

CHAPTER III

METHODOLOGY

In this chapter, the writer will discuss about the method used to conduct the study. It included in research design, subject of the study, data collection and data analysis.

3.1 Research Design

This study may be described as mix method research design. Mix method used to conduct the research question through questionnaire (quantitative) and observation check-list (qualitative). Based on (Ary, Jacobs, Sorensen, & Razavieh, 2010) stated that the goal of mix methods is to combine between two approaches to utilize the strengthen of each approach. To obtain the data, the writer distributes the questionnaire to the respondents. This study needs the mean score toward the students' response from questionnaire. Due to this study tries to identify the perceptual learning style of students, the description after distributing the questionnaire needed. Describing the responses from questionnaire will be helped through observation check-list. Observation check-list conducted to make the data of questionnaire stronger. In addition of it, it may help the writer know the relation toward students' response through observation check-list and the data from questionnaire. Observation check-list conducted with distributing questionnaire in the class in one time. Therefore, this study uses mix method. Observation did by the writer as the observer in every class in management in the first semester.

The questionnaire will distribute to the Management students who took English as Academic Purpose (EAP) in the year 2019/2020. This method is to identify the perceptual or preferences of learning styles in Management students and the differences between male and female students in learning.

3.2 Subject of the Study

The subject of this study is Management students who took English as Academic Purpose in academic year 2019/2020. It is totally 255 students. The writer conducts the subject of this study at Muhammadiyah Gresik University which is located in Gresik, East Java. The number of Management students taken is balanced between the number of female and male students. The subject will be taken purposively in Management students that is the students in the first semester in academic year 2019/2020.

3.3 Research Instruments

In this study, the writer uses questionnaire and observation check-list to measure the learning style of students.

3.3.1 Questionnaire

Questionnaire is one of instrument which easily to collect the data. In this study, the writer uses PLSPQ by Reid (1987). PLSPQ stands with Perceptual Learning Style Preference Questionnaire. It was created by Reid in 1987. (Peacock, 2001) stated that PLSPQ is valid and reliable to be used in research. In addition of this, Brown (1994) as cited in (Cheng, 2017) stated that it is something prominent or salient in a formal classroom setting. It also has been used in some research to identify the learning style preferences such in (Isemonger & Sheppard, 2003), (Naserieh et al., 2013) (Cheng, 2017) and the other. As stated by that this questionnaire is the popular examination EFL/ESL students learning styles.

Reid created 30 items in her PLSPQ which described the six learning styles which are visual, auditory, kinesthetic, tactile, group and individual. The respondents will choose and indicate on how much they prefer or tend in learning styles on a scale from 1 to 5 when they learn

English. Each scale has certain measurement. 5 for Strongly Agree, 4 Agree, 3 Undecided, 2 Disagree, and 1 for Strongly Disagree. After the respondents choose for the preference learning styles in a scale, Reid had a PLSPQ Scoring Sheet. In Scoring Sheet, Reid classified again five questions for each learning category in questionnaire. In every question which the respondents answer has a numerical value.

Due to the purpose of this study, the items of questionnaire will be translated in *Indonesia*. It will be checked by the lecturer as the advisor to ensure their clarity. From 30 items of questionnaire, there are some items which have ambiguity meaning and need some detail to make them clear. In this study, the writer modifies some items and will calculate the reliability and validity after the adaptation questionnaire distributed.

In item 8 “When I make things in class, I learn better” need more detail in the phrase “make things”. So that, it will be modified into “When I practice my writing in class, I learn better”. Item 11 which stated “I learn more when I can make a model of something” have ambiguity meaning in the word “model”. Hence, the writer modified it into “I learn more when I apply my writing in constructing sentences for describing thing”. For the next item that will be modified is item 15, which stated “I enjoy learning in class by doing experiments”. It needs more detail in the word “experiments”. So that, the writer will adjust the word “experiments” that have the same meaning in English learning process for students. It will be “I enjoy learning in class by applying my speaking in role-play”. Due to item 15 included in Kinesthetic question, so the word “experiments” changed into the activity reflects with it and it is going to “role-play”. Item 16 which stated “I learn better when I make drawings as I study” needs to be modified. It needs ambiguity meaning in the word “drawings” in English learning process. Due to item 16 included in Tactile question which Tactile students prefer in hands-on experience, and writing is included in Tactile, so the word “drawings” should be modified into “mind map of the information I got”. And the item 16 will be “I learn better when I make a mind map of the information I got”. The last item

needed to be modified is item 22 which stated “When I build something, I remember what I have learned better”. The phrase “build something” has the ambiguity meaning. Therefore, the ambiguity item was modified into “When I apply the theory practically, I remember what I have learned better”.

The item of questionnaire which modified and translated will be distributed into 168 convenience sample at each of morning and evening management class for academic year 2019/2020 located in Muhammadiyah Gresik University. After the items distributed, the responses will be analyzed to get the reliability and validity using SPSS.

In PLSPQ Scoring Sheet, Visual questions stands on questions number 6, 10, 12, 24 and 29. We found Auditory questions in number 1, 7, 9, 17 and 20. Kinesthetic questions included in questions number 2, 8, 15, 19 and 26. Tactile questions stand on questions number 11, 14, 16, 22 and 25. Group learning style included in questions number 3, 4, 5, 21, and 23. The last that is individual stands on questions number 13, 18, 27, 28 and 30. In PLSPQ Scoring Sheet, respondents should give the numerical value in each question which has been classified in each category. For instance that the respondents try to give the score in Visual questions number 6, then the respondents choose SA in PLSPQ, so they need to write 5 (SA) in PLSPQ Scoring Sheet in question number 6. It continues until the last questions in every categorized question. After they finished giving the numerical value, add the numbers. Multiply the scoring in every category with two and the total in the appropriate blank.

Due to this study, PLSPQ Scoring Sheet had been made to divide the Major learning style preference, Minor and Negligible/Negative of students' preference. So, after the respondents answer the PLSPQ Scoring Sheet, they will know what the major, minor or negligible learning style preference. If the score has a 13.5 and above, so it will be a major of students learning style. Meanwhile, a mean score between 11.5 to 13.46 means that it is a minor students learning style. It was negligible or negative learning students, if the mean score get 11.49 and less.

3.3.2 Observation check list

To obtain the validity of the data, the writer observes the students in a class when they are learning English as Academic Purpose. This will make the data match with the students' answer toward the questionnaire items. In addition of this, observation checklist will make the data in questionnaire be stronger with the real situation in learning process. So that, the writer makes an observation check list which includes some characteristic of students who reflect in learning styles model by Reid in PLSPQ (see Appendices)

Procedures in observation checklist

Due to the writer wants to know that the data from questionnaire match with the learning process situation in a class, the writer needs to observe the students in a class. Therefore, the writer needs to join in English as Academic Purpose (EAP) class. Due to this study will focus on Management students in the first semester who took English as Academic Purpose, so the writer will join in each class of them. In joining the class, the writer will observe and make investigation the attitude of students in learning English with the observation check list. When the writer found activities of students same with the characteristic in observation item, then the writer gave check to the items. Writer gave the check when students mostly do it. And maybe the least students doing also be checked to get the students least preferences.

3.4 Validity

There are 30 items in Perceptual Learning Style Preferences Questionnaire (PLSPQ) by Reid (1987). In addition of this, the writer thought there are some items which have the ambiguity meanings and need more detail explanation to be answered by Management students. Therefore, the writer modified those items. The questionnaire was

distributed to 168 management students to test the validity and the reliability of the modifying questionnaire. Some items can be valid if it could measure what it wanted and could show the data correctly.

The modifying questionnaire was conducted to make sure that the respondents understand and suitable with their major when they answer the questionnaire. To test it, SPSS with validity and reliability formula are used. The validity was calculated by Bivariate in Correlate of SPSS 16. The result showed that the item of questionnaire was valid with the significant tailed <0.05 (Reid, 1987) (see Appendix). Due to the the score in every item was under 0.05 means that the 30 item of questionnaire were valid to test toward in Management students and no need to revise and delete some items.

3.5 Reliability

After the validity of the item questionnaire was calculated and the result was valid, the reliability also need to be calculated by SPSS 16. From 168 students with 30 items questionnaire, the writer calculated with Reliability Analysis. The Cronbach's Alpha showed that was 0.816 which is very strong or reliable (see Table 1). Therefore, the writer used this questionnaire in this study. Based on (Afzal Ahmad, 2011) stated why PLSPQ used is because it was used by many language styles studies. Other than that, the result from PLSPQ data can be generated and make sense of language teachers as they are very practical in nature.

Table 1: Reliability Result

Reliability Statistics

Cronbach's Alpha	N of Items
.816	30

3.6 Data Collection Techniques

The data wants to investigate the perceptual preferences learning styles in Management students in the first semester. In this study, the

writer as observer and need allowance from lecturers to distribute the questionnaire in the end of the class. In order to collect the data, there are some procedures have to be done:

1. Before distributing the questionnaire, the writer finds the information about the number of Management students in the year of 2019/2020 who took English as Academic Purpose. After that, the writer asks the allowance from lecturers to distribute the questionnaire in the end of the class. Due to there are seven classes in the first semester in management major, the writer entered and joined in each class to distribute the questionnaire. After the questionnaire distributed and answered by students, they submit the questionnaire to the writer to calculate and analyze the result using SPSS16.
2. Joining in the class also do by the writer when distributing the questionnaire. It will be done by the writer to check and match the students learning style through observation check-list made by the writer as explained by Reid. The writer enter in each class depends of the each schedule. First meeting is done on Thursday 20th of November 2019 in d Management in morning class. There were 41 questionnaire submitted to the writer. The next day was done on Monday 25th of November 2019 in C Management for evening class. There were 29 questionnaire submitted to the writer. The third meeting was done in B Management and C Management in morning class and followed in B Management for evening class on Tuesday 26th of November 2019. The writer got 37, 35 and 26 responses in every class. The next meeting was done on Friday 29th of November 2019 at A Management for morning class and A Management for evening class. 37 and 25 questionnaires have gotten by the writer in those every class. The observation did in one meeting when the writer felt enough in obtaining the data. In addition of this, observation did together with distributing the questionnaire. After the writer did the observation, the result could match with the data from questionnaire. And it will combine to make the data stronger.

3.7 Data Analysis

After the data collected, analyzing data is needed to obtain the clear discussion related to perceptual preferences of students' learning styles. Based on Ary (2005) there are three activities constructed it. Those are reducing to organizing, searching for significant patterns, and discovering the important data. This study, the three activities made by:

3.7.1 Data Reduction

The data will collect from questionnaire and observation check-list. It may not be denied there was something not necessary and not related activities appeared. Therefore, the writer will discard them. The writer collected the important and appropriate data to analyze the students' preferences in learning styles.

In analyzing the questionnaire, the writer checked the missing or questionnaire with has no answer by students. The writer also checked the number of respondents who submitted the questionnaire.

3.7.2 Data Display

This point explains how to display the data collection. In displaying the result from questionnaire data (quantitative), the writer used SPSS16 with Descriptive Statistic. A repeated Descriptive Statistic used to measure the perceptual preferences of management students, and also to measure the perceptual preferences of management students from different gender group. The writer calculated described the result from the Output of Descriptive Statistic. From Descriptive Statistic, the writer knew the mean score, standard deviation, minimum and maximum score in each category of learning style.

In addition of this, Microsoft Excel 2007 also used by the writer to get the data from questionnaire. Mean and sum function was used to know the score in each item of questionnaire. Even the writer knew the managements students mostly preferred in from the result of Descriptive

Statistic, but this study need to know the score in every item of questionnaire. And Micorsoft Excel 2007 is the media that the writer felt helpful to measure it.

About observation (qualitative), the writer will describe it together with interpreting the data questionnaire. The observation check-list will be displayed in appendices. Observation check-list listed some characteristics in every category of learning style. When the writer found the activities of students which presented the same thing with the characteristics in list, the writer gave the check to those items.

Those two instruments done by the writer in order to explain the research questions about perceptual preferences learning styles of management students and the differences of preferences learning styles between male and female students.

3.7.3 Drawing Conclusion

This point is to provide the clear the explanation about perceptual preferences learning styles in management students and examine it from female and male students. It will be got through the data of questionnaire and observation check-list done by the writer. After interpreting the questionnaire and observation, the conclusion will construct by the writer. Conclusion included the opinion or the sustain of the study.