

Chapter Three

Research Methodology

This chapter discussed the methodology used by the researcher in this study. There were five sections namely research design, setting and participant of the study, population and sample technique, research instrument, validity, reliability, data collection procedure, and data analysis. Several theories were also included in this chapter to support the methodology in this study.

Research Design

This study aims to find out the level of students' satisfaction toward their lecturers' teaching and the factors that affecting the students feel satisfied with their lecturers. Based on this study' purpose, quantitative approach was used by the researcher to conduct this study. According to Creswell (2012), quantitative research is the term where the researcher searches for the trends based on the issues that he/she takes. To measure the trends, it is necessary to get it from the large number of participants to know the result. He also reveals that they have to include specific research questions. Besides, the research questions have to be measurable to get the scores of the data. It was useful to investigate the levels of the students' satisfaction toward their lecturers' teaching in ELED and IPIREL major batch 2015 at a private university in Yogyakarta because it used numerical data to show the result. To find out their levels, the exact measurement was by number or quantity. Besides, the research questions have to be measurable to get the scores of the data. By using quantitative approach, the researcher could find

out the trends that become the factors leading the students' satisfaction toward the lecturers' teaching.

Survey design was appropriate with the issue of this study because this study observed the trends in the group of people. Creswell (2012) stated that the aim of survey is describing the opinion in the group of people. In this study, the researcher describes the students' opinions about their lecturers during teaching in classroom by measuring their satisfaction. Also, the researcher investigated their trends about the factors that led students' satisfaction toward their lecturers' teaching.

Based on Creswell (2012), survey design has two types. They are cross-sectional survey design and longitudinal survey design. Cross-sectional survey design allowed the researcher to study the present issue in education. This survey design describes the current issue. In longitudinal survey design, the researcher can study in overtime and investigate the changes toward the samples. Therefore, the researcher chose cross-sectional survey design because the researcher only studied in one time and described the current issue in education,

Besides, in cross-sectional survey design, there is also comparative study. According to Creswell (2012), comparative study compares two or more educational groups in terms of attitudes, beliefs, opinions, or practices. Hantrais (1995) stated that the purpose of comparative study is examining the two different things to find out the similarities and the differences between them. In another statement, comparative study does not only discover the differences and

similarities, but also it find out the uniqueness of the two things that have not been found (Mills, Bunt, & Bruijin, 2006).

Based on the experts' statement above, this study examined two group students from different departments. Those were ELED and IPIREL students. The researcher aimed to find out the level of students' satisfaction toward their lecturers' teaching in both departments. Likewise, the researcher also investigated the factors which led the students' satisfaction toward their lecturers' teaching. Thus, the researcher also investigated the similarities and differences of the factors that led the students' satisfaction toward their lecturers' teaching.

Research Setting and Participants

Setting. The research setting had been set up by the researcher to conduct this study. The researcher had decided to conduct the study in a private university in Yogyakarta. In this university, it has ELED and IPIREL. In those departments, the lectures used English as media instruction, and their teaching were similar enough. They also used group discussion and presentation to teach the students. Besides, the researcher believed that those two different majors had different opinion regarding their lecturers teaching in the classroom. Some of them feel satisfied with their lecturers' teaching and some of them did not feel satisfied. Based on the researcher's observation, some students in ELED and IPIREL were satisfied with their lecturers. Besides, some of them also felt not satisfied. So, this background was useful for the researcher to investigate their level of satisfaction toward their lecturers' teaching and also the factors that affecting the students fell satisfied with their lecturers' teaching.

Population and Sample Technique

Population. The researcher took the population of ELED and IPIREL students' batch 2015. The population of 2015 batch students in IPIREL was 79 students. Meanwhile, the total of ELED students' batch 2015 was 118 students. The researcher believed that the students of ELED and IPIREL had the similarities of lecturers' teaching because they used English as the media instruction.

In addition, those two majors were considered as the students who had studied in one of private university in Yogyakarta for a long time. They had studied for approximately three years. It means that they were in 6th semester. Therefore, their opinions about their lecturers' teaching had been abundant in their thought. Also, their thoughts about their lecturers' teaching were useful to investigate their satisfaction level toward their lecturers' teaching and the factor that lead the students' satisfaction.

Sampling Technique. According to Cohen, Manion, and Marison (2011), sample is the part of population taken for a research. In the study, random sampling was applied to decide the sample of this study. Cohen, Manion, and Marison (2011) they also conveyed that random sampling selected the respondents randomly from sample. It meant that, the researcher spread the questionnaires randomly until reach the minimal sample.

To get the samples, the researcher used the reference from Notoadmodjo (2010). The formula is displayed below.

$$n = \frac{N}{(1 + N \cdot d^2)}$$

n = Sample size

N = Population size

d = Level of confidence/accuracy desired (0.05)

To determine the sample size of ELED with 118 students, the researcher used the formula and the researcher gets the result. Besides, the researcher took 91 students of ELED as the sample. The step to get the sample was mentioned below.

$$n = \frac{N}{(1 + N \cdot d^2)}$$

$$n = \frac{118}{(1 + 118 \cdot (0.05)^2)}$$

$$n = 91$$

In addition, the researcher also used the formula to find out the sample size of IPIREL with 79 students. The researcher took 65 students as sample. The step to get the sample was presented below.

$$n = \frac{N}{(1 + N \cdot d^2)}$$

$$n = \frac{79}{(1 + 79 \cdot (0.05)^2)}$$

$$n = 65$$

Research Instrument

Using questionnaires were needed to gain the data and to analyse the trends. Cohen, Manion, and Morrison (2011) stated that the questionnaires could be used to collect the information by providing several questions to the respondents. The researcher also used structured questionnaires because the researcher focused on the numerical items for answering the research questions (Cohen, Manion, & Morrison, 2011). The questionnaires included about the level of students' satisfaction toward their lecturers' teaching method and the factors causing the students felt satisfied.

The researcher adapted the questionnaires from Student Satisfaction Questionnaires Test Version May 2005 issued by European Union. In these questionnaires, all questionnaires were in English and they were translated into Indonesian. The researcher focuses on lecturers' teaching and the researcher took the questionnaires that can measure the students' satisfaction from lecturers' teaching.

The questionnaires consisted of dichotomous and likert scale. According to Cohen, Manion, and Morrison (2011), dichotomous were fruitful to find out the general information about the participants started from their name, student number, and class. They also stated that multiple choices were also useful to find out the information regarding the issue in this study from the participants. Also, the students could fill out the likert scale freely because this was useful to find out the level of students' satisfaction toward their lecturers' teaching in ELED and IPIREL whether the factors that made the students felt satisfied or not satisfied

with their lecturers' teaching. Besides, the questionnaires consisted of 19 items and each item had likert scale which is mentioned in the following table.

Table 2. Likert Scale of Students' Satisfaction toward Their lecturers' Teaching

Scale	Respond
1	Not satisfied
2	Slightly satisfied
3	Satisfied enough (cukup puas)
4	Satisfied (Puas)
5	Very satisfied (Sangat Puas)

Validity

Validity is important to know whether the questionnaires are able to answer the research question or not (Cohen, Manion, & Morrison 2011). They also state that to get the validity of the questionnaires, the researcher can use Aiken test or expert judgement to look for it and calculate it in Excel. They also reveal that the item is considered as valid if the score is 0.4 - 0.8. Besides, if the result of Aiken test shows < 0.4 , the item is not valid. If the result of Aiken test shows the range between 0.4 until 0.8 or higher, it means the item is valid. Therefore, to get the score, the researcher asked the three experts to score each questionnaire. If there was an invalid item, the item was deleted.

After conducting Aiken test, the researcher got the scores from three experts and calculates them. Here was the result shown in the following table.

Table 3. Aiken Test Table

Items	Expert_1	Expert_2	Expert_3	s1	s2	s3	Sum	Validity	
001	4	4	4	3	3	3	9	1.00	High
002	4	4	4	3	3	3	9	1.00	High
003	4	4	3	3	3	2	8	0.89	High
004	4	4	4	3	3	3	9	1.00	High
005	4	4	4	3	3	3	9	1.00	High
006	4	4	4	3	3	3	9	1.00	High
007	4	4	2	3	3	1	7	0.78	Medium
008	4	4	4	3	3	3	9	1.00	High
009	4	4	2	3	3	1	7	0.78	Medium
010	4	4	4	3	3	3	9	1.00	High
011	4	4	4	3	3	3	9	1.00	High
012	4	4	4	3	3	3	9	1.00	High
013	4	4	4	3	3	3	9	1.00	High
014	4	4	3	3	3	2	8	0.89	High
015	4	4	3	3	3	2	8	0.89	High
016	4	4	4	3	3	3	9	1.00	High
017	4	4	3	3	3	2	8	0.89	High
018	3	3	4	2	2	3	7	0.78	Medium
019	4	4	4	3	3	3	9	1.00	High

19 items were considered valid because the score was 0.4 - 0.8. If the score was more than 0.8, it was also considered as the valid item.

Reliability

In this reliability, the researcher had to look for reliability of the questionnaires. In reliability, the researcher looked for the stability of item to measure the issues in the study (Carmines and Zeller, 1979, taken from Cohen, 2011). The researcher used SPSS to know whether the instruments were

consistent or not. Then, the item was considered as reliable item which had to be more than 0.90 Cronbach alpha score. Thus, the following table explained more about the Cronbach alpha score's category.

Table 4. Cronbach Alpha Score's Table

Category of Reliability	
Score	Category
>0.90	Very Highly Reliable
0.80-0.90	Highly Reliable
0.70-0.79	Reliable
0.60-0.69	Minimally Reliable
>0.60	Unacceptably Low Reliable

After conducting reliability test using SPSS, the result showed that 19 items were considered as reliable. The reliability of the items was showed on the table below.

Table 5. Reliability Statistic

Cronbach's Alpha	N of Items
.938	19

The Alpha score of the questionnaire was 0.938. Based on the category of the reliability, it was considered very highly reliable because it was more than 0.90. Therefore, the questionnaire was acceptable to be used and the total number of the questionnaire used were 19 items

Data Collection Procedure

This study was conducted in a private university in Yogyakarta. The researcher began to distribute the questionnaires to ELED and IPIREL in 7th until 11th of July 2018. Because the time was not enough, the researcher decided to make google form and share it to their social media group. Before gaining the data, the researcher took permission to the lecturers. For the place, the researcher tended to use the class. It was conducive enough to pay attention to the students. Then, the researcher asked the students to fill out the questionnaires related to this study. To fill out the questionnaires, the researcher spent 15 minutes.

The researcher spread the questionnaires to the students. The task of the researcher in the class was to supervise the students whether they understand the questionnaires or not. Checking their answer was needed whether there was the blank answer or not. Therefore, this was important to ease the researcher to analyse the results. Then, the researcher closed the section and thanked them for helping this study.

Data Analysis

To answer each research question in this study, descriptive statistic was used in this research. The first research question was that the researcher aims to investigate the level of students' satisfaction toward their lecturers' teaching of

ELED, and the second research question was to investigate the level of students' satisfaction toward their lecturers' teaching at IPIREL major. According to Cohen, Manion, and Morrison (2011), mean in descriptive statistic were needed to answer the first and second research questions because it could present the numerical data such as the level. By using it, the researcher could decide whether the students of English Language Education Department and IPIREL feel satisfied toward their lecturers' teaching or not.

To make the results clear to read, rating scales were used in this research as it was able to establish the sensitivity degree and diverse responses while maintaining to generate numbers (Cohen et al., 2011). There were five categories. They are (1) not satisfied, (2) slightly satisfied, (3) satisfied enough, and (4) satisfied, (5) very satisfied. The class interval for the each category can be known from the following calculation.

The maximum scale should be minus by the minimum scale then divided by the n category. The maximum scale was 4 and the minimum scale was 1, while the n category is 5. The formula will be $(5 - 1) : 5 = 0.80$. As the result, the class interval for each category was 0.80. The following was the category table.

Table 6. Category of the level of students' satisfaction toward their lecturers' teaching

Scale	Category
1 - 1.80	Not Satisfied
1.81 - 2.6	Slightly Satisfied
2.61 - 3.4	Satisfied Enough
3.41 - 4.2	Satisfied
4.21 – 5	Very Satisfied

. Besides, mean were also useful to answer the third research question. The third research question was to find out the factor that leads to students' satisfaction. Also, the researcher could take the three highest item that become the factor that led to the students' satisfaction toward their lecturers' teaching. Then, the researcher also investigated between ELED and IPIREL students about the different and similar factors that led the students' satisfaction toward their lecturers' teaching.