CHAPTER III
RESEARCH METHODOLOGY

This chapter consists of the research methodology of the study, which is presented in detail. Also, it covers the research design, participants, data collection, data analysis, and the closing remarks of this chapter.

3.1 Research Design

In order to gain rich and in-depth insight (Dornyei, 2007), this research adopted a qualitative research approach and case study design in investigating the role of Zoom Meeting in reducing EFL students' speaking anxiety. This is in line with Mansing (2022) who stated that case study research of the role of technology in language learning is one of the areas that currently much in need. Thus, this current study makes a contribution in associating EFL students' speaking anxiety and the existence of technology, to see whether the particular technology would be beneficial to mitigating speaking anxiety in EFL students or not.

In case study, the researcher seeks to provide a rich portrayal of what happened within the boundaries of the case by carefully choosing and presenting descriptions and analyses of discourse, scenes and other information derived from the entire data set (Hornberger & Corson, 1997). In this method, an intervention—such as the implementation of technology via Zoom Meeting—was introduced, and the effect of this intervention on EFL students' speaking anxiety was examined.

Hancock, Okleford, and Windiridge (2007) pointed out that qualitative research is related with explaining opinions, experiences, and feelings of individuals producing subjective data. In this research, the researcher will conduct the study to find out students' anxiety differences in speaking the language in the real classroom and using technology as the media. This research was conducted to

get a real picture of the level of EFL students' anxiety and seek the role of Zoom Meeting in reducing the students' speaking anxiety.

3.2 Participants

This research is a case study dealing with second year EFL students at one of Islamic universities in Bandung, specifically joining the English program in their campus language center. The English program itself is specifically learned about public speaking. There are 20 students in this class from different majors; however, only 5 of them were interviewed. The participants pursued their bachelor degree on the campus, and they need to take the required course for the English program this semester. Moreover, the participants came from different English proficiency levels such as high, middle and low proficiency levels of English. However, the majority of them have learnt English since the first year in middle school, which makes a sum of seven years before entering the university. Every student was asked in person, in order to gather the detailed information for the study.

3.3 Research Procedure

The research for this study was conducted at an Islamic university in Bandung, specifically within its Language Center building. Access was granted based on information received regarding the program, which was well-known in the surrounding area. Upon identifying its relevance to the research, the site was promptly visited, and permission was obtained. The setting provided an ideal environment for observing and analyzing the impact of technology (Ahmadi, 2018), particularly the use of Zoom Meeting, on EFL students' speaking anxiety. The following procedures outline the steps taken to gather and analyze data, ensuring a comprehensive understanding of how this online platform can be utilized in language learning to reduce speaking anxiety among students.

Table 3.1 *Overview and timeline of the study*

Activity	Timeline

Receiving ethics approval to conduct research.	April 16, 2024
Preparing research instruments and selected participants	April 18, 2024
Meeting with the participants and piloted the instruments	April 23, 2024
Collecting the data	April 25, 2024

The research procedures began with a visit to the Language Center, where permission was requested to conduct the study (through consent form—see Appendix 1), and information regarding class conditions, student numbers, and the program was gathered. This English class program is intended for students from all majors as one of the graduation requirements. It is considered a course, although it focuses more on speaking activities to equip students with communication skills. There are only two sessions available each week, and students can choose the schedule that best fits their availability without conflicting with other commitments. During the study, the research was initiated following a brief self-introduction to gain the participants' consent. There was no prior interaction with the students. Students were informed about the presentation procedures and provided with a presentation structure by their instructor. The students' familiarity and experience with giving presentations were then observed.

The first data collection involved students delivering their first English presentation in an offline classroom setting, with the researcher collecting data through observations of student behavior and anxiety symptoms, as well as field notes. The second English presentation was performed in a virtual environment using Zoom Meeting as the platform. During this phase, further observations, document analysis, and field notes were conducted, focusing on the differences between student behaviors in online versus offline settings.

Finally, students were interviewed via the Zoom video conferencing platform to gather their perceptions and experiences directly, providing additional insights into their reactions and adjustments to the different presentation

environments. The procedures for data collection are outlined in detail in Appendix 2 about the audit data trail.

3.4 Data Collection

Data from various sources like class observation, document analysis, and also the students' interview were collected in order to collect the required data. The use of three methods mentioned before is aimed to triangulate the data and collect the information provided using a variety of methods. As Maxwell (1996) pointed out, triangulation reduces the risk and to argue for a combination of methodologies in the study of the same phenomenon. The use of different methods, techniques, or tools strengthens the validity and reliability of the data collected. The details and further explanation of each data collection will be discussed below.

3.4.1 Classroom Observation

The purpose in conducting the observation is to capture and witness a clear picture on the reality of students' activities, especially in the classroom. As Hyland (2009, as cited in Ramadhani, 2014) pointed out that "observation methods propose actual evidence by a systematic documentation of participants in the process of teaching cycle."

During the observation, notes are taken, the observation sheet (see Appendix 10) filled in, and the class situation is recorded, whether the session is conducted in an offline classroom or during a Zoom Meeting. The reason for recording the classroom activities is to provide evidence. The whole activities and the students' presentation were screen-captured and downloaded because video data offer "completeness of analysis and comprehensiveness of material" (Cohen et al., 2017). Besides, if any important details are missed by the observer, they can be reviewed in the recorded video. Furthermore, during the observations, a complete observer role was adopted, meaning that the researcher only observed and was not part of the group being

observed (neither the teacher nor the instructor of the class program). Observation, recording, and note-taking were conducted.

Observations were conducted three times, as they covered three essential activities: the instructor's material presentation (see Appendix 3), offline presentation practice, and online presentation practice. According to Dornyei (2007), when observations are considered to have sufficiently captured the necessary data, further observations may be deemed unnecessary, indicating that the data collection process is complete.

3.4.2 Documents: Students' Performance Evaluation Form

According to Creswell (2014), in research that adapts a qualitative approach, documents are one of the valuable sources of information. In the present study, the researcher of the study could gain a lot of data from the available documents, which in this case are students' speaking performance evaluation form from the first and second assignment that is given by the instructor.

In the first assignment, the students were given a task by the instructor that required them to present a certain topic in English without using any technology and in a different setting (face to face; offline class). In other words, students were presenting it in front of the class. Then, for the second assignment, the instruction is still the same. However, they did not present their speaking performance in front of the class but in front of their own camera in Zoom Meeting (online setting).

After students present their own speaking performance through Zoom Meeting, the instructor assesses their performance. A comparison between an evaluation form of students' speaking performance (see Appendix 4) when using and when not using the particular technology, Zoom Meeting, was conducted to enrich the data. The instructor assigned a score ranging from 1 to 100 for

student assessments, and these results were analyzed to observe and compare the outcomes.

3.4.3 Students' Interview

The last instrument is an interview. According to Nazir (1999, as cited in Moulida, 2019) emphasized that "interview is the process to get explanation by asking questions face to face between researcher and respondent using interview guide." Therefore, five volunteers among the members of the class were invited to do the interview session. In this case, they were asked and discussed their feelings and opinion after experiencing the activities through face-to-face interview. This aimed to check whether Zoom Meeting is able to reduce the anxiety they always feel when speaking English so far or not.

The interview process began by requesting student volunteers to participate in the research. Afterward, the Students' Interview Guide (see Appendix 5) and the interview protocol (see Appendix 6) were explained to them, outlining how the interview would be conducted. Finally, the participants filled out the consent form as a confirmation of their willingness to participate (see Appendix 7). The interview was conducted one time on April 27, 2024. The decision to conduct the interview only once is based on the principle of data saturation in qualitative research. According to Guest, Bunce, and Johnson (2006), data saturation occurs when no new information or themes emerge from the data, indicating that additional interviews would not contribute significantly to the findings. Therefore, one well-structured and focused interview can be sufficient if it captures all the relevant information needed for the research objectives.

The semi-structured interview questions were adapted and utilized, in order to examine the students' general impressions and summative comments toward the technology used, Zoom Meeting,

in speaking class to reduce their anxiety (Tarighat and Khodabakhsh, 2016). The interviewees were doing the interview in their native language, Bahasa Indonesia, around 10 minutes. This approach was chosen to obtain more in-depth and comprehensive results, thereby ensuring greater accuracy in their responses. However, it was transcribed and subsequently translated into English. At the initial meeting, participants received a consent form, as the interviews will be recorded.

The data collection methods are summarized in Table 3.2 below.

Table 3.2 *Summary of data collection.*

	Methods	Participants	Time	Number of sessions
P h a s e	Classroom observation	20 students	40 minutes/ session	3 sessions
	Documents	5 students	20 minutes/ performance	5 performances
	Students' interview	5 students	10 minutes/ student	1 session

3.5 Data Analysis

Table 3.3 *Data analysis procedure*

Data Analysis Procedure	
1	Transcribing raw data
2	The text was translated into English
3	Key segments were highlighted to identify relevant information pertinent to the research questions
4	The highlighted data was organized into themes and sub-themes

The study used semi-structured interview, document analysis, and classroom observations. The research uses thematic analysis to process the data, following Creswell's (2014) guidelines:

1. Organizing and transcribing the raw data for analysis

The first step in thematic analysis involves gathering all the data from the observation, evaluation forms, and interview results and preparing them for analysis. Observation notes were arranged chronologically, capturing key events, including offline and online presentation practices. The evaluation forms were compiled into a single file, allowing for ease of comparison, and the interviews were transcribed verbatim from the audio recordings. Interviews must be transcribed verbatim from audio recordings to written text to capture the participants' exact words (Creswell, 2013).

2. Reading through data

Once the data were organized, a thorough reading of the transcribed interviews, observation notes, and evaluation forms was undertaken. This step aimed to familiarize the researcher with the data and allowed for initial reflections on potential patterns or themes. Reading through the data multiple times helped identify recurring concepts related to student anxiety, English presentation, and performance in both online (Zoom Meeting) and offline settings.

3. Coding the data

After familiarizing with the data, the process of coding was carried out. Coding involved systematically labeling relevant segments of data across the three sources (observations, evaluation forms, and interviews) that aligned with the research questions. During the coding process, key segments from the observations, evaluation forms, and interview transcripts were highlighted based on their relevance to the research questions.

4. Looking for patterns or themes to be interpreted.

Once the coding was completed, patterns or themes across the different data sources were examined. Themes that emerged included

improving English performance, ability to control settings, and practicality. These themes were identified through the consistent appearance of similar ideas across interviews, observations, and evaluation forms.

Finally, the findings are interpreted to draw conclusions in the context of qualitative research. This analysis focuses on the way technology, the Zoom Meeting, supported EFL students' speaking and reduced their speaking anxiety.

3.6 Concluding Remarks

This chapter has discussed the research methodology of the study that has been conducted. It covers introduction, research design, participants, data collection, and data analysis. The research employs a qualitative approach and case study design. In order to collect the data, observation, document analysis, and the students' interview results were collected.