

CHAPTER I

INTRODUCTION

This chapter examines the background of the research, three research questions, three research objectives, the research scope, the conceptual framework, the research hypotheses, and previous studies.

A. Research Background

This study aims to use a quasi-experimental design to assess the integration of gamification using Educaplay to enhance students' English listening comprehension in English as a Foreign Language (EFL) senior high schools in Indonesia. English as a Foreign Language (EFL) refers to learning English in contexts where English is not the primary language of daily communication. In Indonesia, English is taught as a foreign language in education, where students are required to develop their communication skills through classroom learning. Therefore, among the four language skills, listening plays a particularly important role as it provides the primary source of language input for learners. According to Brown (2001), learners tend to spend more time listening than speaking in classroom interactions, making listening a crucial skill for language acquisition.

More specifically, listening comprehension is an active and complex process in which learners construct meaning by processing auditory input and relating it to prior knowledge and context (Rost, 2011). In classroom practice, this ability is reflected through several measurable indicators of listening comprehension. Listening comprehension is commonly operationalized through students' ability to identify the main idea, specific information, and make inferences from spoken texts. In addition, listening comprehension involves simply understanding spoken input (Harmer, 2007 & Brown, 2004). He states that learners must be able to "infer relationships and interrelationships between events, infer cause and effect, and detect relationships such as main ideas, supporting ideas, generalizations, and examples. Therefore, one of the primary purposes of instruction is to help students enhance their listening comprehension, especially in Senior High Schools where students are expected to meet real-world communication needs.

However, despite its importance, listening comprehension is a fundamental language skill, yet it remains one of the most challenging for many English as a foreign language (EFL) learners to master (Vandergrift & Goh, 2012). Students need to comprehend auditory input while also understanding its meaning. They need to be able to distinguish unfamiliar pronunciations, adapt to varying accents and speaking rates, and maintain attention. According to Buck (2001) & Goh (2000), the challenges of listening comprehension are multifaceted and influenced by factors such as speed of delivery, accent variations, and the cognitive load involved in processing and interpreting auditory input. This is difficult because spoken language is transient and spoken discourse is complex, requiring learners to understand sounds, words, and meanings directly. Students need to comprehend auditory input while also understanding its meaning. Based on initial observations with teachers at SMA Karya Budi, these conditions often cause students to miss important information, have difficulty identifying main ideas and details, and rely more on guesswork than on strategic listening. This can hinder listening comprehension progress in EFL classes.

One of the contributing factors to this issue is that in some EFL classrooms traditional listening methods still dominate, often relying on textbook audio materials and teacher-centered explanations. This approach tends to limit opportunities for active student engagement and meaningful interaction with listening tasks. Harmer (2007), Rost (2011) & Munday (2016) suggest that effective listening instruction should involve activities that guide students in identifying specific details, understanding main ideas, and interpreting meaning, rather than simply assessing comprehension after listening, that traditional methods often lead to passive listening, where students experience inactivity, lack of immediate feedback, and difficulty maintaining focus. These limitations point to the need for alternative teaching strategies that encourage active listening, increase student engagement, and support more effective processing of spoken content, particularly in Senior High School.

The potential approach to address these limitations is Gamification. Gamification is a widely used strategy that integrates game design elements into educational

environments to increase student engagement and participation (Deterding et al., 2011). In classroom practice, gamification creates an interactive learning environment by incorporating features such as points, a leaderboard, and scores. Nation and Newton (2009) emphasize that developing effective listening comprehension requires frequent exposure to spoken language and feedback to help learners identify errors and refine their comprehension strategies. By incorporating game-like tasks into listening comprehension activities, students are encouraged to actively process auditory input while engaging in meaningful tasks rather than simply listening to recordings. Furthermore, gamified learning has been shown to increase student engagement and participation, which can contribute to more effective learning outcomes compared to traditional methods (Hariadi et al., 2021). Therefore, gamification presents a promising alternative to conventional listening instruction and has the potential to improve listening comprehension in EFL classrooms.

A platform that facilitates the implementation of gamification in language learning is Educaplay. Educaplay is an online educational platform that facilitates the application of gamification in language learning through a variety of interactive activities, such as listening quizzes, matching tasks, and fill-in-the-blank exercises, most of which incorporate audio elements tailored to learning needs. The platform allows teachers to create customizable learning games aligned with specific learning objectives. Unlike conventional listening comprehension activities that often rely on passive audio playback, Educaplay offers a more interactive and task-focused environment that aligns with Harmer (2007) principles for effective listening comprehension instruction through its game-based features, such as points, leaderboard, and scores. Educaplay encourages active student participation and sustained attention during listening comprehension activities. These features help students focus on specific objectives, including identifying main ideas, identifying detailed information, and making inferences.

Previous studies have shown that using Educaplay can increase student engagement and participation in learning. For example, Páez-Quinde et al. (2022) & Vargas et al. (2024) found that Educaplay-based activities increased student

focus and participation in online learning environments reported that students using Educaplay were more motivated and actively engaged in class activities compared to those learning through traditional methods. Furthermore, studies have shown that gamification improves student learning outcomes by encouraging active participation and sustained attention (Ghazy et al., 2021). Thus, Educaplay can be considered a promising approach to improving listening comprehension in English as a Foreign Language (EFL) classrooms, particularly in Senior High School.

However, despite these advantages, existing research reveals several limitations. Most studies using Educaplay primarily focus on vocabulary acquisition and student motivation, rather than on listening comprehension as a measurable skill. Furthermore, studies on gamification for listening comprehension, such as those using Duolingo or classroom-based games, generally do not use Educaplay as a learning medium and are often conducted at the junior high school level or in non-Senior High School contexts. Furthermore, many previous studies relied on pre-experimental designs without a control group, which limits the ability to draw strong causal conclusions about the effectiveness of gamification. To date, only a small number of studies have integrated Educaplay-based gamification, listening comprehension, Senior High School learners, and quasi-experimental designs with control groups and inferential statistical analysis.

These gaps in the methodology and context of this study highlight the need for further investigation into the integration of Educaplay-based gamification to enhance students' listening comprehension. Therefore, this study aims to address these gaps by using a quasi-experimental design with an experimental group that is taught by Educaplay-based gamification listening activities and a control group that is taught by conventional instruction using textbooks. This study focused on 10th-grade students at SMA Karya Budi and examined their ability to comprehend narrative texts using a pre-test and post-test, and measurements were analyzed using inferential statistics. These findings provide stronger empirical evidence on the integration of Educaplay as a gamification-based learning approach to enhance listening comprehension in EFL education in Senior High School.

B. Research Questions

According to the research background, this study develops three research questions:

1. What is the score of students' English listening comprehension taught with implementation of Educaplay-based gamification?
2. What is the score of students' English listening comprehension taught without implementation of Educaplay-based gamification?
3. How the differences in the score of students' English listening comprehension with and without using Educaplay-based gamification?

C. Research Purposes

Based on the research topic and background, the study develops three objectives:

1. To identify the score of students' English listening comprehension taught with the implementation of Educaplay-based gamification.
2. To identify the score of students' English listening comprehension taught without the implementation of Educaplay-based gamification.
3. To figure out if there is a significant difference in students' English listening comprehension between utilizing Educaplay-based gamification and without Educaplay-based gamification.

D. Research Significance

This research has both theoretical and practical importance in the field of English language teaching, particularly in listening comprehension facilitated by gamification. From a theoretical perspective, this study contributes to the current literature on listening comprehension, gamification, and technology-enhanced language learning in the context of English as a Foreign Language (EFL). The findings strengthen theoretical discussions about how Educaplay, as a gamified digital platform, can enhance listening comprehension, particularly in Senior High School education.

Practical Significance:

1. For English Teachers: This study provides educators with an efficient and user-friendly digital tool that enhances the interactivity of listening lessons.

It enables teachers to construct more engaging learning activities by combining gamification features such as points, leaderboard, and scores, while also providing real-world classroom evidence to support the use of technology in English language instruction.

2. For Students: This research helps students become more involved in listening comprehension exercises through interactive activity, improves their listening comprehension, particularly in recognizing main ideas, details, and making inferences, as Educaplay can be used independently for self-practice at any time.
3. For Future Researchers: The study serves as a basis for future investigations into Education.

E. Research Scope

This study aims to assess the impact of Educaplay-based gamification integration to enhance English listening comprehension in Senior High Schools in Indonesia. The primary objective is to assess students' ability to comprehend narrative texts through listening comprehension, which includes identifying main ideas, recognizing specific details, and making inferences from spoken content, as noted by (Harmer, 2007). The materials used are based on the "Work in Progress" book utilized in the high school curriculum. A quasi-experimental research approach with pre-test and post-test measurements is used. The sample includes two 10-th grade classes from SMA Karya Budi, each consisting of approximately 38 students. One class was designated as the experimental group and was taught with listening comprehension using gamification based on Educaplay. The second class, by comparison, is the control group which is given typical listening instruction through the textbooks.

The primary tool used in this study is Educaplay, an online platform that offers interactive listening comprehension exercises. The gamification component includes score, a leaderboard and point exercises all centered on the narrative text. This treatment lasts for four learning sessions, each lasting two 45-minutes sessions. Students' listening comprehension skills are evaluated using a 20-item multiple-

choice test, administered before and after the treatment. The pre-treatment test provides baseline information, and the post-treatment test measures improvements in listening comprehension skills following the intervention. Purposive sampling is used to select participants based on their class structure and similar English proficiency levels. The findings of this study aim to provide important insights into the integration of Educaplay-based gamification on English listening comprehension in Senior High Schools in Indonesia.

F. Conceptual Framework

This section describes the theoretical framework for the investigation and illustrates how the integration of Educaplay-based gamification relates to students' English listening comprehension in the context of an EFL Senior High School. The framework is constructed on relevant theories of listening comprehension, student engagement, and gamification, along with insights from previous empirical research. The study focuses on using Educaplay-based gamification to teach English listening comprehension through narrative texts to senior high school students in an EFL context.



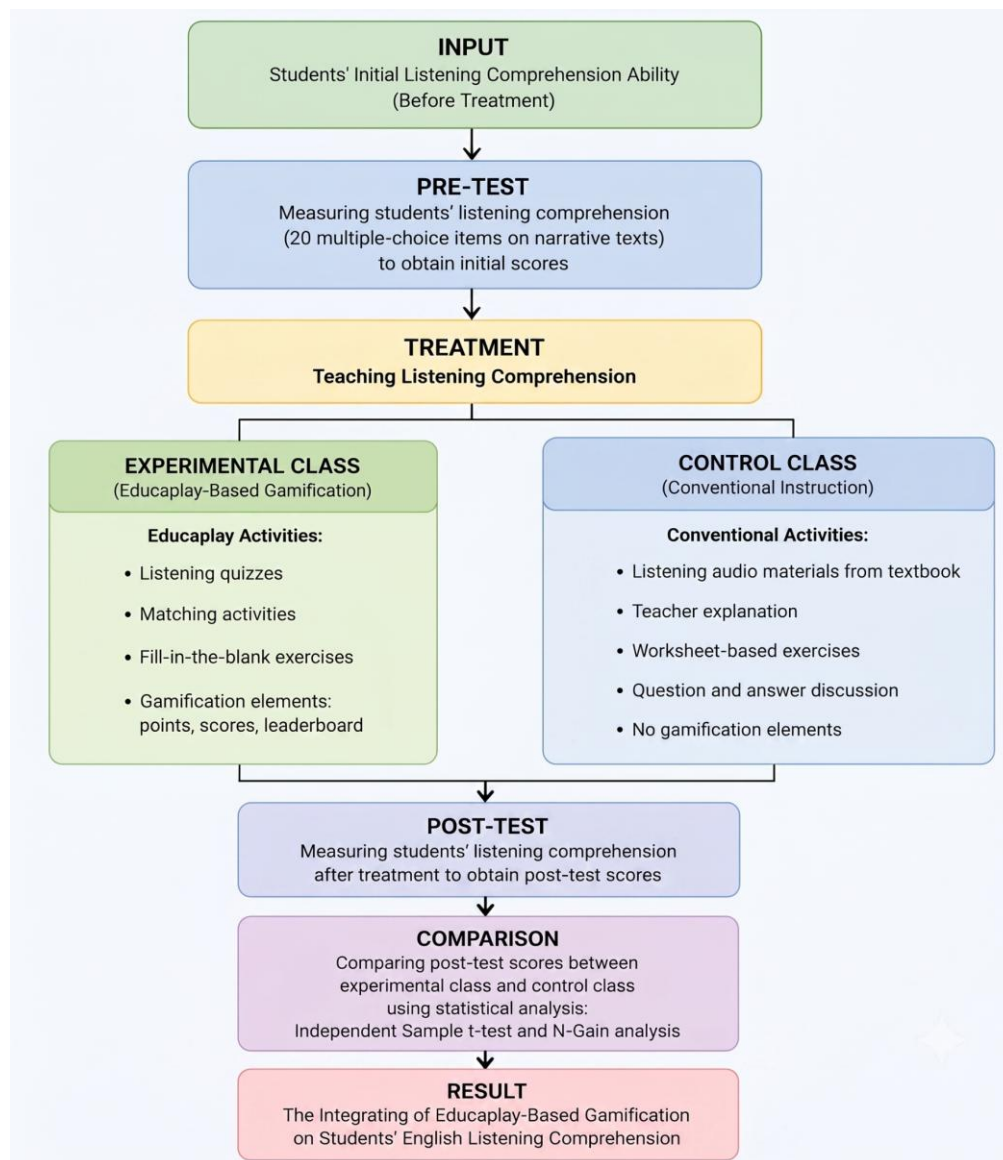


Figure 1.1 Conceptual Framework

This study shows that students' listening comprehension is influenced not only by the amount of exposure to oral input but also by cognitive engagement and the quality of listening comprehension activities during the learning process. Listening comprehension is a crucial receptive skill in language learning. Brown (2001) & Brown and Yule (1983) state that students listen more than they speak in class, making listening the main source of language input. They define listening comprehension as the ability to understand spoken language, but Rost (2011) highlights that listening is an active process that includes recognizing sounds,

processing meaning, and integrating new information with prior knowledge. In EFL contexts, Students frequently experience difficulty with listening comprehension due to variables such as limited vocabulary, fast speech, accent differences, and difficulty maintaining focus.

Many students also find it difficult to comprehend narrative texts when they are presented orally, especially when it comes to following the order of events, picking out specific details, and figuring out what is meant by what is said. If students miss a piece of information, they may become confused and lose their understanding of the text as a whole. To address these challenges, Gamification through Educaplay provides a learning environment that can overcome these problems. Educaplay integrates audio-based listening comprehension activities with game features such as points, scores, and challenges. Deterding et al. (2011) & Kapp (2012) suggest that gamification can enhance student activity, focus, and participation, key elements for effective language learning. In listening comprehension instruction, these aspects help students concentrate more, review the content, and engage actively with the information they hear.

Students engage in Educaplay activities, such as listening quizzes, matching tasks, and fill-in-the-blank exercises, based on narrative texts. These activities are specifically designed to support key listening comprehension such as identifying main ideas, recognizing specific information, and making inferences. Therefore, the conceptual framework of this study assumes that integrating Educaplay-based gamification into listening comprehension instruction using narrative texts can enhance students' listening comprehension by increasing engagement, active, and repeated practice.

G. Hypothesis

The purpose of this study is to assess students' English listening comprehension using Educaplay-based gamification. As a result, this study develops the following research hypotheses, which comprise a null hypothesis and an alternative hypothesis:

1. **The alternative hypothesis (H_a):** There is a significant difference in the students' English listening comprehension between the students who are taught by using Educaplay-based gamification and those who are taught by using conventional listening instruction.
2. **The null hypothesis (H₀):** There is no significant difference in the students' English listening comprehension between the students who are taught by using Educaplay-based gamification and those who are taught by using conventional listening instruction.

H. Previous Studies

Several previous studies have explored the use of gamification and digital platforms for English learning, particularly focusing on vocabulary and listening skills. However, these studies differ significantly in aspects such as the learning environment, educational levels, research methods, teaching tools, and the specific language skills addressed. These differences make it difficult to reach clear conclusions about the effectiveness of a particular gamified platform, such as Educaplay, in improving English listening comprehension, especially within Senior High School settings.

The first study, conducted by Ma'arif et al. (2025), investigated the use of Educaplay as a game-based learning tool for teaching English vocabulary to fifth-grade elementary students. This research employed a pre-experimental one-group pretest-posttest design with a sample of 32 students. A 15-item multiple-choice vocabulary test was used as the research instrument. The data were analyzed using the Shapiro–Wilk normality test, followed by the Wilcoxon Signed Rank Test, as the data were not normally distributed. The findings indicated that there was no significant difference between the pre-test and post-test scores ($\text{sig.} = 0.576 > 0.05$), so Educaplay was declared statistically ineffective in improving vocabulary mastery. However, qualitatively, students showed increased enthusiasm and engagement in learning. The researchers concluded that the failure to achieve a significant effect was due more to the very short treatment duration and the inconsistency of the test format than to any weakness of the Educaplay platform.

itself. Despite providing useful insights, this study focused only on vocabulary and elementary school learners and therefore does not address the effectiveness of Educaplay for listening comprehension at the secondary or Senior High School level.

The second study, conducted by Rahman and Muallim (2025), also explored the use of Educaplay, but in the context of EFL learners in boarding schools. The study aimed to assess the impact of Educaplay-based gamification on students' vocabulary proficiency and learning motivation. It employed a pre-experimental one-group pretest-posttest design with 42 students, and the treatment involved six learning sessions. The research tools included a vocabulary test and a student perception survey. The data were analyzed using descriptive statistics, normality tests, and paired-samples t-tests at the 0.05 significance level. The results indicated a significant improvement in scores, with the pre-test average at 55.71 and the post-test average at 94.48. Therefore, these findings cannot explain the effectiveness of Educaplay in improving listening comprehension, particularly in Senior High School contexts. Additionally, the survey results showed increased student motivation and satisfaction with their learning experience. However, the researchers noted the study's limitations, including the lack of a control group, which means the observed improvements could not be attributed solely to Educaplay. While this study highlights the potential benefits of Educaplay-based gamification, it focuses primarily on vocabulary rather than listening comprehension. It lacks a comparison group, limiting the ability to draw strong causal conclusions.

The third study, conducted by Rosyidah, Laksmi, and Anugerahwati (2023), examined the impact of gamification in the Duolingo application on junior high school students' English listening comprehension. This research employed a quantitative, nonequivalent control-group quasi-experimental design with seventh-grade students in both the experimental and control groups. The research instruments included listening tests (pre-test and post-test) and observational data collected during the treatment sessions. Data analysis was carried out using descriptive statistics, the Kolmogorov–Smirnov normality test, Levene's test for

homogeneity, and the independent-samples t-test in SPSS. The results revealed that the experimental group had a higher average post-test score (68.39) than the control group (55.81), with a p-value of 0.002 (< 0.05). While the study was methodologically robust, it was conducted at the junior high school level and used Duolingo rather than Educaplay, so its findings may not be directly applicable to Senior high School students or the Educaplay platform. Thus, although the study supports the effectiveness of gamification for listening comprehension, it does not specifically address the use of Educaplay or Senior High School learners.

The fourth study, conducted by Torres Rodríguez et al. (2023), investigated the use of gamification strategies to enhance students' listening comprehension skills in Ecuador. This research employed a mixed-method action research approach, involving 33 high school students aged 14 to 15 years. Gamification was incorporated through game-based classroom activities such as Simon Says, Running Dictation, and Pass the Ball which is added with points, scores and challenges. Quantitative data were gathered through pre-test and post-test listening comprehension assessments, while qualitative data were collected through observations and questionnaires. Quantitative data analysis used only descriptive statistics, without inferential tests. The results showed an increase in listening comprehension scores and a significant improvement in listening sub-skills, including understanding main ideas and specific information. However, this study did not use a control group, did not perform statistical significance tests, and did not use a specific digital platform, so its inferential power remained limited.

The fifth study, conducted by Bularafa et al. (2023), explored the impact of gamification techniques on students' listening comprehension abilities in Maiduguri Metropolis, Nigeria. This research involved 46 junior secondary school students and utilized a one-group pretest-posttest design. The gamification features included points, badges, leaderboards, levels, and rewards. Data analysis was performed using a paired sample t-test, and the results revealed a significant improvement in listening scores ($p = 0.0001 < 0.05$). While the findings highlight the effectiveness of gamification, this study lacked a control group, did not compare it with traditional methods, and did not use a specific digital platform such as Educaplay.

This limits the applicability of the findings to structured classroom settings using digital platforms such as Educaplay.

Based on previous studies, it can be concluded that gamification has strong potential to improve English language learning, particularly vocabulary and listening comprehension. However, several significant gaps remain. First, most studies involving Educaplay focus primarily on vocabulary rather than listening comprehension as a measurable skill. Second, many studies use pre-experimental designs without a control group, thus limiting the ability to establish causal relationships. Third, studies examining gamification for listening comprehension often use different platforms, such as Duolingo, than Educaplay. Fourth, research conducted in the context of Senior high schools, particularly in Indonesia, is still very limited. Therefore, this study aims to address these gaps by investigating the integration of Educaplay-based gamification in enhancing listening comprehension in 10th-grade Senior High School students using a quasi-experimental design with experimental and control groups, supported by inferential statistical analysis.

