Chapter Three

Methodology

In this chapter, the researcher presents the method of this research. The research design of this study is explained in the beginning of this chapter. The researcher then explains the population and sample of this study. Subsequently, the researcher elaborates the data collection method used in the recent study. In the end, this chapter describes how the researcher analyses the data.

Research Design

In this research, the researcher applied quantitative methodology to conduct the study. The purpose of this study is to investigate strategies used by students in learning speaking English. In addition, this research used survey design to gather the data. The researcher chose this design because it is appropriate to answer the research questions. Creswell (2012) argued that survey research designs are used to describe the options of the population and describe trends about the respondents. Based on the earlier statement, this type of research designs is suitable with the purpose of this research which aimed to reveal what strategies of speaking used by students and to know the frequency of strategy used by students.

Research Setting

This research took place at an English department at one of the private universities in Yogyakarta. The reason why the researcher chose this place as the setting of the research was because English department provides listening and

speaking course. There are Speaking and Listening for Daily Conversation, Speaking and Listening for Formal Setting, Speaking and Listening for Academic Purposes, and Speaking and Listening for Career Development. Then, students at this department especially batch 2014 have experienced those four courses. Moreover, the researcher chose this department is because of accessibility and practicality. The researcher took this place because the researcher is also studying at this department. It means that it was easier for researcher to collect the data. For the setting of time, the research conducted the research in August 2017.

Research Population and Sample

Deciding the suitable population of the research is an important stage in doing a research. The researcher believes that the proper population result in better result of the study. In this study, the researcher has decided the research population and sample to be used.

Research population. A population is a group of people who have same characteristic that differentiate them from other groups (Creswell, 2012). The population in this study were students at English department batch 2014 and all of them were 152 students. They were chosen because they have studied English at the department at the longest period and it is believed that they have experienced various strategies dealing with speaking skills.

Research sample. In this research, the researcher used purposive sampling in selecting the respondents**.** Cohen et al (2011) argued that purposive sampling has been chosen for a specific purpose. Additionally, the particular

characteristic sample build up a satisfactory for specific needs. The sample of this research were thirty students of English Department batch 2014. There was one criterion, namely students' GPA (Grade Point Average). The researcher selected the students who have GPA in the range of 3.5 to 4.0. The researcher took samples according to the GPA because the description of GPA 3.5 to 4.0 is outstanding achievement (Volwerk and Tindal, 2012).

Instrument of the Study

In this research, the researcher used a questionnaire as the instrument to gather the data. The questionnaire was adopted from The Strategy Inventory for Language Learning (SILL) version 7.0. It was developed by Oxford (1990). Creswell (2012) suggested that a questionnaire is a form which is used in a survey research design in which participants fill in and return it to the researcher. The reason why the researcher used the questionnaire was because the questionnaire helped the researcher get the survey information and the nature of data is numerical which was easily analysed. Version 7.0 of SILL contains 50 items and divided into six subscales: (a) memory strategies (items 1 to 9), (b) cognitive strategies (items 10 to 23), (c) compensation strategies (items 24 to 29), (d) metacognitive strategies (items 30 to 38), (e) Affective strategies (items 39 to 44), (f) Social strategies (items 45 to 50) and the distribution is explained in table. The researcher designed the questionnaire by five-point scales starting from 1 to 5. Scoring of the questionnaire's response mode was described in table 1:

Table 1
Scale of Questionnaire

Score	Alternative Answer
1	Never
2	Seldom
3	Sometimes
4	Often
5	Always

Furthermore, the researcher translated the questionnaire in Indonesian language in order to ease the respondents in understanding and answering the questionnaire. The items in questionnaire were distributed randomly. To validate the translation, the researcher had consulted the questionnaire to two lectures at one of the English Department at one of the private universities in Yogyakarta as experts. The detail information about the questionnaire was explained in the appendices.

Technique of Data Collection

In this research, the researcher distributed the questionnaire to 30 students at the English department selected at the setting of the research batch 2014. Before the researcher distributed the questionnaire, the researcher obtained the document of students' Grade Point Average score from the office staff at the department. After that, the researcher listed the names of students who have GPA in range of 3.5 to 4.0. From there, the researcher searched for their contact numbers. After that, the researcher made a group using WhatsApp application and

the researcher shared the link to 30 students at English department batch 2014. The questionnaires were distributed using online survey which was created by google form application with link https://goo.gl/forms/7aGqtJfpJQ5m3Agn1. Next, the researcher asked the respondents to fill the questionnaire by opening the link and they filled in the questionnaires until the last question. The reason why the researcher used online questionnaire because it was more economical and practical as well as it required less time and energy to gather the data.

Analysis of Data

After the researcher distributed the questionnaire to the students, the data of the questionnaire was automatically saved to excel format. The further steps after gathering the data, the researcher analysed the data used SPSS application version 15. The first step was checking the validity of each statement in the questionnaire. It was an essential step in analysing the data because the researcher needed to know which questions items were used and which items in the question cannot be used for the next stage. Cohen et al., (2011) stated that analysing the validity of the data is important because in a part of the study. If it is not valid then it is useless.

Validity. Before analysing data, the researcher checked the validity of the questionnaire as instrument testing. Validity is a part of the instrument to assess what is intended to describe it aims to provide the appropriate instrument and data statistical treatments (Cohen et al., 2011). The researcher involved two experts to judge the questionnaire. The experts were the English department lecturers who

have been teaching speaking at English department at one of the private universities in Yogyakarta. Then, the judgment of the questionnaire items was conducted at the end of May 2017.

The first expert suggested to replace several words so the translations were more appropriate with the original statement. The first judgment also argued that the questionnaire items were too many. Thus, she suggested to choose only several items which were related to the topic of the research. Therefore, the researcher did not take all of the items yet, the researcher only selected the questionnaire items which were related to the topic and as suggested by the expert. Then, the researcher eliminated five questions which were not related to the topic namely questions number 16, 38, 39,44, and questions number 46. The reason was because those questions were appropriate strategies to learn reading and writing. The second expert suggested to replace some words, replacement such as in items 2, 9, 11, 16, 19, 21, 24, 26, and 46. The second expert also added relevant information in order to ease respondents' understanding.

Reliability. In this research, the researcher measured the reliability using SPSS application version 15. Reliability concerns the research situation, factor affecting the researcher or participants, and the instrument for the data collection (Cohen et al., 2011). The researcher inputted the data to the SPSS application and the software analysed the reliability of the items in the questionnaire by looking at Cronbach alpha (alpha coefficient). The reliability level was acceptable at 0.8, that it was acceptable if it is 0.67 or above (Cohen et al., 2011). The following

guideline for alpha coefficient can be used and seen in table 3 (Cohen, Minion, & Morrison,2011).

Table 2
Category of Reliability

Cronbach's Alpha	**Categories**
>0.90	Very highly reliable
0.80-0.90	Highly reliable
0.70-0.79	Reliable
0.60-0.69	Marginally/minimally reliable
<0.60	Unacceptably low reliability

The data collected were input into SPSS software, and it analysed the items statistically. The result showed that overall Cronbach alpha (N=45) was 0.938 which was categorised into 'Very highly reliability'. According to Cohen, Manion, and Morrison (2011) remarked that the reliability level is acceptable at 0.8. Therefore, the reliability of the questionnaire in this research was acceptable since the overall alpha in this questionnaire was 0.938, which was higher than 0.8.

Table 3
Result of Reliability Test

Cronbach's Alpha	**N of Items**
.938	45

The researcher did not need to rise the overall reliability by exciding the items which have greater alpha coefficient than overall alpha. Moreover, as seen on the table 5. The Cronbach alpha if item deleted show that all the items in the questionnaire were categorised to 'very high reliability'. The score was ranged

from 0.90 to 0.95 which mean it was very high reliable. Therefore, the questionnaire items were all reliable seen from the overall Cronbach's alpha and each item of Cronbach's alpha.

Table 4

Result of Reliability of each Item

Items	**Cronbach Alpha if item deleted**	**Reliability**
Q1	.939	Very highly reliable
Q2	.936	Very highly reliable
Q3	.935	Very highly reliable
Q4	.939	Very highly reliable
Q5	.941	Very highly reliable
Q6	.937	Very highly reliable
Q7	.935	Very highly reliable
Q8	.937	Very highly reliable
Q9	.937	Very highly reliable
Q10	.937	Very highly reliable
Q11	.938	Very highly reliable
Q12	.937	Very highly reliable
Q13	.936	Very highly reliable
Q14	.935	Very highly reliable
Q15	.937	Very highly reliable
Q17	.935	Very highly reliable
Q18	.936	Very highly reliable
Q19	.937	Very highly reliable
Q20	.936	Very highly reliable
Q21	.933	Very highly reliable
Q22	.937	Very highly reliable

Q23	.937	Very highly reliable
Q24	.934	Very highly reliable
Q25	.936	Very highly reliable
Q26	.938	Very highly reliable
Q27	.936	Very highly reliable
Q28	.937	Very highly reliable
Q29	.938	Very highly reliable
Q30	.937	Very highly reliable
Q31	.937	Very highly reliable
Q32	.937	Very highly reliable
Q33	.935	Very highly reliable
Q34	.938	Very highly reliable
Q35	.934	Very highly reliable
Q36	.935	Very highly reliable
Q37	.936	Very highly reliable
Q40	.936	Very highly reliable
Q41	.937	Very h ighly reliable
Q42	.933	Very highly reliable
Q43	.934	Very highly reliable
Q45	.935	Very highly reliable
Q47	.936	Very highly reliable
Q48	.934	Very highly reliable
Q49	.938	Very highly reliable
Q50	.937	Very highly reliable

Data analysis

The researcher used descriptive statistic to analyse the data. Cohen et.al (2011) described descriptive statistics as a statistic that only described and show the data, and then the researcher evaluated and inferred the meaning of the description. Descriptive statistics included mean, mode, median, max, min, range, variance, and standard deviation. The descriptive statistic could describe students' strategies used by students in learning speaking English because in this study the researcher did not make any hypothesis or prediction then this type of statistic is the best choice to be used.

The researcher made a range prediction to categories the result of mean score of each item to which category the mean score belongs to. The formula to make a range or category was from Supranto (2000) in the following.

$$c = \frac{Xn - X1}{K}$$

c = the range prediction (class width, class size, class length)

K = the number of class

Xn =the maximum score of variable.

X1 =the minimum score of variable

Moreover, the range prediction of students' strategies in learning speaking was divided into four categories. The categories were 'never', 'rarely', 'often, and 'always' which means that the category show the average of students' strategies in learning speaking.

Table 5

Category of Students' Strategies in Learning Speaking English

Description	**Scale**
Always	4.01-5.00
Often	3.01-4.00
Rarely	2.01-3.00
Never	1.00-2.00