INVESTIGATING THE EFFECT OF GAMIFICATION ON EFL LEARNERS' MOTIVATION AT UIN PALOPO

A Magister Thesis

Submitted to Fulfill the Requirements for A Master's Degree in English Educational Study Program (M.Pd)

Proposed by
FAUZIAH TANJUNG
Reg Num: 2305040002

ENGLISH EDUCATION STUDY PROGRAM POSTGRADUATE
STATE ISLAMIC UNIVERSITY OF PALOPO
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Reg Num: 2305040002

Supervised by
1. **Dr. Masruddin, S.S., M.Hum.**
2. **Dr. Jufriadi, S.S., M.Pd.**

ENGLISH EDUCATION STUDY PROGRAM POSTGRADUATE
STATE ISLAMIC UNIVERSITY OF PALOPO
2025

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Master's thesis entitle "Investigating The Effect Of Gamification On Efl Learners' Motivation At Uin Palopo" written by Fauziah Tanjung, student Identification number 2305040002, student of UIN Palopo Postgraduate Tadris English Language Study Program, which has been examined in the *Munaqasah* session of the research on Tuesday, 09th of September 2025 which coincide with 16 Rabiul Awal 1447 H, and accepted as a requirement for obtaining a master's degree in field of Tadris English Language (Master of Education)

Palopo, 17th September 2025

EXAMINER TEAM

1. Prof. Dr, Muhaemin, M.A	Chairman of the Session	( )
2. Dewi Furwana,S.Pd.I.,M.Pd	Secretary of the session	( )
3. Prof. Dr. H. Rustan S.S M.Hum.	Examiner I	( )
4. Dr. Wisran, S.S., M.Pd.	Examiner II	( )
5. Dr. Masruddin, S.S., M.Hum.	Supervisor I	( )
6. Dr. Jufriadi, S.S., M.Pd.	Supervisor II	( )

Approved by

Direktur Pascasarjana

Prof. Dr, Muhaemin, M.A
Nip 197002032005011 006

The head of Tadris English

Dr. Wisran, S.S., M.Pd.
NIP 19720611 20003 1 001

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The researcher hopes this thesis can give some value to the students of the English Department, English teachers, and readers. The researcher admits that this thesis is not perfect, so the researcher will accept suggestions from the readers to improve it. The researcher hopes that this thesis will be beneficial to everyone.

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Fauziah Tanjung
NIM: 23 0504 0002

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ABSTRAK

Fauziah Tanjung, 2025. *"Pengaruh Gamifikasi terhadap Motivasi Pembelajar EFL di UIN Palopo."* Tesis Pascasarjana Program Studi Tadris Bahasa Inggris, Universitas Islam Negeri Palopo. Dibimbing oleh Masruddin dan Jufriadi.

Penelitian ini bertujuan untuk menyelidiki pengaruh gamifikasi terhadap motivasi pembelajar Bahasa Inggris sebagai Bahasa Asing (EFL) di UIN Palopo, dengan fokus khusus pada penggunaan *Kahoot* dan *Duolingo*, serta didasarkan pada teori motivasi *(Self-Determination Theory* dan *Malone's Intrinsic Motivation)*, teori pembelajaran orang dewasa *(Andragogy dan Social Cognitive Theory)*, serta teori gamifikasi *(Constructivist Theory dan Flow Theory)*. Penelitian ini menggunakan desain kuasi-eksperimental dengan *pretest–posttest* yang melibatkan 34 mahasiswa semester II jurusan Akuntansi. Kelompok eksperimen memperoleh pembelajaran dengan pendekatan gamifikasi, sedangkan kelompok kontrol mengikuti metode tradisional. Data dikumpulkan melalui angket motivasi dan observasi kelas, kemudian dianalisis menggunakan SPSS serta teknik deskriptif. Hasil penelitian menunjukkan adanya peningkatan signifikan pada skor motivasi kelompok eksperimen (dari 38,82 menjadi 54,12, $r = 0,822$, $p < 0,05$), yang juga diperkuat oleh hasil observasi berupa peningkatan keterlibatan dan antusiasme mahasiswa. Kebaruan penelitian ini terletak pada pendekatan dengan dua media sekaligus, yaitu mengintegrasikan *Duolingo* sebagai sarana latihan bahasa dan *Kahoot* sebagai media tinjauan kolaboratif, yang dirancang khusus untuk pembelajar dewasa di perguruan tinggi. Secara teoretis, penelitian ini memperkaya kajian mengenai gamifikasi dengan menyoroti efektivitasnya dalam konteks EFL perguruan tinggi di Indonesia. Secara praktis, penelitian ini memberikan wawasan bagi guru EFL tentang bagaimana kombinasi *platform* gamifikasi dapat meningkatkan motivasi belajar dan partisipasi siswa di kelas.

Kata Kunci: Gamifikasi, Motivasi Belajar, Pembelajar EFL, UIN Palopo

ABSTRACT

Fauziah Tanjung, 2025. "*The Effect of Gamification on EFL Learners' Motivation at UIN Palopo.*" Thesis of Postgraduate English Language Education (Tadris Bahasa Inggris) Study Program, Universitas Islam Negeri Palopo. Supervised by Masruddin and Jufriadi.

This study investigates the impact of gamification on the motivation of English as a Foreign Language (EFL) learners at UIN Palopo, focusing on the use of **Kahoot** and **Duolingo**. The research is grounded in motivation theories (Self-Determination Theory and Malone's Intrinsic Motivation), adult learning theories (Andragogy and Social Cognitive Theory), and gamification frameworks (Constructivist Theory and Flow Theory). A quasi-experimental pretest–posttest design was employed with 34 second-semester Accounting majors. The experimental group received instruction through a gamification approach, while the control group followed traditional methods. Data were collected via a motivation questionnaire and classroom observations, then analyzed using SPSS and descriptive techniques. The results reveal a significant increase in the experimental group's motivation scores (from 38.82 to 54.12, $r = 0.822$, $p < 0.05$), corroborated by observation data showing greater engagement and enthusiasm. The novelty of this research lies in combining two platforms Duolingo for language practice and Kahoot for collaborative review specifically tailored to adult learners in higher education. Theoretically, the study enriches the literature on gamification by highlighting its effectiveness in an Indonesian tertiary EFL context. Practically, it provides valuable insights for EFL instructors on leveraging multiple gamified platforms to enhance learner motivation and classroom participation.

Keywords: Gamification, Learning Motivation, EFL learners, UIN Palopo

Verified by UPB

الملخص

فوزية تانجونج، ٢٠٢٥. "أثر التلعيب على دافعية متعلمي اللغة الإنجليزية لغة أجنبية في جامعة بالوبو الإسلامية الحكومية". رسالة ماجستير، برنامج دراسة تعليم اللغة الإنجليزية، الدراسات العليا، جامعة بالوبو الإسلامية الحكومية. بإشراف الدكتور مسردين، والدكتور جفريادي.

يهدف هذا البحث إلى دراسة أثر التلعيب على دافعية متعلمي اللغة الإنجليزية لغة أجنبية في جامعة بالوبو الإسلامية الحكومية، مع التركيز على استخدام تطبيق كاهوت و دولينجو، ويرتكز على نظريات الدافعية (نظرية التحديد الذاتي ونظرية الدافعية الجوهرية لمالون)، ونظريات تعليم الكبار (الأندراغوجيا ونظرية الإدراك الاجتماعي)، ونظريات التلعيب (النظرية البنائية ونظرية التدفق). اعتمد البحث على تصميم شبه تجريبي باختبار قبلي–بعدي بمشاركة ٣٤ طالباً من الفصل الدراسي الثاني في قسم المحاسبة، حيث تلقّت المجموعة التجريبية دروساً مطبقة بالتلعيب، بينما تلقت المجموعة الضابطة دروساً بالطرق التقليدية. جُمعت البيانات من خلال استبيانات الدافعية والملاحظات الصفية، وتم تحليلها باستخدام برنامج إس.بي.إس والأساليب الوصفية. وقد أظهرت النتائج تحسناً ملحوظاً في درجات دافعية المجموعة التجريبية (من ٣٨,٨٢ إلى ٥٤,١٢، $r = ٠,٨٢٢$، $p < ٠,٠٥$)، مدعومة بملاحظات صفية أبرزت زيادة التفاعل والحماس. وتكمن جدة هذا البحث في استخدام أداتين معاً، بدمج دولينجو لممارسة اللغة الفردية و كاهوت للمراجعة التعاونية، بحيث صُممت خصيصاً لتناسب متعلمي الكبار في التعليم العالي. ومن الناحية النظرية، يُسهم البحث في إثراء الدراسات المتنامية حول التلعيب بإبراز فعاليته في سياق تعليم اللغة الإنجليزية لغة أجنبية في الجامعات الإندونيسية. أما من الناحية التطبيقية، فيقدم البحث رؤى للمدرسين حول كيفية الجمع بين منصات التلعيب لتعزيز دافعية المتعلمين ومشاركتهم الصفية.

الكلمات المفتاحية: التلعيب، دافعية متعلمي اللغة الإنجليزية لغة أجنبية، متعلمو اللغة الإنجليزية لغة أجنبية، جامعة بالوبو الإسلامية الحكومية

اللغة تطوير وحدة قبل من التحقق تم

CHAPTER I

INTRODUCTION

A. Background

The education landscape has undergone a profound transformation in recent years, with the integration of technology becoming an essential component to meet the evolving demands of modern learning. In an era marked by rapid educational transformation the synergy of combining globalization with new technology has had dramatic impacts, including in English language teaching and learning.[1] In this context, proficiency in English as a foreign language has become increasingly vital, serving as a critical tool for individuals to navigate and succeed in a globalized era.[2] Consequently, The role of technology media is needed in the learning process, where media is not merely a tool but an integral part of the educational system and learning process.[3]

Technology in education facilitates personalized learning, provides access to diverse resources, and fosters interactive and collaborative environments, which are crucial for preparing learners for the challenges of a rapidly digitizing world. In the context of English as a Foreign Language (EFL) education, technology offers innovative tools to address persistent challenges, such as low motivation and engagement among learners. One approach that leverages the strengths of

[1] Jufriadi Jufriadi and Wahibah Wahibah, "Faith-Driven Innovation in Practice: Investigating MBKM within Islamic Higher Education in Indonesia," *Utamax: Journal of Ultimate Research and Trends in Education* 7, no. 1 (2025): 71–86.
[2] Amalia, Y., & Muliasari, A. "The Influence of Arabic Sound toward English Pronunciation at English Department Students of IAIN Palopo". *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature* 3, no. 2 (2015).
[3] Masruddin Masruddin, "The Importance of Using Technology in English Teaching and Learning," *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature* 2, no. 2 (2014).

technology to enhance learning outcomes is gamification, which applies game design elements in non-game contexts to improve motivation and engagement.

Gamification, as a learning approach that adopts game elements in a non-game context, has attracted great attention in the education world.[4] Gamification, which integrates game aspects like points, leaderboards, and prizes into non-gaming environments, offers numerous benefits to education[5] and it refers to various activities and procedures.[6] Gamification is a pedagogical approach that utilizes game elements to create an interactive and motivating learning environment. Gamification has been recognized for its ability to transform traditional learning experiences into dynamic and enjoyable activities, making learning more appealing and effective. The game elements would make learning process more enjoyable and exciting that can significantly boost student motivation and engagement.[7] This transformation is crucial as it fosters a sense of excitement and challenge among students, which in turn cultivates a more positive learning atmosphere and increases their involvement in educational activities.[8] Research indicates that gamification not only boosts optimizes learning outcomes but also motivation, as students are more likely to participate

[4] Zainuddin, Z., et al. (2020). "The role of gamified e-quizzes on student learning and engagement: An interactive gamification solution for a formative assessment system". Computers & Education, 145, 103729.

[5] Dewi Furwana et al., "Game-Based Learning in the AI Era: Designing Curricula for Society 5.0," in *Advancing Society 5.0 Through AI-Driven Curriculum Innovation* (IGI Global Scientific Publishing, 2026), 259–94.

[6] Ika Puspitasari and Shokhibul Arifin, "Implementation of Gamification on Learning Motivation: A Meta-Analysis Study," *International Journal of Progressive Sciences and Technologies* 40, no. 1 (2023): 356, https://doi.org/10.52155/ijpsat.v40.1.5596.

[7] Jorge Simões, Rebeca Díaz Redondo, and Ana Fernández Vilas, "A Social Gamification Framework for a K-6 Learning Platform," *Computers in Human Behavior* 29, no. 2 (2013): 345–53.

[8] Carlos J Hellín et al., "Enhancing Student Motivation and Engagement through a Gamified Learning Environment," *Sustainability* 15, no. 19 (2023): 14119.

actively when they perceive the learning process as enjoyable and rewarding.[9]

Motivation is defined as the learners' orientation in relation to the goals of learning the language. It determines the extent of active and personal involvement, as well as attitude towards learning.[10] Motivation is a critical factor as it influences the effort and persistence learners invest in their studies. Traditional language instruction methods may not sufficiently engage students, leading to a decline in motivation and, consequently, in learning outcomes. Intrinsic motivation refers to the internal drive to engage in learning activities out of genuine interest, enjoyment, or personal satisfaction, whereas extrinsic motivation is driven by external rewards or outcomes such as grades, recognition, or competition. In the EFL context, intrinsic motivation may arise when learners find language learning enjoyable and meaningful to their personal goals, while extrinsic motivation can be stimulated by tangible rewards or competitive achievements. Gamification has the potential to foster both types of motivation: tools like Duolingo can enhance intrinsic motivation through self-paced progress, mastery of tasks, and the pleasure of overcoming challenges, while Kahoot can strengthen extrinsic motivation by providing real-time feedback, leaderboards, and peer competition. This combination creates a balanced motivational environment that sustains learner engagement in the long term.

Many researches has consistently demonstrated that gamification tools like Kahoot and Duolingo significantly enhance student motivation in

[9] Loly Suwandani and None Sunyono, "Analysis of the Role of Gamification in Education: Its Impact on Student Motivation" 2, no. 1 (2024): 153–59, https://doi.org/10.32672/pice.v2i1.1332.
[10] Karen Yeok-Hwa Ngeow, "Motivation and Transfer in Language Learning. ERIC Digest.," 1998, https://api.semanticscholar.org/CorpusID:60530578.

educational settings one of the study from Petrusly proved the interactive nature of Kahoot, which includes real-time feedback and competitive elements, fosters both intrinsic and extrinsic motivation among students, encouraging them to actively participate in their learning process.[11] While another research highlights that Duolingo's gamified approach has attracted over 300 million active users, showcasing its effectiveness in promoting sustained engagement and motivation in language acquisition.[12]

Gamification platforms such as Kahoot, and Duolingo have gained widespread adoption in educational settings around the globe. Kahoot, for instance, offers a user-friendly interface for creating and participating in quizzes, surveys, and discussions. Its interactive nature, combined with real-time feedback and a competitive element, makes it an effective tool for fostering active learning.[13] Similarly, Duolingo provides a gamified experience for language learners, incorporating challenges, rewards, and streaks to keep users motivated.[14] These platforms provide engaging ways to introduce new content and facilitate interactive, fun learning experiences. Teachers can create customized activities aligned with their curriculum, while students engage in an enjoyable and competitive learning environment.

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[11] Petrusly Petrusly et al., "The Effect of Gamification Using Kahoot on Students' Critical Thinking Abilities: The Role of Mediating Learning Engagement and Motivation," 2024, https://doi.org/10.53555/kuey.v30i5.1524.

[12] Nikoletta Zampeta Legaki et al., "The Effect of Challenge-Based Gamification on Learning: An Experiment in the Context of Statistics Education," *International Journal of Human-Computer Studies* 144 (2020): 102496, https://doi.org/10.1016/j.ijhcs.2020.102496.

[13] Kuok Ho Daniel Tang, "Gamification to Improve Participation in an Environmental Science Course: An Educator's Reflection," *Acta Pedagogia Asiana* 2, no. 2 (2023): 54–63, https://doi.org/10.53623/apga.v2i2.192.

[14] Reza Hadi Mogavi et al., "When Gamification Spoils Your Learning: A Qualitative Case Study of Gamification Misuse in a Language-Learning App," 2022, https://doi.org/10.48550/arxiv.2203.16175.

The effect of gamification on EFL learners' motivation has been widely studied, particularly among younger learners, where tools like Kahoot and Duolingo have demonstrated significant potential. For example, studies such as Bander, Sahari, and Fawaz in Jeddah public schools and Moldakassymovna Duisenova in primary education have shown that gamification enhances engagement and vocabulary acquisition. Similarly, research by Hashim, Rafiq, and Yunus on ESL learners' grammar skills and Habibie on Duolingo's motivational impact further validate its effectiveness. However, research has largely overlooked adult EFL learners, leaving a gap in understanding how gamification impacts their unique motivational dynamics. Focusing on this underexplored context, this study aims to contribute novel insights into how gamification strategies can be tailored to enhance motivation specifically among adult EFL learners.

Adult learners have distinctive characteristics compared to younger learners, as explained by Knowles' andragogy, including being self-directed, goal-oriented, and drawing upon prior experiences to make learning meaningful. Gamification aligns with these traits by offering autonomy through choice-based activities, providing clear objectives via levels and challenges, and creating opportunities to connect learning with real-life contexts. In addition, Bandura's Social Cognitive Theory highlights how gamified environments encourage observational learning, build self-efficacy, and foster social interaction through collaboration and competition. Taken together, these perspectives show that gamification is not merely an engaging method but one that resonates with the

core principles of adult learning. By giving learners control, directing them toward concrete goals, and situating tasks within contexts that value their experiences, gamification operationalizes the very assumptions of andragogy, making it especially effective for adult EFL learners. By exploring the motivational impact of tools such as Kahoot, and Duolingo, this study aims to investigate the effect of gamification, specifically the use of the Kahoot and Duolingo platform, on the motivation of EFL learners in the Accounting Department at UIN Palopo.

B. Research Question

Based on the background above, the researches formulates the following research questions :

1. Does the use of gamification tools (Kahoot and Duolingo) significantly influence the motivation of EFL learners at UIN Palopo?
2. How does the use of gamification tools (Kahoot and Duolingo) influence the motivation of EFL learners at UIN Palopo?

C. Research Objective

1. To determine whether the use of gamification tools (Kahoot and Duolingo) significantly influences the motivation of EFL learners at UIN Palopo.
2. To explore how the use of gamification tools (Kahoot and Duolingo) influences the motivation of EFL learners at UIN Palopo.

D. Research Significances

1. For Teachers: This research will provide insights on how gamification tools such as Kahoot and Duolingo can increase student motivation and engagement

in EFL learning, offering practical strategies to enhance teaching methodologies.

2. For Students: The study aims to demonstrate how gamification can make language learning more enjoyable and effective, potentially improving students' motivation.
3. For other researchers: This research will contribute to the existing body of knowledge on gamification in education, particularly in the context of EFL learning, serving as a reference for future studies on similar topics.

E. Research Scope

The research scope focuses on Integration and Implementation of Kahoot and Duolingo For Motivation. The study strategically integrates Kahoot and Duolingo into EFL learning as part of a gamified instructional approach. While both tools inherently support language skill development, in this research their primary role is to serve as instruments for stimulating and measuring changes in learners' motivation. Duolingo was incorporated into the teaching process as a supplementary platform to introduce and reinforce language concepts. Kahoot, on the other hand, was mainly employed as a post-lesson review tool. Students participated in interactive quizzes designed to consolidate the material, providing opportunities for collaborative competition and instant feedback.

CHAPTER II

LITERATURE REVIEW

A. Previous Studies

In this research, the researcher discovered the followed literature that was relevant and could be the based of what this research trying to aimed.

Gamification has been shown to effectively increase the motivation of the students in language learning, as demonstrated by a study in Jeddah public schools by Bander, Sahari, and Fawaz. This study examined gamification's help in enhancing English language learning motivation among 409 participants (155 teachers and 254 students) in Jeddah public schools. Grounded in theories emphasizing gamification's capacity to create engaging learning experiences, the research used a quantitative method with Google Form questionnaires and SPSS analysis. Findings showns that both teachers and students held positive attitudes toward gamification, noting its effectiveness in boosting motivation and fostering positive attitudes toward English learning. The study focuses on gamification's potential to transform teaching practices and improve learning outcomes, particularly in Saudi Arabia's educational context, while advocating for its broader integration into curriculum design.[15]

A study by Marzhan Moldakassymovna Duisenova, This study explored how game-based strategies, such as Kahoot, FredisaLearns, and ESL Games Plus, impact student motivation for learning English as a foreign language. Utilizing a

[15] Bander Sahari & Fawaz Al Mahmud, "The Role of Gamification in Enhancing Students' Motivation Toward Learning English in Jeddah Public Schools," *International Journal of English Linguistics; Vol. 14, No. 6; 2024* 14, no. 3 (2024): 46, https://doi.org/10.26436/hjuoz.2024.12.3.1361.

program-based methodology with a 0-5 scale to measure game usage, results showed that gamification effectively enhances vocabulary acquisition and student enthusiasm. Participants, representing varied educational levels, noted improved motivation and engagement through gamified activities. The study emphasizes the need for collaborative content creation, recommending that educators adopt adaptable templates developed by experts to optimize gamification's benefits. It contributes to the field by offering practical strategies for applying gamified education in diverse educational contexts.[16]

Impact of Kahoot! on Student Engagement and Learning Outcomes This study explored the impact of Kahoot! on engagement, motivation, and learning outcomes among 97 high school students in the Ifrane Directorate. Grounded in the model of meaningful learning, the research used a quantitative survey method with close-ended Likert-scale questions. Results showed that Kahoot! significantly enhanced student engagement, motivation, and skills, particularly in and speaking. The study highlights the relevance of integrating gamified learning platforms to meet the preferences of digital-native students, contributing empirical evidence supporting the adoption of ICT tools in modern education. [17]

Hashim, H., Rafiq, K., and Yunus, M in their research improving esl learners' grammar with gamified-learning. The study utilized the effectiveness of

[16] Marzhan Moldakassymovna Duisenova, "Gamification in the Process of Teaching English in Primary School," no. June (2023): 147–55, https://doi.org/10.46529/socioint.202321.
[17] Yassine Benhadj, Mohammed El Messaoudi, and Abdelhamid Nfissi, "Investigating the Impact of Kahoot! On Students' Engagement, Motivation, and Learning Outcomes: Ifrane Directorate as a Case Study," *International Journal of Advance Study and Research Work* 2, no. 6 (2019): 1–9, https://doi.org/10.5281/zenodo.3250661.

gamified learning apps such as Socrative, PowerPoint Challenge Game, and Kahoot!, in improving ESL learners' grammar skills, addressing the challenges faced by Asian learners in mastering English grammar. Grounded in the theory that technology-based methods enhance engagement and learning outcomes, the study aligned with trends of Industrial Revolution 4.0. Using a quasi-experimental design, 30 Malaysian secondary school students with intermediate to low proficiency participated in three treatments sessions over three weeks, followed by a post-test. Results revealed significant improvements in grammar scores, with no students scoring in the lowest grades and a marked increase in high-performing students. The study highlights gamified learning as an effective strategy for enhancing ESL grammar skills, offering a practical and engaging approach to language education while contributing valuable evidence for the integration of online games into ESL curricula.[18]

Habibie, Alvons. "Duolingo as a Motivational Tool for EFL Students." Investigated the motivational impact of Duolingo on 40 EFL students at IAIN Sultan Amai Gorontalo. Using Gardner's motivation theory, the study employed a mixed-methods approach, combining questionnaires and interviews conducted over three days. Findings revealed that Duolingo effectively motivated students to learn English independently, providing a user-friendly platform for daily integration. While the app proved beneficial for fostering independent learning, the study suggested improving vocabulary and grammar coverage. This research emphasizes the motivational benefits of mobile learning apps and calls for

[18] Harwati Hashim, Karmila Rafiqah M. Rafiq, and Melor Md. Yunus, "Improving ESL Learners' Grammar with Gamified-Learning," *Arab World English Journal*, no. 5 (2019): 41–50, https://doi.org/10.24093/awej/call5.4.

extended studies on various language tools. [19]

The study investigated the effectiveness of gamification in Duolingo for increasing English competence among junior high school students at SMPN 1 Jatiroto. Grounded in theories emphasizing the engaging potential of gamification in language learning, it used a quasi-experimental design with pre- and post-tests comparing an experimental group (using Duolingo) and a control group (traditional methods). Data from tests and observations were analyzed quantitatively using SPSS 26. Results showed a significant improvement in proficiency in the experimental group, with higher post-test scores (mean 68.39) compared to the control group. The study highlights the relevance of gamified tools like Duolingo in enhancing skills and contributes to the field by advocating for integrating gamification in educational strategies, while suggesting further research across diverse contexts and durations.[20]

Long-Term Effects of Gamification in STEM Education by Rodrigues et al., This study investigated the novelty and familiarization effects of gamification over 14 weeks among 756 Brazilian STEM students in CS1 programming courses. Grounded in theories addressing the temporal impacts of gamification, the 2x7 quasi-experimental design measured user behavior across seven time points, including metrics like usage time and system access. Results revealed a U-shaped pattern: gamification's impact declined after four weeks (novelty effect) but

[19] Alvons Habibie, "To Enhance Efl Students ' Motivation in Learning," *Jurnal Bahasa Dan Literature* 9, no. 1 (2020): 13–26.
[20] Umniyah Juman Rosyidah, Ekaning Dewanti Laksmi, dan Mirjam Anugerahwati, "Gamification in Duolingo App on Improving English Proficiency of Junior High School Students," ENGLISH FRANCA : Academic Journal of English Language and Education 7, no. 1 (2023): 119, https://doi.org/10.29240/ef.v7i1.5377.

recovered between six and ten weeks (familiarization effect). Despite fluctuations, gamification consistently outperformed the control group in engagement metrics. The findings underscore the need to consider time-based dynamics in gamification and contribute valuable longitudinal evidence for its sustained effectiveness in educational contexts.[21]

Pehlivan, Fatma, and Taner Arabacioglu. "Gamification in Flipped Classroom Mathematics." This study examined the effects of gamification on academic achievement, motivation, and learning strategies among 38 low-achieving 9th-grade vocational students in a flipped classroom mathematics course on "Clusters." Using a quasi-experimental pre/post-test design, data were collected through the MSLQ and achievement tests over five weeks. While gamification did not significantly impact achievement or motivation, it enhanced elaboration strategies (e.g., summarizing) and peer learning, improving cognitive and social skills like communication and cooperation. The study highlights the potential of gamification to enhance learning strategies and social dynamics in group settings, advocating for designs that mitigate anxiety and jealousy to maximize positive outcomes.[22]

Motivational Effects of Gamification in Education (Mohammed & Özdamlı, 2021) This systematic literature review examined how gamification systems enhance student motivation and engagement in educational settings.

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[21] Luiz Rodrigues et al., "Gamification Suffers from the Novelty Effect but Benefits from the Familiarization Effect: Findings from a Longitudinal Study," *International Journal of Educational Technology in Higher Education* 19, no. 1 (2022), https://doi.org/10.1186/s41239-021-00314-6.

[22] Fatma Pehlivan and Taner Arabacioglu, "The Effect of Gamification on Math Achievement, Motivation, and Learning Strategies in Flipped Classrooms," *International Journal of Education and Literacy Studies* 11, no. 4 (2023): 309–17, https://doi.org/10.7575/aiac.ijels.v.11n.4p.309.

Grounded in motivation theories, the study analyzed 37 articles selected from 167 identified across databases like ScienceDirect and IEEE Xplore. Key findings highlighted that gamification elements such as badges, levels, points, leaderboards, and feedback significantly boost participation and engagement by fostering competition and enhancing students' status. The study emphasizes the motivational benefits of gamification, contributing valuable insights for educators seeking to implement gamified strategies in their curricula.[23]

Mila and Mahbub. "Gamified Board Game for EFL Learners." This study explored the perceptions of four Indonesian undergraduate students on the use of gamification in English grammar classrooms. Using a sequential-explanatory design, it combined web-based questionnaires (five-point Likert scale) and semi-structured interviews. The results demonstrated that gamification helped influence student engagement and motivation, creating a conducive and attractive learning environment. While highlighting gamification's potential in EFL grammar instruction, the study acknowledges limitations due to its small sample size and suggests further research across diverse contexts to validate its findings.[24]

The current study investigates the motivational effects of gamification tools, specifically Kahoot and Duolingo, on EFL learners at UIN Palopo, focusing on adult students in a tertiary-level setting. This objective aligns with other

[23] Yakubu Bala Mohammed and Fezile Özdamlı, "Motivational Effects of Gamification Apps in Education: A Systematic Literature Review," *Brain Broad Research in Artificial Intelligence and Neuroscience* 12, no. 2 (2021), https://doi.org/10.18662/brain/12.2/196.

[24] Hayatul Mila and Moh. Arif Mahbub, "An Alternative Board Game to Promote EFL Learners Grammatical Skill," *Enjourme (English Journal of Merdeka)* 7, no. 1 (2022): 78–87, https://doi.org/10.26905/enjourme.v7i1.7043.

research, such as Mohammed and Özdamlı's systematic review of gamification's motivational impacts and Habibie's study on Duolingo's role in fostering independent learning among EFL students. However, while these studies predominantly focus on younger learners or broader educational contexts, the current research addresses a notable gap by targeting adult learners, providing insights into a less-explored demographic.

Methodologically, this study employs a pretest-posttest design to measure changes in student motivation. Similar approaches are seen in the work of Rodrigues et al., where longitudinal or controlled experiments assess gamification's impact over time. In contrast, studies such as Nafila et al. take a strictly quantitative approach, while Azzahra and Haryudin's meta-analysis aggregates findings across multiple studies. Other methodologies, like the mixed-methods approach used by Habibie and the sequential-explanatory design by Mila and Mahbub, highlight the diverse ways gamification research can be conducted. This variety underscores the methodological adaptability required to explore different facets of gamification effectively.

The findings of the current research align with those of prior studies in demonstrating gamification's positive effects on motivation and engagement. Mohammed and Özdamlı identified elements like badges, leaderboards, and feedback as critical motivators, while Habibie and Moldakassymovna reported similar results for Duolingo and other game-based strategies. However, studies such as Pehlivan and Arabacioglu (2023) concluded that gamification's influence was more significant on learning strategies, such as peer learning and elaboration,

than on academic performance. Meanwhile, Rodrigues et al. found a U-shaped pattern in the impact of gamification, with an initial decline followed by recovery, indicating the need for sustained engagement. These findings collectively suggest that while gamification is broadly beneficial, its effects can vary based on the tools, contexts, and metrics used.

Theoretical frameworks further highlight distinctions across these studies. While the current research draws on Gardner's motivation theory to explore how gamification enhances learners' drive and attitudes, other studies use complementary frameworks. For example, Rodrigues et al. consider temporal aspects of gamification effects, and Moldakassymovna emphasizes game-based learning principles. This diversity in theoretical underpinnings reinforces the importance of aligning frameworks with specific research contexts to provide a robust understanding of gamification's impacts.

In terms of contributions, the current study advances the literature by focusing on adult EFL learners, a demographic often overlooked in gamification research. It also bridges findings from prior studies, applying them to a unique context to generate actionable insights for educators. For instance, while Habibie emphasizes the independent learning benefits of Duolingo, this study explores its applicability in structured classroom environments. Similarly, the integration of Kahoot aligns with findings from Moldakassymovna and Mohammed and Özdamlı, demonstrating how gamified tools can transform traditional learning experiences.

By addressing gaps in demographics and providing practical insights into

gamification's implementation, It complements existing studies by expanding their applicability and reinforcing the role of gamification in enhancing motivation and engagement, particularly in EFL learning. This synthesis situates the current research within the broader academic discourse, emphasizing its relevance and potential to inform future studies and teaching practices.

The study's novelty lies in its integration of two gamification tools Duolingo was incorporated into the teaching process as a supplementary tool to introduce and reinforce language concepts and Kahoot was utilized primarily as a review tool. While previous research examined these tools separately, this investigation uniquely explores their combined effect on adult EFL learners' motivation at UIN Palopo. The dual-approach design leverages Duolingo's self-paced mastery with Kahoot's social engagement features, addressing both individual and collaborative learning needs. This strategic combination fills a critical gap in gamification research by demonstrating how complementary digital tools can enhance different aspects of language learning motivation simultaneously.

B. Some Pertinent Ideas

1. Theories of Motivation in Education

Motivation plays a pivotal role in educational achievement, This study is grounded in six key theoretical frameworks that collectively explain how gamification tools like Duolingo and Kahoot influence learner motivation in EFL contexts. The foundation comes from Self-Determination Theory (SDT) by Deci and Ryan, which posits that motivation flourishes when three basic psychological

needs are met: autonomy (control over learning choices), competence (mastery of tasks), and relatedness (social connection). These needs are directly addressed by gamification features. Duolingo supports autonomy through self-paced level selection, while Kahoot fosters relatedness through competitive social interaction.

Complementing SDT, Malone's Intrinsic Motivation Theory explains how gamification triggers internal drive through carefully designed challenges (evident in quiz difficulty levels), fantasy elements (like Duolingo's character narratives), and curiosity stimulation (through Kahoot's timed questions). In the EFL context, students who enjoy their learning, competent in their abilities, and connected to their peers and instructors are more likely to be motivated to learn the language.[25]

a. Key factors determining student motivation based on SDT:

1) Autonomy

a) Students feel in control of their learning process.

b) They have the freedom to choose how, what, and at what pace they learn.

2) Competence

a) Students feel capable of mastering tasks and achieving goals.

b) They receive constructive feedback and can track their progress.

3) Relatedness

a) Students feel connected to their peers, teachers, or learning community.

b) They experience a sense of belonging and support in their learning environment.

4) Intrinsic Motivation and Extrinsic Motivation

[25] Qinghe Zhang, Yan Song, and Chen Zhao, "Foreign Language Enjoyment and Willingness to Communicate: The Mediating Roles of Communication Confidence and Motivation," *System*, 2024, 103346, https://doi.org/https://doi.org/10.1016/j.system.2024.103346.

a) Students engage in learning because they find it enjoyable and fulfilling.

b) Students are driven by external rewards or outcomes, such as grades or recognition.

5) Supportive Environment

A positive learning environment (teachers, peers, and resources) helps fulfill students' psychological needs. Example: Teachers who encourage the creative use of gamification tools.

6) Appropriate Challenges and Feedback

Students need tasks that match their skill level and provide meaningful feedback. Example: Adaptive difficulty levels in Duolingo or tailored quizzes in Kahoot.

b. Characteristics of highly motivated students based on malone:

1) Challenge

Highly motivated students thrive when tasks are optimally challenging neither too easy nor too difficult. Key traits include:

a) Goal-Oriented Behavior: They set clear, achievable goals and enjoy overcoming obstacles.

b) Persistence: They are willing to put in effort and persist even when tasks are difficult.

c) Preference for Mastery: They seek tasks that allow them to develop skills and competence.

2) Fantasy

a) Engagement in Imaginative Scenarios**:** They enjoy simulations, role-playing, or problem-solving tasks that involve creative thinking.

b) Personal Connection to Tasks: They find ways to relate learning to their own interests or real-world applications**.**

3) Curiosity

Motivated students are driven by a desire to explore and discover. This includes:

a) Cognitive Curiosity: They ask questions, seek deeper understanding, and enjoy puzzles or unexpected outcomes.

b) Sensory Curiosity: They are attracted to novel, surprising, or interactive elements in learning (e.g., experiments, multimedia).

Additional Factors from Malone's Framework

a) Control/Autonomy**:** Motivated students prefer having choices in how they learn and demonstrate knowledge.

b) Feedback**:** They respond positively to immediate and meaningful feedback that helps them improve.

2. Gamification for Adult Learners: Theoretical Foundations and Previous Research

Gamification for adult learners can be effectively grounded in Andragogy, as proposed by Malcolm Knowles and Social Cognitive Theory by Albert Bandura. Knowles' theory of andragogy emphasizes that adult learners are distinct from children in several key ways: they are self-directed, goal-oriented, and bring a wealth of personal experience that they use to interpret and apply new

knowledge. Gamification aligns well with these characteristics by offering autonomy through choice-based tasks, providing clear goals through levels and challenges, and enabling learners to connect game scenarios with real-life contexts. For example, problem-solving games can simulate workplace situations, allowing adults to apply prior experiences in meaningful ways while learning new strategies.[26]

Meanwhile, Bandura's Social Cognitive Theory highlights the importance of observational learning, self-efficacy, and the reciprocal interaction between behavior, personal factors, and environment. Gamified environments support these principles by allowing learners to observe peer behavior in leaderboards or collaborative tasks, build confidence through progressive achievements, and stay motivated through real-time feedback and visible progress. The social aspect of gamification such as competition, cooperation, and community recognition also facilitates behavioral modeling and reinforces learning[2]. Together, these theories provide a strong foundation for designing gamified learning experiences that resonate with adult learners' cognitive and motivational needs.[27]

Several recent studies provide nuanced support for the use of gamification in adult learning. Pehlivan and Arabacioğlu explored gamification in vocational mathematics for low-achieving adult learners in Turkey and found that, while it did not significantly improve test scores, it greatly enhanced peer collaboration and elaboration strategies. Adult participants were more likely to explain concepts to one another and engage in cooperative learning when game

[26] MALCOLM, S. K. (1978). *The adult learner: A neglected species*. Gulf Publishing Company.
[27] Bandura, A., & National Inst of Mental Health. (1986). *Social foundations of thought and action: A social cognitive theory.* Prentice-Hall, Inc.

elements were included, indicating that the value of gamification may lie in its ability to foster interactive learning environments rather than directly boost academic performance.

On a more positive note, Van Gaalen et al. conducted a systematic review of gamification in medical education and found it to be highly effective in adult continuing education contexts. Health professionals appreciated the flexibility and practical relevance of gamified content, especially when it allowed for asynchronous participation and immediate clinical application. However, the study also highlighted that the success of gamified approaches was highly dependent on how well they were implemented and the learners' prior familiarity with digital tools.

Similarly, Legaki et al. emphasized the importance of design quality in their study of challenge-based gamification in statistics education. They found that adult learners responded positively to narrative-driven challenges that linked statistical concepts to real-world applications, which enhanced both persistence and learning outcomes. Nonetheless, the authors warned that poorly designed challenges particularly those with imbalanced difficulty could lead to frustration rather than motivation.

3. Theories Related to Gamification and Educational Technology

Gamification leverages principles from various educational and psychological theories. Constructivist learning theories, particularly those proposed by Piaget and Vygotsky, suggest that learners build knowledge actively through experience and social interaction. A core principle of this perspective is

that individuals actively construct their own knowledge and understanding of the world through experience.[28] Constructivism posits that learners build their own understanding based on their experiences. Learning becomes most effective when individuals actively engage with information and interpret it in a personally meaningful way.[29] Gamification, by engaging students in interactive and often collaborative activities, aligns with these constructivist principles. Additionally, Flow Theory by Csikszentmihalyi, which describes the state of being fully immersed and engaged in an activity, is highly relevant to gamification. Flow theory is a psychological concept that describes the ideal experience, happiness, and motivation. Flow happens when people are completely immersed in an activity that meets their capabilities and challenges. Flow is defined by concentration, immersion, and enjoyment, which can result in deep learning and high levels of satisfaction.[30] Games designed to balance challenge and skill can induce a flow state, enhancing motivation and learning.

a. Gamification in Education

1) Historical Background and Development

Gamification, as a concept, emerged in the early 2000s, with the term being first coined in 2002, by Nick Pelling, a British programmer and game designer. Pelling introduced the term to describe the application of game-like elements in non-game contexts, particularly in user interfaces. However,

[28] Nilam Permatasari Munir, "Pengembangan Buku Ajar Trigonometri Berbasis Konstruktivisme Dengan Media E-Learning Pada Prodi Tadris Matematika IAIN Palopo," *Al-Khwarizmi: Jurnal Pendidikan Matematika Dan Ilmu Pengetahuan Alam* 6, no. 2 (2018): 167–78.
[29] Ghaour Nesrine Ghaour Nesrine, "Piaget's and Vygotsky's Constructivist Theories," 2018, https://api.semanticscholar.org/CorpusID:150906147.
[30] Mihaly Csikszentmihalyi, "Flow: The Psychology of Optimal Experience," 1990.

gamification gained significant attention and strategic use starting around 2010, when it began to be widely adopted in various fields such as business, education, and healthcare. and gained significant attention and strategic use starting around 2014.[31] It refers to the application of game design elements and mechanics in non-game contexts to drive desired behaviors and outcomes. The initial interest in gamification stemmed from its potential to enhance engagement, motivation, and learning in various domains, including business, education, and healthcare.[32]

Researchers and practitioners recognized that incorporating game-like elements, such as rewards, challenges, and social interaction, could positively impact user experience and performance in non-game settings. In the business context, gamification has been widely adopted to improve employee engagement, customer loyalty, and overall organizational performance.[33] And also have been successfully applied in areas like marketing, sales management, human resources, and training.

In addition, international researchers such as Sebastian Deterding, Jane McGonigal, and Mihaly Csikszentmihalyi have made significant contributions to the development of gamification theory and practice. Deterding, along with his colleagues, popularized the concept of gamification through their seminal paper, "From Game Design Elements to Gamefulness: Defining Gamification", which

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[31] Amany Abdel-Ghany Al-Sabbagh, "Enhancing English Language Skills Through Gamification: A Case Study at Umm Al Quwain University," *International Journal of Instructional Technology and Educational Studies* 4, no. 3 (2023): 29–43.

[32] Konstantina Skritsovali, "Learning through Playing: Appreciating the Role of Gamification in Business Management Education during and after the COVID-19 Pandemic," *Journal of Management Development* 42, no. 5 (2023): 388–98.

[33] Serafeim Triantafyllou and Christos Georgiadis, "Gamification Design Patterns for User Engagement," *Informatics in Education*, 2022.

defined gamification as ”the use of game design elements in non-game contexts.[34] Meanwhile, McGonigal, in his book “Reality is Broken”, emphasizes the potential of gamification to increase engagement and motivation in various aspects of life, including education. Csikszentmihalyi, with his Flow theory, provides a theoretical basis for understanding how gamification can create immersive and motivating learning experiences.[35]

The development of gamification is also supported by empirical research conducted by Yu-kai Chou, creator of the Octalysis Framework, which identifies eight core human motivations in gamification design. This framework is widely used in designing effective gamification systems, including in educational contexts. Within the educational domain, gamification has been leveraged to enhance student learning, motivation, and knowledge retention. Gamification can help students explore the applicability of theoretical knowledge in practical.

Nationally, the development of gamification in Indonesia started to gain attention in the 2010s, along with the increasing use of technology in education. Several Indonesian researchers, such as Melor Md. Yunus and Harwati Hashim, have contributed to research on gamification, particularly in the context of English as a foreign language (EFL) learning. Their studies, such as the one conducted by Yunus and Hashim, have become important references in understanding the effectiveness of gamification in improving students' motivation and learning

[34] Huseyin Bicen and Senay Kocakoyun, “Perceptions of Students for Gamification Approach: Kahoot as a Case Study,” *International Journal of Emerging Technologies in Learning* 13, no. 2 (2018).
[35] Lei Shi et al., “Contextual Gamification of Social Interaction–towards Increasing Motivation in Social e-Learning,” in *Advances in Web-Based Learning–ICWL 2014: 13th International Conference, Tallinn, Estonia, August 14-17, 2014. Proceedings 13* (Springer, 2014), 116–22.

outcomes.[36]

2) Key Benefits and Challenges of Gamification

Gamification offers significant advantages in educational settings. Gamification can foster motivation, engagement, and behavioral changes among students by leveraging game design elements such as points, badges, leaderboards, and challenges. Gamification has also been shown to improve learning outcomes, boost knowledge retention, and overall academic performance.[37] Furthermore The flexibility in learning design facilitated by gamification allows for more enjoyable and dynamic educational experiences,

Despite its benefits, gamification in education faces several challenges. Designing effective gamification solutions that align with educational goals and cater to diverse student needs can be a complex and challenging task.[38] Moreover the current research lacks sufficient empirical evidence to establish a comprehensive understanding of the benefits and limitations of gamification in educational contexts.[39] Lastly, Educators must ensure that the use of gamification is clearly aligned with educational competencies, learning outcomes, and skills-based reporting to avoid potential misalignment.[40]

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[36] Harwati Hashim, Karmila Rafiqah M Rafiq, and Melor Md Yunus, "Improving ESL Learners' Grammar With Gamified-Learning," *Arab World English Journal*, no. 5 (2019): 41–50, https://doi.org/10.24093/awej/call5.4.

[37] C Neerupa et al., "Game on for Learning: A Holistic Exploration of Gamification's Impact on Student Engagement And Academic Performance In Educational Environments," *Management Matters* 21, no. 1 (2024): 38–53, https://doi.org/10.1108/manm-01-2024-0001.

[38] Manuel Trinidad, Alejandro Calderón, and Mercedes Ruiz, "GoRace: A Multi-Context and Narrative-Based Gamification Suite to Overcome Gamification Technological Challenges," *Ieee Access* 9 (2021): 65882–905, https://doi.org/10.1109/access.2021.3076291.

[39] A E J Van Gaalen et al., "Gamification of Health Professions Education: A Systematic Review," *Advances in Health Sciences Education* 26, no. 2 (2020): 683–711, https://doi.org/10.1007/s10459-020-10000-3.

[40] Denise L Hope et al., "Gamification in Pharmacy Education: A Systematic Quantitative Literature Review," *International Journal of Pharmacy Practice* 31, no. 1 (2022): 15–31,

One significant challenge is technical issues, such as app crashes and server overloads. Platforms like Kahoot often experience server instability during peak usage times, disrupting learning sessions and reducing student engagement.[41] Another critical barrier is slow internet connectivity, which affects the effectiveness of real-time interactive gamification tools. Research by Sailer & Homner highlights that inconsistent internet speeds, particularly in remote or underprivileged areas, can hinder seamless implementation.[42] Additionally, limited access to devices exacerbates educational inequities, as not all students own smartphones, tablets, or computers. A study by Hamari found that socioeconomic disparities influence students' ability to participate in digital gamification, further widening the learning gap.[43] These challenges showing the need for the technical infrastructure, equitable access to technology, and further research to optimize gamification in education.

b. Kahoot and Duolingo in Educational Settings

1) Kahoot

Kahoot! was created by Johan Brand, Jamie Brooker, and Morten Versvik, who co-founded the company in 2012. The idea for Kahoot! originated from a collaboration between the Norwegian University of Science and Technology (NTNU) and the company Mobitroll, where the founders were working on educational technology projects. The platform was designed to make learning

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https://doi.org/10.1093/ijpp/riac099.

[41] Ismail, M. A. A., & Mohammad, J. A. M. (2017). Kahoot: A promising tool for formative assessment in medical education. *Education in medicine journal*, *9*(2).

[42] Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis. *Educational psychology review*, *32*(1), 77-112.

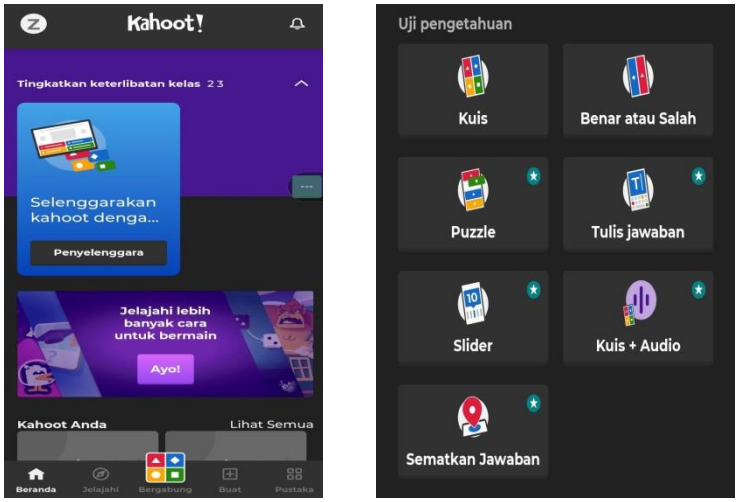
[43] Sarsa, H. (2013). Does Gamification Work? A Literature Review.

interactive, engaging, and fun by incorporating game-based elements like quizzes, surveys, and discussions.

The team was inspired by the concept of social learning and wanted to create a tool that would allow students and teachers to collaborate in real-time while making education more accessible and enjoyable. Kahoot! quickly gained popularity in classrooms and beyond, becoming a widely used tool for both education and corporate training. Today Kahoot is widely used across subjects like English, math, science, and medical education, helping reduce anxiety, improve understanding, and boost academic performance. Teachers and students find Kahoot effective for fostering interactive and engaging classroom environments.[44]

To use Kahoot!, educators first need to sign up for a free account on the Kahoot! website or app. After logging in, they can create a quiz by adding questions and answer choices, then launch the game, which generates a unique game PIN. Students join the game by entering this PIN on their devices, and as the quiz progresses, they answer questions in real-time. The platform displays scores and leaderboards, making it engaging and competitive. After the quiz, teachers can review the results to assess student understanding.

[44] Ira Irzawati and Agnes Felisya Unamo, "Students' Perceptions and Attitudes towards the Utilization of Duolingo in EFL Learning," *J-SHMIC : Journal of English for Academic* 10, no. 2 (2023): 123–38, https://doi.org/10.25299/jshmic.2023.vol10(2).13649.



Picture 2.1 View of Kahoot mobile application

The platform is particularly effective in promoting collaborative learning, as students often work in teams, which can enhance motivation and engagement.[45] Additionally, Kahoot! serves as a formative assessment tool, allowing teachers to gauge student understanding in real-time and adjust their teaching strategies accordingly. Overall, Kahoot! is recognized for its effectiveness in creating a dynamic learning environment that supports both teaching and learning objectives.

2) Duolingo

Duolingo was created by Luis von Ahn and Severin Hacker. Luis von Ahn, a Guatemalan computer scientist and entrepreneur, is the primary founder and the public face of Duolingo. He is also known for his earlier creation, reCAPTCHA, which was sold to Google in 2009. Severin Hacker, a

[45] Rebecca Donkin and Rosemary Rasmussen, "Student Perception and the Effectiveness of Kahoot!: A Scoping Review in Histology, Anatomy, and Medical Education," *Anatomical Sciences Education* 14, no. 5 (2021): 572–85, https://doi.org/10.1002/ase.2094.

Swiss computer scientist, co-founded Duolingo with von Ahn while they were both at Carnegie Mellon University.

The idea for Duolingo was born out of von Ahn's desire to make education free and accessible to everyone. He noticed that language learning was often expensive and out of reach for many people, especially in developing countries. With this in mind, von Ahn and Hacker developed Duolingo as a free, gamified language-learning platform that would make learning a new language fun, engaging, and accessible to anyone with an internet connection.

Duolingo was officially launched in 2011 and quickly gained popularity due to its user-friendly interface, gamified approach (using points, streaks, and levels), and the ability to learn multiple languages for free. The platform also

introduced innovative features like the Duolingo Owl (Duo), which became a mascot and a symbol of motivation for users.

Picture 2.2 View of Duolingo mobile application

To get started, users simply need to download the app from their device's app store and create a free account. Once logged in, they can choose the language

they want to learn and begin with a personalized learning path that includes various exercises such as vocabulary practice, grammar lessons, and pronunciation drills. The app uses gamification elements like points, levels, and rewards to keep learners motivated and engaged. Users can practice at their own pace, and the app provides instant feedback on their performance, which helps reinforce learning. Additionally, Duolingo is accessible anytime and anywhere, making it a convenient tool for language learners.[46]

Duolingo is increasingly utilized in English as a Foreign Language (EFL) contexts, providing a flexible and engaging platform for language learners. Students use the Duolingo app to practice English skills outside the classroom, benefiting from its gamified approach that makes learning enjoyable and motivating. Research shows that learners appreciate the app's user-friendly design, bite-sized lessons, and progress tracking features, which help maintain their interest and encourage consistent practice.[47] The app's accessibility and convenience make it particularly appealing to EFL students, who can engage with the material anytime and anywhere, thus fostering a more autonomous learning environment. Overall, Duolingo's effectiveness in enhancing language skills and motivation highlights its role as a significant tool in modern language education.[48]

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[46] Diah Permatasari and Farida Aryani, "Duolingo: An Enchanting Application to Learn English for College Students," *Eltr Journal* 7, no. 2 (2023): 101–9, https://doi.org/10.37147/eltr.v7i2.176.
[47] Nurul Inayah, Qismullah Yusuf, and Nurul Fibula, "Exploring Undergraduate Students' Perception Toward the Use of Duolingo in Learning English," *Humanities & Social Sciences Reviews* 8, no. 3 (2020): 76–85, https://doi.org/10.18510/hssr.2020.839.
[48] Irzawati and Unamo, "Students' Perceptions and Attitudes towards the Utilization of Duolingo in EFL Learning."

3) A Colaboration Studies of Kahoot and Duolingo

Kahoot stands out for their user-friendly platform that is easy for both teachers and students to navigate and utilize also the platform is freely available and accessible, making it a cost-effective option for educational institutions, furthermore Kahoot can be effectively integrated into a wide range of educational settings, including K-12, higher education, and in general. Lastly The platform allows teachers to create customized quizzes and assessments that can be tailored to the specific needs and learning objectives of their students.[49] This feature makes it ideal for reviewing material, reinforcing concepts, and increasing classroom engagement through gamified learning.

Duolingo on the other hand, stands out for the interactive and game-like nature of Duolingo creates an enjoyable and relaxed learning environment, which can positively impact students' language learning experience. Studies have shown that Duolingo can effectively improve various language skills, including vocabulary acquisition, grammar understanding, reading and comprehension, and speaking fluency. The platform's adaptive learning algorithms and personalized feedback help cater to individual learner needs and support language skill development.[50] Furthermore Duolingo's mobile-based platform allows for flexible and independent language learning, enabling students to practice and improve their skills at their own pace and convenience. The platform

[49] Muhd Al-Aarifin Ismail and Jamilah Al-Muhammady Mohammad, "Kahoot: A Promising Tool for Formative Assessment in Medical Education," *Education in Medicine Journal* 9, no. 2 (2017): 19–26, https://doi.org/10.21315/eimj2017.9.2.2.

[50] Suziana Mat Saad and Nur Ameera Abdul Rahim, "Vocabulary Acquisition Using Duolingo in French Language Learning: A Malaysian Context," *E-Bangi Journal of Social Science and Humanities* 19, no. 2 (2022), https://doi.org/10.17576/ebangi.2022.1902.15.

can provide additional practice, reinforcement, and exposure to the target language, supporting and enriching the overall language learning experience.[51]

When used together, Kahoot and Duolingo offer a powerful and complementary approach to language learning. While Duolingo provides structured, individualized practice and skill development, Kahoot serves as an engaging platform for formative assessment and collaborative review. The integration of both platforms enhances motivation, fosters active participation, and supports a more comprehensive language learning experience for EFL students.

4) How Kahoot and Duolingo Complement Each Other

a) Introducing New Material with Duolingo

Duolingo is ideal for introducing students to new content, such as vocabulary and sentence structures, listening, etc. Its interactive exercises immerse students in the target language, allowing them to explore and practice independently. The adaptive learning algorithms ensure that each student progresses at their own pace, fostering confidence and a strong foundation in the subject matter.

b) Reinforcing and Reviewing with Kahoot

After students have gained exposure to the new material through Duolingo, Kahoot can be used to reinforce their learning through engaging quizzes and games. Teachers can design Kahoot quizzes to test vocabulary, grammar, or comprehension learned in Duolingo. The competitive, game-like

[51] Lana Husna Faradisa et al., "The Use of Duolingo to Assist EFL Students of Prof. KH. Saifuddin Zuhri State Islamic University in Learning Vocabulary," *Conference on English Language Teaching* 2 (2022): 14–25, https://doi.org/10.24090/celti.v2.29.

environment encourages students to participate actively, while the instant feedback helps clarify misunderstandings and solidify knowledge.

c) Combining Tools for Motivation

Using Duolingo for independent/group learning and Kahoot for reviewing activities ensures that students remain motivated both inside and outside the classroom. Duolingo's reward system (e.g., streaks and XP points) incentivizes consistent practice, via its reward system. Features like streaks (tapping into loss aversion) and XP points provide extrinsic motivation through micro-rewards, while its self-paced structure fosters intrinsic motivation by promoting autonomy and a sense of gradual mastery.

Kahoot's role, on the other hand, is to transform review sessions into a shared, energetic experience. Its core function is to harness social energy and friendly competition. The gamified quiz format, with its timed questions, creates a state of focused excitement that minimizes distractions and heightens engagement. Kahoot's gamified quizzes also create excitement and camaraderie among students during live sessions. Together, they seamlessly blend the intrinsic satisfaction of self-paced learning with the extrinsic thrill of social competition, This combination addresses both intrinsic and extrinsic motivation leading to a more sustained, effective, and enjoyable learning process.

d) Supporting Differentiated Instruction

Duolingo's adaptive features help cater to students of varying proficiency levels, ensuring that each learner works on material suited to their abilities. In contrast, Kahoot allows teachers to create collaborative or competitive activities

where students of all levels can participate, fostering a sense of inclusion and teamwork. Together, these tools provide a balanced approach to addressing diverse learning needs.

2. Motivation in EFL Learning

a. Importance of Motivation for EFL Learners

Motivation is a key factor that plays a crucial role in the language learning process for EFL students. It influences students' interest, effort, persistence, and overall success in learning the target language. Several studies have found a strong correlation between students' motivation and their language learning outcomes, such as proficiency, willingness to communicate, and overall performance Motivation can be intrinsic, driven by personal interest and enjoyment, or extrinsic, driven by external factors like academic or career goals.[52]

EFL teachers play a vital role in fostering and maintaining students' motivation through the use of various motivational strategies and techniques. These strategies can include the use of technology, interactive activities, and addressing students' needs and interests.[53]

Factors such as cultural milieu, social support, personality traits, and mental health can also influence EFL learners' motivation. Addressing these affective variables can help enhance students' motivation and, consequently, their

[52] Nanda Aspuri et al., "The Role of Instrumental Motivation Among Efl Students in Language Learning Process," *Journal of English Education* 4, no. 1 (2019): 48–53, https://doi.org/10.31327/jee.v4i1.892.

[53] Eman Alshehri and Siân Etherington, "Motivational Strategies: The Perceptions of EFL Teachers and Students in the Saudi Higher Education Context," *International Journal of English Language Education* 5, no. 2 (2017): 46, https://doi.org/10.5296/ijele.v5i2.11727.

language learning outcomes.[54]

Motivation is a crucial factor that significantly impacts EFL learners' language acquisition and overall success. Fostering and maintaining students' motivation should be a primary focus for EFL teachers and researchers to improve language learning outcomes.

b. Factors Affecting Motivation in Language Learning

Intrinsic motivation, such as personal interest and enjoyment in learning the language, plays a crucial role in language learning. Extrinsic motivation, such as academic or career goals, also significantly impacts language learning.[55]

1. Classroom Environment and Teaching Strategies, in the previous research the classroom environment, including the physical setting, teaching methods, and teacher-student interactions, can greatly influence learners' motivation. Effective motivational strategies employed by teachers, such as using interactive activities and addressing students' needs, can enhance learners' motivation.[56]
2. Affective Factors, Affective variables, such as anxiety, self-esteem, and attitudes towards the language and culture, can significantly impact language learning motivation. - The cultural and social context in which language

[54] Fakieh Alrabai and Christo Moskovsky, "The Relationship Between Learners' Affective Variables and Second Language Achievement," *Arab World English Journal* 7, no. 2 (2016): 77–103, https://doi.org/10.24093/awej/vol7no2.6.
[55] Mubasher Hussain, Abdus Salam, and Aisha Farid, "Students' Motivation in English Language Learning (ELL): An Exploratory Study of Motivation-Al Factors for EFL and ESL Adult Learners," *International Journal of Applied Linguistics & English Literature* 9, no. 4 (2020): 15, https://doi.org/10.7575/aiac.ijalel.v.9n.4p.15.
[56] Rima Bahous, Nahla Nola Bacha, and Mona Nabhani, "Motivating Students in the EFL Classroom: A Case Study of Perspectives," *English Language Teaching* 4, no. 3 (2011), https://doi.org/10.5539/elt.v4n3p33.

learning takes place can also influence learners' motivation.[57]

3. Learner Autonomy and Self-regulation: Learners' ability to self-regulate their learning and take an active role in the learning process can enhance their motivation. - Fostering learner autonomy and providing opportunities for self-directed learning can positively impact motivation.[58]
4. Willingness to Communicate and Language Learning Orientations: Learners' willingness to communicate in the target language and their language learning orientations (e.g., instrumental, integrative) are closely linked to their motivation. Addressing factors that influence willingness to communicate, such as classroom dynamics and learners' attitudes, can promote motivation.[59]
5. Enjoyment and Engagement: The enjoyment and engagement experienced by learners in the language learning process can significantly impact their motivation. - Strategies that foster enjoyment, such as the use of technology and interactive activities, can enhance learners' motivation and language learning outcomes.[60]

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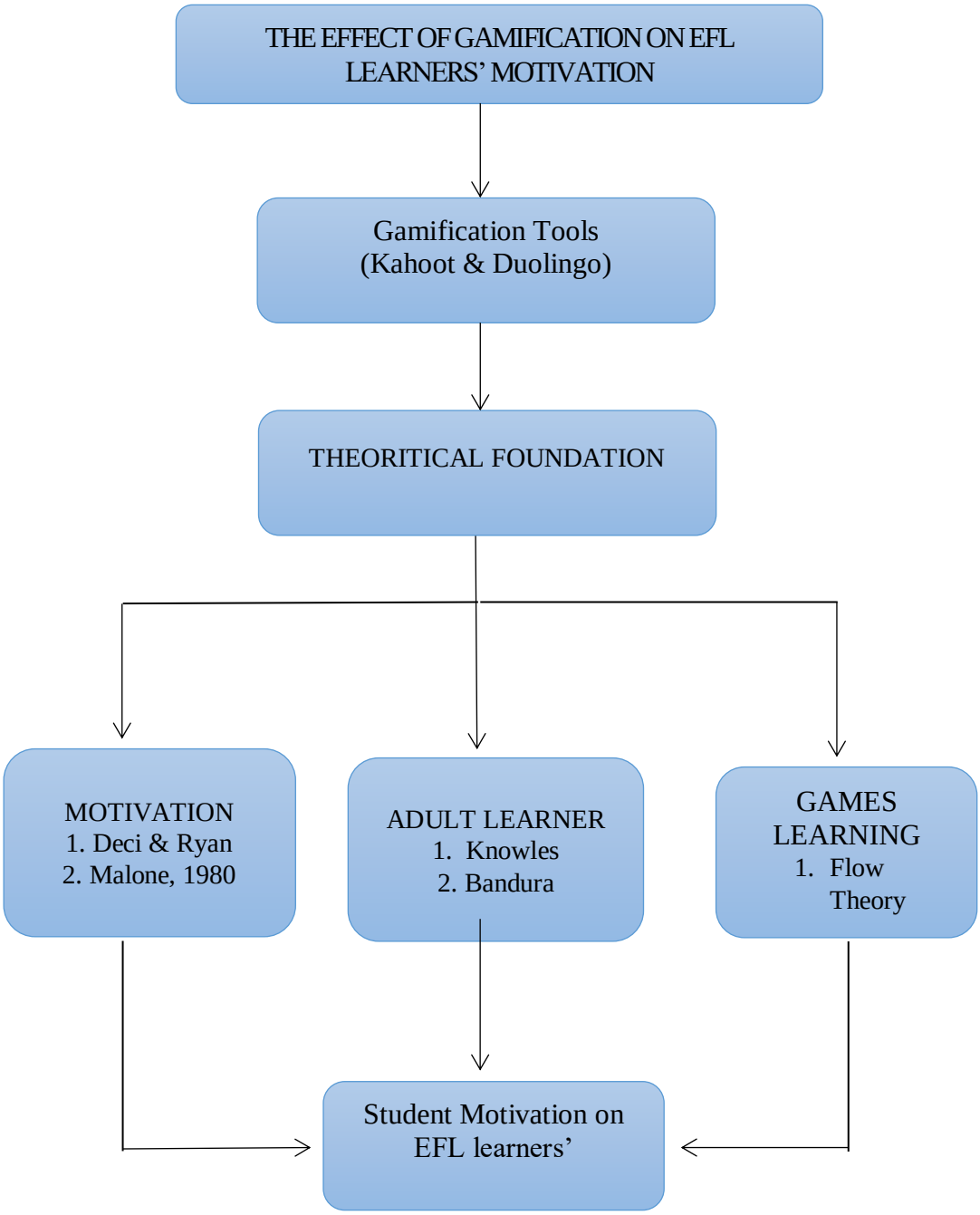
[57] Alrabai and Moskovsky, "The Relationship Between Learners' Affective Variables and Second Language Achievement."

[58] Judit Kormos and Kata Csizér, "The Interaction of Motivation, Self-Regulatory Strategies, and Autonomous Learning Behavior in Different Learner Groups," *Tesol Quarterly* 48, no. 2 (2013): 275–99, https://doi.org/10.1002/tesq.129.

[59] Gholam Hassan Khajavy et al., "Willingness to Communicate in English: A Microsystem Model in the Iranian<scp>EFL</Scp>Classroom Context," *Tesol Quarterly* 50, no. 1 (2014): 154–80, https://doi.org/10.1002/tesq.204.

[60] Yang Liu et al., "Fostering EFL/ESL Students' Language Achievement: The Role of Teachers' Enthusiasm and Classroom Enjoyment," *Frontiers in Psychology* 12 (2021), https://doi.org/10.3389/fpsyg.2021.781118.

C. Conceptual framework



The conceptual framework of this study draws upon several foundational theories to examine how gamification, specifically using Kahoot and Duolingo, affects the motivation of adult EFL learners in the Accounting Department second

semester at UIN Palopo. It is built upon three core theoretical foundations: (1) Game-Based Learning Theory, incorporating Flow Theory by Csikszentmihalyi and Vygotsky's Social Constructivism, which describe how game features foster deep engagement and peer collaboration; (2) Adult Learning Theory, rooted in Knowles' Andragogy and Bandura's Social Cognitive Theory, which highlight the importance of learner independence, real-world relevance, and learning through social interaction; and (3) Motivation Theory, guided by Deci and Ryan's Self-Determination Theory and Malone's Intrinsic Motivation Theory, emphasizing that gamification supports psychological needs, competence, autonomy, and relatedness while enhancing intrinsic motivation through interactive feedback and goal-oriented tasks.

In practice, Duolingo was used as a gamified learning media to support individual practice with features such as levels, streaks, and badges that sustain learner persistence, while Kahoot served as an engaging classroom review tool that promotes competition and collaboration through real-time quizzes. These media stimulate both intrinsic motivation (enjoyment, challenge, self-achievement) and extrinsic motivation (scores, rewards, recognition), which synergistically increase learners' engagement. Factors such as instant feedback, progressive challenges, and social interaction embedded in gamification are key drivers that enhance overall motivation, tailored to the unique needs and preferences of adult language learners.

D. Hypotheses

Drawing from existing literature, hypotheses can be formulated:

1. **H_0**: The use of Kahoot and duolingo does not significantly influence the motivation of EFL learners.
2. **H_1**: The use of Kahoot and duolingo significantlyy influences the motivation of EFL learners.

Based on relevant literature, the hypothesis in this study is formulated to examine whether the use of Kahoot and Duolingo significantly influences the learning motivation of EFL students. The null hypothesis (H_0) states that the use of these gamification tools does not significantly affect learning motivation, while the alternative hypothesis (H_1) states that their use significantly enhances motivation.

The hypothesis is considered supported (H_1 accepted, H_0 rejected) if the results of statistical analysis, such as a t-test, show a significance value (p-value) less than 0.05, indicating a statistically significant difference between the experimental and control groups. Conversely, if the significance value is greater than 0.05, then the null hypothesis (H_0) cannot be rejected, meaning that the use of Kahoot and Duolingo does not significantly affect the learning motivation of EFL learners within the context of this study.

CHAPTER III

RESEARCH METHOD

A. Research Method

The study employed a quasi-experimental research design utilizing a pretest-posttest approach to investigate the impact of gamification tools, specifically Kahoot and Duolingo, on the motivation of adult English as a Foreign Language (EFL) learners. In addition, this study adopted a mixed methods approach, combining quantitative and qualitative data to provide a comprehensive understanding of motivational changes. This methodology was particularly suited for assessing changes in motivation levels before and after the implementation of gamification strategies. The design compared an experimental group exposed to gamification with a control group (non-gamified).

A non-equivalent control group design was used in the study. Non-equivalent control group design was a quasi-experimental research method that compared outcomes between a non-randomized treatment group and a control group to assess the effect of an intervention when random assignment was not feasible. Purposive sampling was used in this study to choose samples for the control and experimental groups.

Table 3.1 Research Design

Group	Pretest	Treatment	Post-test
Experiment	**O_1**	**X**	O_2

Control	O_3	-	O_4

Where :

1. O1, O3: Pre-test for the experimental and control groups (Measurement of motivation levels in both the experimental and control groups before the treatments).
2. O2, O4: post-test in control and experimental groups (Measurement of motivation levels in both the experimental and control groups after the treatments).
3. X: The experimental group's course of treatment (Implementation of Kahoot and Duolingo in EFL learning sessions for the experimental group, while the control group continues with non-gamification method).

B. Time and place of the research

1. Time of the research

   This research took around 4 meetings to complete.

2. Location of the research

   The research was conducted at UIN Palopo, which is located in Balandai, Bara District, Palopo City South Sulawesi Selatan.

C. Variables

This research included two types of variables:

1. Independent Variable: The use of Kahoot and duolingo as a gamification tool.
2. Dependent Variable: The level of student motivation in EFL learning.

D. Population and Samples

The population for this study comprised the second semester accounting students at UIN Palopo. From this population, a purposive sampling technique was used to select 34 students who participated in the study. The students selected, divided into two groups:

1. Experimental Group (17 students): Uses Kahoot and Duolingo in their learning.
2. Control Group (17 students): Engages in traditional EFL learning without gamification.

The sampling technique employed was purposive sampling, as participants were deliberately selected based on specific criteria relevant to the study's objectives, including enrollment in the same semester and program. This approach aligns with Campbell and Stanley's recommendations for quasi-experimental designs, where targeted selection can strengthen contextual relevance even when random assignment is impractical. By intentionally choosing participants who share key characteristics (e.g., comparable language proficiency, similar exposure to EFL instruction), the study enhances control over extraneous variables and bolsters internal validity. While purposive sampling may limit broad generalizability, it ensures the sample aligns with the research focus (e.g., evaluating gamification's impact on motivation within a defined learner population).

E. Research Instrument

The primary instrument used in this study is Motivation Questionnaire**:**

a. Questionnaire consisting of Likert-scale items measuring motivation levels.

b. Observation checklist

The observation sheet was used to assess the classroom atmosphere, students' behavior, and level of engagement during the learning process. In the control class, the observation sheet was also used to record students' engagement during conventional learning without the gamified tools. The observed aspects included attention to material, class participation, and interaction patterns during non-gamified instruction. This data served as a comparison to evaluate differences in motivation and engagement between the experimental and control groups.

F. Procedure for Collecting Data

This study was conducted over a period of four days following a structured schedule. In this study, students began their Duolingo activities with vocabulary lessons, as this was the first learning focus presented on the platform. On the first day, observation sessions and pre-tests were administered simultaneously to both the experimental and control groups to establish baseline data. The subsequent two days (Days 2-3) were dedicated to implementing gamification-based interventions exclusively in the experimental class, with each session lasting 20–30 minutes. The final day of the study involved administering post-tests to both groups. for the experimental group, this occurred after they had completed two intervention sessions, while the control group took their post-test immediately

following their traditional instruction session (non-gamified). The data collection procedured includes the following steps:

1. First Meeting

a. Pre-Test: Both the experimental and control groups completed an identical neutral questionnaire to assess their initial motivation levels before the treatments began. This pretest questionnaire was designed to avoid bias by using generic, non gamification specific questions about learning attitudes (e.g., interest in English, self-perceived motivation, and engagement in class).

2. Second Meeting

The experimental group underwent a series of gamified learning interventions designed to enhance motivation through Kahoot and Duolingo integration. The experimental class treatments were implemented as follows:

a. Introduction to Kahoot and Duolingo: Participants are introduced to the app and explained the functions and features of Kahoot and Duolingo.

b. Students use Duolingo to learn and practice vocabulary: Participants together answer Duolingo questions displayed by the researcher via LCD.

c. After the activity, the researcher conducts a review by hosting a Kahoot quiz with questions about the vocabulary meanings. Teams are now larger groups (e.g., 4–5 students) to promote peer discussion.

d. Kahoot automatically displays the top-scoring teams on the leaderboard.

3. Third Meeting

a. Students utilized the Duolingo application independently to learn and practice vocabulary through structured exercises.

b. Participants worked in pairs (2 students per team) to collaboratively construct sentences using vocabulary items displayed on Duolingo's word board.
c. Following the vocabulary activities, the researcher facilitated a comprehensive review by conducting an interactive Kahoot quiz.
d. Observational data is collected during sessions to document.
e. In the post-test phase: students retook the motivation questionnaire to measure changes in motivation levels.

4. Fourth Meeting

The control group received conventional vocabulary instruction through traditional classroom methods in a single session. The non-gamified treatment proceeded as follows:

a. Vocabulary Introduction by the Researcher: The researcher wrote a list of vocabulary words on the whiteboard.
b. Student Note-Taking : Students copy the words and definitions into their notebooks.
c. Group Task, Sentence Formation: Students form small groups (3–4 people) to create original sentences using the vocabulary. They discuss and write their answers on paper.
d. Class Discussion and Correction : Groups share their sentences aloud. The instructor provides verbal feedback and corrects errors.
e. Post-Test: students retook the motivation questionnaire to measure changes in motivation levels.
f. Observational data is collected during sessions to document.

G. Technique of Data Analysis

It is one of the research processes carried out after all the necessary data to solve the research problem has been completely obtained. The explanation as follows:

1. Before the instruments (The questionnaire and observation) are used, validation activities are first carried out by validator who is expert in the field. The research instrument validators consisted of one validator taken from UIN Palopo lecture.

Table 3.2 Validator's Name

No	Name	Job
1	Dewi Furwana, S.Pd.,M.Pd	**Lecturer in UIN Palopo**

2. Once the data has been collected and validated, it is processed and analyzed. For the qualitative data it was taken using observation sheet. The observation sheet in this study used a checklist format with "Yes/No" columns to record indicators of student engagement (such as enthusiasm, social interaction, response to feedback, and competitive participation), supplemented by a "Notes" column to document specific behavioral examples. The data were analyzed using descriptive analysis, which functions to present the results in a clear summary by explaining the observed indicators and describing the situations that appeared during the learning process. This technique was used to interpret students' engagement, enthusiasm, social interaction, and responses during both gamified and conventional learning. Furthermore, the

descriptive analysis connected the observation findings with relevant theories and previous studies, so that the qualitative results could complement the quantitative analysis and provide a more comprehensive understanding of how gamification influenced learners' motivation.

3. For the quantitative data it was processed and analyzed using SPSS (Statistical Package for the Social Sciences) for further statistical analysis. The procedural steps are outlined as follows:

a. The normality test

The normality test is used to determine whether the data obtained comes from a normally distributed population. This test can be performed using the Chi-Square test, Shapiro-Wilk, Lilliefors test, or Kolmogorov-Smirnov test with the help of the SPSS program. In this study, the Shapiro-Wilk test was used. Whether the data is normally distributed can be seen in the SPSS output table "Test of Normality" based on the significance level. The decision rule is that if the significance value is greater than 0.05, the data is considered to be normally distributed. However, if the significance value is less than 0.05, it can be concluded that the data is not normally distributed.

b. Homogeneity Test

The homogeneity test is used to ensure whether the data is homogeneous or comes from the same population or not. In this study, the homogeneity test is used to determine whether the variance of the posttest data in the experimental class and the control class is homogeneous or not. The homogeneity test can be conducted using the Homogeneity of Variance test with the decision-making

basis being if the sig *Based on Mean* > 0.05. In this study, Levene's Test test was used.

c. Paired Sample T-Test

The Paired Sample T-Test is used to determine whether there is a statistically significant difference between the pretest and posttest scores within the same group. This test compares the mean scores before and after the intervention to assess whether the observed improvement is significant or due to random chance.

d. Descriptive Analysis Test

Descriptive statistics were used to compare the performance of the experimental and control groups. These numbers help to give a clearer picture of how the students performed before and after the treatment. Descriptive statistics in this study include the calculation of the mean (average), minimum and maximum scores, and standard deviation of student motivation scores from both the experimental and control groups. These statistical measures help researchers understand the general trends in the data without making complex inferences. By comparing the mean scores from the pretest and posttest, we can identify whether there was a noticeable improvement in motivation after the treatment.

e. Instrument Validity Test

An instrument validity test measures the extent to which a research tool (such as a questionnaire, test, or observation sheet) accurately assesses what it is intended to measure. In research, instrument validity is crucial to ensure that the collected data is accurate and relevant to the study's objectives.

CHAPTER IV

FINDINGS AND DISCUSSIONS

This chapter discussed the findings, which were a series of reports obtained during the research in the form of questionnaires and observations. The information obtained from this research provided answers regarding the effect of gamification on students' learning motivation at Accounting Department of the Faculty of Islamic Economics and Business (FEBI), UIN Palopo.

A. Research Findings

This study employed a mixed-methods approach to examine the impact of gamification tools (Kahoot and Duolingo) on EFL learners' motivation at Accounting Department of the Faculty of Islamic Economics and Business (FEBI), UIN Palopo. Quantitative data were collected through pre-test and post-test questionnaires, Each questionnaire consisted of 13 items designed to measure motivation. While qualitative insights were gathered from participant observations and reflective feedback. By combining both data types, the research aimed to provide a comprehensive analysis of how gamification influences student engagement and motivation in language learning. The data collection process in this study took 4 days, starting from June 16 to June 19, 2025. Data were collected through pretest and posttest questionnaires administered to both the experimental and control groups.

Additionally, classroom observations were conducted in the both groups to document behavioral engagement during gamified activities. The research sample comprised 34 participants, with equal representation from two second-semester

accounting classes (Accounting B and C, 17 students per class). The table below summarizes the pre-test and post-test results for both control and experimental groups:

Table 4.1 Comparison of Pre-Test and Post-Test Results: Experimental vs. Control Groups

Kelas A (Kontrol)		**Kelas B (Eksperimen)**	
Pre-test	**Post-test**	**Pre-test**	Post-test
29	42	37	**57**
35	41	43	**63**
32	44	35	**47**
29	38	38	**56**
32	44	39	**53**
33	43	38	**56**
33	46	39	**53**
30	41	40	**57**
29	40	34	**46**
38	46	42	**59**
33	45	37	**50**
38	50	39	**56**
30	43	36	**48**
35	46	40	**52**
35	47	41	**55**
31	42	40	**56**
34	47	42	**56**

The data presents the pre-test and post-test scores of two groups: Class A (Control) and Class B (Experimental). The results indicate notable differences in performance between the two groups. In Class A, the pre-test scores ranged from 29 to 38, with post-test scores improving to a range of 38 to 50. This suggests a moderate increase in performance after the intervention. Conversely, Class B exhibited higher pre-test scores, ranging from 34 to 43, and demonstrated a more substantial improvement in post-test scores, which ranged from 46 to 63. The

greater post-test scores in Class B imply that the experimental treatment may have had a more pronounced effect on learning outcomes compared to the control group. These findings highlight the potential efficacy of the gamification intervention in enhancing student performance, particularly when compared to non-gamified class (conventional).

The results of the data analysis are explained step by step according to the procedures conducted in SPSS. Each section presents the outcome of a specific statistical test, including instrument validation for both experimental and control classes, descriptive statistics, paired samples correlation, and paired samples t-test, in order to assess the impact of the treatment on students' motivation. The results of the data analysis are presented in the following tables:

a. Normality Test

Table 4.2 Normality Test Results

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelas	Statistic	df	Sig.	Statistic	df	Sig.
Hasil	Pretest A (Kontrol)	.120	17	.200*	.929	17	.210
	Posttest A (Kontrol)	.117	17	.200*	.984	17	.984
	Pretest B (Eks)	.116	17	.200*	.976	17	.918
	Posttest B (Eks)	.194	17	.090	.942	17	.341

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

To check whether the data followed a normal distribution, the Shapiro-Wilk test was used. This test is commonly used when the number of participants is less than 100. It was applied to the pretest and posttest scores in both the

experimental and control groups. The normality test using Shapiro-Wilk confirmed that all data were normally distributed ($p > 0.05$), A value above 0.05 tells us that the data are close to a normal curve, and not too skewed or irregular. This is important because many statistical tests, like the t-test, require the data to be normal in order to give accurate results. Since the data met this condition, the study could move forward using parametric tests, which are more powerful and appropriate when the normality assumption is satisfied.

b. Homogeneity Test

Table 4.3 Homogeneity Test Results

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Nilai	Based on Mean	2.096	1	32	.157
	Based on Median	.884	1	32	.354
	Based on Median and with adjusted df	.884	1	23.562	.357
	Based on trimmed mean	2.133	1	32	.154

A Levene's Test was done to check if the variances (or how spread out the scores are) in the experimental and control groups were equal. This test helps ensure that any differences between the groups are due to the treatment, not because one group had more variation in scores. The homogeneity test using Levene's Test indicated that the variances between the experimental and control groups were homogeneous ($p = 0.157 > 0.05$), ensuring that the groups were comparable and that any observed differences could be attributed to the intervention rather than variability in group characteristics.

c. Paired sample T-test

Table 4.4 Paired Samples Statistics Result

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	38.82	17	2.506	.608
	Posttest	54.12	17	4.442	1.077

Based on the results of the paired t-test (Paired Samples Statistics), it was found that there was an increase in the average score from 38.82 during the pretest to 54.12 during the posttest in the experimental group.

Table 4.5 Paired Samples Correlations Result

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest & Posttest	17	.822	.000

Based on the results of the paired correlation analysis, a correlation coefficient of 0.822 was obtained with a significance value of 0.000 (< 0.05).

Table 4.6 Paired Samples Test Result

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Pretest - Posttest	-15.294	2.779	.674	-16.723	-13.865	-22.695	16	.000

The results of the paired t-test (Paired Samples Test) between pretest and posttest scores in the experimental group yielded a significance value of 0.000 (<

0.05) and a t-statistic of -22.695.

To see if there was a meaningful change in students' performance before and after the treatment, a paired sample t-test was used for the experimental group. This test compares the average (mean) scores of the same group at two different times: before the treatment (pretest) and after the treatment (posttest). This test compares the average (mean) scores of the same group at two different times: before the treatment (pretest) and after the treatment (posttest). The average score before the treatment was 38.82, and it increased to 54.12 after the treatment. This clear increase in the average score shows that students improved after participating in the learning activities using gamification tools like Duolingo and Kahoot. The paired t-test is helpful in measuring change within one group and is especially useful in research that uses a pretest-posttest design.

A correlation analysis was also done to understand how closely related the pretest and posttest scores were in the experimental group. The result showed a correlation coefficient of 0.822 and a significance value of 0.000. This means that there was a very strong and significant relationship between students' scores before and after the treatment. In simple terms, students who scored high on the pretest also tended to score high on the posttest, and those who scored lower on the pretest also improved but stayed consistent in ranking. A strong correlation like this suggests that the changes in scores were consistent and meaningful, not random or caused by external factors.

The result of the Paired Samples Test also supports the improvement found in the experimental group. The test gave a t-statistic value of -22.695 and a

significance level of 0.000. Because this value is much smaller than 0.05, it means the difference between the pretest and posttest scores is statistically significant. The negative sign in the t-value simply shows that the posttest scores were higher than the pretest scores.

The paired sample t-test results further reinforced the effectiveness of gamification. The significant increase in posttest scores ($p = 0.000 < 0.05$) and the high correlation coefficient ($r = 0.822$) between pretest and posttest scores in the experimental group demonstrated both the consistency of student performance and the strong positive influence of the intervention. The t-test statistic ($t = -22.695$) underscored the statistical significance of these differences, confirming that gamification had an impact on learning outcomes.

d. Descriptive Statistics Analysis

Table 4.7 Pre-Test and Post-Test Descriptive Statistics

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Pretest Eks	17	9	34	43	38.82	2.506
Posttest Eks	17	17	46	63	54.12	4.442
Pretest Kontrol	17	9	29	38	32.71	2.889
Posttest Kontrol	17	12	38	50	43.82	3.026
Valid N (listwise)	17					

Descriptive statistics were used to compare the performance of the experimental and control groups. These numbers help to give a clearer picture of how the students performed before and after the treatment. The descriptive analysis revealed a notable increase in the average scores of the experimental

group, from 38.82 in the pretest to 54.12 in the posttest, compared to the control group's increase from 32.71 to 43.82. This suggests that the gamification treatment had a more substantial impact on learning outcomes than non-gamification class (conventional). Thus, it can be concluded that the gamification treatment was effective in improving the learning outcomes of students at UIN Palopo. The study's results also support the hypothesis (H_1) that gamification tools (Kahoot and Duolingo) improve EFL learners' motivation, while rejecting the null hypothesis (H_0) that they have no effect.

e. Validity Test Results for the control Class

Table 4.8 Validity Test Results for Control Class Instruments

Correlations

		Pretest	Posttest
Pretest	Pearson Correlation	1	.787**
	Sig. (2-tailed)		.000
	N	17	17
Posttest	Pearson Correlation	.787**	1
	Sig. (2-tailed)	.000	
	N	17	17

**. Correlation is significant at the 0.01 level (2-tailed).

Before using any data collection tools, it is important to test whether they are valid, meaning they can measure what they are supposed to measure. For the control group, a Corrected Item-Total Correlation test was used. This test checks how well each item in the test is related to the total score. All items had correlation values higher than the critical value from the r-table (around 0.482) for N = 17 and $\alpha = 0.05$, which means the test items were valid.

f. Validity Test Results for the Experiment Class

Table 4.9 Validity Test Results for Experimental Class Instruments

Correlations

		Pretestesk	Posttesteks
Pretestesk	Pearson Correlation	1	.822**
	Sig. (2-tailed)		.000
	N	17	17
Posttesteks	Pearson Correlation	.822**	1
	Sig. (2-tailed)	.000	
	N	17	17

**. Correlation is significant at the 0.01 level (2-tailed).

For the experimental group, a Pearson correlation test was done to check the validity of the instrument by comparing the pretest and posttest results. The result showed a very strong correlation (0.822) with a significance value of 0.000. This means that the instrument was consistent and reliable in measuring the students' performance. A strong and significant correlation between pretest and posttest results also shows that the instrument was stable. Thus, it can be concluded that the instruments used are valid and suitable for measuring student learning outcomes in this study.

1. Observation Checklist Data

Table 4.10 Observation Results of Gamification Implementation In The Experimental Group

No	Aspek yang Diobservasi	Indikator	Ya	Tidak	Catatan
1	**Keterlibatan Kognitif**	Mahasiswa menunjukkan upaya pemecahan masalah saat menggunakan	✓		-

		aplikasi (misal: mengulang level, memilih strategi)		
2	**Antusiasme**	Mahasiswa menunjukkan ekspresi positif selama aktivitas gamifikasi	✓	**Beberapa mahasiswa terlihat antusias dengan memberikan respons verbal saat menjawab pertanyaan.**
3	**Interaksi Sosial**	Mahasiswa berdiskusi/berkolaborasi dengan teman terkait materi	✓	**80% aktif berdiskusi dalam kelompok kecil (2 orang) dengan fokus pada materi (terlihat dari konten pembicaraan dan penggunaan catatan/alat pembelajaran**
4	**Respons terhadap Feedback**	Mahasiswa menanggapi umpan balik dari aplikasi (misal: mengulang soal yang salah)	✓	**Mahasiswa bertanya alasan kenapa mereka salah dalam menjawab pertanyaan**
5	**Partisipasi Kompetitif**	Mahasiswa merespons fitur kompetisi (leaderboard Kahoot) dengan positif	✓	**Peneliti memberikan *warning* 1 kali untuk menenangkan suasana tanpa mengurangi semangat.**
6	**Otonomi Belajar**	Mahasiswa memilih level/materi secara	✓	**-**

		mandiri di Duolingo			
7	**Ketekunan**	Mahasiswa terus berusaha menyelesaikan tantangan meskipun gagal	✓		
8	**Penerapan Materi**	Mahasiswa menggunakan kosakata dari aplikasi dalam interaksi kelas	✓		-

Table 4.11 Observation Results In The Control Group

No	Aspek yang Diobservasi	Indikator	Ya	Tidak	Catatan
1	**Keterlibatan Kognitif**	Mahasiswa menunjukkan upaya pemecahan masalah (misal: mengajukan pertanyaan, mencoba berbagai cara untuk menjawab)	✓		**Beberapa mahasiswa menunjukkan upaya pemecahan masalah. namun, mayoritas cenderung diam dan kurang terlibat aktif**
2	**Antusiasme**	Mahasiswa menunjukkan ekspresi positif selama pembelajaran		✓	**Mahasiswa kurang menunjukkan ekspresi positif yang jelas selama pembelajaran, tetapi tetap fokus mendengarkan penjelasan.**
3	**Interaksi Sosial**	Mahasiswa berdiskusi/bertanya kepada teman/peneliti terkait materi	✓		-
4	**Respons terhadap Feedback**	Mahasiswa menanggapi koreksi dari peneliti (misal: memperbaiki jawaban)	✓		-

5	**Partisipasi**	Mahasiswa aktif menjawab pertanyaan peneliti	✓	**Mahasiswa cenderung pasif dalam menjawab pertanyaan peneliti; hanya sebagian kecil yang merespons secara spontan.**
6	**Otonomi Belajar**	Mahasiswa mengerjakan latihan secara mandiri	✓	**-**
7	**Ketekunan**	Mahasiswa terus berusaha menyelesaikan tugas meskipun kesulitan	✓	**-**
8	**Penerapan Materi**	Mahasiswa menggunakan kosakata yang diajarkan dalam interaksi	✓	

The observation was conducted to evaluate student engagement in both the experimental and control groups. Several aspects were observed, including cognitive involvement, enthusiasm, social interaction, response to feedback, competitive participation, learning autonomy, perseverance, and application of material. In the experimental class, initial results indicate that most students actively participated in small group discussions, demonstrated enthusiasm through verbal responses, and reacted positively to competitive features. However, additional notes also identified areas requiring further attention, such as increased engagement in problem-solving and direct application of the material. In contrast, the control class showed moderate engagement, with students generally remaining passive during discussions and showing limited enthusiasm or interaction. While

some students participated in tasks and responded to feedback, the overall classroom atmosphere lacked the dynamic energy seen in the gamified setting. These findings provide preliminary insights into the effectiveness of gamification in enhancing student participation and motivation compared to traditional instruction.

B. Discussion

1. General Overview of the Study

This study was conducted at State Islamic University (UIN) Palopo, specifically within the Accounting Department of the Faculty of Islamic Economics and Business (FEBI). UIN Palopo is a state Islamic higher education institution located in Palopo, South Sulawesi Province, Indonesia. Originally established as State Islamic College (STAIN) Palopo under Presidential Decree No. 11 (March 21, 1997), it was later upgraded to a State Islamic Institute (IAIN) on October 14, 2014, and ultimately attained university status as UIN Palopo on May 10, 2025, inaugurated by the Minister of Religious Affairs of the Republic of Indonesia.

The present study investigated the effect of gamification on EFL learners' motivation at UIN Palopo by integrating two widely-used digital platforms, Duolingo and Kahoot, in classroom instruction. The study adopted a quasi-experimental design with mixed-method data collection, involving pretest-posttest questionnaires and classroom observations.

Gamification has been increasingly adopted in language learning to address the issue of low motivation, especially in traditional EFL settings. In this

study, gamification was used strategically: Duolingo was applied as a tool for learning, while Kahoot served as a post-lesson review and assessment tool. Together, these tools were intended to boost both independent and collaborative motivation by providing meaningful engagement through challenges, feedback, rewards, and interaction.

Based on the observation results, the observed subjects in this study were students from the second semester of the Accounting Study Program at the Faculty of Islamic Economics and Business (FEBI). The research focused on the students' behavior, responses, and participation when using two gamification tools, Duolingo and Kahoot, in the context of English language learning. The research revealed that students exposed to gamified instruction displayed significantly higher levels of motivation compared to those who received conventional instruction. This was evidenced by increased average scores in post-test questionnaires, strong statistical correlations, and rich observational data showing behavioral indicators of motivation.

These results directly address the research questions regarding the effect of gamification tools Duolingo and Kahoot on students' motivation. The discussion that follows will elaborate on how the collected data reflects this impact, linking it to relevant theories and previous studies. As this study employed a mixed-methods approach, the results comprised both quantitative and qualitative data, as presented below.

2. Experimental and Control Group Comparison on Motivation Outcomes

To evaluate the impact of gamified learning tools on students' motivation, this study utilized a quantitative approach supported by statistical analysis. The quantitative data were gathered through pretest and posttest questionnaires administered to both the experimental and control groups. The data were analyzed using SPSS to measure changes in motivation levels before and after the implementation of gamification. Before the experiment, the experimental class (which used gamification) had an average pretest score of 38.82, indicating their initial level of understanding. After implementing gamification, their posttest score increased significantly to 54.12, demonstrating that this method effectively improved learning. Statistical analysis confirmed that this improvement was not due to chance, meaning gamification had a real impact. Furthermore, students who performed well at the beginning also achieved high scores after the intervention, showing consistent progress. In contrast, the control class (which used traditional teaching without gamification) started with a lower pretest average of 32.71. After standard instruction, their posttest score improved to 43.82, indicating some progress. However, this improvement was much smaller than the experimental class.

The research question sought to determine whether gamification tools like Kahoot and Duolingo influence the motivation of EFL learners at UIN Palopo. The findings provide a clear answer: the significant 15.3-point improvement in the experimental class (compared to the control group's 11.11-point gain) directly supports the alternative hypothesis (H_1) that gamification enhances motivation. The statistical strength of the results with a high correlation (0.822) and an

extremely low p-value (0.000) eliminates doubt that this improvement occurred by chance, effectively rejecting the null hypothesis (H_0). These results align with the core intent of the research question, demonstrating not just that gamification works, but that it produces measurable, statistically validated improvements in learner motivation. The contrast between the two groups underscores that traditional methods, while still effective, are less impactful than gamified.

The significant improvement in motivation observed in the experimental group resonates with the conclusions of multiple studies cited in the literature review. For instance, Bander, Sahari, and Fawaz demonstrated that gamification boosts motivation and engagement in Jeddah public schools, while Moldakassymovna Duisenova's research suggest that its effectiveness in enhancing vocabulary acquisition and enthusiasm among EFL learners. These parallels confirm that gamification's motivational benefits are replicable across diverse educational settings, including the adult EFL learners at UIN Palopo.

3. Student Behavioral Responses on Motivation Outcomes

Based on the observation results for the experimental class the research focused on the students' behavior, responses, and participation when using two gamification tools, Duolingo and Kahoot, in the context of English language learning. The observation sheet from the experimental class revealed significant effects of gamification using Duolingo and Kahoot on students' motivation and engagement in learning English. These findings are consistent with core motivational and learning frameworks, particularly the Self Determination Theory developed by Deci and Ryan, the Intrinsic Motivation Theory proposed by

Malone, and the concept of Flow introduced by Csikszentmihalyi. These theories are also strengthened by Knowles' principles of adult learning, which emphasize learner autonomy, purposeful engagement, and critical reflection, all of which were evident in students' observed behaviors during gamified activities.

In contrast, the observation results from the control class where students engaged in traditional, non-gamified instruction demonstrated lower levels of behavioral engagement and motivational indicators. While some students attempted to incorporate the new vocabulary into class discussions or spontaneous speech, the majority remained passive in their usage. Most interactions with the material were limited to structured written tasks, indicating that deeper internalization and practical application of the vocabulary were not yet fully achieved. This suggests varying levels of engagement, with only a portion of students actively experimenting with the new words in communicative contexts.

The following section presents a detailed explanation of student behaviors across the eight observed indicators of motivation and engagement. Each indicator is described based on the observed behaviors in the control class, followed by a contrasting explanation from the experimental class.

a. Student Behavioral Responses in the Conventional Learning Environment (Control Group)

In the control class, where conventional instruction was implemented without the integration of gamification tools, students tended to exhibit lower levels of observable motivation and engagement. The observation revealed that while some students made efforts to complete vocabulary tasks, overall cognitive

engagement was relatively limited. Most learners appeared passive, showing minimal problem-solving behavior or active inquiry during learning activities. Unlike the experimental group, they did not frequently explore different strategies for task completion or show curiosity beyond the basic requirements. In terms of enthusiasm, although students remained attentive to the lesson and followed instructions, their emotional involvement seemed low; visible signs of enjoyment or excitement were rare. Their participation appeared more routine, compliance-based, and teacher-driven rather than stemming from internal motivation or genuine interest. Social interaction, though present in group tasks, lacked the dynamic energy and high involvement seen in the gamified environment. Group discussions tended to be brief and somewhat mechanical, resulting in limited opportunities for mutual learning and classroom bonding. This reduced interaction led to a weaker sense of peer connection, which is essential in fostering relatedness according to Self-Determination Theory.

The described classroom interactions showed students generally exhibited lower observable levels of intrinsic motivation and engagement compared to the experimental group. While they completed assigned tasks, much of the cognitive engagement appeared surface-level, with limited problem-solving. This suggests that the instructional format provided fewer opportunities for activities that might stimulate curiosity or challenge-seeking behaviors.

The emotional climate of the class was relatively calm and orderly, with participation occurring primarily in response to teacher prompts. Interactions among peers during group work were functional, focusing on task completion

rather than extended discussion or collaborative exploration. From the perspective of Self-Determination Theory (SDT), this may indicate that opportunities for fostering relatedness through rich peer interaction and shared problem-solving were comparatively limited in this setting.

The passive attitude displayed by most students in the control class reflects one of the key barriers to adult learning identified by Knowles the lack of direct relevance and opportunities to control the learning process. When adult learners are only given one-way instruction without room to make choices or connect the material to their personal experiences, motivation tends to be externally driven and fragile. The absence of meaningful peer interaction also reduces the sense of *relatedness* (SDT), which is crucial for sustaining engagement. This aligns with the andragogical principle that adults learn more effectively when they are actively involved, receive immediate feedback, and feel responsible for their own learning process.

When feedback was provided, students generally acknowledged it quietly, with limited follow-up questioning or dialogue to clarify concepts, thereby restricting deeper engagement with the material. This passive response constrained opportunities for developing competence and reflecting on their own progress. Participation in class discussions was modest, with only a few students volunteering brief, cautious answers. The absence of game-like elements contributed to a subdued atmosphere, reducing the motivation to contribute more confidently or frequently. Regarding autonomy, students complied with directions but rarely showed initiative or made self-directed choices during learning. The

teacher-led format offered minimal space for learners to exercise control, explore interests, or personalize their approach to tasks.

Persistence was another area with observable challenges; students often disengaged when encountering difficulties, showing little inclination to try again or adopt alternative strategies. This contrasted with the experimental group, where gamified techniques promoted repeated efforts and resilience. Lastly, while vocabulary was introduced, students seldom applied new words in class discussions or spontaneous speech. Most learning remained limited to completing written exercises, suggesting surface-level engagement rather than meaningful internalization or communicative application.

b. Student Behavioral Responses in the Gamified Learning Environment (Experimental Group)

The implementation of gamification in the experimental class elicited distinct behavioral responses from students. This section examines student engagement patterns by analyzing key indicators, including active participation, peer collaboration, task persistence, and motivational enthusiasm. The observational data reveal how gamified elements influenced learning behaviors compared to the conventional classroom setting. Each indicator is discussed in detail to provide a comprehensive understanding of gamification's impact on student dynamics.

1) Engagement and Problem Solving during Duolingo Activities

In the experimental class as seen in the observation data (indicator 1), during the Duolingo exercises, the researcher projected questions on the screen,

which students answered with great enthusiasm. Those who answered incorrectly received guidance and subsequently corrected their mistakes in the next questions. It also shows that students demonstrated strong problem-solving efforts when using Duolingo and also supports SDT's competence dimension, where constructive feedback helps learners build confidence in their abilities. In addition, this aligns with Behaviorist principles by using reinforcement and corrective feedback to shape learning outcomes.

2) Enthusiasm and Intrinsic Motivation

Another key finding was enthusiasm and intrinsic motivation. Students showing positive emotional responses, such as smiling and laughter during gamified activities (Indicator 2), suggest that students found the experience enjoyable. This aligns with Malone's Intrinsic Motivation Theory, where elements like challenge (appropriate difficulty) and game-like immersion (fantasy and curiosity) make learning inherently rewarding. Moreover, the balance between skill level and task difficulty created a flow state, keeping students fully absorbed and motivated throughout the activity. This immersive engagement also reflects Knowles' principle of internal motivation and readiness to learn, as the students responded well to meaningful and interactive tasks.

3) Peer Collaboration and Social Interaction

Additionally, observations showed active peer discussions and collaboration (Indicator 3), especially during Kahoot activities. The data revealed strong peer collaboration, with approximately 80% of students actively discussing concepts in small groups. Even those who were less vocal remained attentive,

following the session closely. This dynamic underscore the role of relatedness in SDT, as peer interactions fostered a sense of connection and mutual support. Additionally, these findings align with Vygotsky's sociocultural theory, reinforcing that learning is a socially mediated process where knowledge is co-constructed through dialogue and shared problem-solving. Such social interaction also aligns with adult learning principles that emphasize collaborative learning and drawing from learners' prior experiences.

4) Response to Feedback and Reflective Learning

The observation also highlighted how students responded to feedback (Indicator 4), not just passively accepting corrections but actively seeking explanations for their mistakes. This behavior aligned with SDT where learners reflect on their errors to improve, as students felt capable of refining their skills through guided feedback. This behavior also illustrates a transformative learning moment, where learners shift perspectives based on critical reflection and interaction with others.

5) Competitive Engagement with Kahoot

Moreover, students' competitive engagement with Kahoot's leaderboard (Indicator 5), where students were enthusiastically striving for higher rankings. However, the researcher must exercise caution, as excessive enthusiasm among participants may lead to disruptions in other classrooms. The researcher needed to intervene to maintain focus without dampening enthusiasm. This excitement taps into Malone's concept of curiosity and challenge, two key drivers of intrinsic

motivation. Furthermore, the competitive yet playful environment aligns with adult learners' need for goal orientation, as highlighted in andragogical theory.

6) Autonomy and Self-Directed Learning

The data further indicated that students exercised autonomy (Indicator 6) by selecting their own difficulty levels and learning paths in Duolingo. This self-directed approach aligns with SDT's autonomy dimension, where having control over one's learning process increases intrinsic motivation and commitment. When learners choose their challenges, they are more likely to stay engaged and take ownership of their progress. This is also central to Knowles' adult learning theory, where learners value independence and self-direction

7) Persistence and Self-Efficacy

Despite encountering difficulties, students consistently persevered, retrying failed exercises until they succeeded. This persistence (Indicator 7) reflects Bandura's concept of self-efficacy, where repeated effort and small victories build confidence in one's abilities. The gamified structure of the apps contributed to this resilience by framing challenges as achievable milestones rather than discouraging setbacks. It also supports Behaviorism through repetition and reinforcement, helping to form habits and positive learning attitudes.

8) Vocabulary Application in Classroom Interaction

Finally, students applied vocabulary from Duolingo/Kahoot in classroom interactions (Indicator 8) when they were fulfilling the task, aligning with principles of Constructivism. Instead of passive memorization, they actively used language in the learning process, reinforcing retention and practical skills. This

practical application of knowledge also supports the adult learning principle of relevance learners are motivated when content connects to real-life needs.

The described classroom interactions aligns closely with established motivation theories. The observed student behaviors strongly align with Malone's Intrinsic Motivation Theory, particularly in three key elements: challenge, curiosity, and fantasy. The gamified structure of Duolingo and Kahoot provided optimal challenge tasks were neither too easy nor too difficult, maintaining engagement while fostering a sense of accomplishment. The leaderboard system in Kahoot stimulated curiosity by creating a dynamic, competitive environment where students sought to improve their rankings. Additionally, the game-like immersion (fantasy) in Duolingo, with its interactive exercises and rewards, made learning inherently enjoyable, reinforcing intrinsic motivation.

From the perspective of Self-Determination Theory (SDT), the activities effectively supported the three basic psychological needs: autonomy, competence, and relatedness. Autonomy was evident as students selected their own difficulty levels and learning paths in Duolingo, fostering a sense of control. Competence was reinforced through immediate feedback and mastery experiences, students corrected errors, persisted through challenges, and applied vocabulary in real interactions, building confidence in their abilities. Relatedness emerged through peer collaboration in Kahoot, where discussions and group problem-solving created a supportive social learning environment. These psychological needs, when fulfilled, strengthen intrinsic

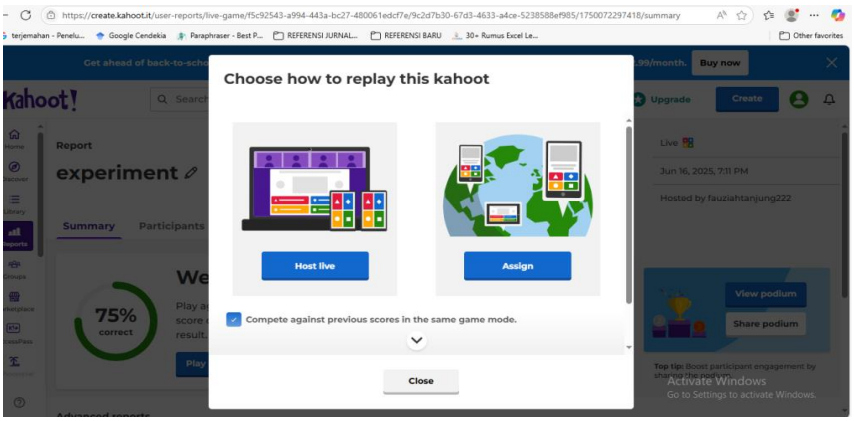
motivation, which in turn increases learners' engagement and willingness to invest effort in the learning process. Ultimately, the practical application of knowledge in a relevant and interactive setting reinforces both motivation and sustained interest in language learning.

In contrast of control class, the active participation observed in the experimental class reflects an environment where the key conditions of adult learning are met. The freedom to select learning paths in Duolingo nurtured a sense of control over the process, a factor Knowles identifies as central to sustaining adult learners' commitment. Meanwhile, Kahoot's blend of competition and collaboration engaged learners' natural goal orientation while promoting peer support, fulfilling both the competence and relatedness needs described in Self-Determination Theory. Because the tasks were interactive, it Allows learners to choose quests, levels, or challenges that match their interests and goals suited with key characteristics of effective andragogical practice.

The challenges observed during the implementation of gamification tools like Kahoot and Duolingo primarily revolved around technical and logistical issues. Network connectivity emerged as a critical factor, as the quality of internet access directly impacted the feasibility of real-time interactive activities. Internet related obstacles in learning turn out not only to occur in remote areas. Poor internet connectivity even happens in major cities in Indonesia.[61] Additionally, device compatibility posed another significant hurdle, as not all students had access to smartphones or laptops capable of running these applications smoothly.

[61] Evi Surahman, Rustan Santaria, and Edi Indra Setiawan, "Tantangan Pembelajaran Daring Di Indonesia," *Kelola: Journal of Islamic Education Management* 5, no. 2 (2020): 89–98.

During the intervention, unexpected technical disruptions further complicated the process. for instance, the researcher initially planned to use Kahoot's live game feature but had to switch to the "Assign" mode due to device malfunctions. These practical challenges align with findings from previous studies cited in the proposal, such as Sailer and Homner's work on internet reliability issues[62] and Hamari's research highlighting socioeconomic disparities in technology access.[63] The experience underscores the importance of conducting pre-implementation checks for infrastructure readiness and having backup plans to ensure smooth execution. As emphasized in the proposal's theoretical framework, these technical barriers must be addressed to fully realize gamification's potential in educational settings. Future researchers should prioritize contingency planning and align their approaches with studies like Rodrigues et al. which stress the need for adaptable implementation strategies to overcome such obstacles.



Picture 4.1

[62] Michael Sailer and Lisa Homner, "The Gamification of Learning: A Meta-Analysis," *Educational Psychology Review* 32, no. 1 (2020): 77–112.
[63] Juho Hamari, Mimmi Sjöklint, and Antti Ukkonen, "The Sharing Economy: Why People Participate in Collaborative Consumption," *Journal of the Association for Information Science and Technology* 67, no. 9 (2016): 2047–59.

The findings of this study align with and extend existing research on gamification in education. Habibie's result in evidence supports that that Duolingo enhances learner autonomy and persistence, a result mirrored in this study, where students exhibited increased self-directed learning and accountability. Similarly, Mohammed and Özdamlı's systematic review highlighted the motivational benefits of gamification elements such as leaderboards and instant feedback, which were evident in the heightened engagement observed during Kahoot-based review sessions in this study. The longitudinal work of Rodrigues et al. further contextualizes these findings, revealing that while gamification's initial novelty may wane, its sustained impact can be maintained through strategic implementation a principle reflected in this study's design, where alternating between Duolingo (for learning) and Kahoot (for review) helped sustain motivation. Additionally, Hashim et al. provided empirical support for gamification's role in improving language proficiency, reinforcing this study's conclusion that well-structured gamification enhances both motivation and knowledge retention.

However, the literature also presents nuanced perspectives. Pehlivan & Arabacioğlu found that gamification's impact on academic achievement was less pronounced than its effect on engagement, suggesting that its primary strength lies in motivational and behavioral outcomes rather than direct cognitive gains. This study's results while showing significant posttest improvements also emphasize that gamification's success depends on its alignment with pedagogical goals. Furthermore, Legaki et al. cautioned that poorly designed gamification can

demotivate learners, particularly adults. This underscores the importance of tailoring gamified experiences to learner preferences, as exemplified in this study's adherence to Knowles' principles of andragogy (e.g., goal orientation, autonomy, and real-world relevance). By integrating these insights, the current research not only corroborates prior findings but also refines the understanding of how gamification should be structured to maximize its educational impact.

As a synthesis of the findings from classroom observation and questionnaire. Research findings demonstrate that gamification using Kahoot and Duolingo significantly enhances English learning motivation among students at UIN Palopo. Quantitative data shows post-test scores increased from 38.82 to 54.12 ($p=0.000$), supported by qualitative observations of improved student engagement, enthusiasm, and collaboration during learning. These findings reinforce Self-Determination Theory (autonomy, competence, and relatedness needs) while addressing the research gap on gamification effectiveness for adult learners in Indonesia.

In terms of practical implications, the study recommends combining Duolingo and Kahoot (for group activities) as an effective strategy to boost learning motivation. However, technical challenges such as device availability and internet connectivity need to be addressed, for example by utilizing offline features or adapting activities for limited-resource settings. Teachers are also advised to consider adult learner characteristics when designing gamified activities to better meet their needs.

The contribution of this study lies in its strong relevance for educational development in Indonesia, particularly in promoting technology-based learning innovation. The findings support student-centered learning approaches and highlight the importance of teacher training in digital tool utilization. Therefore, teacher motivation to utilize e-learning is crucial, as it drives them to develop simplified and accessible learning models that directly address the challenges students face in digital environments.[64] By integrating empirical evidence, learning theories, and contextual solutions, this research not only contributes to academia but also provides practical guidance for educators across institutions.

[64] Hilal Mahmud, Munir Yusuf, and Lilis Purnanengsi Masâ, "Peran Kepala Sekolah Dalam Meningkatkan Motivasi Guru Untuk Menggunakan E-Learning Pada Masa Covid 19 Jurusan Teknik Komputer Di Sekolah Menengah Kejuruan Negeri 2 Palopo," *Journal of Teaching Dan Learning Research* 2, no. 2 (2020): 45–54.

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

This chapter presents the conclusions derived from the findings and discussion of the research. It summarizes the impact of integrating gamification tools Duolingo and Kahoot on EFL learners' motivation in accounting students at UIN Palopo.Then, provide some suggestions that might be useful for the teachers, for the students, and for other researchers.

A. Conclusions

Based on both the quantitative and qualitative findings, the integration of gamification tools, specifically Duolingo and Kahoot, has demonstrated a significant positive impact on students' motivation of EFL learners at UIN Palopo. Quantitative evidence from the paired samples t-test indicated a statistically significant increase in students' motivation levels after using gamification tools, with the mean score improving from 38.82 to 54.12 and a p-value of 0.000. This proves the effectiveness of the intervention in enhancing student motivation.

The results from the paired sample t-test showed a substantial increase in students' motivation levels after the intervention, indicating that these gamified platforms are effective in enhancing students' interest and engagement in English learning. Duolingo and Kahoot, when used in combination, complement each other by addressing different aspects of learning. Duolingo was incorporated into the teaching process as a supplementary tool to introduce and reinforce language concepts, while Kahoot reinforces knowledge through interactive and competitive

group reviews. This dual approach supports both intrinsic and extrinsic motivation, making the learning process more dynamic and enjoyable.

In addition to the quantitative results, qualitative data gathered through classroom observations provided valuable insights into students' motivational behaviors. The observation checklist used in both the experimental and control classes revealed distinct differences in student engagement. In the experimental class, where gamification tools such as Kahoot and Duolingo were implemented, students showed greater enthusiasm, active participation, and collaborative interaction. They responded positively to real-time feedback, demonstrated persistence in completing challenges, and engaged in meaningful peer discussions. These behaviors reflect increased intrinsic motivation, aligning with theoretical frameworks such as Self-Determination Theory and Flow Theory. Conversely, in the control group, students appeared more passive, with limited interaction and lower enthusiasm during traditional instruction. The qualitative findings reinforce the conclusion that gamification fosters a more engaging and motivating learning environment for EFL learners.

In line with motivational theories such as Deci and Ryan's Self-Determination Theory and Malone's Intrinsic Motivation Theory, this study explains how gamification supports learners' autonomy, competence, and relatedness while enhancing intrinsic drive through goal-oriented challenges and interactive feedback. From the perspective of adult learning theories, Knowles' Andragogy and Bandura's Social Cognitive Theory emphasize self-directed learning, real-world relevance, and peer modeling elements reflected in the design

of Kahoot and Duolingo activities. Finally, gamification-related learning theories, including Csikszentmihalyi's Flow Theory and Vygotsky's Social Constructivism, describe how immersive, game-like mechanics foster deep engagement, active knowledge construction, and collaborative problem-solving.This multidisciplinary approach not only confirms gamification's motivational effects but also holistically explains its learning mechanisms. These findings are supported by research instruments that have been statistically validated for reliability and validity.

Despite the overall positive impact, several challenges were noted during the implementation process, particularly related to technical limitations such as internet connectivity and access to digital devices. These factors occasionally hindered the smooth operation of the gamified activities and should be taken into consideration in future applications. Nevertheless, the findings strongly support the use of gamification as a powerful and engaging strategy to improve EFL learners' motivation, especially among adult students in higher education.

B. Suggestions

1. For English Teacher

English teachers are encouraged to integrate gamification tools such as Duolingo and Kahoot into their teaching practices to enhance student motivation, especially in EFL classrooms. These tools can be used strategically duolingo for vocabulary practice and Kahoot for interactive reviews to create a more engaging and student-centered learning environment. Teachers should also consider the technical readiness of their classrooms and provide support for students who may

lack access to adequate devices or internet connections, ensuring equitable learning opportunities for all students.

2. For the Students

Students are encouraged to actively engage with gamified learning platforms both inside and outside the classroom. They should take advantage of the flexibility and interactivity provided by tools like Duolingo and Kahoot to develop their language skills more effectively. By embracing self-directed learning and participating in group-based gamified activities, students can improve not only their English proficiency but also their motivation, collaboration, and problem-solving skills.

3. For future researchers

Future researchers are advised to further investigate the use of multiple gamification tools in varied educational contexts, particularly among adult learners. It is recommended to expand future studies by involving larger sample sizes or applying mixed-method approaches to gain a deeper understanding of the long-term impact of gamification on student motivation and academic outcomes. Researchers should also explore potential challenges in implementation, such as technical limitations or learner variability, to improve future gamification practices in EFL education.

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APPENDIX 1
KUESIONER

PRE-TEST QUESTIONNAIRE UNTUK KELAS EXPERIMENT & KONTROL

IDENTITAS RESPONDEN

Nama : Deva

NIM : 2004040022

Kelas/Semester : AKS B /2

Petunjuk:

Beri tanda centang (✓) pada kolom yang sesuai dengan pendapat Anda (Skala Likert 1-5):

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setuju (4)	Sangat Setuju (5)
1	Saya biasanya bisa tetap fokus selama pembelajaran Bahasa Inggris.				✓	
2	Saya termotivasi belajar Bahasa Inggris karena aktivitas pembelajaran yang menyenangkan.			✓		
3	Saya percaya diri berinteraksi dalam Bahasa Inggris.			✓		
4	Mereview materi Bahasa Inggris membuat saya semangat dan tertantang.				✓	
5	Saya bisa belajar Bahasa Inggris secara mandiri dengan baik.			✓		
6	Saya nyaman dengan metode pembelajaran Bahasa Inggris saat ini.			✓		
7	Saya aktif dalam pembelajaran Bahasa Inggris.				✓	

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setuju (4)	Sangat Setuju (5)
8	Saya biasanya mendapatkan umpan balik (feedback) yang jelas dalam pembelajaran.			✓		
9	Saya senang berkolaborasi/berkompetisi dengan teman saat belajar.				✓	
10	Penggunaan lebih dari satu metode pembelajaran memotivasi saya.			✓		
11	Saya merasa terhubung dengan teman sekelas dalam pembelajaran.			✓		
12	Saya merasa pemahaman Bahasa Inggris saya cukup kuat.			✓		
13	Saya bisa melihat progres belajar Bahasa Inggris saya.			✓		

POST-TEST QUESTIONNAIRE UNTUK KELAS KONTROL

Metode Konvensional (Non-Gamifikasi)

IDENTITAS RESPONDEN

Nama : Sulis Aulia

NIM : 2404040045

Kelas/Semester : C/2

Petunjuk:

Beri tanda centang (✓) pada kolom yang sesuai dengan pendapat Anda (Skala Likert 1-5):

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setuju (4)	Sangat Setuju (5)
1	Penggunaan metode konvensional membantu saya tetap fokus selama pembelajaran Bahasa Inggris.			✓		
2	Saya lebih termotivasi belajar Bahasa Inggris karena aktivitas dalam metode konvensional menyenangkan.		✓			
3	Saya merasa lebih percaya diri untuk berinteraksi dalam Bahasa Inggris setelah menggunakan metode konvensional.				✓	
4	Penggunaan metode konvensional untuk mereview materi membuat saya lebih semangat.			✓		

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setuju (4)	Sangat Setuju (5)
5	Metode konvensional memberikan latihan yang cukup menarik untuk belajar mandiri.				✓	
6	Saya merasa nyaman menggunakan metode konvensional dalam pembelajaran.			✓		
7	Aktivitas belajar melalui metode konvensional membuat saya lebih aktif.			✓		
8	Saya merasa mendapatkan umpan balik yang jelas saat menggunakan metode konvensional.			✓		
9	Metode konvensional mendorong saya untuk berkolaborasi dengan teman.			✓		
10	Saya merasa termotivasi dengan penggunaan metode konvensional dalam pembelajaran.			✓		
11	Saya merasa terhubung dengan teman sekelas saat belajar dengan metode konvensional.			✓		
12	Penggunaan metode konvensional membuat saya merasa pemahaman Bahasa Inggris saya semakin kuat.				✓	
13	Saya merasa progres belajar saya terukur saat menggunakan metode ini.			✓		

PRE-TEST QUESTIONNAIRE UNTUK KELAS EXPERIMENT & KONTROL

IDENTITAS RESPONDEN

Nama :

NIM :

Kelas/Semester :

Petunjuk:

Beri tanda centang (✓) pada kolom yang sesuai dengan pendapat Anda (Skala Likert 1-5):

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setuju (4)	Sangat Setuju (5)
1	Saya biasanya bisa tetap fokus selama pembelajaran Bahasa Inggris.					
2	Saya termotivasi belajar Bahasa Inggris karena aktivitas pembelajaran yang menyenangkan.					
3	Saya percaya diri berinteraksi dalam Bahasa Inggris.					
4	Mereview materi Bahasa Inggris membuat saya semangat dan tertantang.					
5	Saya bisa belajar Bahasa Inggris secara mandiri dengan baik.					
6	Saya nyaman dengan					

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setuju (4)	Sangat Setuju (5)
	metode pembelajaran Bahasa Inggris saat ini.					
7	Saya aktif dalam pembelajaran Bahasa Inggris.					
8	Saya biasanya mendapatkan umpan balik (feedback) yang jelas dalam pembelajaran.					
9	Saya senang berkolaborasi/berkompetisi dengan teman saat belajar.					
10	Penggunaan lebih dari satu metode pembelajaran memotivasi saya.					
11	Saya merasa terhubung dengan teman sekelas dalam pembelajaran.					
12	Saya merasa pemahaman Bahasa Inggris saya cukup kuat.					
13	Saya bisa melihat progres belajar Bahasa Inggris saya.					

POST-TEST QUESTIONNAIRE UNTUK KELAS EXPERIMENT (Duolingo & Kahoot)

IDENTITAS RESPONDEN

Nama :

NIM :

Kelas/Semester :

Petunjuk:

Beri tanda centang (✓) pada kolom yang sesuai dengan pendapat Anda (Skala Likert 1-5):

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setuju (4)	Sangat Setuju (5)
1	Penggunaan Duolingo dan Kahoot membantu saya tetap fokus selama pembelajaran Bahasa Inggris.					
2	Saya lebih termotivasi belajar Bahasa Inggris karena aktivitas dalam Duolingo dan Kahoot menyenangkan dan menantang.					
3	Saya merasa lebih percaya diri untuk berinteraksi dalam Bahasa Inggris setelah menggunakan Duolingo dan Kahoot.					
4	Penggunaan Kahoot untuk mereview					

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setuju (4)	Sangat Setuju (5)
	materi membuat saya lebih semangat dan tertantang menjawab soal.					
5	Duolingo memberikan latihan yang cukup menarik untuk membantu saya belajar secara mandiri.					
6	Saya merasa nyaman menggunakan Duolingo dan Kahoot dalam pembelajaran Bahasa Inggris.					
7	Aktivitas belajar melalui Duolingo dan Kahoot membuat saya lebih aktif dalam pembelajaran.					
8	Saya merasa mendapatkan umpan balik (feedback) yang cepat saat menggunakan Duolingo dan Kahoot.					
9	Duolingo dan Kahoot mendorong saya untuk berkolaborasi dan berkompetisi secara sehat dengan teman.					
10	Saya merasa lebih termotivasi karena penggunaan dua aplikasi (Duolingo & Kahoot) secara					

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setuju (4)	Sangat Setuju (5)
	bersamaan dalam pembelajaran Bahasa Inggris.					
11	Saya merasa lebih terhubung dengan teman sekelas saat menggunakan Kahoot.					
12	Penggunaan Kahoot! membuat saya merasa pemahaman Bahasa Inggris saya semakin kuat.					
13	Saya merasa progres belajar saya terukur saat menggunakan aplikasi ini.					

POST-TEST QUESTIONNAIRE UNTUK KELAS KONTROL

Metode Konvensional (Non-Gamifikasi)

IDENTITAS RESPONDEN

Nama :

NIM :

Kelas/Semester :

Petunjuk:

Beri tanda centang (✓) pada kolom yang sesuai dengan pendapat Anda (Skala Likert 1-5):

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setuju (4)	Sangat Setuju (5)
1	Penggunaan metode konvensional membantu saya tetap fokus selama pembelajaran Bahasa Inggris.					
2	Saya lebih termotivasi belajar Bahasa Inggris karena aktivitas dalam metode konvensional menyenangkan.					
3	Saya merasa lebih percaya diri untuk berinteraksi dalam Bahasa Inggris setelah menggunakan metode konvensional.					
4	Penggunaan metode konvensional untuk mereview materi membuat saya lebih semangat.					
5	Metode konvensional memberikan latihan yang cukup menarik untuk belajar mandiri.					

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setu ju (4)	Sangat Setuju (5)
6	Saya merasa nyaman menggunakan metode konvensional dalam pembelajaran.					
7	Aktivitas belajar melalui metode konvensional membuat saya lebih aktif.					
8	Saya merasa mendapatkan umpan balik yang jelas saat menggunakan metode konvensional.					
9	Metode konvensional mendorong saya untuk berkolaborasi dengan teman.					
10	Saya merasa termotivasi dengan penggunaan metode konvensional dalam pembelajaran.					
11	Saya merasa terhubung dengan teman sekelas saat belajar					

No	Pernyataan	Sangat Tidak Setuju (1)	Tidak Setuju (2)	Netral (3)	Setu ju (4)	Sangat Setuju (5)
	dengan metode konvensional.					
12	Penggunaan metode konvensional membuat saya merasa pemahaman Bahasa Inggris saya semakin kuat.					
13	Saya merasa progres belajar saya terukur saat menggunakan metode ini.					

APPENDIX 2
Lembar Observasi

A. LEMBAR OBSERVASI PEMBELAJARAN BAHASA INGGRIS

(Untuk Kelas Eksperimen - Duolingo & Kahoot)

No	Aspek yang Diobservasi	Indikator	Ya	Tidak	Catatan
1	**Keterlibatan Kognitif**	Mahasiswa menunjukkan upaya pemecahan masalah saat menggunakan aplikasi (misal: mengulang level, memilih strategi)	✓		
2	**Antusiasme**	Mahasiswa menunjukkan ekspresi positif (senyum/tertawa) selama aktivitas gamifikasi	✓		
3	**Interaksi Sosial**	Mahasiswa berdiskusi/berkolaborasi dengan teman terkait materi	✓		
4	**Respons terhadap Feedback**	Mahasiswa menanggapi umpan balik dari aplikasi (misal: mengulang soal yang salah)	✓		
5	**Partisipasi Kompetitif**	Mahasiswa merespons fitur kompetisi (leaderboard Kahoot) dengan positif	✓		
6	**Otonomi Belajar**	Mahasiswa memilih level/materi secara mandiri di Duolingo	✓		
7	**Ketekunan**	Mahasiswa terus berusaha menyelesaikan tantangan meskipun gagal	✓		
8	**Penerapan Materi**	Mahasiswa menggunakan kosakata dari aplikasi dalam interaksi kelas	✓		

B. LEMBAR OBSERVASI PEMBELAJARAN BAHASA INGGRIS

(Untuk Kelas kontrol)

No	Aspek yang Diobservasi	Indikator	Ya	Tidak	Catatan
1	**Keterlibatan Kognitif**	Mahasiswa menunjukkan upaya pemecahan masalah (misal: mengajukan pertanyaan, mencoba berbagai cara untuk menjawab)	✓		**Beberapa mahasiswa menunjukkan upaya pemecahan masalah. namun, mayoritas cenderung diam dan kurang terlibat aktif**
2	**Antusiasme**	Mahasiswa menunjukkan ekspresi positif selama pembelajaran		✓	**Mahasiswa tidak menunjukkan ekspresi positif yang jelas selama pembelajaran, tetapi tetap fokus mendengarkan penjelasan.**
3	**Interaksi Sosial**	Mahasiswa berdiskusi/bertanya kepada teman/peneliti terkait materi	✓		**-**
4	**Respons terhadap Feedback**	Mahasiswa menanggapi koreksi dari peneliti (misal: memperbaiki jawaban)	✓		**-**
5	**Partisipasi**	Mahasiswa aktif menjawab pertanyaan peneliti	✓		**Mahasiswa cenderung pasif dalam menjawab pertanyaan peneliti; hanya sebagian kecil yang merespons secara spontan.**
6	**Otonomi Belajar**	Mahasiswa mengerjakan latihan secara mandiri	✓		**-**
7	**Ketekunan**	Mahasiswa terus berusaha menyelesaikan tugas meskipun kesulitan	✓		**-**
8	**Penerapan**	Mahasiswa	✓		

Materi	menggunakan kosakata yang diajarkan dalam interaksi

APPENDIX 3

DOKUMENTASI


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Kampus IAIN Palopo Jln. Agatis, Balandai, Telp. 0417-22076 fax 0471-325195 Kota Palopo

LETTER OF ACCEPTANCE

No. 779.2308/In.19/IDEAS/VIII/2025

Kepada Yth.
Fauziah Tanjung, Masruddin,
Jufriadi
fauziahtanjung222@gmail.com
UIN PALOPO

Assalamu'alaikum Warahmatullaahi Wabarakaatuh

Dengan hormat kami sampaikan bahwa tim redaktur telah menerima artikel **ID 7871** yang berjudul **"GAMIFICATION IN HIGHER EDUCATION EFL: INTEGRATING DUOLINGO AND KAHOOT TO ENHANCE MOTIVATION"** dan dinyatakan layak diterbitkan pada Jurnal Ideas Bulan **December 2025, Volume 13 Nomor 2**.

Demikian penyampaian ini, atas perhatiannya kami ucapkan terima kasih.

Wassalamu'alaikum Warahmatullaahi Wabarakaatuh

Palopo, 23 Agustus 2025
Tim Redaksi

Dr. Masruddin., SS., M.Hum.
NIP. 19800613 200501 1 005

Cek Status Naskah

CURRICULUM VITAE

Fauziah Tanjung, was born on december 20th 1996 in Padang. She is the first child from three children in her family. Her father’s name is Kanna Syahrir and her mother’s name is Mardiah Tanjung. She began her education in 2002 at SDN 18 Kayu Aro Batang Barus, Solok. She later moved and completed her elementary school at SDN 72 Temmalullu, Palopo, graduating in 2008.

She continued her studies at SMPN 6 Palopo, graduating from junior high school in 2011. She then attended SMK Negeri 1 Palopo, a vocational high school, and graduated in 2014. She pursued her higher education at IAIN Palopo, earning her Bachelor's degree (S1) in 2019.

Following her undergraduate studies, she worked as a tutor at Phinisi Course, where she taught both general and private classes. Currently, she is furthering her academic journey by pursuing a Master's degree (S2) at UIN Palopo.