

CHAPTER III

RESEARCH METHOD

This chapter explains the research design, research subject, research method and research procedure, and research analysis. Each subchapter is explained to provide a clear and comprehensive explanation of the direction and context of the research conducted.

3.1 Research Design

This study was conducted to discuss the Language Learning Strategies used by English Education Program Students of Universitas Pendidikan Ganesha in the academic year 2021-2023. Therefore, this study uses mixed methods the mixed method is a research approach that combines qualitative research with quantitative research (Creswell J. W., 2010). The design of the mixed method using an explanatory sequential strategy consists of two primary stages. The first stage involves collecting and analyzing quantitative data, followed by the second stage, which entails collecting and analyzing qualitative data. The qualitative data is developed based on the initial results from the quantitative data analysis. This strategy places more emphasis on the quantitative data. Quantitative data is gathered through numbers and scales from questionnaires, while qualitative data is collected through interviews conducted after the questionnaire data collection is complete.

3.2 Research Subjects

The participants in this research were students from the English Education Program at Universitas Pendidikan Ganesha. According to academic records from the Faculty of Language and Arts, there were 932 students enrolled in the English education program for the odd semester of the 2023-2024 academic year. The research sample was determined using the Slovin technique, which allows for a sample size of 10-20% of the total population. For this study, a sample of 10% was chosen, totaling approximately 93 students. The

questionnaire was distributed to around 150 students across several classes, with 95 students returning the completed questionnaires. Since this number exceeded the target, data analysis was carried out accordingly.

3.3 Methods and Instruments of Data Collection

In this research, there is a data collection section that needs to be passed. During the process of collecting data in this study, researchers used questionnaire and interview.

3.3.1 Questionnaire

The questionnaire used in this research was based on the Strategy Inventory for Language Learning (SILL). The SILL comes in two versions: one for foreign language learners whose native language is English (version 5.0, 80 items) and another for those who speak English as a second language (version 7.0, 50 items). This study utilized SILL version 7.0, as it is a widely used instrument and appropriate for the EFL (English as a Foreign Language) students in this research. The questionnaire comprised 50 items divided into six subcategories: cognitive, memory, metacognitive, compensation, affective, and social strategies, and used a five-point Likert scale. The questionnaire was distributed via an online platform (Google Forms), and before distribution, it was reviewed by experts to ensure the validity and appropriateness of the instrument.

Table 3.1 Instruments Rubric

Strategy	Number of Questions
Memory	1.1 – 1.8
Cognitive	2.1 – 2.14
Compensation	3.1 – 3.6
Metacognitif	4.1 – 4.9
Affective	5.1 – 5.6
Social	6.1 – 6.6
Total number of questions: 49	

This questionnaire uses a five-point Likert scale with the following description (1: I have never done/experienced, 2: I rarely do/experienced, 3: I have done/experienced, 4: I often do/experienced, 5: I always do/experienced). Furthermore, before being submitted to students who participate in the study, the questionnaire is submitted to expert judgment to check the validity of the instrument to be distributed.

The SILL questionnaire was updated with 13 items to reflect advancements in technology and 21st-century developments. This update was based on the theory that SILL requires modernization, including adaptation or integration with other research methods and incorporating strategies for technology-enhanced language learning (20). The items that were modified include:

Table 3.2 SILL Questionnaires that have changes

Strategy	Statement Number
Memory	1.6, 1.8
Cognitive	2.2, 2.6, 2.7, 2.8, 2.10, 2.14
Compensation	3.5
Metacognitive	4.3, 4.6
Affective	5.5
Social	6.4

Content validity relates to both the content and structure of the instrument. Key questions regarding content validity include: 1) the precision of the instrument's content, 2) whether it effectively measures the intended variables, 3) how well the test items represent the sample material, and 4) the appropriateness of the instrument's format. The following are the results of the content validity assessment for the questionnaire, which included 49 items, evaluated by expert judgment using the Gregory formula (2000).

Table 3.3 Gregory Formula

		Expert 1	
		Not relevant	Relevant
Expert 2	Not relevant	A (0)	B (49)
	Relevant	C (0)	D (49)

$$\text{Content Validity} = \frac{49}{0 + 49 + 0 + 49} = 0.5$$

So the content validity coefficient of the tested instrument is 0.5. The validity coefficient ≥ 0.30 means that the item can be said to be valid (Azwar, 2014 p. 143). After obtaining instrument validation, the next questionnaire instrument was distributed to students online as a Google form. A total of 95 students have filled out the questionnaire. Based on the results of the check carried out by expert judgment, the results of the questionnaire are declared valid and relevant and are to be distributed to respondents to obtain accurate data.

3.3.2 Interview

In addition to giving questionnaires, the researcher gives semi-structured interviews to students from the English language education study program at Universitas Pendidikan Ganesha. They were selected based on the strategy that they used the most. Due to the limited number of students willing to be interviewed, there were only 2 students from each strategy, so a total of 12 students were selected to be interviewed.

Based on the expert judgment evaluation, the questionnaire results have been deemed valid and relevant for distribution to respondents to gather accurate data. The author followed several procedures to collect the data. These procedures are as follows:

1. Requested permission from the study program coordinator of the English Language Education study program at Universitas Pendidikan Ganesha to conduct the research.

2. Questionnaires were distributed to several classes containing a total of around 150 students and 95 students returned because they had met the target.
3. Provide a brief and clear description of the procedures for filling out the google form that has been distributed
4. Collect questionnaires filled in by respondents to get the necessary data; generate Microsoft Excel from Google form.
5. Validate and check the information obtained through the google form platform previously.

To support the questionnaire data, a structured interview was conducted to identify the problems and factors affecting the students' English learning process. The students were selected based on the strategy that they used the most. Two students from each strategy were selected to be interviewed, for a total of 12 students.

3.4 Data Analysis

After all the required data has been obtained, the responses to the questionnaire and interview were analyzed to answer the first and second research question. The data from the questionnaire were analyzed quantitatively, and data from the interview were analyzed qualitatively.

The data were analysed through several processes as follows.

A. Quantitative data in the form of a questionnaire analyzed by:

1. Mean values analysis

After all the data were obtained, the researcher analysed them by finding the mean values. Each mean was shown using tabulations.

2. Frequency Analysis

After data tabulation, the researcher analyzed the data by frequency to identify how often certain variable values may occur. After the data analysis process was completed, the interpretation was put into writing so that readers would find it easier to understand the content. Based on

Oxford's classification of frequency use, the analysis of the average SILL instrument is as shown in table 3.4:

Tabel 3.4 SILL's Classification of Frequency Use

Classification	Frequency of Use	Average Score
Low	Never or almost never used	1.0 to 1.4
	Generally Not Used	1.5 to 2.4
Medium	Sometimes used	2.5 to 3.4
High	Usually Used	3.5 to 4.4
	Always or almost always true of me	4.5 to 5.0

Adapted from Oxford 1990

3. Interpretation of Questionnaire

The data collected from the questionnaires was interpreted to determine the respondents' responses regarding language learning strategies and the factors that affect them. The data were displayed in a table and interpreted by analyzing the mean and also the frequency.

B. Qualitative data in the form of interview results analyzed by:

The interview data was initially transcribed. Students were asked three questions during the interviews, and their responses were first recorded in a notebook. Conclusions were then drawn from the descriptions, indicating that each interview supported their reasoning and offered a deeper insight.