

## **Chapter Three**

### **Methodology**

This chapter discusses the method used by researcher in examining the Impact of debate habit toward speaking skill at English Education Department of Universitas Muhammadiyah Yogyakarta. It consists of research design, research setting, population and sample, data collection instrument, data collection procedure and data analysis. In this chapter, some references that support the research methodology are also included.

#### **Research Design**

The purpose of this research was to investigate the impact of debate toward speaking skill at English Education Department of Universitas Muhammadiyah Yogyakarta (EEDUMY). In this research, the researcher had three research questions, the first was “how is debate habit at EED UMY?” and second was “how is speaking skill at EED UMY?” and the last “What are the impact of debate toward speaking skill at EED UMY?”. The researcher used quantitative research to answer those research questions. Quantitative research was a research that could be analyzed in numerical data. Lisa (2008) defined that quantitative research explained phenomena by collecting numerical data that were analyzed using mathematically based methods (in particular statistics). In quantitative research, the researcher collected and analyzed based on statistic method. Therefore, a quantitative research was essentially about collecting numerical data to explain a particular phenomenon, particular questions which could be answered using quantitative method. By using quantitative method, the

researcher was helped to analyze the data by statistic method and also the researcher could find a good answer to answer the research questions.

### **Research Setting**

The researcher conducted this research in English Education Department of Universitas Muhammadiyah Yogyakarta (EED UMY) because EED UMY provided debate activity batches 2011 – 2014. It was appropriate with the respondents of this research. Whereas to measure the speaking skill, the researcher analyzed speaking score especially two kinds of subject courses at EED UMY namely listening and speaking for academic purposes in batches 2012 – 2014 and academic presentation in batch 2011.

Another reason of choosing EED of UMY was because of its accessibility since the researcher studied in that department. This research was started on 5<sup>th</sup> June 2015 and finished on 7<sup>th</sup> August 2015. Therefore the researcher was easier to gather the data. It was done to confirm whether or not there was the impact of debate habit toward speaking skill at EED UMY.

### **Population and Samples**

**Population.** This research was conducted at EED of Universitas Muhammadiyah Yogyakarta. The researcher took students batches 2011 until 2014 as the population of this research. The objective of this research was to investigate the impact of debate toward speaking skill, hence the population and sample was the students who join debate at EED UMY. The reason why the researcher conducted this research at English Education Department of Universitas Muhammadiyah Yogyakarta was because the students who joined

debate at EED UMY provided from batches 2011 until 2014. In this study, population and sample was important. Population is all of the object in the research such as event, phenomenon, human and it can be a sources of data in the research (Nawawi, 2005). The population taken from student's batches 2011 until 2014 at EED UMY was around 31 students who join debate at EED UMY.

**Samples.** The researcher selected the sample from the target population of the research. Sugiyono (2011) claimed that sample was part of the population and can be presented as an object of the research. In this study, the researcher took students of English Education Department batches 2011 until 2014 who joined in debate at EED UMY. The researcher used 31 students as the sample. The technique used to determine the sample was purposive sampling. Cohen, Manion and Morrison (2011) said, "a purposive sample has been chosen for a specific purpose, for example: a group of principals and senior managers of secondary schools is chosen as the research was studying the incidence of stress amongst senior managers" (p.205). Based on those opinion, the researcher used purposive sampling because the researcher only took sample for a particular group, especially the student who joined debate at EED UMY.

### **Data Collection Instruments**

**Questionnaire.** This research was expected to find out the impact of debate toward speaking skill at EED UMY. The researcher used questionnaire as the instrument to gather the data. Noor (2011) stated that questionnaire was a technique to collect data by giving or distributing list of questions to the respondents and the answer of the questionnaire can be question of open minded,

checklist (give a mark in the column of question), and scale (provide some choices based on certain level). The questionnaire consisted of some statements that have been made by the researcher based on the research questions. Then, the statements were supported from the literature review in this research. After the researcher got the statements, the statements was put in the questionnaires. The construct of questionnaire was detailed on the appendix. The questionnaire used Indonesian language, because Indonesian language made respondents understood with the statements clearly. This research used a scale, and the questionnaire consisted of some statement based on the literature review. Sanusi (2011) said, likert Scale was a scale which was based on amount of respondents to respond to the statements relating to the variable that was being measured. The researcher used following scale to give themselves a score from 1 to 4 for each of the questions.

No	Rating Scale	Score
1	Strongly agree	4
2	Agree	3
3	Disagree	2
4	Strongly disagree	1

Those answer helped to find out and to identify of impact debate habit toward speaking skill at UMY.

Before the instrument was distributed to 31 respondents, the researcher conducted the piloting to test validity and reliability level of the instrument. The level of validity and reliability showed the quality of collecting data.

***Validity of the instrument.*** Validity was a measurement of the instrument, whether the instrument valid or not. The instrument could be called valid if the instrument could give the proper data which was appropriate with the objectives of the research. According to Creswell (2012) “validity is the degree to which all of the evidence points to the intended interpretation of test scores for the proposed purpose. Thus, a focus was on the consequences of using the scores from an instrument” (p.156). The testing of validity of this study, the researcher used the correlation ( $r$ ) of Pearson product moment. The finding of the validity for each questionnaire item could be seen in the tables below. Based on piloting result from 15 item statements, the result of validity test of the 15 item statements was presented in this following table.

Question	r coefficient	r table	Category
Q1	0.782	>0.3	Valid
Q2	0.735	>0.3	Valid
Q3	0.643	>0.3	Valid
Q4	0.557	>0.3	Valid
Q5	0.603	>0.3	Valid
Q6	0.653	>0.3	Valid
Q7	0.626	>0.3	Valid
Q8	0.594	>0.3	Valid
Q9	0.678	>0.3	Valid
Q10	0.705	>0.3	Valid
Q11	0.363	>0.3	Valid
Q12	0.718	>0.3	Valid
Q13	0.769	>0.3	Valid
Q14	0.762	>0.3	Valid
Q15	0.619	>0.3	Valid

The result of validity test was compared by the researcher with the r table ( $r = 0.3$ ). The researcher found that all the items were valid. Based on the table above, it could be concluded that all items of the questionnaire were valid since the r value  $>$  r table.

***Reliability of the instrument.*** Reliability was the score which showed the instrument that could be trusted. The result of measurement should be reliable. This means that the data should have a high level of consistency. Creswell (2012) stated that “reliability means that score from instrument were consistent and stable, therefore score should be nearly same when the researcher administers the instruments multiple times at different time” (p. 159).

Meanwhile, Sekaran (2000) decided the three levels of reliability indicator are as follows:

Table 3.3 <i>Criteria of Reliability</i>	
<b>Table of Reliability Criteria</b>	
<b>The Criteria of Reliability (if alpha)</b>	
0,8 – 1,0	Good
0,6 – 0,799	Reliability is received
< 0,6	Not Good

Table 3.4 <i>Reliability</i>	
Cronbach's Alpha	N of Items
0.96	14

The researcher used Cronbach alpha scale to measure the reliability of the instrument. According to Field (2005), instrument was reliable if the value of reliability coefficient alpha is more than 0.7. The instrument of this research was found to be reliable ( $0.906 > 0.7$ ). The reliability of the instrument was good because based on the table 3.3, 0.906 is included in good category. In order to make the item questionnaire more reliable, after the researcher analyzed in items reliable, the researcher just used 14 item questionnaire to analyze the data.

**Documentation.** The second instrument was documentation.

Documentation was the researcher asked to the teacher about the score of

speaking skill in batches 2011 - 2014. Cohen, Manion and Morisson (2011) has found “a document can be defined concisely as a record of an occurrence, an incident or process. Like records might be created by groups or individuals, and affect a lot of forms that different” (p. 249). In this research, the primary document was used by researcher. Cohen *et al* (2011) said, primary document was the documents that were used as the basis for historical, for example they have been examined on his historical educational research. One of the kinds of primary document was personal documents, here the score of speaking in listening and speaking for academic purpose was included in autobiographies in personal documents (Cohen *et al*, 2011). The researcher took students’ speaking score from two subject courses in every batch that related with the speaking score. For batch 2011, the researcher took different subject courses because debate activity at EED UMY began from fourth semester. The first following table explains about the kinds of course subject that related to the speaking skill.

<b>Batch</b>	<b>Kind of Subject Course</b>
2011	Academic presentation
2012	Listening and speaking for academic purposes
2013	Listening and speaking for academic purposes
2014	Listening and speaking for academic purposes

The second table explains about the categories score of students based on the Book of Panduan Akademik UMY (2013/2014).

Score	Category
80 - 100	Excellent
66 - 79	Good
56 - 65	Enough
46 - 55	Fail
0 - 45	Poor

### **Data Collection Procedure**

The researcher distributed the questionnaires to the students-debaters at EED UMY. Noor (2011) stated that there are two kinds of questionnaire, the first was open-ended questions and the second was closed ended questions. In the open-ended question, the respondents were given the occasion to answer the question freely, based on their opinion. Meanwhile, in the closed ended question, the respondents should choose the answer that has been provided by the researcher. In this research, the researcher used closed ended question because the answer of the question have been determined and provided by the researcher, and the respondents only needed to fill the questions.

Since this research was conducted in EED UMY, the questionnaires was distributed by the researcher through spread the questionnaire to the student's batches 2011 – 2014 who join debate. The first stage of the research was conducting the piloting to test the reliability and validity of the questionnaire. Total questionnaires that should be fill the respondents are fifteen. Before the researcher distributed the questionnaires, the researcher explained how to fill the questionnaire and explained the objective of this research. Then, the researcher waited the respondents until they finished filling the questionnaire around 10-15

minutes with the total of questionnaires are 15 (fifteen) questions. The questionnaires for piloting was distributed to 31 students who join debate at EED UMY. Here, the researcher used the total sample that should fill the questionnaire, which were 31 students in batches 2011 – 2014 who join debate at EED UMY.

The second stage was to know the speaking skill the students who join debate at EED UMY. The researcher revealed the students' speaking score in two kinds subject courses, such as: listening and speaking for academic purposes and academic presentation. The researcher asked permission to institution to get the data speaking score. Then, the researcher gathered the all of score to analyze the data in SPSS program.

### **Data Analysis**

The purpose of this research was to find out the impact of debate toward speaking skill at EED UMY, therefore, the researcher analyzed the data using descriptive statistic. The first question was “How's debate habit at EED UMY” second question was “how's speaking skill at EED UMY” and the last question was “what are the impact of debate habit toward speaking skill at EED UMY”. The first and second research question were analyzed using descriptive statistic by SPSS. Creswell (2012) argued that “descriptive statistic indicate general tendencies in the data (mean, mode, median), the spread of scores (variance, standard deviation, and range)” (p.182). The data was directly taken from the data source and the data was analyzed using *SPSS (statistical package for the social science) version 19.0* for windows. Afterward, the researcher did the screening of the data to identify the frequency of statistic and item discrimination by using

descriptive statistic.

To answer the third questions “what are the impact of debate habit toward speaking skill at EED UMY”, the researcher employed inferential statistic. Inferential statistic was used to analyze data in order to know the impact of debate toward speaking skill. Subana (2000) defined, inferential statistic was the statistics which related to the conclusion of a general nature after the data that has been compiled or processed. Inferential statistic was one of the tool to collect data, to process the data, to make conclusions and make decisions based on analysis of collected data through descriptive statistics. Subana (2000) also argued, inferential statistic divided into 2 part, parametric statistic and nonparametric statistic. The researcher used parametric statistic to analyze the data, especially regression. Wesiberg (2005) said, “regression was the study of dependence and it was used to answer questions such as does changing class size affect, as with most statistical analyses, the goal of regression is to summarize observed data as simply, usefully, and elegantly as possible” (p.104). The researcher used simple linier regression model to analyze the data. Wesiberg (2005) also explained that simple linear regression analyzed a relationship between the independent variable (X) and the dependent variable (Y). This analysis was to determine the relationship between the dependent and independent variables whether positive or negative.