

CHAPTER 3

RESEARCH METHODOLOGY

A. Research Design

To enable a more in-depth exploration of the specific challenges faced by Sundanese EFL learners, this research used a descriptive case study approach with qualitative methods as it was appropriate to investigate the pronunciation difficulties experienced by Sundanese speakers who are learning English as a foreign language (EFL). This method is also in accordance with the purpose of the study, which is to identify and describe the pronunciation difficulties experienced, without the need to examine cause-and-effect relationships. As stated by Nassaji (2015), descriptive research focuses on describing a phenomenon by emphasizing on “what” happens, not on “how” or “why”. This research design is appropriate for gaining a deeper understanding of three Sundanese language learners' experiences and difficulties, as well as analyzing how the Sundanese language affects their English pronunciation.

B. Research Setting and Participants

This research was conducted at one of the universities in Tasikmalaya, West Java, Indonesia. This location was chosen as it provided access to Sundanese students from non-English majors, allowing for a focused exploration of the pronunciation difficulties experienced by this particular group.

The participants of this study were three Sundanese students from non-English majors who were native speakers of Sundanese, with an age range of 20–22 years old. They were selected based on an initial survey distributed via Google Forms to identify students who had difficulty pronouncing English. The three participants were considered sufficiently representative because they had backgrounds that matched the focus of the study, namely non-English major students who were still required to take English as a compulsory subject. There was one student from the Physics Education Department, one from the Math Education Department, and one from the Shariah Economics

Department. Although the number of participants was limited, each participant came from a different academic background but had similar language experience. This assisted the study in obtaining a detailed and informative overview of the English pronunciation challenges faced by this group of learners.

Prior to participating in this study, the participants received detailed information about the purpose, methodology, and ethical considerations. They were asked to review and sign a consent form to formally indicate their agreement to participate in the data collection. They were also guaranteed their safety, privacy, and the right to withdraw from the study at any time. Furthermore, the interview schedule was arranged in advance by the participants and the researcher.

C. Data Collection

1. Pronunciation Assessments

This was the initial step that involved a pronunciation assessment to identify the research participants. This assessment consisted of a read-aloud task, during which the participants were recorded. The assessment focused on evaluating the accuracy of the participants' pronunciation in terms of sound production in English. In this test, the three participants were asked to pronounce vocabulary and short sentences based on the sounds of English according to Ambalegin and Arianto (2019). The list of sentences that the participants had to pronounce was enclosed. The participants' voice recordings in this pronunciation test were transcribed using a table of mispronounced words adapted from Listyani et al. (2024). The analyzed pronunciations were adjusted to the IPA (International Phonetic Alphabet) with the help of the website tophone.com, and the accuracy was supported by the Oxford Learner's Pocket Dictionary 4th edition. This procedure ensured that the selected participants exhibited different pronunciation challenges, so that the results could serve as additional data supporting the primary data in the interviews.

2. Semi-Structured Interviews

After the pronunciation assessments, semi-structured interviews were conducted with each participant. This interview served as the primary data collection method. The interviews were guided by a series of open-ended questions designed to explore the participants' experiences with their pronunciation challenges. The questions for the interview were adopted from Whitman's (1970) theory, with a process of comparing two languages to predict the difficulties that second language learners may experience, which involves four main steps: description, selection, contrast, and prediction. In this study, the four steps were applied as follows:

- a. Description: This stage described the students' understanding of the sound systems of Sundanese (as a first language) and English (as a learned language), which revealed their perception and awareness of the differences in pronunciation between the two languages.
- b. Selection: This stage identified sounds or words that EFL learners perceived to be similar between Sundanese and English, although these perceptions were not always accurate.
- c. Contrast: This stage analyzed how EFL learners explained the differences and similarities between the sounds of the two languages based on their learning experiences, allowing them to compare familiar sounds in Sundanese with new sounds in English.
- d. Prediction: This stage identified the aspects of English pronunciation that were most difficult for the students and why. It aimed to explore the causes of their difficulties and their efforts to overcome them.

In this study, the interviews were audio-recorded with the consent of the participants. Afterwards, the recordings were transcribed verbatim to ensure an accurate interpretation of the participants' perspectives.

D. Data Analysis

After the interview data were collected, all of the data were analyzed using thematic analysis techniques. This qualitative technique was used to

help organize, interpret, and investigate the data in greater depth (Thompson, 2022). Guided by the steps outlined by Braun and Clarke (2006), this process included familiarizing oneself with the data, generating initial codes, searching for themes, reviewing potential themes, defining and naming themes, and producing the report.

1. Familiarizing with the Data

The first step is to gain a deep understanding of the data by reading it repeatedly. At this stage, researcher read the interview transcripts repeatedly and noted important points related to the participants' experiences in dealing with pronunciation difficulties. The researcher also listened to the recordings again to ensure that no insights or messages were missed.

2. Generating Initial Codes

This stage involved systematic and meaningful data analysis. This step was carried out by identifying parts of the data that contained relevant information, then coding those parts. Each code represented a type of difficulty or experience related to English pronunciation. Codes were assigned to capture both the obvious (semantic) and more hidden (latent) meanings of the participants' statements.

Table 5. Sample of Generating Initial Codes

Extracts	Initial codes
In Sundanese, “F” and “V” are similar in pronunciation, or even change to “P”, so I really didn’t notice it (making mistakes during the pronunciation test)	Sound shifting
In Sundanese, the letter “R” is pronounced clearly, unlike in English, where the “R” sound is less clear and can even be omitted.	“R” pronunciation
The –ed ending is quite easy when it’s fully	“–ed” endings

pronounced, like in “detected”, but it’s harder when it isn’t pronounced clearly, like in the test word “slipped”.

But if I had to say the most difficult one, it would be the “th” sound.

Consonant clusters

There are also confusing words like “sea” and “see”, and “night” and “knight”. They are pronounced in the same way, right? That’s why I sometimes get confused when pronouncing them.

Inconsistent spelling

My difficulty in pronouncing words in English is due to my Sundanese language habits.

Habitual errors

But for the words I find difficult, it’s usually because I rarely hear them, so I don’t really know how they are pronounced.

Unfamiliar vocabulary

In the test, there was the word “whole”, which I couldn’t pronounce because I remembered that “who” is pronounced “hu”, but there’s also “what”, which is pronounced “wat”. I was confused about whether the “w” or “h” in (the word whole) was pronounced.

Silent letters

English words are often written differently from how they are pronounced, so it can be confusing.

Unpredictable sounds

In the word “scream”, the combination of the letters “e” and “a” is confusing. I’m not sure whether to pronounce it with an “e” or an “i” sound.

Vowel combinations

Since I was little, I was taught at elementary school that sometimes the English teachers or instructors were not perfect in their

Early misinformation

pronunciation, which could cause me to make mistakes.

Researcher identified 11 initial codes that describe various important points that emerged in the participants' interview transcripts. These codes reflect the diverse themes and patterns that emerged in the data, providing a basis for further analysis and a deeper understanding of the participants' experiences and perspectives. The following is the frequency of codes that appeared in the participants' interview transcripts.

Table 6. Calculating initial codes

No.	Initial Codes	Frequency
1.	Sound shifting	2
2.	“R” pronunciation	3
3.	“-ed” endings	3
4.	Consonant clusters	10
5.	Inconsistent spelling	3
6.	Habitual errors	2
7.	Unfamiliar vocabulary	3
8.	Silent letters	3
9.	Unpredictable sounds	6
10.	Vowel combinations	2
11.	Early misinformation	3

3. Searching for themes

Once all the initial codes had been collected, the researcher began to group them into themes based on similarities in meaning or main ideas. The purpose of this process was to find common patterns that could answer the research questions. In this context, the resulting themes

describe experiences of pronunciation difficulties arising from various factors that influence these difficulties.

Table 7. *Searching for themes*

Initial Codes	Potential Themes
Sound shifting	Challenges Arising from Phonological Difference
“R” pronunciation	
“-ed” endings	
Unpredictable sounds	
Vowel combinations	Simplification of Consonant Clusters
Consonant clusters	
Habitual errors	Fossilized Pronunciation Errors
Early misinformation	
Unfamiliar vocabulary	Spelling Influence on Pronunciation
Inconsistent spelling	
Silent letters	

4. Reviewing themes

The researcher ensured that each theme had a strong connection with the previously coded quotes and was relevant to the focus of the research. If a theme was too broad or inconsistent, adjustments were made. The adjustments were made by the researcher, resulting in more focused themes to answer the research questions, which are as follows.

Table 8. *Reviewing themes*

Potential Themes	Themes
Challenges Arising from Phonological Difference	Differences between Sundanese and English Sound Systems on English Pronunciation

Simplification of Consonant Clusters	The Influence of Native Language on the Simplification of Consonant Clusters in English
Fossilized Pronunciation Errors	Persistent Pronunciation Difficulties Rooted in Habitual Pattern and Early Learning Errors
Spelling Influence on Pronunciation	Interference of the Sundanese Spelling System on English Pronunciation

5. Defining and Naming Themes

At this stage, the researcher refined the analysis so that each theme was clear and had a strong core concept. Each theme was clearly formulated to reflect its main content. The naming was based on the research context so that the themes formed could directly describe the challenges faced by students in pronouncing English. The themes produced in this study can be seen in the table below.

Table 9. *Defining and Naming Themes*

No.	Themes
1	Differences between Sundanese and English Sound Systems on English Pronunciation
2	The Influence of Native Language on the Simplification of Consonant Clusters in English
3	Persistent Pronunciation Difficulties Rooted in Habitual Pattern and Early Learning Errors
4	Interference of the Sundanese Spelling System on English Pronunciation

From September to November 2024, the researcher focused on writing and designing research proposal. The research proposal examination process was conducted in December 2024. Data collection took place in January 2025, followed by data analysis from February to April 2025. Meanwhile, the writing of the report took place from May to June 2025. Finally, the thesis results seminar and thesis examination were conducted in July 2025. The schedule was designed to be flexible so that it could be adjusted based on the progress of the research.