

## **BAB III**

### **RESEARCH DESIGN**

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

#### **3.1. Research Design**

This study was designed to identify the views of students' feelings toward group work at English Language Education Department of Private University in Indonesia. This study was a descriptive study which undertaken completely about the situations as well as possible.

This study was a quantitative research which focus on survey study because this study only limits the identification of attitudes given by students in this research. As well as in (Creswell, 2014) Quantitative research is an approach for testing objective theories by examining the relationship among variables. Malhotra & Grover (1998) stated that Survey research is included of quantitative method that requires standardized information in order to define or describe variables.

#### **3.2. Population and Sample**

##### **3.2.1. Population**

The participant of this study were conducted at English Language Education Department Islamic private university in Indonesia. Population is the overall subject of research (Arikunto, 2006). The population of this research consists of 142 students at students English Language Education Department batches 2016 and 2017. The researcher chose students from batches 2016 and 2017

because this participant had been undertaken the most subjects and have more experiences of learning in using group work (referred to as cooperative, collaborative or peer learning) in the class. Thus it is appropriate with this study.

### 3.2.2. Sampling

According to Arikunto (2006), sample and population related each other which have same characteristics. Another statements from Cohen, Manion, & Marrison (2007) determine the number of samples can be defined by the total population which shows in the table below:

*Table 3.1 Confidence Level And Confidence Intervals*

| 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      |

This research applying Cohen, Manion and Marrison (2007) theory, the level of confidence in this research is 90% and the confidence interval is 5%. The

lower number of confidence interval, the higher number of sample size. Thus, the total population taken as sample will be 105 students.

### **3.3. Data Collection**

This subchapter 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. According to Wilkison & Birmigham (2003) research instrument are device for obtaining information that relevant to the research.

Researcher used questionnaire as the instrument in this research. By using Google form as an online medium that focuses on surveys and questionnaires. After that, the researcher shared the questionnaire on group chat apps of students' batches 2016 and 2017 through Line application. In this study, the data were collected for a month (29 October 2019 – 29 November 2019). While collecting data, the difficulty faced by researcher was that participants did not respond and fill in the questionnaire, therefore the researcher sent the message personally to the participants who did not respond at least five times. Moreover reward was also given to the chosen participants.

#### **3.3.2. Questionnaire**

In this study, the researcher chose Feelings toward Group Work (FTGW) as the main instrument in data collection. This questionnaire was developed by Cantwell and Andrews (2002). The FTGW consists of 30 statements in the questionnaire which was reflecting three scale factors which are preference

for individual learning (PIL), preference for group learning (PGL), and discomfort in group learning (DGL). Respondents answered based on five-point Likert-type scale: If the statement very true of you, circle the “5”. If the statement is not true of you, circle the “1”. If the statement is partly of you, circle “2”, “3”, or “4”. Then, researcher adapted the questionnaire by choosing only some of the original items include in three scales. In the current study there were only 11 items were being tested in this study. Researcher translate into Bahasa Indonesia in order to make it easier and to avoid misunderstanding to fill the questionnaire.

### **3.3.3. Validity and Reliability of the Instrument**

The validity and reliability of the questionnaire were already determined by the aforementioned researcher.

#### **3.3.3.1. Validity**

Validity is defined as measurement of an instrument to be reliable (Kimberlin & Winterstein, 2008). It means the instrument can be reliable if the instrument being valid. Widoyoko (2012) Argues that there are two kinds of validity which are content validity as the development and representative of the content, while construct validity as evidence from numerous studies using a specific measuring instrument. For the validity, researcher rechecks the questionnaire by asked the lecture from English Language Education UII as expert judgment to gain construct validity. It should be noted that the 30 items in FTGW was not all of items is included in the three scale factors, the 12 items were not identified into those scales. Then researcher rechecks the all items which include in the three scale factor and the item was not sufficiently reliable for the present sample. So that, the researcher drop out some items, there were only 11 (which are; 3 items of PIL, 7

items of PGL, and 1 item of DGL) being tested in this study to achieve acceptable levels of reliability for the current study.

### 3.3.3.2. Reliability

Reliability in terms is about the consistence, regularity, accuracy, and also stability on the instrument used in continually (Widoyoko, 2012). Perhaps the most widely used method for estimating internal consistency reliability is Cronbach's alpha (Kimberlin & Winterstein, 2008). In the original instrument of the previous study on Cantwell & Andrews (2002) shows the Cronbach Alpha into three scales, preference for individual learning was 0.78, preference for group learning was 0.71, and discomfort in group learning was 0.60. This is the table of the Cronbach's Alpha coefficient that can be used according to Cohen, Manion, & Marison (2007).

Table 3.2 The Criteria of Cronbach's Alpha

| Cronbach's Alpha | Criteria                     |
|------------------|------------------------------|
| $\leq 0.90$      | Very highly reliable         |
| 0.80 – 0.90      | Highly reliable              |
| 0.70 – 0.79      | Reliable                     |
| 0.60 – 0.69      | Minimally reliable           |
| $\geq 0.60$      | Unacceptably low reliability |

Moreover, researcher retested the adapted questionnaire through SPSS V.22 to gain the reliability of the instrument being tested. The current result shows that it has Cronbachs' Alpha in each scales; (PIL, 0.67), (PGL, 0.72), and (DGL, 0.76). It means, that the PIL was minimally reliable and two others PGL and DGL was reliable. Thus, the questionnaire can be used as an instrument for this research.

### **3.4. Data Analysis Technique**

#### **3.4.1. Data Indicators**

This study shows the specific measurement to answer the research questions. According to Clinton & Kelly (2017) provide levels of feelings toward group work according to mean value, which are: most feelings (mean 3.36 or higher), feeling os neutral (Mean 2.62 to 3.35), and Least feelings (Mean 2.61 or lower).

##### ***3.4.1.1. Respondent Personal Information***

In this section, the respondents were asked to fill in personal data such as name, batch, gender, and students' number.

##### ***3.4.1.2. Feelings toward Group Work Questionnaire***

The researcher using online questionnaire which is Google form to make it more efficient in collecting the data. For starter, the researcher shares the link of the questionnaire in group chat apps of student batches 2016 and 2017. Researcher introducing self and give a brief explanation for the purpose of the questionnaire. After that, the respondent can access and fill in the questionnaire directly.

By using Google form, the score can be summed up automatically. The next step, the researcher processes the data in Microsoft Excel to find out the average of the data.

### *3.4.1.3.Steps of Data Analysis Techniques*

- The FTGW questionnaire is adapted as an instrument by choosing several original items in the questionnaire.
- Translate the items chosen into Bahasa Indonesia.
- Checking the items periodically to make sure that it is easy to understand.
- Transferring the questions into Google form and share the link through group chat apps of students' batches 2016 and 2017
- Analyze and process the data from Google form descriptively by using Microsoft Excel to find out the mean and standard deviation.

