

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

To study the correlation between teachers' strategies in using audio-visual media for developing second and fourth semester TEFL (Teaching English as a Foreign Language) students' interest in listening comprehension topics, a quantitative research method was considered more suitable. This approach enabled the collection of numerical data, which was statistically analyzed to determine the relationship between teaching strategies and students' engagement with the material. By using quantitative measures, researchers were able to evaluate how different teaching methods involving audio-visual media influenced students' interest in listening comprehension across different levels of study (second and fourth semesters).

In this research, variables such as the type and frequency of audio-visual media used, the degree of students' interest, and their performance in listening comprehension tasks were measured using instruments like surveys, questionnaires, or standardized tests. The collected data were then subjected to statistical analysis to assess any significant correlations between the teachers' strategies and the students' responses. This data-driven approach provided a clear, objective understanding of how teaching strategies impacted student interest and comprehension in listening activities.

3.2 Population and Sample

The population for this study consisted of all second-semester and fourth-semester students enrolled in TEFL programs, with a specific focus on a sample of 209 students. To ensure that this sample accurately represented the larger population, the researcher implemented specific criteria: only those students who had been taught using audio-visual media in their listening comprehension classes were included. The researcher employed total sampling to achieve diversity in terms of gender, age, and academic performance among the participants.

Previous research focusing on educational settings indicated that purposive sampling could effectively capture the dynamics of gender and age differences in academic performance (Bisht, R., 2024). By intentionally selecting participants based on these characteristics, the researcher was able to gather richer data that reflected the complexities of educational outcomes.

This carefully selected sample facilitated an analysis of the correlation between teachers' strategies, student interest, and listening comprehension subjects through the use of audio-visual media. The data were gathered from a population that met these specific criteria, including students who had studied or were currently studying English, particularly those in their second or fourth semester of TEFL studies.

Table 3.1 The Population and Sample of The Research

No	Class	Number of student
1	R1 2023	25
2	R2 2023	24
3	R3 2023	25
4	R4 2023	26
5	R1 2024	28
6	R2 2024	25
7	R3 2024	28
8	R4 2024	28
Total		209

3.2.1. Respondent Demographic

Demographics of respondents include frequency and percentage distribution. Respondents' demographics can be classed by class and gender. The demographics of responders are presented in the table below.

Table 3.2 Age classification of the respondents

Age category	Frequency (n)	Percent (%)
17-19	122	58.4
20-23	87	41.6
Total	209	100.0

Table 3.2 categorizes the respondents by their age. It shows that the bulk of responders (122 persons or 58.4%) are between the ages of 17 and 19. Meanwhile, 87 respondents aged 20 to 23 total to 41.6% of the sample.

Table 3.3 Gender classification of the respondents

Gender	Frequency (n)	Percent (%)
Male	49	23.4
Female	120	76.6
Total	209	100.0

Table 3.3 classifies the respondents based on their gender. It indicates that 49 respondents (23.4%) are male, while 120 respondents (76.6%) are female. This shows that the majority of respondents are female.

Table 3.4 Semester Classification of the respondents

Semester	Frequency (n)	Percent (%)
Second	100	48.3
Fourth	109	51.7
Total	209	100.0

Table 3.4 shows the distribution of responders according to their semester. It shows that 109 respondents (51.7%) are in the fourth semester and 100 respondents (48.3%) are in the second semester. This shows that the majority of respondents are in their fourth semester.

3.3 Data Source

The data were taken into consideration during the design and collection phases of the study. Data were obtained from a questionnaire consisting of 44 checklist items formatted using a Likert scale. In other words, the data took the form of numerical values, which were subsequently processed using SPSS for statistical analysis.

3.4 Instrument of Data Collection

The instrument used in this study was a questionnaire developed using Google Forms. Google Forms was selected due to its ease of creation, online distribution, and efficient data collection capabilities. The questionnaire was divided into several sections, each designed to gather data relevant to the research objectives.

The questionnaire consisted of three sections. The first section included questions about respondents' demographic information, such as age, gender, educational background, and CPA listening score. This section aimed to provide a basic understanding of the research population's characteristics.

The second and main section contained questions directly related to the research variables. It employed a combination of multiple-choice items, Likert scale statements, and short answer questions to collect comprehensive and in-depth data. This section was further divided into three parts, focusing on students' perceptions of teachers' strategies, their level of interest, and their listening comprehension abilities.

In designing the survey, the researcher used a 4-point Likert scale to gauge participants' views and feelings.

The scale was as follows:

1 = Strongly Disagree,

2 = Disagree,

3 = Agree,

4 = Strongly Agree.

This type of scale allowed for a clearer interpretation of the intensity of respondents’ opinions and ensured the avoidance of a neutral option, thereby encouraging more decisive responses.

Table 3.5 The Blueprint of instrument data collection

Category	Total items	Details	In
Demographic section	6 items	Name, age, gender, semester of study, grade of listening and speaking for general purposes, grade of listening and speaking for academic purposes,	conclus
Benefit	6 items	Q1 - Q6	ion, the
Teacher strategies in using audio-visual	10 items	Q7 - Q16	table
Student interest	20 items	Q17 – Q36	outlined
Listening comprehension difficulty	8 items	Q37 – Q44	a
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			various
			factors
			influen
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learning, with a focus on demographic information, teacher strategies, student interest, and listening comprehension achievement. The demographic section (6 items) collected basic student

data, including age, gender, and grades in listening and speaking. The benefit section consisted of 6 items, the teacher strategies section included 10 items, and the student interest section comprised 20 items. Finally, the listening comprehension difficulty section contained 8 items that directly measured students' listening comprehension abilities, thereby linking earlier assessments of teaching strategies and student interest to actual learning outcomes. Together, these sections provided a comprehensive overview of how teaching methods and student engagement impacted listening comprehension in the context of language learning.

Additionally, the use of a four-point Likert scale offered more precise insights into respondents' views by encouraging specific responses, reducing central tendency bias, and simplifying data analysis. These advantages contributed to the improved validity and reliability of the study's findings, which are essential in research settings that seek to capture a broad range of perspectives. By yielding clear and measurable data, the scale supported the production of accurate and dependable results.

3.5 Data Collection Technique

The questionnaire was distributed to respondents via a link shared through WhatsApp, and the researcher, along with several colleagues, personally approached students after class to request their participation in completing the questionnaire. Participation was entirely voluntary, and respondents were asked to complete the questionnaire at their own discretion. The data collected were automatically stored in Google Sheets and later analyzed using appropriate statistical techniques. This approach aligned with best practices for survey distribution, which emphasize accessibility and ease of participation (Johnson & Christensen, 2020). For the distribution process, the researcher initially contacted a colleague who had connections

with students in the second and fourth semesters of the English department. Once the connection was established, the researcher explained that the study was being conducted as part of a thesis titled *"The Correlation Between Teachers' Strategies in Using Audio-Visual Media and Student Interest Toward Listening Comprehension Achievement."* This explanation was intended to engage the target participants, who were fellow students. In addition to digital distribution, the researcher also met with students in person after class to encourage them to complete the questionnaire.

To further motivate participation, the researcher shared the Google Form link and offered small tokens of appreciation to respondents who completed the survey. Data collection was scheduled to take place over a period of two weeks, followed by an additional two weeks dedicated to data processing and analysis.

3.6 Data Analysis

The data collected through the Google Forms questionnaire were analyzed using both descriptive and inferential statistical methods. The analysis was conducted in several stages to ensure a comprehensive understanding of the research findings. Initially, the data were processed and cleaned to remove any incomplete or inconsistent responses, which ensured the accuracy and reliability of the analysis. The cleaned data were then imported into statistical software (SPSS) for further analysis.

Given that connections between variables depend not only on data but also on theoretical knowledge, hypothesis formulation, and logical analysis, the study employed correlation analysis to examine the relationships among variables. Specifically, Spearman's correlation coefficient was used to analyze the relationship between teachers' strategies and students' interest in

listening

comprehension.

According to Alkharusi (2022), when analyzing and interpreting data from Likert scales, which in this study ranged from 1 to 4, the resulting mean scores also fall within that range. This allowed for meaningful interpretation of central tendencies in participants' responses.

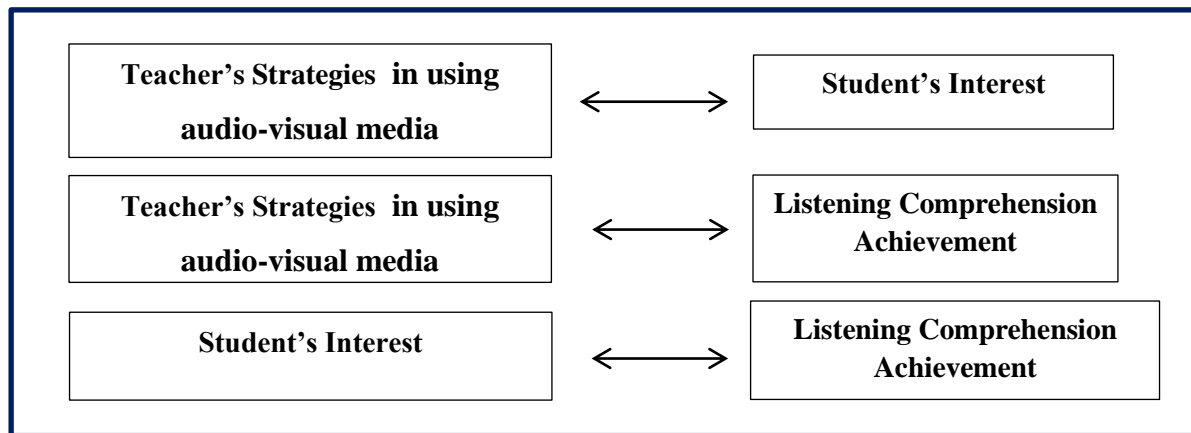
Table 3.6 Classification student perception of benefit, teachers strategies, student interest, listening difficulty score

Mean Score Range	Interpretation
3.26 – 4.00	Very high/ strongly agree
2.51 – 3.26	High/ agree
1.76 – 2.51	Low/ disagree
1.00 – 1.75	Very low/ strongly disagree

Figure 1 explains *Teacher Strategies in Using Audio-Visual Media and Student Interest*: Teachers who employ interactive conversations, real-life examples, and multimedia tools can boost student interest. When education are relevant and engaging, students are more likely to participate and invest in the learning process. *Teacher strategies in Using Audio-Visual Media and Learning Comprehension Achievement* : Effective teacher methods have a direct impact on students' comprehension of information. For example, employing visual aids, summarizing key points, and assessing for comprehension can assist reinforce new concepts and ensure students understand the subject more effectively. *Student Interest and Listening Comprehension Achievement* : Students who truly have an interest in a topic are more engaged and motivated to actively listen. This extra attention enhances their listening comprehension, allowing students to

recap more information and link concepts.

Figure 3.1 Relationship between Teachers' Strategies in using Audio-Visual Media and Student Interest toward Listening Comprehension Achievement



3.7 Reliability

The instrument used in this study was adopted from a previous study that had undergone validation and reliability testing. Therefore, the researcher used the reliability coefficient reported in the original study as a reference. Although the sample in this study differed from that of the previous study, the researcher did not re-test the reliability and validity of the instrument. This decision was based on the consideration that an instrument proven to be reliable and valid in prior research can be used directly, especially if the context and characteristics of the samples are similar. However, the researcher acknowledges that not conducting re-testing is a limitation of this study, so the interpretation of the measurement results should be approached with caution.

Figure 2. reliability from prior research

Case Processing Summary			
		N	%
Cases	Valid	45	100.0
	Excluded ^a	0	.0
	Total	20	100.0

Reliability Statistics	
Cronbach's Alpha	N of Items
.745	45

This approach is consistent with Creswell (2014), who states that it is acceptable to use instruments with established validity from previous research, as long as the researcher provides a clear explanation and considers the differences in context and sample. A Cronbach's Alpha score above 0.7 is generally considered acceptable for establishing reliability. This analysis helps ensure that the items included in the questionnaire work together effectively to assess the intended variables. These steps are essential for enhancing the overall quality of research findings and ensuring that conclusions drawn from the data are trustworthy.

3.8 Content Validity

In conducting a study, trustworthiness was important. Thus, some steps were taken to check the trustworthiness, such as:

1. Expert judgment

The instrument of this study was asked and consulted with an expert judgment to avoid unnecessary data. In this case, the expert judges were the researcher's lecturers who understood and were experts in this field of study.

2. Calculating Regression

The researcher used SPSS version 30 to calculate regression analysis for examining the relationship between teachers' strategies in using audio-visual media and students' interest toward listening comprehension achievement. SPSS was a widely used statistical software for data analysis, particularly for regression analysis, as it offered a user-friendly

interface and robust capabilities for handling complex datasets. By applying regression techniques, the researcher aimed to determine the strength and direction of the correlation between the variables under study. This method was effective in understanding how teacher strategies and student engagement contributed to listening comprehension outcomes. The use of regression analysis in this context aligned with recent studies that emphasized the importance of statistical tools like SPSS for examining educational data and drawing meaningful conclusions (Singh & Kaur, 2022).