

## CHAPTER III

### METHODOLOGY

In this study, the researcher addresses study design, demographic and sample, the research instrument, the research data collection as well as the research data analysis.

#### 3.1 Research Design

This study employs descriptive quantitative methodology. Additionally, descriptive research is known as survey research, which involves the collection of numbers to address inquiries regarding the subject's actual situation. Survey research is a quantitative research method that involves the collection of data from a large number of the people with the goal to describe their attitudes, perceptions, behaviour, or characteristics of the group (Sugiyono, 2012). Hence, the utilization of the survey design facilitates researcher in achieving the research goals, specifically to discover how the views of students in the use of English podcasts to enhance listening ability also to determine what kinds of English podcasts are efficient in enhancing listening abilities.

#### 3.2 The Population and Sample

In this part, the researcher outlines the population and sample used in this study. The researcher also detailed the sampling procedure used in this study.

##### 1. The Population

According to Sugiyono (2012:80), a population is a target or the subject of a study that has specific characteristics or features chosen by the researcher to be investigated in this research. Participants of this study consisted of students enrolled in the English Education Study Programme at Universitas Muhammadiyah Gresik for the academic years 2021, 2022, and 2023. Characteristics of participants in this study: Active students in English Education, students who having previous experience with English podcasts, and employ English podcasts to enhance their listening abilities.

Table 3.1 Population

<b>Academic Year</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
2021	5	21	26
2022	3	20	23
2023	6	16	22
			71

## 2. The Sample

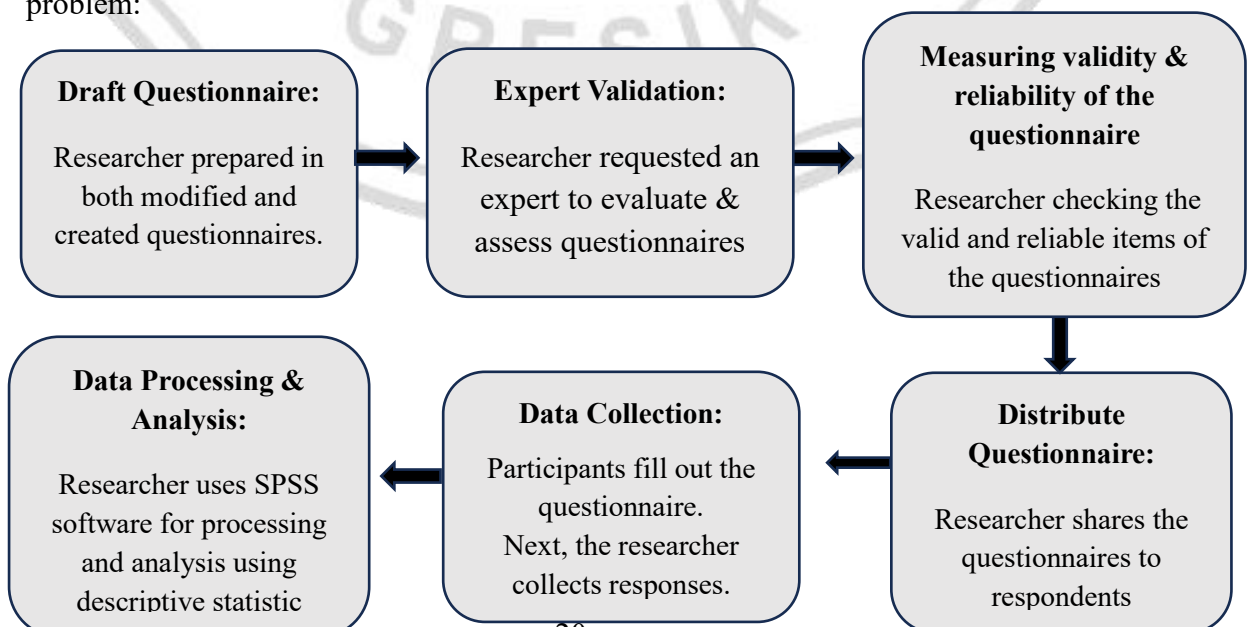
The sample selection is based on Arikunto (2013) that all participants have a chance to contribute to sampling in the study if the number of participants is under 100 people. Nevertheless, if the number of participants above 100, the researcher should select a sample that represents 10-15%, 20-25%, or a larger proportion of the total population. In order to conduct the study, researcher must include the whole population for study. The total number of populations for this study consisted of 71 students. Since not all populations have the chance to participate in the collection of data, the researcher used purposive sampling. In final form, only 54 respondents who will fill out the questionnaire. The sample selected based on criteria determined by the researcher, include: Active students in English Education, having previous experience with English podcasts, and employ English podcasts to enhance their listening abilities. The researcher selected 54 individuals to participate from the population based on the preliminary study findings, through those mentioned sampling approaches as well as specifications. The sample classification like description below:

Table 3.2 The Sample Classification

Academic Year	Male	Female	Total
2021	2	18	20
2022	3	18	21
2023	3	10	15
			54

### 3.3 The Research Data Collection

The researcher was following stages during gathering data procedure to address the study problem:



### 3.3.1 The Research Instrument.

This study was employed the closed questionnaires as instruments for study, which was formulated by a Likert scale to evaluate for each accessible response choice. In the words of Sugiyono (2012:142), "The questionnaire is a data collection technique that is carried out by giving a set of statements or written statements for respondents to answer". In the statement of Arikunto (2006), a Likert scale consists of an argument followed by several levels of replies. In accordance with that, the Likert scale may be used to assess a person's or even group's views, perceptions, and views on issues related to education. In this study, a fair response will be removed in order to prevent respondents from indicating bias to either side so that the data is free from ambiguity. Hence, this study will primarily examine four alternatives: strongly agree represents 4 points; agree represent 3 points; disagree represent 2 points; and strongly disagree represent 1 point. However, the researcher will be used two different questionnaires to measure and answer the research question. The questionnaire will be provided in offline. The first questionnaire aims at understanding student perceptions which modified from Abdulrahman et al., (2018), Harahap (2020), and Sanggaria (2022) questionnaires, whereas the second questionnaire was designed by the researcher based on the opinion of Leonard (2017) it combines two processes of listening: the bottom-up process along with the top-down process with total 21 items.

The items form has been adapted and modified to achieve the research goals in this study. In order maximize the specificity and clarity of the questions, adaptations have been made, including the addition of requirements which are related to the specific of study topic. In order to verify the questionnaire, the researcher requested that an expert evaluate and assess the blueprint that had been developed. First and foremost, the researcher reached out to the thesis supervisor to request an expert recommendation. The thesis supervisor gave the researcher the expert letter of recommendation form, validation request letter, validation evaluation instructions, blueprint/theory, and instrument. After all the files were finalized, the researcher contacted the expert validator lecturer to request his approval to evaluate the instrument that had created. Also, the expert validator conducted an assessment and evaluation, which the researcher was subsequently able to rectify. Expert validation (Appendix) illustrates the outcomes of the instrument review.

Table 3.3 Modify Item

Research Author	No Item	Original item	Modified item
Abdulrahman et al., (2018)	3	<i>“My vocabulary is enriched after listening to podcasts”</i>	Changed to “I think listening to English podcasts increase my vocabulary development”
	6.	<i>“Podcast is very portable and easy to use”</i>	Changed to “I feel learning and improving my listening skills with English podcasts are a lot of enjoyable and simple to grasp”
Harahap (2020)	7.	<i>“Podcast gave me the motivations in learning English especially listening skill”</i>	Changed to “I feel confident when studying and developing my listening skills using English podcasts”
	4	<i>“Podcast gave me the new vocabulary”</i>	Changed to “I think listening to English podcasts increase my vocabulary development”
Sanggaria (2022)	5	<i>“I think that listening to Podcasts in English or Podcasts in which the speaker/ host/ podcaster speaks English is improving my pronunciation.”</i>	Changed to “I think that using English podcast can help me improve my listening abilities more, include my pronunciation”
	8.	<i>“I like topics provided by podcast in general”</i>	Changed to “I feel the topics and material on English podcasts are mainly interesting and beneficial to develop my listening skills”

Table 3.4 Indicators of the Questionnaire

Variables	Indicator	Item number	Total item
Students' perception on using podcast (X)	Cognitive	1,2,3,4,5	5
	Affective	6,7,8	3
	Conative	9,10	2
Listening skill (y)	Type podcast + bottom- up	1,4,7,10,13,16,19	7
	Type podcast + top-down	2,5,8,11,14,17,20	7
<b>Total</b>			<b>31</b>

Table 3.5 Blueprint Instrument I

Question items I: Students' Perception towards Podcast

Indicator	No	Questions
<b>Cognitive</b>	1.	I think English podcasts from native speakers influence the development of my listening skills.
	2.	I think that using English podcasts helps me improve my listening skills in the classroom. For instance, improved listening skills and comprehension of subject lessons.
	3.	I think that using English podcasts offers me the opportunity to comprehend many styles of speech from different native speakers, which is expanding my understanding of spoken English as a whole.
	4.	I think that using English podcast can help me improve my listening abilities more, including my pronunciation.
	5.	I think listening to English podcasts increases my vocabulary development
<b>Affective</b>	6	I feel learning and improving my listening skills with English podcasts is a lot of enjoyable and simple to grasp.
	7.	I feel confident when I'm studying and developing my listening skills with English podcasts.
	8.	I feel the topics and material on English podcasts are mainly interesting for developing my listening skills.
<b>Conative</b>	9.	I find English podcast are an alternate source that provides me with an opportunity to enhance my listening skills.
	10.	I find English podcast content is generally beneficial for listening practice.

The first item evaluates students' belief that exposure to native speakers' actual language usage will enhance their ability to understand spoken English. While the second question shows whether students believe that listening to podcasts helps them better understand classroom instructions and teachings. The next item highlights to determine whether podcasts expose listeners to various accents, including languages and native speakers' speech patterns. The fourth question is to discover whether students perceive that regular listening to native speakers via podcasts lead to in enhanced listening and increasingly articulate English pronunciation. The fifth item is whether listening English podcast helps in vocabulary acquisition. The sixth item asks students whether they enjoy using podcasts and whether they find them accessible. Furthermore, the seventh item asks whether learners are confident in their capacity for developing and enhancing listening skills using podcasts. While the next question, question assesses whether

the podcast concepts are engaging and beneficial for listening skills or not. Then, the ninth item, evaluates the utility of podcasts as additional learning assistance. The final item underlines the perception of podcasts as a valuable tool for improving listening skills. The researcher defined each item in the questionnaire as pertaining to the perception component. By categorizing those statements in accordance with the perception component, it can gain a better understanding of individual views and opinions about the value of podcasts to enhance their listening abilities.

Table 3.6 Blueprint Instrument II: Types of Podcasts Leonard (2017)

No	Types of Podcasts	Questions
1.	Solo Podcast	1. Listening to a solo podcast assists me in identifying terms and vocabulary in the content.
		2. Listening to a solo podcast allow me to identify the speaker's main topic.
		3. Listening to a solo podcast enhances my listening skills.
2.	Interview Podcast	4. Listening to interview podcasts allows me to figure out certain words and phrases used by various speakers
		5. Listening to interview podcasts allows me to perceive the important points stated throughout discussions.
		6. Listening to interview podcasts enhance listening skills.
3.	Multi-host Podcast	7. Listening to multi-host podcasts helps me to determine each distinct information and details delivered by every speaker.
		8. Listening to multi-host podcast allows me to comprehend various viewpoints stated by every speaker.
		9. Listening to multi-host podcasts enhances my listening skills
4.	Non-fiction storytelling podcast	10. Listening to nonfiction storytelling podcasts allows me to recognize the important aspects of the narrative itself.
		11. Listening to non-fiction storytelling podcasts enhances to grasp of the story's focus
		12. Listening to non-fiction storytelling podcasts enhances my listening skills
5.	Fictional Podcast	13. Listening to fictional podcast enhance my understanding of storylines and character interactions.
		14. Listening to fictional podcast allows me to keep apprised of the main plotline
		15. Listening to fictional podcasts enhances my listening skills.
6.	Hybrid Podcast	16. Listening to hybrid podcasts allow me to identify particular expressions in various section.

		17. Listening to hybrid podcasts allows me to understand the primary concepts given in each section.
		18. Listening to hybrid podcasts enhances my listening skills.
7.	Reused content Podcast	19. Listening to reused podcasts improves my recall of ideas from earlier topics.
		20. Listening to reused podcasts allows me to integrate new facts with earlier comprehended knowledge.
		21. Listening to reused podcasts enhances my listening skills.

The researcher uses both listening process ideas of top-down and bottom-up process to address questions about various kinds of English podcasts. There are three items each of kind podcast mentioned above. Each the first items are related to bottom-up process. Which is concerned with detailed knowledge such as identifying vocabulary, specific terms and expression as well as distinguish facts and details. Top-down processing, on the other hand, in each the second item, which involves comprehending the podcast's major ideas, details, and context. In each the final item explains how each kind of podcast could enhance listening abilities and so on.

### 3.3.2 Indicators for Measuring Improvement on Questionnaires

The questionnaire employed in this study specifically assessed the "enhancement" of listening abilities. Each level was constructed to represent particular aspects of students' enhancements in listening skills.

Table 3.7 Key Indicator of "Enhancement" I

Dimension	Indicator	Explanation
Cognitive	Authentic Native Speech	Exposure to authentic native speech enhances comprehension of natural speech patterns
	Classroom learning	Podcasts assist learners to understand subject matter more in the classroom.
	Diverse Accent and styles	Podcasts assist learners to understand subject matter more in the classroom.
	Pronunciation	Podcasts improve pronunciation by using clear and repeated audio models.
	Vocabulary	Frequent exposure enhances vocabulary recall and utilisation.
Affective	Enjoyment	Podcasts make learning more enjoyable and less stressful
	Self-confidence	Podcasts increase confidence by providing flexible and accessible content.
	Interest	Engaging themes boost interest and drive in practicing listening
	Self-directed learning	Podcasts offer self-directed learning and practice outside of the classroom.

Conative	Listening habits	Podcasts encourage habitual listening practices by providing accessible and diverse information.
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Table 3.8 Key of “Enhancement” II

Podcast Type	Indicator	Explanation
Solo Podcast	Vocabulary Recognition	acknowledging particular terms and expressions employed in solo podcasts contributes to the development of lexical knowledge.
	Main Idea Comprehension	Understanding the goal of individual podcasting session.
	Focused Listening Skills	Discovering single-speaker information.
Interview Podcast	Understanding Multiple Perspectives	Grasping crucial points from different speakers with diverse opinions.
	Increased Engagement	Conversational styles improve student engagement and collaboration.
	Focused Listening Skills	Distinguishing between different speakers' points of view
Multi-Host Podcast	Speaker-Specific Contribution Recognition	Differentiating individual contributions from many hosts to obtain a complete knowledge.
	Comprehending diverse perspectives	Understanding multiple points of view on a topic.
	Focused Listening Skills	Keeps listeners actively involved in discussions
Non-Fiction Storytelling	Narrative Structure Understanding	Understanding the flow and format of real-life stories
	Understanding structures	Develops comprehension of how real-life events are structured in narratives.
	Focused Listening Skills	identifying specific points in narratives
Fictional Storytelling	Understanding Character Dynamics	Identifying links and responsibilities in fictional narratives.
	Engagement with Creative Content	Encourages listeners to predict and infer meanings based on context.
	Focused Listening Skills	Increased ability to follow complex storylines and plot developments

Hybrid Podcast	Identifying mixed formats	Identifying significant terms offered in various podcast segments.
	Synthesizing Concepts	Analyzing ideas from different areas to spoken context.
	Focused Listening Skills	Recognition of varied speaking styles
Reused Content Podcast	Reinforcement of Learning	Reinforces prior knowledge through repeated exposure.
	Application of Prior Knowledge	Bringing understanding gained from previously reused insight to new activities.
	Focused Listening Skills	Provides additional practice making easier.

### 3.4 The Research Data Analysis

Before distributing the questionnaires to the respondents, the researcher shall verify that the items are acceptable and relevant.

#### 3.4.1 Validity Analysis

The validity test determines if a questionnaire is acceptable or otherwise (Ghozali, 2018). The researcher employed Pearson's product moment to evaluate the validity of data collection. The findings are evaluated using the r-item value as well as the r-table product moment to determine whether they are valid. The calculation for validation test is:

- The answer is considered to be valid if  $r\text{-item} \geq r\text{-table}$ .
- The answer is not valid if  $r\text{-item} \leq r\text{-table}$ .

$$R_{xy} = \frac{n(\sum xy) - (\sum x \sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2] [n \sum y^2 - (\sum y)^2]}}$$

$R_{Y}$  = Product moment correlation

$n$  = the number of respondents

$\sum x$  = the score total of item

$\sum y$  = Total number of answer scores

$\sum xi^2$  = The sum of the squares of the answer scores of an item

$\sum xy^2$  = Sum of the squares of the total answer score

#### 3.4.2 The Result of Validity test

A questionnaire is considered valid if its inquiries can provide insight into the measurement of a specific variable, as defined by Ghozali (2012). Because the aims of this study tend to be comparable with those of Abdulrahman et al., (2018), Harahap

(2020), and Sanggaria (2022), the researcher modified and adjusted several of the instrument's question items. After receiving feedback from both supervisors, the researcher conducted the validation as well as reliability evaluation on the instrument using a sample of 33 individuals. According to Vaus (2002), the trial sample should be representative of identical population as the study's sample. The researcher selected the number of samples from the study's population for the purpose of meeting these specific requirements. The researcher selected participants for the trial among students from the 8th along with 10th semesters of the English language education study program in the academic year 2019 –2020. The requirements of these individuals are that they have experience utilizing English podcasts to enhance their English language skills, which includes listening abilities. The validity test determines whether the study's instrument elements are valid or not. The outcomes of validity testing conducted with an alpha value of 5% are shown in the table below, as the result of processing the data.

Table 3.7 The result of validity

Item	Value of R-count Correlation Coefficient	Value of R- table 5% (N=33)	Description
1.	0,494	0.3494	Valid
2.	0,527	0.3494	Valid
3.	0,594	0.3494	Valid
4.	0,487	0.3494	Valid
5.	0,388	0.3494	Valid
6.	0,508	0.3494	Valid
7.	0,603	0.3494	Valid
8.	0,510	0.3494	Valid
9.	0,508	0.3494	Valid
10.	0,524	0.3494	Valid
11.	0,469	0.3494	Valid
12.	0,474	0.3494	Valid
13.	0,505	0.3494	Valid
14.	0,606	0.3494	Valid
15.	0,529	0.3494	Valid
16.	0,529	0.3494	Valid
17.	0,529	0.3494	Valid
18.	0,652	0.3494	Valid
19.	0,799	0.3494	Valid
20.	0,706	0.3494	Valid
21.	0,756	0.3494	Valid
22.	0,748	0.3494	Valid
23.	0,770	0.3494	Valid
24.	0,602	0.3494	Valid
25.	0,587	0.3494	Valid
26.	0,570	0.3494	Valid

27.	0,743	0.3494	Valid
28.	0,735	0.3494	Valid
29.	0,735	0.3494	Valid
30.	0,722	0.3494	Valid
31.	0,715	0.3494	Valid

Based on the test findings presented in table 3.7, the R-count value is higher in comparison to the R-table with an alpha of 0.05 across all statement items, showing indicating all things have been confirmed acceptable and are accessible the study.

### 3.4.3 Reliability Analysis.

Ghozali (2018) defined reliability as a technique for assessing variables through questionnaires. A questionnaire is considered trustworthy if the respondent responds the inquiries in a continuous or stable way. The instrument's variable is considered reliable if the Cronbach Alpha > ttable (0.5). The coefficient for reliability can be determined using the formula and is clarified further in the rule sections. The instruments' reliability can be categorized as low, medium, or high. (Arikunto, 2010: 276)

Table 3.8 Cronbach Alpha Criteria (Arikunto, 2010)

Alpha	Level of Reliability
0.800-1000	Very high
0.600 – 0.800	High
0.400 – 0.600	Medium
0.200 – 0.400	Low
0.000 – 0.200	Very low

In this study, researcher employed Cronbach's Alpha to measure dependability applying the following calculation:

$$\alpha = \left( \frac{K}{K - 1} \right) \left( \frac{S_r^2 - \sum S_1^2}{S_x^2} \right)$$

$\alpha$  = Cronbach's alpha reliability coefficient

K = Total of item score variances

$\sum S_1^2$  = Total of item score variances

$S_x^2$  = Variance of test scores (all K items)

### 3.4.4 The Result of Reliability

The reliability test was administered to evaluate if the level of the aspects used in the study. Proved appropriate or not applying the Cronbach alpha value, while

the reliability test requirements can be viewed in table 4.2 following the data processing

Table 3.9 The result of reliability

Total Items	Cronbach Alpha	Description
31	.942	Reliable

The tests for reliability with the Cronbach alpha value in the following table demonstrates that the data item have a Cronbach alpha value of 0.942, indicating that it can be utilized in study.

### 3.4.5 Descriptive Statistic Analysis

Researcher may simply collect data regarding the usage of podcasts to enhance students' listening abilities by administering questionnaires. The researcher conducted the study using a Likert Scale form. The findings will be evaluated with SPSS 20 SPSS (Statistical Product and Service Solution) is a software tool that conducts statistical computations.

The formula below to assess questionnaire data:

$$P = \frac{F}{N} \times 100\%$$

- P = percentage.
- F = Frequency.
- N = The number of samples.
- 100 = The constant value.

Furthermore, the data will be analyse utilizing the statistical measures of mean and standard deviation. Lodico et al. (2006) defines the mean as the numerical average of a set for results coming from a collection of data, calculated by totalling the results and divided the results by the percentage of scores. The standard deviation is defined as the mean variation among every result in the data collection and the mean value. The data is displayed using standardized scores. This research will be presents with standard scores since that matches up with the purpose of standard scores as defined by Lodico et al. (2006). Specifically, standard scores are employed to determine the distance of a score from the mean and standard deviation, as well as to provide a summary of the performance of each individual in relation included in this study.

Then, data analysis will be conducted with the SPSS program. Following the data entry, descriptive statistical analysis is implemented to analyse the data. The

researcher selected descriptive statistics to help summarize the total data collected, as well as present the variety in scores collected in order to give insight into how a particular score can be distinguished from another. In this study, the researcher will be present the findings from data analysis of the research questions, which are: the student perceptions on the use of English podcasts to enhance listening skills, as well as which kind of English podcasts are effective to enhance listening skills.

Then researcher defined the grouping indications in the questionnaire by analyzing the percentage of students' perceptions according to Luthfia (2022), which is illustrated in the table as follows:

Table 3.10 Interpretation of scores

Range of Scale	Classification
75% - 100%	Very Positive
50% - 74%	Positive
25% - 49%	Less Positive
0% - 24%	Negative

According to the following table previously, when the index covers the range of 75% to 100%, indicated very positive; while the result ranges about 50% to 74% is referred to positive; While, if scale 25% to 49% indicated less positive. In addition, the perception is indicated not negative if the score is about 0%-24%.

