Chapter Three

Research Methodology

In this chapter, the researcher presents the research design used in this study. Second, the researcher presents research setting. The next part is about research population and sample. Fourth part discusses instrument of the study. Fifth part discusses technique of data collection. Last, the researcher explains the analysis of data.

Research Design

The research design in this study was a quantitative research. Cresswell (2012) stated that in "a quantitative research the investigator identifies a research problem based on trends in the field or on the need to explain why something occurs" (p. 13). The reason why the researcher chose quantitative data for her research design was because the researcher want to know the trends in the community to find out the student-teachers' motivation level and factors that influence student-teachers' motivation in doing the internship program.

In addition, the researcher used survey research as a research method. Creswell (2012) stated that "survey research allows a quantitative or numeric description of trends, behavior, or opinion of population by studying a sample of that population. It included cross sectional and longitudinal studies using questionnaire or structured interviews for collecting the data (p. 14). The reason why the researcher used survey research was because the researcher wanted to know the numeric level of student-teachers' motivation.

Research Setting

The researcher conducted this research at English Language Education Department of Universitas Muhammadiyah Yogyakarta. The reason why the researcher used English Language Education Department of UMY was because English Language Education Department of Universitas Muhammadiyah Yogyakarta holds an internship program that is different with the others university. The differences are the English Language Education Department holds six stages of internship program. In odd semester, the student-teachers have coaching time with teacher supervisor. For example, teacher-supervisor taught the student-teachers about school condition, school regulation, and class condition. In the even semester, the student-teachers in first year teach students from elementary school, in the second years, the student-teachers teach junior high school, and the third year student-teachers teach students from senior high school. For example, the student-teachers teach the student actively in the classroom. Besides, The English Language Education Department of UMY gives accessibility for researcher to get data.

Research Population

According to Creswell (2012) population is the group or some people that have similar characteristic. The population of this study was all of the students of English Language Education Department of Universitas Muhammadiyah Yogyakarta with the total number of 565 students; consisted of four batches included 162 students in batch 2013, 151 students in batch 2014, 120 students for batch 2015, and 132 students in batch 2016. The researcher chose batch 2014 as the target population. Student's batch 2014 consists of four classes from A to D with number of students for each class is 30 to 35. The reasons why the researcher chose batch 2014 was because students of English Language Education Department of Universitas Muhammadiyah Yogyakarta batch 2014 completed six internships and have more experience than the first or the second years students.

In this part of research, researcher took samples from batch 2014. A group of people were chosen from the target population is called sample (Creswell, 2012). The researcher used total sampling in this research. The researcher selected all the students batch 2014 as the sample, and 131 students completed the questionnaire.

Technique of Data Collection

This research used questionnaire as the method. According to Cohen et al. (2011) there are two types of self-administered of using questionnaire. They are self-administered questionnaire in the presence of the researcher and self-administered questionnaires without the presences of the researcher. In this research, the researcher used self-administrated questionnaires in the presence of the researcher. The researcher used paper-based questionnaire. The researcher distributed the questionnaire directly to the student-teachers in classroom.

The statements items number one until eight and number sixteen until twenty answered the intrinsic motivation factors. Meanwhile, the statements items number nine until seventeen and number twenty one until twenty four answered extrinsic motivation factors of student-teachers. In addition, all of the statements of items answered level of student-teachers' motivation. Therefore, the statements of items were translated in Bahasa Indonesia to avoid the misunderstanding of items.

Data Gathering Instrument

Data gathering instrument in this study was questionnaire. Cresswell (2012) defined that "questionnaire is a form used in survey design that the participant in a study complete the question and return to the researchers" (p. 382). Questionnaire contains number of questions that should be answered by the respondent based on their belief. Type of the questionnaire that will be used in this study was "closed" questionnaire. It means the respondents only choose one answer per item by making checklist on the options (Cohen, Manion, & Morrison, 2011).

To know the validity and reliability of the instrument, the researcher was checked the validity uses Statistical Package for the Social Science (SPSS) version 17. According to Cohen et al. (2011) validity is degree of standard acknowledgement of the data. The validity could be improved by the careful sampling, appropriate instruments and appropriate statistical data (Cohen et al., 2011). Moreover, Creswell (2012) said that construct validity can be getting by measuring the literature review. According to Supranto (2008), Aikon's formula can be used to checking validity. These are the following of the Aikon's formula:

> Figure 3.1 Validity $V = \frac{\sum S}{n(c-1)}$

V = Validity index of the instruments	S= The sum of <i>s</i> for the <i>n</i> raters
$s = r - I_0$	r = the rating by an expert or rate
l_0 = The lowest possible rating	n = Number of raters

c = Number of categories that raters choose

According to Supranto (2008) to know the validity of the instruments is around 0-1. There are three categories index of the instruments, which are low, moderate, and high. Supranto said that validity index is low when the score is lower or similar to 0.4. When the score is between 0.4-0.8, it means that the score is moderate. However, when the score is bigger than 0.8, it means that the score is high.

Table 3	Table 3.1					
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The val	idity result o	of rating so	core			
Item	Rater 1	Rater 2	Rater 3	Total	Validity	Category
Q1	4	4	4	12	1	High
Q2	4	4	4	12	1	High
Q3	4	4	4	12	1	High
Q4	4	4	4	12	1	High
Q5	4	4	4	12	1	High
Q6	4	4	1	9	0.6	Moderate
Q7	4	4	4	12	1	High
Q8	4	4	4	12	1	High
Q9	4	4	4	12	1	High
Q10	4	4	4	12	1	High

Item	Rater 1	Rater 2	Rater 3	Total	Validity	Category
Q11	1	4	4	9	0.6	Moderate
Q12	4	4	4	12	1	High
Q13	4	4	4	12	1	High
Q14	1	4	4	9	0.6	Moderate
Q15	1	4	4	9	0,6	Moderate
Q16	4	4	4	12	1	High
Q17	4	4	4	12	1	High
Q18	4	4	4	12	1	High
Q19	1	4	4	9	0.6	Moderate
Q20	1	4	4	9	0.6	Moderate
Q21	4	4	4	12	1	High
Q22	4	4	4	12	1	High
Q23	4	1	4	9	0.6	Moderate
Q24	4	4	4	12	1	High

Table 3.1 showed that all of the questions are in the valid category

Table 3.2

The Validity Result of Student-teachers' Motivation in doing the internship

program

Items	r Table	r Value	Validity
Q1	0,159	0,409	Valid
Q2	0,159	0,542	Valid

Items	r Table	r Value	Validity
Q3	0,159	0,565	Valid
Q4	0,159	0,567	Valid
Q5	0,159	0,524	Valid
Q6	0,159	0,488	Valid
Q7	0,159	0,593	Valid
Q8	0,159	0,676	Valid
Q9	0,159	0,475	Valid
Q10	0,159	0,260	Valid
Q11	0,159	0,459	Valid
Q12	0,159	0,694	Valid
Q13	0,159	0,743	Valid
Q14	0,159	0,637	Valid
Q15	0,159	0,622	Valid
Q16	0,159	0,592	Valid
Q17	0,159	0,689	Valid
Q18	0,159	0,639	Valid
Q19	0,159	0,307	Valid
Q20	0,159	0,264	Valid
Q21	0,159	0,151	Tidak Valid
Q22	0,159	0,255	Valid
Q23	0,159	0,238	Valid

Items	r Table	r Value	Validity
Q24	0,159	0,188	Valid

The total sampling of this research are 131 students. By looking r table (Sugiono, 2008) the validity for 131 students are 0, 151. Then, table 3.2 showed that there are 19 valid item with score more than 0, 151 and there is one item that not valid with score 0,151.

The second steps find the reliability. Cohen et al. (2011) explain that reliability is also called the consistency over time, over instrument, and over groups of respondents. To assess the reliability, the researcher looks at Alpha Coefficient in SPSS. The criteria of reliability of Cronbach's Alpha will show in the table below:

Table 3.3				
Criteria of Reliability of Cronbach's Alpha (Cohen, Manion, & Morrison, 2011,				
p. 640)				
Cronbach's Alpha	Criteria			
>0.90	Very highly reliable			
0.80-0.90	Highly reliable			
0.70-79	Reliable			
0.60-0.69	Low reliable			

When the Cronbach's Alpha is >0.90, it means that the instrument is very highly reliable. On the other hand, when it show 0.80-0.90, it means that the instrument is high reliable. Next, when the Crobach's Alpha showed 0.70-79, it means that the instrument is reliable. The last criteria are low when the Crobach Alpha is 0.60-0.69.

Table 3.4 Reability Statistics of Items

Cronbach's	N of
Alpha	Items
,843	23

Table 3.5 Reliability of Items

			Corrected	
	Scale	Scale	Item-	Cronbach's
	Mean if	Variance if	Total	Alpha if
	Item	Item	Correlati	Item
	Deleted	Deleted	on	Deleted
Q1	68,58	53,107	,352	,838
Q2	68,36	51,863	,488	,834
Q3	67,99	52,438	,502	,834
Q4	68,04	52,314	,520	,834
Q5	68,80	51,191	,474	,834
Q6	69,12	51,662	,422	,836
Q7	68,44	51,249	,531	,832
Q8	68,26	51,086	,642	,829
Q9	68,71	52,284	,439	,835
Q10	68,31	54,352	,173	,845
Q11	68,65	52,676	,375	,838
Q12	68,36	50,478	,652	,828
Q13	68,24	49,678	,716	,825
Q14	68,34	50,886	,583	,830
Q15	68,30	51,365	,569	,831
Q16	68,26	51,517	,543	,832
Q17	68,69	49,952	,644	,827
Q18	68,46	50,358	,602	,829

			Corrected	
	Scale	Scale	Item-	Cronbach's
	Mean if	Variance if	Total	Alpha if
	Item	Item	Correlati	Item
	Deleted	Deleted	on	Deleted
Q19	68,79	53,073	,232	,845
Q 20	69,06	54,073	,177	,846
Q 22	68,70	53,780	,166	,848
Q 23	68,80	54,283	,157	,847
Q24	69,34	55,781	-,023	,864

From 23 questionnaire items that have analyzed, the Cronbach's Alpha was 0,843. It means that the items was highly reliable. Then, table 3.5 shows that there are 17 items that are reliable because the Cronbach's Alpha items are lower than 0,843 to use and there are 6 items that are not reliable because the Cronbach's Alpha items are more than 0,843.

Analysis of Data

After collecting the data by doing questionnaire, the researcher was analyzed the data. The researcher used descriptive analysis. Descriptive analysis used to identify the frequencies to answer the question from the questionnaire. The researcher used descriptive analysis because of the researcher only wants to know the student-teachers' motivation level and the factors that influence studentteachers' motivation in doing internship program. There are two factors that influence student-teachers' motivation. They are extrinsic and intrinsic motivation.

To get the degree of students' motivation level and the students' motivation factors, the researcher used questionnaire to get the answer. The researcher designed the items of questionnaire by her based on the resources and expert judgments. The total of questionnaire items is 24. Those 24 statements answered both of the research questions; because we can know the studentteachers' motivation level by looking the motivation factors. Motivation factor is divided into two, extrinsic and intrinsic motivation. There are thirteen statements of items about intrinsic motivation factors. Moreover, there are eleven statements of items about extrinsic motivation factors. The items of questionnaire were made by researcher by looking the statements from Clement, Dornyei, and Noels (2014), Lucas (2010), Reiss (2012), Makiko (2008), Ryan & Deci (2000), Sebnem (2006), and Oleti (2014). The validity of the statements was gained from three experts' judgments. To answer the questionnaire, the respondent was chosen one optional answer of the item scales provided for two research questions. There are: 1 refers to *Strongly Agree*, 2 refer to *Agree*, 3 refer to *Disagree*, and 4 refer to *Strongly Disagree*. According to Supranto (2006) said that class interval can be seen by looking the class width. The researcher was calculated and classified the class width as the formula below:

$$c = \frac{Maxvalue-Minvalue}{N} \qquad \qquad c = \frac{4-1}{5} = \frac{3}{5} = 0.6$$

c = class width N = Number of classes

Maxvalue = Maximal value Minvalue = Minimal value

The researcher used descriptive analysis to measure the central tendency of data to know the mean, mode and median to determine the motivation level and factors that influence student-teachers' motivation. According Cohen et al. the mode is the most chosen number. Then, the mean is the common number (Cohen et al., 2011). The mean score was used to know the student-teachers' motivation level and factors that influence student-teachers' motivation.

The form reveals that the class width is 0.6. The class width created the interval of score to find the category of variable. The category of the two variables will show interval in the table below:

Table 3.6					
The Categori	The Categories of Student-teachers' Motivation Level in Doing Internship				
Program					
No.	Interval	Categories			
1.	3.8-4	Very High			
2.	3.1 – 3.7	High			
3.	2.4 - 3	Moderate			
4.	1.7 – 2.3	Low			
5.	1 - 1.6	Very Low			

From the table above, when the interval showed 3.8 - 4 it means that student-teachers' motivation in doing internship is very high. Besides, category with interval 3.1 - 3.7 is high. It means that the student-teachers' motivation is high. Moreover, category with interval 2.4 - 3 is moderate; it means that studentteachers' motivation level is moderate. Next, when category interval is 1.7 - 2.3, it means that student-teachers' motivation in doing internship is low. Therefore, when category interval is 1 -1.6 it means that student-teachers' motivation is very low.

In addition, to know the factors that can influence student-teachers' motivation, the researcher will see the class width and the width is 0.6. The class width will create the interval of score to find the category of variable. The category of the two variables will show interval in the table below:

Table 3.7		
The Category	ies of Factors that Influence Student	t-teachers' Motivation
No.	Interval	Categories
1.	3.8-4	Very Strong
2.	3.1 – 3.7	Strong
3.	2.4 - 3	Moderate
4.	1.7 – 2.3	Weak
5.	1 - 1.6	Very Weak

From table above, we can know if the interval is 3.8-4 it means that extrinsic and intrinsic factors are very strong. Second, when the interval showed 3.1-3.7 it means that extrinsic and intrinsic factors are strong. Moreover category 2.4-3 is moderate. It means that extrinsic and intrinsic factors are moderate. Then, when the category is 1.7-2.3, it means that an extrinsic and intrinsic factor is weak. Therefore, when a category interval is 1-1.6, it means that extrinsic and intrinsic motivation is very weak.