer interpreted the data as negative. If the mean score is ≥ 3, the writer interpreted the data as positive.

2. Interview

As a support data to get a deep insight and analysis the data better, the writer used the interview method to get an in depth information from the participants' point of view.

3.2.3 Procedure

The writer used several steps to conduct this study as follows:

1. Designing the closed-ended questionnaire.
2. Having a pilot study by distributing the questionnaire to 10 respondents who are students at Faculty of Language and Arts, Unika Soegijapranata, Semarang.
3. Analysing the validity and reliability of the instrument by using SPSS

4. Distributing the questionnaire to the respondents
5. Collecting and analysing the result of questionnaire by using SPSS
6. Interpreting the data

The validity test is used to measure whether the question is valid or not. The statement was considered as valid when the value of significance is higher than the value in the R table. The formula used for the validity check is df = n – 2. N is the total participant of the piloting. The writer used 10 participants meaning that the df is 8. With the significance level of 5% and the *r table* = 0.632. The validity of a statement can be known if *r counting* > *r table,* the statement is valid and if *r counting* < *r table,* the statement is not valid. In checking the reliability of the data, the writer used Cronbach's Alpha. The writer tested the validity of each question using SPSS 20 program For all the items of eight statements, , the corrected item-total correlation is above 0.632, meaning that all items are valid and can be used to collect the data.

Table 3.1 Validity

No	Statement	R_{value}	R_{table}	Remark
1	The result of make up using the airbrush is	0.709	0.632	VALID

	smoother than that using manual technique			
2	The color of makeup using the airbrush is sharper than that using manual technique.	0.737	0.632	VALID
3	Makeup using an airbrush is more attached than that using manual technique	0.756	0.632	VALID
4	The result of makeup using airbrush results is shaping face better than using manual makeup techniques	0.717	0.632	VALID
5	The result of makeup using airbrush is flatter than that of using manual technique makeup	0.847	0.632	VALID
6	Makeup using airbrush technique is more modern than using manual technique	0.679	0.632	VALID
7	I chose to use airbrush makeup because airbrush makeup is a trend	0.766	0.632	VALID
8	I chose to use airbrush makeup because airbrush makeup makes my face prettier than	0.725	0.632	VALID

using manual techniques.

Reliability Statistics

Cronbach's Alpha	N of Items
.871	8

The Cronbach's Alpha value is >0.60, then the questionnaire is declared reliable or consistent. If Cronbach's Alpha value <0.60, the questionnaire or questionnaire is declared unreliable or inconsistent. Based on the above calculations, the result of the questionnaire Cronbach's Alpha's Alpha is 0.871, which is more than 0.6. Thus, the questionnaire in this study is reliable or consistent.

3.3. Method of Data Analysis

The data analysis to answer the questions whether the customers perceive the use of airbrush method positively or negatively was done using SPSS 20 application. The quantitative method results was determined from the transcript of the interview to help the researcher get an in depth perspective.