CHAPTER III

RESEARCH METHODOLOGY

This chapter gives an outline of research methods that were followed in the study. It provides information on the participants, that is, the criteria for inclusion in the study, who the participants were, and also where the research was conducted. The researcher describes the research design that was chosen for the purpose of this study. The instrument that was used for data collection is also described and the procedures that were followed to carry out this study are included. The researcher also discusses the methods used to analyze the data

3.1 Research Design

This study uses a descriptive qualitative research method. Descriptive qualitative research is a method that utilizes qualitative data and is explained descriptively. This study aims to collect data, where the data that has been successfully collected is then presented again accompanied by analysis (Desnaranti.L., Putra., & Utama, 2022). This involves collecting a large amount of information about individuals' experiences, beliefs, and attitudes through surveys, interviews, or observation methods in the form of words and language, rather than using numbers. Based on this, the researcher believes that the descriptive qualitative method is considered the most suitable for this study because it aims to explore the preferences and the needs of Indonesian EFL learners in utilizing or using digital dictionaries in English courses as a tool in their vocabulary learning.

This study explores the experiences and beliefs of Indonesian EFL learners towards the use of digital dictionaries. In relation to the research objectives, this study is a survey research which is defined as the collection of information from a sample of individuals through their responses to questions (Check & Schutt, 2012, p. 160). Furthermore, Jain (2021) stated that surveys are used in descriptive, explanatory, and exploratory research. Based on this, the researcher believes that the research design as previously explained is an appropriate research design to achieve the research objectives.

3.2 Research Site and Participants

The location and participants of this study were selected purposively based on the researcher's consideration of samples that were considered appropriate and representative. Purposive sampling refers to a group of non-probability sampling techniques in which units are selected because they possess the desired characteristics. In other words, units are selected "on purpose" in purposive sampling. Also called judgmental sampling, this sampling method relies on the researcher's judgment when identifying and selecting the individuals, cases, or events that can provide the best information to achieve the research's objectives (Nikolopoulou, 2022)

3.2.1 Site

This research is located in one of the universities in Bandung, West Java. This location was chosen because of considering the time and budget in the research. In addition, the researcher believes that this location supports learning English as a foreign language so it is relevant to the research questions and objectives regarding the use of digital dictionaries in English courses.

3.2.2 Participants

The research participants were domestic students at one of the universities in Bandung, West Java. As the sample data previously mentioned was taken purposively, so that not all participants had the opportunity to participate in the research, the researcher assigned domestic students in the English department which includes English Education and/or English and Literature study program as research participants totaling approximately 100 people to fill out the questionnaire. Then, the selected research participants were deemed suitable to answer the research objectives, considering the research participants' perspective in using digital dictionaries.

3.3 Data Collection

Data collection methods in qualitative descriptive research are diverse and aim to discover the who, what and where of phenomena (Sandelowski, 2000). According to Dasim (in Apriyanti, et.al, 2022), the use of this descriptive

research method is to collect a reality that exists or is happening in the field so that it can be understood in depth, so that in the end the necessary data findings are obtained according to the research objectives. In conducting the study, the researcher used two instruments as data collection techniques, namely using questionnaires and interviews.

3.3.1 Questionnaires

Cohen, et.al. (2017) explained that questionnaire is a widely used and useful instrument for collecting survey information, providing structured, often numerical data, being able to be administered without the presence of the researcher, and often being comparatively straightforward to analyze. It was administered to a selected sample from a specific population.

The data collection instrument was through an online questionnaire (Google Form) which contained 26 close-ended questions. In this research, a close-ended questionnaire in the form of Likert Scale was used for gathering the information. The questionnaire was in Bahasa Indonesia in order to ease the students to express their opinions certainly and to avoid misunderstanding regarding the questionnaire. The participants in the study will fill the questionnaire that figured out students' preferences and needs in the use of digital dictionaries by students in the English department for their vocabulary learning. More specifically, 14 question items confirmed students' preferences in the use of digital dictionaries. Then, 12 question items determine students' needs of using digital dictionaries. The questionnaire was filled out by domestic students from one of universities in Bandung majoring in English Education and English and Literature.

3.3.2 Interviews

According to Adler and Clark (in Jain, 2021), an interview is an interactive form of data collection as compared to a survey. An interview, often referred to as an interview or oral questionnaire, is a dialogue conducted by the interviewer to obtain information from the

Informant. Interviews are a good tool for researching someone's opinions, beliefs, motivations, feelings, and projections for the future.

In this study, researchers used semi-structured interviews as the next instrument after the questionnaire. Semi-structured, in-depth interviews are utilized extensively as interviewing formats, possibly with an individual or sometimes even with a group (Jamshed, 2014). Selected students will be interviewed once for a duration of approximately 30 minutes which gives the interviewer the opportunity to investigate, expand and explore information from the respondent more systematically and comprehensively and keep the interview focused on the desired actions and goals. Therefore, the questions created in the basic checklist consist of core questions and derivative questions from the questionnaire. Furthermore, so that interview data can be captured more effectively, researchers use interview recordings which are used as transcripts for clearer and more detailed data.

3.4 Data Analysis

In analyzing qualitative data, researchers describe more with meaning than with numbers. Qualitative data analysis is a process of the description, classification and interconnection of phenomena with the researcher's concepts (Graue, 2015). In this study, researchers used descriptive analysis as an analysis of data obtained from questionnaires or survey data. Descriptive analysis is an essential first step in survey data analysis. It involves summarizing and describing the main characteristics of the collected data. By calculating frequencies, percentages, averages, and other measures, researchers can gain a better understanding of the data's basic features.

According to Creswell (2012), descriptive analysis is used to analyze data by describing or depicting the data that has been collected as it is without the intention of drawing conclusions that apply to the public or generalizations. In this case, descriptive statistical analysis is used to provide an overview of the data. According to Moore & McCabe (2006), descriptive statistics is "the process of using numbers and graphs to present data concisely and provide insight into patterns or trends in the data." They

emphasize the importance of data visualization through graphs (such as histograms or bar charts) and tables that help to better understand trends or patterns in the data. Meanwhile, Marshall & Jonker (2010) stated that descriptive statistics are the easiest to undertake and interpret and they are a useful way to summarise data and provide a description of the sample.

In addition, researchers also used thematic analysis as an analysis of data obtained through semi-structured interviews. According to Braun and Clarke (2006), thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data. The process of analyzing data using thematic analysis follows some steps, including familiarizing the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. Furthermore, thematic analysis also involves (usually inductive) coding of qualitative data into clusters of similar entities, or conceptual categories and the identification of consistent patterns and relationships between themes, so as to come up with a theoretical explanation of the phenomenon under study. Hecker and Kalpokas (2023) stated that the inductive approach to thematic analysis is grounded in the qualitative data itself, enabling researchers to identify patterns and derive key themes and interesting insights without the constraints of preconceived categories or constructs.

Because qualitative research utilizes an inductive approach, which briefly gives meaning to the data obtained, researchers do not need to work with hypotheses. Therefore, research is adjusted to categories and open questions which then go through a process of contextualization, interpretation, and defining research.

3.4.1 Data Analysis from Questionnaires

To analyze questionnaire data, each question in the questionnaire will be described in descriptive statistics including frequency tables and percentages which are then calculated and analyzed using the Likert scale. The original Likert scale is a set of statements (items) offered for a real or hypothetical situation under study. Participants are asked to show their level of agreement (from strongly disagree to strongly agree)

with the given statement (items) on a metric scale. After being calculated, the data is then described and evaluated by connecting it using literature. Next, conclusions are drawn from the questionnaire analysis to obtain a final statement. In this research, questionnaires will be distributed to 100 students majoring in English Education and/or English and Literature. Throughout data collection, data will be compared and interpretation of the data results will be seen from the assessment categories in the list of questions.

Table 3.1

Categories of The Responses

Categories	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Scores	1	2	3	4	5

Likert scale data, on the other hand, are analyzed at the interval measurement scale. Likert scale items are created by calculating a composite score (sum or mean) from four or more type Likert-type items; therefore, the composite score for Likert scales should be analyzed at the interval measurement scale (Boone Jr & Boone, 2012). In this study, to determine the interval measurement scale, the researcher used the Likert scale calculation formula. The formula is as follows:

Total Score = T x Pn

T = Number of respondents who chose

Pn = Likert score number selection

Next, to interpret the calculation scores, researchers need to know the highest score (Y) and the lowest score (X) for the assessment.

Y = Highest Likert Score x Number of respondents

= 5 x 100

= 500

X = Lowest Likert score x Number of respondents

= 1 x 100

= 100

Pre-Completion

This is used to find out the interval (range of distance) and percentage interpretation in order to find out the assessment using the method of finding the percentage score interval (I).

Formula Index % = Total score/ Y x 100

Formula Interval

I = 100 / Total Likert score

= 100 / 5

= 20 (the interval is the distance from the lowest 0% to the highest 100%)

Thus, the score interpretation criteria are obtained based on the interval:

Tabel 3.2

Score Interpretation Criteria

Index Range (%)	Level
Number 0% –19,99%	Strongly Disagree
Number 20% – 39,99%	Disagree
Number 40% – 59,99%	Neutral
Number 60% – 79,99%	Agree
Number 80% – 100%	Strongly Agree

3.4.2 Data Analysis from Interviews

In this study, there are three steps included in analyzing interview data, those are data reduction, data display, and conclude the research conclusion. Data reduction is used to verify the important and the less important data. It is the important component of analyzing the data because the less important data will reduce the validity of the findings (Nugraha, et.al., 2019). By using data reduction, researchers can handle large amounts of data information so that it is more systematic. Furthermore, data through interviews were analyzed by finding out the transcription. It involves data displays that are used to interpret the collected data. Data transcripts were obtained from interview results using interview recordings, then the results of the interview data were displayed using words. After obtaining the results of the interview data displayed, the researcher describes and transmits the data by connecting it with the literature. Next, conclusions are drawn from the results of the interview analysis.