

## **CHAPTER THREE**

### **METHODOLOGY**

In this chapter, the method used by the researcher in conducting this research will be discussed. The research method which consists of research design, population and sample, data gathering techniques, and data analysis method will be presented.

#### **Research Design**

This research was designed as a descriptive quantitative. A descriptive study, as Jong and Voordt (2002) maintain, is a non-hypothetic research (a research which is not examining hypothesis). Also, a descriptive study attempts to describe a research object (case, data, or event) clearly without any reduction nor addition. In this case, students' critical reading level was examined and described clearly, systematically, and holistically.

#### **Population and Sample**

This research was administered in PBI UMY. The data from the office of PBI UMY shows that the total population of PBI UMY students is 547. By the confidence level of 95%, a total of 264 respondents were taken as the sample in this study. This confidence level was taken from Cohen, Manion, Morrison, Carmel, Gary, Richard, and Martin (2011). By the confidence level of 95%, if there was probably several error margins, this research would still be ensured as 95% high of confidence.

### Data Gathering Techniques

The questionnaire as the instrument to collect the data was used in this research. A total of 264 questionnaires was distributed to students of PBI UMY and were all returned. The questionnaire was adapted from Jennifer Duncan (2014) from The Writing Centre, University of Toronto Scarborough. The questionnaire can be seen on Appendix 1. The questionnaire has been piloted on November 2014 to 30 students of PBI UMY. The piloting was aimed at finding the reliability and validity of the questionnaire items. The critical reading levels discussed in this study are: analyzing, evaluating, and creating. The questionnaire score is shown as follows:

Table 3.1. The distribution of questionnaire items

Levels	Questionnaire items	Total of maximal score
Analyzing	1, 2, 3, 8	16
Evaluating	9, 11, 12, 13	16
Creating	15, 16	8

The reliability and the validity of the questionnaire is shown on Table 3.1 and Table 3.2 below. Table 3.2 shows that the reliability of questionnaire items was 0.646 which indicated that the questionnaire was considered has strong reliability.

Table 3.2. Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.630	.646	10

Table 3.3 indicated the validity of the questionnaire items using KMO test and the value was 0.766. This value indicated that the questionnaire items were valid.

Table 3.3. The validity of the questionnaire using KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.766
Bartlett's Test of Sphericity	Approx. Chi-Square	525.035
	df	45
	Sig.	.000

### Data Analysis Method

The data analysis method is a process to gain specific information with a particular technique. This is to answer the research question. The computation and data analyzing was conducted using electronic software for analysis (SPSS 22 and Microsoft Excel).

To analyze the data, the researcher primarily described the results from each questionnaire items. Then, the critical reading ability in analyzing, evaluating, and creating level was also investigated. This revealed a particular student's ability to read critically. The categorizing was based on the scoring index as Table 3.4 below. After that, the distribution of critical reading levels of PBI UMY students was explored. The result revealed overall PBI UMY students' critical reading levels.

The critical reading levels discussed in this research consisted of analyzing level, which included the students' ability to identify main ideas, structure, type of paragraph, and other several fundamental parts of text; evaluating level, which referred to students' ability to judge, value, criticize, and appreciate reading texts;

and creating level, which referred to students action after evaluating reading texts, that is constructing new ideas or creating students' writing based on their own viewpoint.

Table 3.4. The Interval Scoring Descriptor

Category	Range	Explanation
Very low	0% - 20%	PBI UMY students almost never recognize the fundamental parts of text, evaluate text, and create perspective writing from reading texts.
Low	20.01% - 40%	PBI UMY students rarely recognize the fundamental parts of text, evaluate text, and create perspective writing from reading texts.
Moderate	40.01% - 60%	PBI UMY students sometimes recognize the fundamental parts of text, evaluate text, and create perspective writing from reading texts.
High	60.01% - 80%	PBI UMY students almost often recognize the fundamental parts of text, evaluate text, and create perspective writing from reading texts.
Very high	80.01% - 100%	PBI UMY students almost always recognize the fundamental parts of text, evaluate text, and create perspective writing from reading texts.