

CHAPTER I

INTRODUCTION

1.1 Background

English language proficiency is one of the most important skills that must be mastered by students in the language learning process, but many students have difficulty understanding and are less effective in applying English skills. Especially in learning grammar, Grammar is the basic competence that takes the big role in English Language. It affects all competences in English language proficiency such as speaking, listening, reading and writing. So, it becomes important to EFL students to learn grammar communicatively to be fluent in English as spoken and then written (Ahmad, 2018).

In High School in Indonesia, students are usually introduced to the basic concepts of English grammar. Students will learn about tenses such as simple present tense, simple past tense, and simple future tense, and how to use them correctly in sentences. However, as many as 30% of students are less able to understand grammar due to lack of motivation to learn and lack of understanding of grammar which makes students less able to understand grammar during learning and outside of learning. To overcome this difficulty, innovative and interesting learning methods are needed so that students are more motivated in learning. The participation of technology in English learning activities in digital era is not new anymore. It is applied to make students more excited and motivated as well. Similar with the English learning environment in English Education academic activities (Redjeki & Muhajir, 2020).

According to Suryani (2023) in the era of the industrial revolution 4.0, we can utilize and maximize technology in terms of education, especially to support learning English, as we already know that English is a scourge for students. Many students are still confused about phrases, sentence structure, grammar, and vocabulary. We can get rid of their worries by using and implementing the Duolingo application as a learning media. This application has been widely used as a language learning tool because it provides interesting interactive exercises and allows students to learn independently.

Duolingo is one of the popular language learning apps that offers a gamified approach to learning grammar. Although Duolingo focuses more on reading, writing, listening, and speaking exercises in the form of interactive questions, grammar aspects are also taught implicitly through example sentences and word usage patterns. Users can understand grammar rules by seeing the patterns that appear in various exercises without having to learn the theory directly. The Duolingo application is attractive to students because the learning method uses audio, visuals and questions in English to measure a person's abilities. In each unit, students are asked to learn about understanding basic phrases, using common phrases, discussing about food and animals, then also discussing plural words. By utilizing the Duolingo application, it is believed that it can help the learning process both at home, school, and other places (Suryani, 2023).

The reluctance of millennials and generation z to learn grammar is often considered boring and too theoretical. Many students find it difficult to understand complex grammar rules, especially if they are only taught through textbooks and written exercises without interesting context. The lack of interactive and fun approaches makes them lose interest in learning grammar seriously.

Based on the background above, it is important to in still a sense of education or learning in general to foster interest in learning English, especially learning grammar in young people through the Duolingo application so that mastering good grammar will help them communicate more clearly, both verbally and in writing.

The researcher uses the Gamification approach where this approach combines game elements, such as points, levels, challenges, and rewards, into the learning process to increase user motivation and engagement. Gamification is an approach to game elements that can be controlled in certain fields, especially in education, with the aim of making them more interesting, easy to understand and creative, where game elements are related to motivation, participation and achievement. Gamification has shown its effectiveness in students' integration of the education process by increasing students' integration with the teaching material and increasing their competence. Learning and teaching a new language is a complicated and strenuous process, so learners usually need to be motivated. In the

context of language learning, gamification helps make the learning experience more interactive and fun, so that users feel encouraged to continue practicing (Al-Dosakee & Ozdamli, 2021).

Based on the background above, the researcher is interested in conducting research with a related title “Using Duolingo Application In strengthening Grammar To The Students of SMAN 4 Palopo”.

1.2 Problem Statement

Based on the background above, the issues in this research can be identified as follow: “Does the use of Duolingo applications improve students’ grammar at the tenth grade of SMAN 4 Palopo?”.

1.3 Objective Research

The objective of the research was to find out the effectiveness of using Duolingo application in strengthening grammar to the students of SMA 4 Palopo and identify students' responses toward the use of Duolingo application in learning grammar.

1.4 Significant Research

The significant of this research as material for the use of the Duolingo application for students at SMAN 4 Palopo and it is hoped that students can take or reap positive values from this Duolingo application.

1.5 Scope of The Research

The scope of the research focuses on the enhancing the grammar skill by using Duolingo applications to students at SMA 4 Palopo. Researchers use the Duolingo application as material to improve students' grammar skills which focuses on tenses such as simple present tense, simple past tense, and simple future tense.

1.6 Operational Definition

The operational definition is as follows:

1. Grammar

Grammar is a structural rule that regulates the composition of clauses, phrases, and words in a language. Grammar has an important role because grammar regulates how to write a sentence so that it looks cohesive and understandable.

2. Gamification

Gamification is the use of game design elements in a non-game context. Gamification in education is a concept used with an approach using game elements to increase motivation, engagement and results in various contexts.

3. Duolingo

Duolingo application is a game-based language learning platform that allows users to learn multiple languages for free and in a fun way, with an interactive approach and a focus on everyday communication.

CHAPTER II REVIEW OF LITERATURE

2.1 Some Pertinent Ideas

1. Grammar

a. Definition of Grammar

Grammar is a set of structural rules that regulate the composition of phrases, clauses, and words in a language. Grammar can arrange words and other elements in a language so as to provide clear meaning or significance in speaking, or listening, as well as in reading and writing. According to Elish (1984) in Saragih (2023), formal teaching materials in a language include grammar teaching which can accelerate a person's level of language acquisition without wasting time (Saragih et al., 2023).

According to Crystal in Tarigan (2009), Grammar also known as syntax and morphology, is the study of phrase structure. It is commonly provided as a guide or textbook. belief in the pragmatic, phonological, and semantic principles that govern language in general or in a particular language. Therefore, grammar contributes to the formation of meaning and comprehension in communication in addition to serving as a norm for creating sentences that are structurally sound. Therefore, mastering grammar is crucial for improving language abilities both in writing and speaking, whether studying a first or second language (Fatmawati, Sudirman, & Munawaroh, 2023).

Based on the explanation above, grammar is crucial to language learning and usage, as the description above makes clear. A person may create sentences with the right structure by knowing grammar, which makes the message more effective and clear. Grammar proficiency is also crucial for oral and written communication, particularly while learning a first or second language. Proficiency in grammar comprehension and application will enhance language proficiency and enhance communication expressiveness.

b. The Importance of Grammar

Learning a language must have the support of various components in the language such as vocabulary, grammar or language structure, pronunciation and spelling. However, learning a foreign language requires more effort because it involves additional elements such as understanding culture, social context, and native speaker communication habits. Learners must actively try to listen, speak, read, and write and then master vocabulary, pronunciation, spelling, and most importantly grammar. According to Greenbaum (1996) English language studies can help students improve their ability to adapt to their language in various situations. They must learn to adopt common writing conventions in, vocabulary, spelling, punctuation, and most importantly grammar (Redjeki & Muhajir, 2020).

From the explanation above, it is explained that learning grammar is a very important factor to help us understand language and use language effectively. Therefore, our students must be more serious in learning and understanding grammar accordingly so that they can apply current usage standards in their daily lives.

c. Student's Problems in Grammar

According to Ellis (2009: 144), there are three categories of challenges in learning grammar: linguistic factors, psychological difficulties, and environmental factors. The frequency of input derived from the environment is one of the factors associated with the linguistic environment. A language's grammar is referred to as its linguistic factor, while learning capacity is referred to as its psychological element. Learners have a variety of difficulties in comprehending and mastering grammar due to environmental influences. Ineffective teaching strategies for conveying grammar topics, a lack of interaction with native speakers, or restricted exposure to the target language are examples of environmental issues. Therefore, in order to enhance language acquisition, it is critical for learners to have a supportive atmosphere both within and outside of the classroom when learning grammar (Effendi, Rokhyati, & Rachman, 2017).

Among the three problems student's have in learning grammar, the lack of understanding of basic grammar rules is also a problem in learning grammar, which makes it difficult for students to learn grammar. In addition to practicing effective

communication in the language, student's must master the fundamental grammatical principles of the language. According to Ellis (1993), they will never be able to articulate their ideas and thoughts clearly and accurately if they do not concentrate on studying grammar principles. To comprehend what others have to say, students must concentrate on improving their reading and listening abilities (Akbar & Ahmad, 2017).

2. Tenses

a. Definition of Tenses

Tenses are verb forms that indicate the time of an action or event. According to Suri (2020) Tenses are part of grammar as a supporting aspect in learning English besides vocabulary and pronunciation, he also mentioned that the purpose of using tenses is to indicate the time an activity takes place so that the reader can understand the message conveyed well.

Asmarani & Sundari (2023) explained that tenses are an important part of English, understanding and mastering tenses we can write and speak English more clearly and accurately. He also explained that tenses are divided into three, namely simple present, simple past, and simple future tense.

Based on the explanation above, tenses are essential to learning English, as may be inferred from the explanation above. They facilitate better and more accurate communication by helping to specify the time of an action or event and Tenses are crucial grammatical elements that, in addition to vocabulary and pronunciation, facilitate efficient language learning.

b. Simple Present Tense

According to Murti (2022) simple present tense is a verb form in English that is used to talk about something that is general, or something that always happens repeatedly, or a general truth. Simple present tense has two sentence formulas, namely verbal sentences and nominal sentences. The formulas are as follows:

Verbal:

Subject + Verb 1 (+ s/es) + Complement

Nominal:

Subject + To be + Complement

M. Hamid Hediysah et al., (2024) explaining that the simple present tense has three verbal sentences, affirmative verbal sentences, negative verbal sentences, and interrogative verbal sentences which will be explained as follows:

- **Affirmative Verbal Sentences**

Affirmative verbal sentences are formed by adding –s or –es at the end of the verb for the third person singular; he, she, it. The formula is as follows.:

Subject + Verb 1 + (....)

Subject + Verb 1 (s/es) + (....)

- **Negative Verbal Sentences**

This sentence is formed by adding do not and does not before the infinitive of the verb. The formula is as follows:

Subject + do not + Verb 1 + (....)

Subject + does not + Verb 1 + (....)

- **Interrogative Verbal Sentences**

This sentence is formed by adding do or does in the first place of a sentence. The formula is as follows:

Do + Subject + Verb 1 + (....)

Does + Subject + Verb 1 + (....)

c. **Simple Past Tense**

According to Murti (2022), simple past tense is a sentence used to tell events that occurred in the past and finished or ended in the past also in the same sentence. He also explained that there are two formulas for simple present tense, namely verb sentences and nominal sentences, the formulas are as follows:

Verbal:

Subject + Verb 2 + complement

Nominal:

Subject + to be (was/were) + complement

d. Simple Future Tense

(Nyanden & Zulkarnain, 2024) explained simple future tense is one of the most important is the simple future tense. It facilitates students' expression of future-focused thoughts, including goals, objectives, and forecasts. One of the most important steps in learning English is comprehending and appropriately utilizing the simple future tense. Different from simple present tense and simple past tense, simple future tense relies on modal auxiliary and similar modal which means "will". Modal auxiliary in simple future tense are shall, will, and be going to. The formula used in simple future tense is as follows:

Subject + will/shall + Verb 1 + Object

Subject + to be (am/is/are) going to + Verb 1

3. Duolingo

a. Duolingo Application

Duolingo is an application created by Luis Von Ahn and Severin Hacker based in the United States which was created in 2011 with the motto "*Free World Language Learning*". This application makes it easier for students to learn languages online, where this application aims to help students learn a language efficiently, effectively and fun to learn (Nuri, Heryana, Hanifah, Mujahidah, & Akbar, 2024).

According to Putri & Islamiati (2018) are the process of presenting educational content in an entertaining way using a system, like a game that allows players to learn while they play, followed by an eye-catching visual display with

aural support. This program covers a wide range of language abilities, including speaking, writing, listening, grammar, and vocabulary. It is available on multiple platforms and is lightweight, so it doesn't put undue strain on the platform (Habibie, 2020).

The application offers a lot of simple language-learning activities for novices. According to (Krashen, 2014), the tasks in this application focus on translation, dictation, and pronunciation. By providing data on points earned, overview trees, streaks, and time spent learning with the Duolingo app, this tool may assess student success in an enjoyable manner (Fatmawati et al., 2023).

Based on the explanation above, Duolingo is a language learning application that offers an innovative, interactive, and fun learning approach, which makes learning more like playing than memorizing language rules. And also because of its flexibility, this application can be used anytime and anywhere so that the Duolingo application becomes one of the effective student tools for learning languages independently and efficiently outside of classroom learning.

b. How To Use Doulingo Application

- a. Before creating an account, we can immediately press "Let's get started" or if we already have an account, we can press "I already have an account".



Picture 1 Picture of Duolingo Create Account

- b. After pressing "let's get started" you will be asked to follow the initial procedure for using Duolingo as shown in the following image.



Picture 2 Choosing Language

- c. After doing the initial procedure, we are asked to determine the starting point of the English course. If we still do not understand and want to understand English, we can choose the option "is it your first time learning English?" and if we already understand a little about English, then choose the option "already understand a little English?".



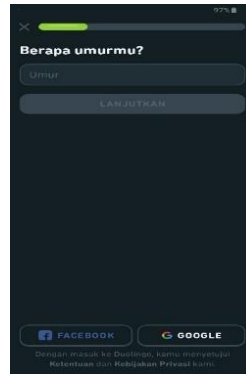
Picture 3 Starting Point of The English Course

- d. After carrying out the initial procedures, we are asked to work on several questions related to English language proficiency.



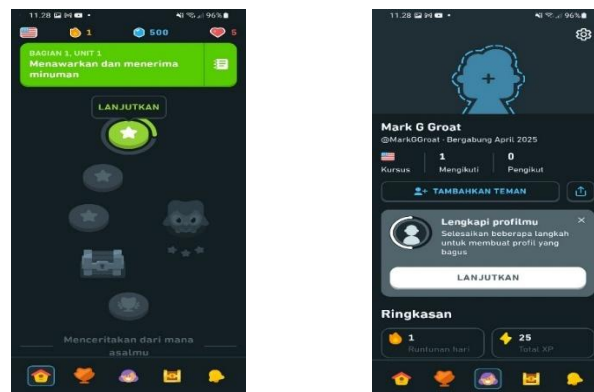
Picture 4 Several Question in Duolingo App

- e. After completing the questions, we can immediately create an account for the Duolingo application, either by using Facebook or Google as a Duolingo account.



Picture 5 Create an Account for Duolingo App

- f. After creating a Duolingo account, we can immediately work on the questions in the sections in the following image, and you can also customize your profile after creating a Duolingo account.



Picture 6 Duolingo Main Menu & Profile Menu

c. The Importance of Duolingo Application

Rachmah (2018) explains that the Duolingo application has many benefits for people learning English. The first is that it can help students to improve their mastery of grammar, and secondly, the Duolingo application can help teachers to make it easier to provide English learning to students (Fatmawati et al., 2023).

According to Jaskova (2014:24) this Duolingo application is very helpful for someone to learn and improve English vocabulary, pronunciation and grammar which can be learned easily. And Duolingo has many good and structured learning

strategies with a game system that can help students in learning and can help teachers in teaching material to students (Solihin, Hartono, Rukmini, & Wahyuni, 2022).

Based on the explanation above, the Duolingo application was created or presented as an educational application that can be accessed by students as a new learning experience and also helps students to master various English language skills in the Duolingo application.

d. Teaching Grammar by Using Duolingo

Teaching grammar using the Duolingo app can be an effective way to improve students' understanding of grammar. Some experts have given some positive feedback regarding teaching using the Duolingo app. Krashen (2014) explains that the Duolingo app is a web-based, self-paced language learning tool that walks users through a series of challenges that are mostly translation-based. It aims to teach pupils both conscious and subconscious language acquisition through reading and hearing language samples (Astarilla, 2018).

The first thing for teaching grammar with the Duolingo application is practicing composing words into sentences, practicing translating sentences, and practicing filling in missing words in sentences so that students can understand the basic rules of grammar. The second is that the teacher asks students to analyze sentence structures such as differences in tenses, plural and singular forms, and the use of pronouns in English (Saragih, 2023).

After completing the exercise, students discuss the grammar rules that appear in the sentence and the teacher provides example sentences from the Duolingo application to clarify certain grammar concepts. And the teacher holds exercises using the Gamification method, namely creating a competition where at the end of each meeting students form groups and complete grammar exercises in Duolingo with the highest score, and teachers can use the "streak" feature to build motivation and grammar learning habits (Youlanda, 2023).

e. Gamification

Gamification is the use of game elements in non-game contexts to motivate and engage people in a particular activity or process. According to Shahri et al. (2019) in learning, gamification includes the use of elements such as challenges,

points, rewards, levels, competition, and collaboration to increase engagement and achievement of learning goals. The term gamification dates back to early 2008, but by 2010, the use of the term had become widespread.

Hursen and Bas (2019) indicated that ‘gamification in education increases learners’ motivation, participation and loyalty. And they see the positive impact of the gamification method, namely it can be useful for creating commitment in learning for students (Al-Dosakee & Ozdamli, 2021).

Based on the explanation above, gamification in education plays an important role in increasing student motivation, involvement, and engagement. This can be achieved by using game components such as challenges, points, awards, levels, competitions, and collaborations.

f. Advantages and Disadvantages of Duolingo in Teaching Grammar

a. Advantages

Duolingo are a type of application that can be used to teach language skills to students’. Abila & Nurcholis (2025) explained that the Duolingo Approach is very friendly and comfortable to use to teach grammar, such as providing interesting, efficient, and easily accessible language learning. According to Journ (2025), when used in the classroom, they appear to offer additional benefits, such as:

1. They assist pupils in practicing grammar and vocabulary.
2. It's readily available. Incorporate gamification components that inspire students.
3. They aid in forming the habit of learning a language.

Additionally, the app's spaced repetition method improves learning by helping users remember words and ideas over time. Additionally, by enabling students to engage with one another, share their accomplishments, and take part in friendly challenges, Duolingo's social features foster a sense of community. Because it offers the structure and flexibility required to achieve fluency, Duolingo's innovative approach to language learning makes it an excellent tool for anyone looking to improve their English (Dearestiani, Rohman, & Pane, 2023).

b. Disadvantages

Although Duolingo is a great language app platform, it also has some disadvantages that can affect classroom learning. According to Symonenko & Syzonova, (2019) Duolingo still has shortcomings as a platform for teaching students in the classroom. The drawbacks of the Duolingo app are as follows:

1. Limited speaking exercises: Duolingo offers a small number of speaking exercises, which makes it less effective for building speaking skills.
2. Uneven coverage of language aspects: some users may find that certain aspects of the language, such as grammar, are more extensive than others.

Based on the explanation above, the Duolingo application is a great language learning platform, but there are some shortcomings that can make learning in class difficult, especially in improving speaking skills and covering less evenly distributed aspects of the language.

2.2 Previous Study

1. Handayani (2023), in her research “*Improving Students Ability in Mastering Simple Present Tense by Using Duolingo Application*” the objective of this research is to investigate the significant research improvement in students’ ability to mastering simple present tense after being taught by using Duolingo application. The result showed it was indicated that there is a significant improvement in students’ ability in mastering simple present tense after being taught by using Duolingo application. The differences with this research are from the sample in previous study used VIII however this research used IX class for the research and the previous study used one class for the research but in this research the researcher used two classes for the research.
2. Suryani (2023), in his research “*Increasing English Language Skills In Terms of Grammar by Using Duolingo Application*” the purpose of this research is to know that students can learn English, especially in terms of grammar which is expected to be practiced in school or home. This belongs

to qualitative research with a case study. The result from the interview of some users said that their proficiency in English has increased after using this application. Based on this study, we can see that the Duolingo application is very helpful and also effective when used by students because they can be assisted in mastering vocabulary, phrases and grammar.

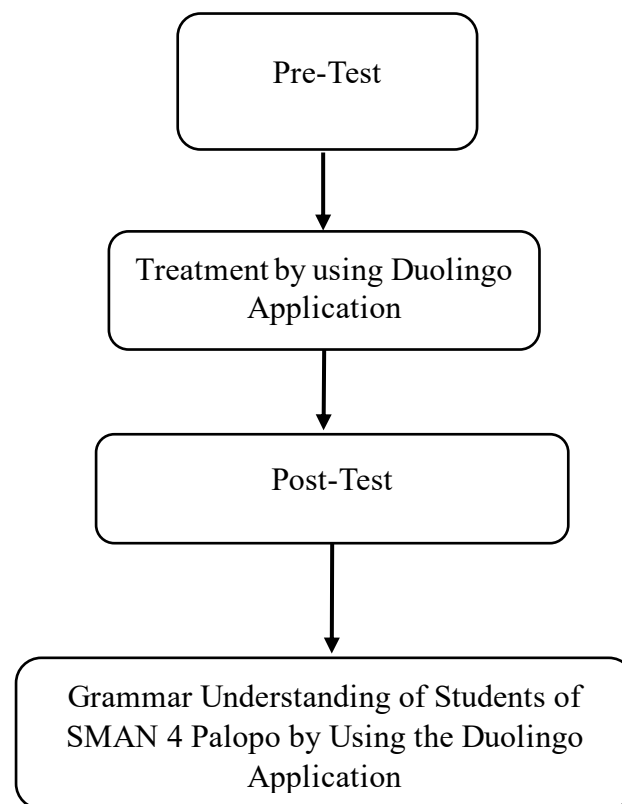
3. Youlanda (2023), in this research "*The Effectiveness Of Using Duolingo Application for Students' Grammar Ability In English*" the purpose of this research is to investigate wheather or not Duolingo Application can improve students' grammar ability in English. This finding from this study was reveals that Duolingo application gives significant result at 7th grade students of SMP Satria Dharma Perbaungan to increase students' grammar ability in English. Based on this study also show that technology-based learning, especially gamification, found in Duolingo, can be more effective and enjoyable for students to understand and master grammar.

This study has similarities with previous studies, namely the focus on the use of the Duolingo application as a learning medium in mastering grammar material, especially tenses. Both from previous studies such as Handayani (2023) and Youlanda (2023) and in this study, the quantitative method with a pre-experimental is used to test the hypothesis to establish a causal relationship. Another similarity between previous studies and this study is the instrument used, the instrument used is a multiple-choice test for collecting research data.

This study also has differences with previous studies, the difference lies in the research subjects, where previous studies such as Handayani's research (2023) and Youlanda's (2023) used samples of class IX and class VII students, while this study used class X students as samples for this study. And also the difference from the Suryani researcher in the use of methods and instruments used for data collection, in Suryani the method used is qualitative and the instrument used is an interview for data collection. While for this study, the method used is a quantitative method with pre-experimental.

In addition, the number of classes used as samples is also different, previous studies such as Youlanda (2023) took two classes, but in this study only took one class which allows for in-depth analysis. Another difference lies in the scope of the grammar material studied, where in previous studies only focused on simple present tense, while in this study it covers several other types of tenses such as simple present tense, simple past tense, and simple future tense.

2.3 Conceptual Framework



Picture 7 Thinking framework scheme

2.4 Research Hypothesis

Based on the above, the hypothesis that can be taken from the use of the Duolingo application to teach students at SMAN 4 Palopo is:

1. (H_0): There is no significant effect of Using Duolingo Application In Strengthening Grammar To The Students of SMAN 4 Palopo.

2. (H_a): There is a significant effect of Using Duolingo Application In Strengthening Grammar To The Students of SMAN 4 Palopo.
 - If the value of Asymp.sig 2 tailed < 0.05 then (H_0 is rejected and H_a is accepted)
 - If the value of Asymp.sig 2 tailed > 0.05 then (H_0 is accepted and H_a is rejected)

According to the above criteria, if a significant value of Asymp.sig 2 tailed is lower than 0.05, it means that H_a is accepted. This means that there is a significant difference between the students' pre-test and post-test results after they use Duolingo in the learning process. On the other hand, if a significant value of Asymp.sig 2 tailed is higher than 0.05, it indicates that H_0 is accepted. It means there is no significant difference between students test scores before and after using a Duolingo.