

CHAPTER III

RESEARCH DESIGN

This chapter explains the methodology of the study. It covers the research design, respondents, and data collection techniques.

3.1 Research Design

This study was designed to find the sense of self efficacy pre-service teacher in Department of English Language Education Universitas Islam Indonesia. This present study is using quantitative research. This research specifically uses survey research. According to Creswell (2014), a survey design provides a description of the current situation, mental outlook, or opinions of a population by looking at the sample of the population. The variables can be measured by the instrument and the data can be analyzed using statistical procedures. In this study, the researchers aims to describe current situation of pre-service English teachers who have experienced their teaching internship program for one month.

3.2 Population and Sample

The total population of this study is 125 pre-service English teachers Islamic University of Indonesia who have experienced their teaching internship program (or Program Praktek Lapangan/ PPL). The schools they teach include secondary school, senior high schools and vocational high school. In determining

the sample, the researcher used the table from Cohen, Manion and Morrison (2007)

Table 1. Table of Cohen and Morrison

Population	Confidence level 90 per cent			Confidence level 95 per cent			Confidence level 99 per cent		
	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence
30	27	28	29	28	29	29	29	29	30
50	42	45	47	44	46	48	46	48	49
75	59	64	68	63	67	70	67	70	72
100	73	81	88	79	86	91	87	91	95
120	83	94	104	91	100	108	102	108	113
150	97	111	125	108	120	132	122	131	139
200	115	136	158	132	150	168	154	168	180
250	130	157	188	151	176	203	182	201	220
300	143	176	215	168	200	234	207	233	258
350	153	192	239	183	221	264	229	262	294
400	162	206	262	196	240	291	250	289	329
450	170	219	282	207	257	317	268	314	362
500	176	230	301	217	273	340	285	337	393
600	187	249	335	234	300	384	315	380	453
650	192	257	350	241	312	404	328	400	481
700	196	265	364	248	323	423	341	418	507
800	203	278	389	260	343	457	363	452	558
900	209	289	411	269	360	468	382	482	605
1,000	214	298	431	278	375	516	399	509	648
1,100	218	307	448	285	388	542	414	534	689
1,200	222	314	464	291	400	565	427	556	727
1,300	225	321	478	297	411	586	439	577	762
1,400	228	326	491	301	420	606	450	596	796
1,500	230	331	503	306	429	624	460	613	827
2,000	240	351	549	322	462	696	498	683	959
2,500	246	364	581	333	484	749	524	733	1,061
5,000	258	392	657	357	536	879	586	859	1,347
7,500	263	403	687	365	556	934	610	911	1,480
10,000	265	408	703	370	566	964	622	939	1,556
20,000	269	417	729	377	583	1,013	642	986	1,688
30,000	270	419	738	379	588	1,030	649	1,002	1,737
40,000	270	421	742	381	591	1,039	653	1,011	1,762
50,000	271	422	745	381	593	1,045	655	1,016	1,778
100,000	272	424	751	383	597	1,056	659	1,026	1,810
150,000	272	424	752	383	598	1,060	661	1,030	1,821
200,000	272	424	753	383	598	1,061	661	1,031	1,826
250,000	272	425	754	384	599	1,063	662	1,033	1,830
500,000	272	425	755	384	600	1,065	663	1,035	1,837
1,000,000	272	425	756	384	600	1,066	663	1,036	1,840

Based on the table above, the researcher used data from the total population which consisted of 125 students. The researcher used 99% of confidence level and 0,1 margin of error. It showed that 102 students must be involve in this study.

3.3 Data Collecting Technique and Research Instrument

This sub chapter explains data collecting techniques which are instrument, validity and reliability.

3.3.1 Instrument

In this part, the researcher explains about the instrument to collect the data which is used to find the results of the study. In the survey research, the research instrument used was a questionnaire. According to Creswell (2012) questionnaire is a form that contains questions and basic personal information that is designed to be completed by respondents. This research focuses on survey and questionnaire using Google form as online media. The respondents need to filling out the questionnaire in online.

The study used Teachers' Sense of Efficacy Scale (TSES) questionnaire developed by Tschannen Moran & Hoy (2001) adapted by Bakar et al. (2012). The questionnaire was modified in the presentation of the scale, from nine-point likert into five-point Likert scale: 1. Not at all confident (*sama sekali tidak percaya diri*); 2. Slightly Confident (*sedikit percaya diri*); 3. Somewhat Confident (*agak percaya diri*); 4. Confident (*percaya diri*); and 5. very confident (*sangat percaya diri*) that indicate the level of pre-service teacher confidence of their teaching activities. There are 24 items of questions that consisting of three subscales: Student engagement (item 1-8); Instructional strategy (item 9-16); and Classroom management (item 17-24). The researcher adapted the questionnaire into Bahasa Indonesia by the professional translator, after that to make sure there

are no language that difficult to understand, the researcher did peer review from some students and checked to the supervisor for final validation.

Table 2. Questionnaire

Category	Question	Scale				
SE	How confident are you to get through to the most difficult students	1	2	3	4	5
SE	How confident are you to help students think critically	1	2	3	4	5
SE	How confident are you to motivate students who show low interest in school work	1	2	3	4	5
SE	How confident are you to get students to believe they can do well in school work	1	2	3	4	5
SE	How confident are you to help your students value learning	1	2	3	4	5
SE	How confident are you to foster student creativity	1	2	3	4	5
SE	How confident are you to improve the understanding of a student who is failing	1	2	3	4	5
SE	How confident are you to assist families in helping their children do well in school	1	2	3	4	5
IS	How confident are you to respond to difficult questions from your students	1	2	3	4	5
IS	How confident are you to gauge student comprehension of what you have taught	1	2	3	4	5
IS	How confident are you to craft good question for your students	1	2	3	4	5
IS	How confident are you to adjust your lessons to the proper level for individual student	1	2	3	4	5
IS	How confident are you to use a variety of assessment strategies	1	2	3	4	5
IS	How confident are you to provide an alternative explanation or an example	1	2	3	4	5

	when students are confused					
IS	How confident are you to implement alternative strategies in your classroom	1	2	3	4	5
IS	How confident are you to provide appropriate challenges for very capable students	1	2	3	4	5
IS	How confident are you to control disruptive behaviour in the classroom	1	2	3	4	5
CM	How confident are you to make your expectations clear about student behavior	1	2	3	4	5
CM	How confident are you to establish routines to keep activities running smoothly	1	2	3	4	5
CM	How confident are you to get children to follow classroom rules	1	2	3	4	5
CM	How confident are you to establish a classroom management system with each group of student	1	2	3	4	5
CM	How confident are you to calm a student who is disruptive and noisy	1	2	3	4	5
CM	How confident are you to keep few problem students from ruining an entire lesson	1	2	3	4	5
CM	How confident are you to respond to defiant student	1	2	3	4	5

NOTE: SE= Student Engagement

IS= Instructional Strategy

CM= Classroom Management

The survey form were distributed to research respondents through google form. The time to fill out the questionnaire is estimated to be around 10-15 minutes. It is including to fill the respondents' profile. Afterward, the researcher direct the students to read the questions choose a five-point Likert scale which indicates their confidence.

3.3.2 Validity

Validity is defined as the extent to which an instrument measures what it is intended to be measured (Kimberlin & Winterstein, 2008). It means that the validity related to the "accuracy" of measuring instruments, with a valid instrument will will produce valid data as well. Construct validity of this questionnaire gained from the previous study by (Tschannen-Moran & Woolfolk Hoy, 2001) that comparing the two-item Rand measure (Armor *et al.*, 1976) and the Hoy and Woolfolk (1993) 10-item adaptation of the Gibson and Dembo (1984) Teacher Efficacy Scale (TES) to find the correlaltion between the new constructed measures and the other measure of teacher sense of self efficacy. The result found that there was positive correlation and indicated that the questionnaire could be considered reasonably valid and reliable to use.

However, the researcher also calculate the validity each question. To facilitate the calculation of the validity can use SPSS, if the r count is greather than r table, the difference is significant. Thus, the instrument is valid. The validation each statement show in the table below

Table 3.Validation each statement

<u>Question</u>	<u>r count</u>	<u>R table</u>	<u>judgement</u>
Q1	0,741	0,1937	Valid
Q2	0,649	0,1937	Valid
Q3	0,712	0,1937	Valid
Q4	0,654	0,1937	Valid
Q5	0,622	0,1937	Valid
Q6	0,569	0,1937	Valid
Q7	0,650	0,1937	Valid
Q8	0,586	0,1937	Valid
Q9	0,639	0,1937	Valid

Q10	0,549	0,1937	Valid
Q11	0,649	0,1937	Valid
Q12	0,617	0,1937	Valid
Q13	0,630	0,1937	Valid
Q14	0,608	0,1937	Valid
Q15	0,709	0,1937	Valid
Q16	0,630	0,1937	Valid
Q17	0,663	0,1937	Valid
Q18	0,629	0,1937	Valid
Q19	0,706	0,1937	Valid
Q20	0,746	0,1937	Valid
Q21	0,668	0,1937	Valid
Q22	0,718	0,1937	Valid
Q23	0,633	0,1937	Valid
Q24	0,535	0,1937	Valid

3.2.3 Reliability

According to Cohen, Manion, & Morrison (2007) reliability means the consistency of the instrument, the instrument indicated reliable if the instrument carried out the similar group respondents and similar context will produce the same result (constant). It means the questionnaire will produce the same data even used more than once. Based on Bakar et al. (2012), the overall reliability was found 0.94. For each subscale the reliability for efficacy in student engagement was 0.83; efficacy in instructional strategies was 0.87 and efficacy in classroom management was 0.90. However, after translated into Bahasa Indonesia the Cronbach's Alpha was found 0,938. Thus, the score indicate this questionnaire is reliable to use.

Case Processing Summary

		N	%
Cases	Valid	103	100,0
	Excluded ^a	0	,0
	Total	103	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,938	,939	24

3.2.4 Data Indicator

According to Atay (2007) the data of self efficacy measure for instructional strategies, classroom management and student engagement will be categorised into the lowest and the highest score efficacy subscale, the value of as equal to or less than 2.7 was set as a lowest level of efficacy while a high level of efficacy was set as equal to or greater than 3.8.

3.4 Steps of Data Analysis Technique

The researcher took same appropriate steps with this research.

- The first step was review of literature about the questionnaire.
- The Teachers' Sense of Efficacy Scale (TSES) adapted by Bakar et al. (2012) as the instrument and translated into Bahasa Indonesia.

- Checked one by one item in questionnaire to make sure that is was easy to understand the meaning.
- Using the Google form web for the data collection. Afterward, the researcher simply links created from Google form into tinyurl.com.
- Shared the link of 24 items questionnaire to students in English Language Education Department.
- Download the result of the questionnaire from google form and used Microsoft Excel to analyze the data into statistical package.
- Used SPSS to analyze data the researcher determines the Standard Deviation (SD) and Mean