CHAPTER I
INTRODUCTION

In the first section, the researcher begins by discussing key aspects of the study, including the background of the research, research questions and purposes, research significance, conceptual framework, and previous studies.

A. BACKGROUND OF RESEARCH

Listening is the process that enables the listener to comprehend, determine, and identify what the speaker is saying, (Atiyah & Izzah, 2019). Listening skill play a role in making students learning process fast and effective in mastering next English skills. It is also the process of capturing verbal symbols with full attention, understanding, appreciation, and interpretation to obtain information, capture content, and understand the meaning of communication through speech (Sudaryanto et al., 2019).

In listening, there are two categories of skills: micro skills and macro skills. Micro skills concentrate on grasping the main concept or overall significance, whereas micro skills involve finer details such as recognizing sounds, detecting stress and intonation, pinpointing specific words, and comprehending grammatical structures in spoken language. According to Vandergrift and Goh (2021) stated micro skills in listening like identifying phonemes, grasping intonation, and differentiating similar terms (e.g., "ship" vs "sheep") are essential for precise audio understanding.

Based on the researcher's observations during the pre-service English teaching period, many students often misunderstand spoken language due to their lack of familiarity with the sounds or sound recognition of English in everyday conversation. In several meetings, the researcher was tried to use Elsa Speak in teaching, especially in listening exercises that focused on similar terms. Sixty percent of the students are struggling in determining English similar terms like “She” vs “See” and others. A study conducted by Hamada (2014) in the Journal of English Language Learning indicated that 70% of

junior high school students struggled to identify words in natural conversations because of speech rate and sound reduction (e.g., "gonna" instead of "going to").

Goh (2000) also stated that issues in listening comprehension frequently occur when learners struggle to correctly perceive sounds or recognize familiar words in flowing speech, potentially affected by their native language's phonological structure (System Journal). These challenges increase when students encounter rapid, genuine audio or native speaker pronunciation without adequate support or repeated practice. Consequently, cultivating listening micro skills like recognizing sound is crucial for assisting students in enhancing their listening comprehension and correctly grasping spoken English.

Additionally, Richards (1983) supported for training listening micro-skills in the early stages of learning. In his work Listening Comprehension: Approach, Design, and Procedure, he identified many listening micro-skills appropriate for young learners. For example, he suggested that pupils practice recognizing shortened versions of words and discriminating between similar sounding concepts. These assist students avoid confusion between words like “ship” and “sheep”.

Despite its importance, language programs frequently overlook listening. Reading and writing are usually prioritized in traditional education approaches, which decrease listening abilities (Field, 2008). In this era, there are so many means of digital tools such as AI education or apps to encourage their willingness to learn English. Apps provide on-demand access to language lessons, dictionaries, games, and other digital tools for acquiring English (Godwin-Jones, 2017).

Technology can be utilized in the classroom to assist students in enhancing their listening micro skills. A beneficial resource is the ELSA Speak app. ELSA, short for English Language Speech Assistant, is an AI-driven

application that provides learners with opportunities to practice their listening and speaking skills. Zhang (2020) states that ELSA offers immediate feedback, distinct audio input, and pronunciation assessment, all of which are helpful for developing listening micro skills. The app provides brief listening tasks in which learners listen to native speakers and then either repeat or reply. The technology for speech recognition identifies errors and corrects students, aiding them in acknowledging their weaknesses and enhancing their skills

Many previous studies have shown the benefits of ELSA Speak. For example, Rismawati, Suryana, and Agustiana (2020) found that junior high school students improved their pronunciation and motivation after using ELSA Speak. Another study by Tran and Vu (2024) reported that students became more confident and independent learners when using the app in English classes. However, most studies focused on pronunciation or speaking. There are still not many studies that explore how ELSA Speak can improve listening micro skills in terms of recognizing sound, especially in the context of Indonesian junior high school students.

Thus, considering the existing issues and recent updates. This research aims to merge the emphasis on students' issues with listening micro skills and the advancement of AI as a tool for learning. The researcher intends to raise this problem in a study entitled ***"ENHANCING STUDENTS' LISTENING MICRO SKILLS THROUGH THE USE OF ELSA SPEAK APPLICATION: A PRE-EXPERIMENTAL STUDY IN THE FIRST GRADE OF JUNIOR HIGH SCHOOL".***

B. RESEARCH QUESTIONS

These are three research questions to be addressed in the course of the research:

1. What are students' listening micro skills before using Elsa Speak application?
2. What are students' listening micro skills after using Elsa Speak application?

3. How significant is the Elsa Speak app in enhancing students' listening micro skills before and after treatment?

C. RESEARCH PURPOSES

The purpose of the study goes as a result:

1. To figure out students' listening micro skills before using Elsa Speak application.
2. To figure out students' listening micro skills after using Elsa Speak application.
3. To figure out if the Elsa Speak app helps first-grade students of junior high school improve their listening micro skills by comparing their scores before and after treatment.

D. RESEARCH SIGNIFICANCE

Understanding how the Elsa Speak application affects teenage students' listening abilities and motivation to learn English is the main goal of the research problem. It specifically seeks to respond to two important questions: (1) What are students' listening micro skills before using the Elsa Speak application? (2) What are students' listening micro skills after using the Elsa Speak application? (3) How significant is the Elsa Speak app in enhancing students' listening micro skills before and after treatment? This study is important because it provides a thorough understanding of the app's efficacy by examining both the quantifiable results of language acquisition and the students' subjective experiences.

1. Theoretical Significance

   This study advances the understanding of how technology—more especially, the Elsa Speak application—can enhance students' listening micro skill especially sound recognition when they are learning English. It contributes to the amount of knowledge already available on efficient techniques for improving comprehension and listening micro skills in language learning. The study also adds to

theories about the development of listening skills and educational technology by offering insights into the implementation of digital technologies in language instruction.

2. Practical Significance

In order to assist student, become better listeners in English classes, this research attempts to improve their listening micro skills in recognizing sound. By integrating the Elsa Speak app, it provides educators with innovative and diverse teaching strategies to enhance students' listening skills. Through improved listening skills, the study is anticipated to enhance students' learning outcomes and establish a more engaging and productive English learning environment for schools.

E. RESEARCH SCOPE

First-grade students will be the subject of this study, which will be carried out in a junior high school environment. Following the use of the Elsa Speak program will detect changes in listening micro skill that focused on distinguish between English similar terms or sound recognition. Pre-tests and post-tests will be used as part of a pre-experimental design to measure listening micro skill development. The main resource for improving listening micro skill will be the ELSA Speak app. The goal of the study is to show that using the ELSA Speak application significantly improves students' listening micro skill.

F. CONCEPTUAL FRAMEWORK

1. Listening Micro Skills

In recent years, there has been an increasing acknowledgment of the significance of listening micro-skills, which are distinct sub-skills that assist learners in interpreting and understanding spoken language more proficiently. Richards (1983) suggests that micro-skills in listening are crucial resources for learners to grasp spoken communication. Richards' famous taxonomy includes more than 30 micro-skills, such as recognizing

reduced forms, discriminating between similar sounds, identifying patterns of stress and intonation, detecting key words, and inferring meaning from context. These abilities are fundamental for EFL learners who frequently find it challenging to comprehend native-like speech because of its quickness, connectedness, and pronunciation patterns.

Galdames (2018), in his thesis at Universidad de Chile, carried out an experimental study that showed that explicit instruction in listening micro-skills enhanced students' listening comprehension abilities. The research involved comparing two groups of Chilean high school students—one group was taught micro-skills while the other was not. While both groups made progress, the experimental group demonstrated marginally superior outcomes. This indicates that educating learners about particular listening strategies can enhance their understanding, particularly in EFL settings where interaction with the target language is restricted.

In classroom activities, micro-skills can be instructed through targeted listening exercises, such as sound recognitions which contains focusing on emphasized words, recognizing shortened forms, or differentiating minimal pairs. Field (2010) recommends employing micro-listening tasks that focus on particular skills and offer repeated practice, aiding learners in internalizing these components. Educators can employ genuine audio, organized resources, or technological tools to support this practice.

In conclusion, the theoretical framework for listening micro-skills is founded on the notion that learners need to cultivate both cognitive awareness and perceptual sensitivity to the characteristics of spoken English. These micro-skills establish the groundwork for advanced listening comprehension.

2. Media AI of Teaching Listening

Technology has transformed how students acquire languages in today's era. A significant technology is Artificial Intelligence (AI). AI is employed

in various fields, including education, to assist both educators and learners. In English language acquisition, AI can serve as a tool for teaching listening skills. This is significant since listening ranks among the most challenging language skills.

Hameed and Al Haq (2024) state in their article Teaching Listening Skills to EFL Students Using AI-Driven Technology-Based Media from Qassim University that AI technology holds great importance in education as it can customize lessons to fit individual learners' needs, enhancing the engagement and effectiveness of listening practice. This technology aids students in concentrating on sounds, intonation, and vocabulary by providing instant feedback, which is crucial for enhancing listening comprehension.

The concept of AI in education was initially proposed by John McCarthy in 1956 at Dartmouth College. He stated that AI is the study of enabling machines to think and behave like people. In education, this implies that AI can function as a tutor or aide. AI hears the student, provides answers, and assists them in learning incrementally—similar to a teacher.

This concept is further backed by Lev Vygotsky's (1978) Zone of Proximal Development (ZPD) theory. Vygotsky stated that students learn most effectively when aided by a "more skilled individual." In this scenario, AI functions as a virtual mentor, guiding learners through comprehension of audio content gradually. AI tools assist learners with tasks they can't complete independently, enhancing the effectiveness of listening practice.

Studies indicate that media powered by AI enhance learners' motivation and focus. For instance, in the research titled AR and AI Applications Supporting Listening Skills in Early Childhood (Gazi University), Avan and Kalenderoğlu (2023) discovered that AI applications enhance children's concentration and listening behaviors by integrating visual and auditory

stimuli. This multisensory method enhances learner engagement with listening activities and improves information retention.

3. Elsa Speak Application

The Elsa Speak app is a current language learning resource made to assist students in enhancing speaking, listening, and pronunciation in English. It makes learning personalized and interactive by using Artificial Intelligence (AI) technology to provide real-time feedback on pronunciation, accent, and fluency (Elsa Speak official website, 2025). The concept of communicative language instruction, which prioritizes learner-centered activities and real-life conversation, is supported by this technology.

Elsa Speak plays a vital role in English learning and instruction by fusing language pedagogy with technology to produce an adaptable, easily accessible, and productive learning environment. It supports independent study by assisting students in practicing grammar, vocabulary, and pronunciation at any time and location. This aligns with contemporary educational objectives, which include using technology to enhance language proficiency and inspire students outside of the traditional classroom (Perdani, BINUS University, 2023).

To sum up, Elsa Speak is a customized AI tutor that uses major theories of language learning including Vandergrift's metacognitive techniques, Vygotsky's Social Constructivism, and Krashen's Input Hypothesis. The evolution of English instruction from conventional approaches to AI-powered learning resources ushers in a new era that is more effective, interactive, and learner-centered.

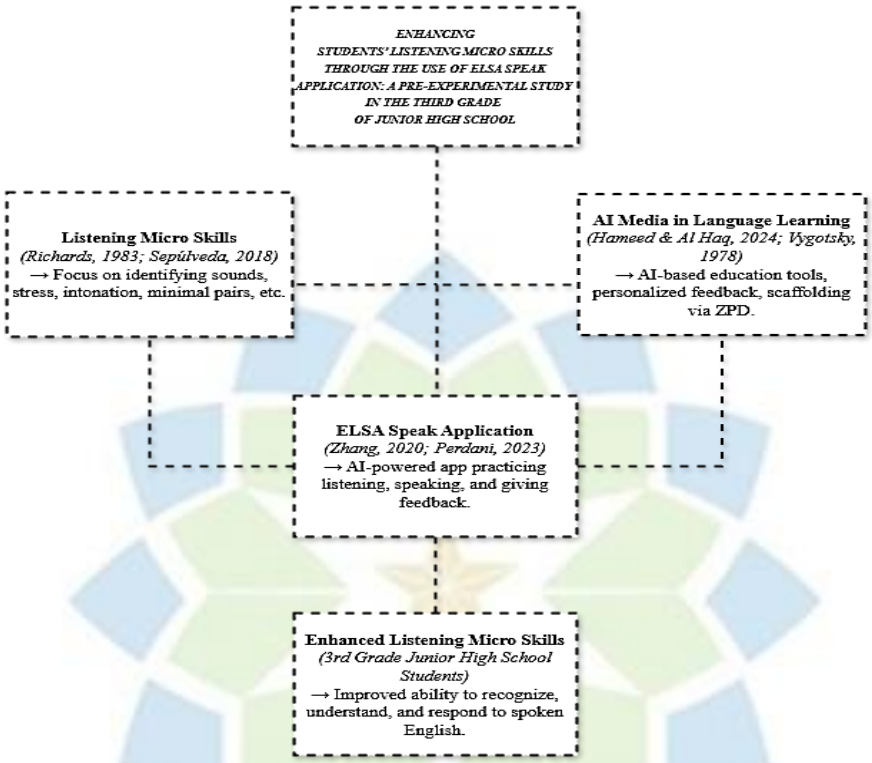

Figure 1.1 Conceptual framework

G. HYPOTHESES

The researcher will then use a hypotheses test to determine whether the pre-test and post-test scores differ in a way that is statistically significant. When the same participants are measured twice or under two different circumstances, such as before and after an intervention, this test is especially helpful.

The hypotheses:

H0= (>0.05) then H0 is accepted and Ha is rejected, which means there is no significant change in students' listening micro skills when using the Elsa Speak application.

Ha= (<0.05) then H0 is rejected and Ha is accepted, which means there is a significant change in students' listening micro skills when using the Elsa Speak application.

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Then, this quantitative method will help the researcher to determine if the ELSA Speak program is responsible for the improvements in listening micro skills or whether they were the result of chance.

H. PREVIOUS STUDIES

Among the numerous abilities required to learn English, listening is one of the most crucial. The foundation of effective communication is listening. Students who don't listen well will find it difficult to comprehend others, especially when speaking English. Students in many school's struggles with listening since they don't practice it enough. In the classroom, traditional methods can occasionally be dull or ineffective. Because of this, utilizing technology such as the ELSA Speak app can be a novel approach to assist students in developing their listening skills.

Numerous researchers have examined ELSA Speak's utilization, and their results are encouraging. Classroom Action Research was used in one study conducted at MA Al-Djufri by Sumo et al. (2024). Two rounds of the study were conducted, and the findings demonstrated significant progress. In the second cycle, the students' average listening score rose from 56.6 in the first to 72. Students were more engaged and interested in the lessons, as seen by the rise in instructor and student involvement. This indicates that ELSA Speak is beneficial for hearing since it provides exercises and feedback that are appropriate for the students' level.

Pangastuti (2021) examined pronunciation in another study. Five junior high school kids participated in a pre-experimental investigation that she conducted. The findings demonstrated that students' pronunciation scores on the post-test improved following their use of ELSA Speak. This indicates that by increasing students' familiarity with English sounds, the app helps them practice speaking more accurately, which in turn supports improved listening.

In another study, Martom, Marjun, and Sa'adah (2022) conducted an experiment at SMK Kesehatan Kapuas Raya Sintang with two classes. ELSA

Speak was utilized in one class but not in the other. The app-using class improved more than the others. The average score rose from 46.03 to 76.46, indicating that the program improved pronunciation in a somewhat effective way. Even though the emphasis was on speaking, students who practice their pronunciation can also improve their recognition of spoken words, which helps them with their listening skills.

Ummah, M. S. (2019) final study from Algeria examined the impact of ELSA Speak on speaking and listening using exams and a questionnaire. Students reported that ELSA Speak provided helpful comments and increased their confidence. After using the program, the tests revealed improved speaking and listening skills. According to this study, a lot of students enjoy using mobile apps since they are simple and entertaining. According to the researchers, ELSA Speak and other artificial intelligence (AI) tools have the potential to personalize and enhance learning.

Although these studies demonstrate the value of ELSA Speak, the majority of them concentrate on speaking or pronunciation, particularly at the senior high school or college level. Because so few studies concentrate solely on listening, particularly for junior high school children, there is a research gap. Additionally, almost all of previous studies employed ELSA Speak in higher education rather than at lower levels, such as junior high school first grade. The research is crucial because of this. It bridges the gap by employing an experimental approach to concentrate on listening skills at a lower grade level.

In conclusion, it has been demonstrated that ELSA Speak enhances English speaking and pronunciation while also fostering students' confidence and engagement as learners. Research on how this program enhances younger children' listening abilities is still scarce, though. This research can demonstrate the value of ELSA Speak in helping junior high school students in the first grade develop their listening skills and provide fresh concepts for further study.