

CHAPTER III

RESEARCH METHOD

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

3.1 Research Design

This study is intended to identify students' level of motivation and attitudes towards learning English at International Program of the Private University in Indonesia.

This present study is using quantitative approach based on the aims and needs of the research. According to Creswell (2009), quantitative design is an approach for testing objective theories by examining the relationship among variables. In turn, these variables can be measured by using instrument, in which the numbered data are analyzed by using statistical procedures. Instruments are used to collect the data and the information. Based on Arikunto (2006), in quantitative research, according to its name many are required to use numbers, ranging from data collection, interpretation of the data, and appearance of the results. Quantitative research is thus very strictly applying the principles of objectivity. The objectivity is obtained, among others, through the use of instruments that are tested for their validity and reliability.

This research is a survey study. In survey research, the researcher needs survey media as a tool to communicate with the object research. The researcher will use questionnaire as an instrument of the study. Survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population (Creswell, 2009). Based on the method of the survey, it usually uses a questionnaire as the instrument. According to Brown (2007) questionnaires have many advantages. It is efficient at giving information from a large number of respondents because it is quick and cheap, also

it is relatively easy to administer and suitable for handling sensitive issues because of their anonymity. And finally, the respondents can fill out the questionnaire in their own time and at their own pace. The respondents of this research are the undergraduate students of International Program Private University in Indonesia.

3.2 Population and Sample

3.2.1 International Program Students in Private University in Indonesia

The survey is administered to the International Program undergraduate students. International Program (IP) is an international class that is consisting several undergraduate study programs at one of the private university in Indonesia which uses foreign languages (English and/or Arabic) as the language of instruction. The entrance selection for IP program is different from the regular class because the students need to submit a TOEFL certificate score. Where the students can not always be supported by their TOEFL score for four years of studying in International Program which it is crucial for their motivation and attitudes in learning class while International Program uses English as a medium instruction for the learning process. IP has a variety of supporting activities designed to help students adapt learning environments in university and improve academic skills through matriculation program (Bridging Program) as well as series of Character Building Programs that aim to strengthen the students' non-technical skills to be able to compete in global world (global leadership). IP students also have the opportunity to access international mobility activities with the Private University in Indonesia partner universities abroad, such as student exchanges, double degree programs, and more.

3.2.2 Population

The population is the overall subject of research (Arikunto, 2006). The population of this research consists of 134 undergraduate students in International Program of the Private University in Indonesia. The researcher chooses International Program students because they

use English as a medium instruction in their class. It is appropriate for this study which is about the motivation and the attitudes of IP students towards their English learning.

3.2.3 Sampling

The sample is a part of the population which has the same characteristics (Arikunto, 2006). If the population is less than 100, all population can be sampled but if the population is over 100, the researcher can take 10% up to 15% or 20% up to 25% or more from all the population as a sample (Arikunto, 2006). The technique for selecting sample in this research was using probability sampling. It is a sampling technique which provides equal opportunity for each element (member) of the population to be selected as a sample member. According to Creswell (2009), in probability sampling, representative sample from a population provides the ability to generalize to a population.

This research used 5% of error rate to set the target sample of the students. Slovins' formula was used to calculate the number of sample from the population. The Slovins' formula shown as followed.

$$n = \frac{N}{1 + Ne^2}$$

Explanation:

n = Number of sample

N = Population

e = Error rate (5% = 0.05)

This research used error rate of 5% to determine the number of sample. It is much of impossibility to achieve 100% perfect result in every study, as the bigger number of the error rate, the less number the sample sizes. The population was 134 students; therefore, the calculation for the sample shown as followed:

$$n = \frac{134}{1 + (134)(0,05^2)}$$

$$n = \frac{134}{1,335}$$

$n = 100,3745$ or 100 students.

Therefore, the sample would be 100,3745, from 100,37 then rounded to 100; the numbers behind the comma was under 500. Finally, the sample in this research was 100 students.

Table 3. 1 Population and Sample

No	Major	Calculation of Proportionate Simple Random Sampling	Result
1	Civil Engineering	$22/134*100$	17
2	Architecture	$74/134*100$	55
3	Industry Engineering	$38/134*100$	28
Total			100%

3.3 Data Collecting Techniques

This subchapter explains data collecting techniques, including instrument, validity and reliability.

3.3.1 Instrument

3.3.1.1 Questionnaire of Attitude/Motivation Test Battery (AMTB)

In this study, the researcher chooses Attitude/Motivation Test Battery (AMTB) as the survey instrument as attached in appendices. AMTB (Attitudes/Motivation Test Battery) is widely used for motivation and attitudes questionnaire. The researcher is using the same questionnaire for the International program students. The questionnaire for international students revised version (Gardner, 2004) contains of 104 items and characterized into 12 scales: (a) Interest in Foreign; (b) Parental Encouragement; (c) Motivational intensity; (d) English class anxiety; (e) English teacher evaluation; (f) Attitudes towards learning English;

(g) Attitudes towards English-speaking people; (h) Integrative orientation; (i) Desire to learn English; (j) English course evaluation; (k) English use anxiety; (l) Instrumental Orientation.

However, as the major focus on this study is on finding out the level of motivation and the attitudes of students toward learning English, which lead to the researcher to adopt from Chalak and Kassaian (2010) as they have modified the domains from Gardner (2004). In this case, the researcher uses 8 domains that: (a) Interest in Foreign languages, (b) Attitudes towards learning English, (c) Desire to learn English, (d) Integrative orientation, (e) Instrumental Orientation, (f) Parental Encouragement, (g) Motivational Intensity and (i) Attitudes toward English-speaking people. As attached in the appendices. The reason for choosing these 8 domains, is to directly focused on the objective of the research. The complete questionnaires (see appendices)

The semantic differential scale is a scaling tool which has been used regularly for measuring social attitudes, mainly in the fields of linguistics and social psychology (Al-Hindawe, 1996). These AMTB 64 items are evaluated on Semantic Differential Scale which adapted from Semantic Differential format Gardner's Attitude/Motivation Test Battery (AMTB), ranging from 1 to 6 (Gardner, 2004). In fact, the six-point scales have been the most popular choices in attitude studies (Al-Hindawe, 1996). In six-point scale, there is no neutral choice which forces the subject to lean towards one evaluation or another. The number indicates how often the learner motivated and their attitude toward learning English. As 1 means 'Strongly Disagree', 2 means 'Disagree', 3 means 'Moderately Disagree', 4 means 'Moderately Agree', 5 means 'Agree' and 6 means 'Strongly Agree'.

3.3.1.2 Validity of Instrument

Instrument can be valid if the instrument can accurately measure what it wants to measure. In other words, validity is related to "accuracy" with the measuring instrument

(Widoyoko, 2012). A scale or measuring instrument can be stated to have a high degree of validity if the instrument performs its measuring function, or provides a measurable result in accordance with the purpose of the measurement. While tests that have low validity will produce data that is not relevant to the purpose of measurement. A valid measuring instrument is not only capable of producing the right data, but also must provide a careful picture of the data. Validation is an important process for researcher to take consideration when the researcher selects instrument.

This part explains about how to ensure that instrument of students' response of their motivation and their attitude is appropriate to serve the purpose of this research. The researcher adopted 64 items from Chalak and Kassaian (2010) that is adapted from Gardner (2004) as the instrument in this research to find out empirical evidence of Private University in Indonesia International Program students' motivation and attitude towards learning English.

The researcher uses content validity for this study. According to Widoyoko (2012) content validity is a measure that indicates to which extent the scores in a test relate to respondents' mastery in the material that tested through the instrument. The researcher tests the validity of content used a formula as figured below:

$$S = r - lo$$

$$V = \Sigma s / [n * (C - 1)]$$

Explanation:

r = Respondents' item score

lo = The lowest score of instrument

n = Total of respondents

C = The highest score of instrument

The validity of the instrument is obtained higher than 0,2461, it shown that it is valid because the r obtained is higher than the r table. (see appendices)

3.3.1.3 Reliability of Instrument

Widoyoko (2012) states that the test is said to be reliable if it gives consistent results when being tested many times. Consistent in the sense that it remains in the position of the respondent among other group members. Compare to the validity, validity is related to the accuracy while reliability is related to consistent.

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	10	100,0
	Excluded ^a	0	,0
	Total	10	100,0

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

Reliability Statistics

Cronbach's Alpha	N of Items
,875	64

Figure 3. 1 Table of Reliability All Variables

The researcher has calculated the reliability of this research by collecting other 10 respondents from IP students exclude from the 100 respondents of this research. The figure 3.1 shows the result of the all variables reliability is reliable with the Cronbach's Alpha is 0,875 (Alpha \geq 0,700, means sufficient reliability). For the items-total statistics (see appendices).

3.4 Data Analysis Techniques

The questionnaire used in this research presents 64 items of AMTB Gardner (2004). The first part is designed to collect respondents' information, such as name, gender and major. Those are the general personal information for respondents to fill in the questionnaire. This

questionnaire is responded by circling the number (1, 2, 3, 4, 5, or 6). The variable will be measured in a Semantic differential scale ranging from 1 (strongly disagree) to 6 (strongly agree).

The questionnaire will be given to International Program students of Private University in Indonesia. The questionnaires are aimed at tracing the level of motivation and the attitudes of International Program students. This motivation and attitude survey, uses the google form which gives advantage for the administrative time to make it practically efficient which is about 5-10 minutes in the completion of the questionnaire.

The steps in analyzing the data in this study are as followed.

- a. The researcher doing the literature review about attitude and motivation.
- b. The Attitude/Motivation Test Battery (AMTB) questionnaire is adopted as an instrument by then translating the English version question of AMTB content into Bahasa Indonesia.
- c. The researcher adopted from Chalak and Kassaian (2010) who adapted some domain of the Attitude/Motivation Test Battery (AMTB) from Gardner's (2004) questionnaire.
- d. The researcher checks the item periodically in the questionnaire to make sure it is easy to understand by consultation with two lecturers.
- e. The researcher uses the Google form web for the data distribution and data collection. Afterward, the researcher simply links created from Google form into <https://tinyurl.com/amtb-instrument>
- f. The researcher shares the link 38 questions of questionnaires to 100 International Program undergraduate students through What's App.
- g. The researcher analyzes the data using Microsoft Excel to measure the level of students' motivation by analyzing SUM formula, MEAN, Median and SD. Also, the researcher used Microsoft Excel to analyze the data based on the domain and make into chart form.
- h. The researcher processes the data into SPSS to know the reliability of the instrument

- i. The researcher categorizes the level of students' motivation and attitude into 5 categories by using charts.
- j. The researcher interprets the level of motivation and attitude based on the scale of interpretation below:

Table 3. 2 The Scale Interpretation of Positive Statements

<u>Interpretation</u>	<u>Scale</u>
Very high	6
high	5
Moderately high	4
Moderately low	3
low	2
Very low	1

Table 3. 3 The Scale Interpretation of Negative Statements (reverse)

<u>Interpretation</u>	<u>Scale</u>
Very high	1
high	2
Moderately high	3
Moderately low	4
Low	5
Very low	6

Note: The scale for negative statements are the opposite of positive statements scale