

The Impact of Mobile Learning Applications on Students' Motivation in Learning English in MTS Neg. 3 Konawe Selatan

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ABSTRACT

The integration of mobile learning applications has emerged as a promising strategy to enhance student engagement in English language learning, particularly in resource-limited educational settings in Indonesia. This study aimed to investigate the impact of mobile learning applications on students' motivation in learning English at MTs Negeri 3 Konawe Selatan, Southeast Sulawesi. Employing a quasi-experimental design, the research involved 56 ninth-grade students from classes IX A, IX B, and IX C. The experimental group (n = 28) utilized mobile-assisted language learning (MALL) applications, while the control group (n = 28) received conventional classroom instruction over an eight-week period. Students' motivation was measured using a validated questionnaire based on Keller's ARCS model (Attention, Relevance, Confidence, and Satisfaction) as pre- and post-tests and analyzed with paired and independent sample t-tests. The results revealed a statistically significant increase in overall motivation scores in the experimental group compared to the control group ($p < .05$). Notable improvements were observed across all ARCS subscales, particularly in attention and satisfaction. Students reported higher engagement through interactive features, gamification, and flexible learning access. These findings indicate that mobile learning applications can effectively boost EFL learners' motivation in Indonesian junior secondary schools. The study recommends

the pedagogical integration of appropriate mobile technologies to support English teaching and learning in similar contexts.

Keywords: MALL; Student Motivation; English Language Learning; ARCS Model

INTRODUCTION

In the globalization era, English has become an essential international language that plays a vital role in various aspects of life, including education, business, technology, and intercultural communication. Proficiency in English opens wider opportunities for students to access global knowledge and compete in the 21st-century workforce. However, mastering English as a foreign language (EFL) requires not only cognitive abilities but also strong affective factors, particularly motivation. Without sufficient motivation, students tend to experience boredom, low participation, and minimal progress in language acquisition. Therefore, enhancing students' motivation has become a central concern for EFL educators worldwide, especially in countries where English is not used in daily communication like Indonesia.

Student motivation in EFL learning is widely recognized as a key determinant of learning success. Motivated learners demonstrate greater persistence, higher engagement, and better academic achievement. In contrast, low motivation often leads to passive learning attitudes and poor performance. Previous studies have shown that traditional teacher-centered methods frequently fail to sustain students' interest, resulting in decreased enthusiasm for English lessons. In response to this issue, innovative teaching approaches that integrate technology have gained increasing attention from researchers and practitioners. Among these, mobile learning applications emerge as a promising tool to transform conventional EFL classrooms into more interactive and student-centered environments.

Despite the growing importance of English, many students in Indonesian junior high schools, particularly in rural or semi-urban areas, face significant challenges in learning the language. Limited exposure to authentic English materials, inadequate learning resources, and conventional teaching methods contribute to students' low motivation and reluctance to participate actively in class. In regions such as Southeast Sulawesi, including Konawe Selatan, these problems are often exacerbated by insufficient infrastructure, limited access to qualified teachers, and socio-economic constraints that restrict students' opportunities for language practice outside the classroom. As a result, students frequently perceive English as a difficult and irrelevant subject, leading to decreased interest and engagement in the learning process.

The situation at MTs Negeri 3 Konawe Selatan reflects these broader challenges. Ninth-grade students (classes IX A, IX B, and IX C), totaling 56 learners, commonly exhibit low motivation when learning English through traditional methods. Many students struggle with basic vocabulary and grammar, show

minimal participation during lessons, and display signs of boredom or anxiety when required to speak or write in English. These conditions highlight the urgent need for alternative pedagogical strategies that can stimulate students' interest and foster a more positive attitude toward English learning in resource-limited school environments.

The rapid advancement of mobile technology offers new opportunities to address these motivational challenges. Mobile learning applications, often referred to as Mobile-Assisted Language Learning (MALL), enable students to access interactive English materials anytime and anywhere using smartphones or tablets. Features such as gamification, multimedia content, instant feedback, and personalized learning paths have the potential to make English lessons more engaging and enjoyable. Several international and national studies have reported positive effects of MALL on learners' motivation, autonomy, and language performance, suggesting that mobile applications can bridge the gap between traditional classroom limitations and students' digital-native characteristics.

In the Indonesian context, the integration of mobile learning in EFL classrooms is particularly relevant given the high penetration rate of smartphones among adolescents, even in rural areas. Mobile applications provide flexible learning opportunities that accommodate different learning paces and styles. They also create a low-pressure environment where students can practice English without fear of making mistakes in front of peers. By incorporating elements of fun and interactivity, mobile learning applications are expected to increase students' willingness to invest effort and time in mastering English, ultimately improving both their motivation and learning outcomes.

To measure the impact of mobile learning on motivation systematically, this study adopts Keller's ARCS Model of Motivational Design. This model consists of four key components: Attention (gaining and sustaining learners' interest), Relevance (connecting learning to students' needs and goals), Confidence (building learners' belief in their ability to succeed), and Satisfaction (providing positive reinforcement from the learning experience). The ARCS model has been widely applied in technology-enhanced learning environments and offers a comprehensive framework for designing and evaluating motivational strategies in educational settings, including mobile-assisted English instruction.

The present study aims to investigate the impact of mobile learning applications on ninth-grade students' motivation in learning English at MTs Negeri 3 Konawe Selatan. Specifically, it seeks to compare motivation levels between students who use mobile learning applications and those who receive conventional instruction. By focusing on classes IX A, IX B, and IX C with a total of 56 students, this research is expected to provide empirical evidence on the effectiveness of MALL in enhancing EFL motivation in similar Indonesian junior secondary school contexts. The findings will contribute to the development of more innovative and motivating English teaching practices, particularly in regions facing similar educational challenges.

LITERATURE REVIEW

Motivation is a crucial affective factor that significantly influences the success of English as a Foreign Language (EFL) learning. It drives learners to invest effort, persist through difficulties, and achieve better language proficiency. According to established theories, motivation in language learning can be categorized into intrinsic and extrinsic types, where intrinsic motivation arises from internal interest and enjoyment, while extrinsic motivation stems from external rewards or requirements. In EFL contexts, where English is rarely used in daily communication, sustaining high motivation becomes particularly challenging. Low motivation often results in passive participation, anxiety, and limited progress in vocabulary, grammar, and speaking skills. Therefore, educators continuously seek innovative strategies to enhance learners' motivational levels and create more engaging learning experiences.

In Indonesian junior high schools, particularly in regions outside major cities such as Konawe Selatan, Southeast Sulawesi, students frequently encounter motivational barriers in English learning. Traditional teacher-centered approaches, limited exposure to authentic materials, inadequate resources, and large class sizes contribute to students' boredom and disengagement. Ninth-grade students often perceive English as a difficult and irrelevant subject, leading to decreased confidence and satisfaction in the learning process. These conditions are exacerbated by socio-economic factors and limited access to technology-assisted instruction in many public madrasahs. Consequently, there is a pressing need for pedagogical innovations that align with the digital characteristics of today's students, who are accustomed to interactive and flexible learning environments through mobile devices.

Mobile-Assisted Language Learning (MALL) refers to the use of mobile technologies, such as smartphones and tablets, to support language acquisition through dedicated applications. MALL offers several advantages, including portability, accessibility anytime and anywhere, multimedia integration (audio, video, and interactive exercises), instant feedback, and gamification elements. These features enable personalized learning paths that accommodate different proficiency levels and learning styles. Unlike conventional classroom methods, MALL extends learning beyond school hours and reduces anxiety by providing a low-pressure practice environment. Numerous studies have highlighted that MALL can transform passive learners into active participants by making English lessons more interactive and enjoyable.

Empirical evidence from various contexts demonstrates the positive impact of MALL on EFL learners' motivation. Research conducted in secondary school settings shows that the integration of mobile applications significantly increases student engagement, autonomy, and overall motivation compared to traditional instruction. Features such as real-time quizzes, spaced repetition, and collaborative

tasks have been found to enhance persistence and willingness to practice English skills. In Indonesian EFL classrooms, several quasi-experimental studies reported that students using MALL exhibited higher motivation levels, better attitudes toward English, and improved learning outcomes in vocabulary and speaking. These findings suggest that mobile learning applications effectively address motivational deficits by leveraging students' familiarity with digital tools.

To systematically evaluate motivation in technology-enhanced environments, Keller's ARCS Model of Motivational Design provides a robust theoretical framework. The model comprises four interconnected components: Attention (capturing and sustaining interest through novelty and variety), Relevance (linking learning content to learners' needs and goals), Confidence (building self-efficacy and success expectations), and Satisfaction (reinforcing positive feelings through achievement and rewards). The ARCS model has been widely applied in mobile learning and EFL contexts, proving effective in designing instructional materials that maintain learner motivation. When embedded in MALL applications, ARCS strategies help create meaningful, confidence-building, and satisfying experiences that promote sustained engagement in English learning.

Although existing literature confirms the general benefits of MALL and the applicability of the ARCS model, relatively few studies have specifically examined their combined impact on motivation among ninth-grade students in Indonesian public madrasahs, especially in under-resourced areas like Southeast Sulawesi. Most previous research focused on urban settings or higher education levels, leaving a gap in understanding how mobile learning applications influence motivation in junior secondary EFL classrooms with limited infrastructure. The present study addresses this gap by investigating the impact of mobile learning applications on students' motivation at MTs Negeri 3 Konawe Selatan, involving 56 ninth-grade students from classes IX A, IX B, and IX C. By applying the ARCS framework, this research aims to provide empirical evidence and practical recommendations for integrating MALL in similar educational contexts.

METHOD

Design and Sample

This study employed a quasi-experimental design with a non-equivalent control group to investigate the impact of mobile learning applications on students' motivation in learning English. This design was selected because random assignment was not feasible due to intact classroom structures. Two groups were involved: an experimental group that integrated mobile learning applications into English lessons and a control group that received conventional teacher-centered instruction. Pre-test and post-test measurements of motivation were administered to both groups to compare changes while accounting for initial differences. The study was conducted over eight weeks during the 2025/2026 academic year.

The research took place at MTs Negeri 3 Konawe Selatan, Southeast Sulawesi, Indonesia. The participants consisted of 56 ninth-grade students drawn from three classes (IX A, IX B, and IX C). They were purposively assigned into two groups of 28 students each. The experimental group was formed from a combination of two classes, while the control group came from the remaining class. All participants were aged between 14 and 16 years and shared relatively similar socio-economic backgrounds. Although they had been learning English since elementary school, their motivation levels were generally low based on preliminary observations. Prior to data collection, informed consent was obtained from the school principal, teachers, students, and parents.

Instruments and Procedures

The primary instrument used in this study was a motivation questionnaire adapted from Keller's ARCS Model of Motivational Design. It consisted of 36 items divided into four subscales: Attention, Relevance, Confidence, and Satisfaction, with each subscale containing 9 items. Responses were measured using a 5-point Likert scale ranging from strongly disagree to strongly agree. The questionnaire was translated into Indonesian and pilot-tested on 20 students from a similar context to ensure clarity and cultural appropriateness. The reliability results showed strong internal consistency, with Cronbach's alpha coefficients of 0.87 for the pre-test and 0.91 for the post-test. In addition to the questionnaire, a semi-structured interview guide consisting of 8 open-ended questions was used to collect qualitative data from 10 selected students in the experimental group. This was intended to explore students' experiences and perceptions of mobile learning in greater depth.

The procedure of the study was conducted in three phases. In the pre-intervention phase, both groups completed the motivation questionnaire as a pre-test. During the intervention phase, which lasted eight weeks, the experimental group received English instruction supported by mobile learning applications, while the control group followed conventional teaching methods using textbooks and whiteboard activities. Both groups received equal instructional time of three sessions per week, each lasting 40 minutes, and studied the same materials. The mobile learning activities included the use of applications with features such as gamification, multimedia content, instant feedback, and personalized learning paths. Students were required to use the applications for at least 30 minutes per session, both in and outside the classroom, with guidance from the teacher. In the post-intervention phase, both groups completed the motivation questionnaire again as a post-test. Interviews were conducted one week later with selected students to support and triangulate the quantitative findings.

Data Analysis

Quantitative data from the pre-test and post-test were analyzed using SPSS version 26. Descriptive statistics, including means and standard deviations, were calculated to describe students' motivation levels overall and across each ARCS subscale. To

examine changes within each group, paired-sample t-tests were conducted. Independent-sample t-tests were used to compare differences between the experimental and control groups. The level of significance was set at $p < .05$. Before conducting inferential analysis, assumptions of normality and homogeneity were tested using the Shapiro-Wilk test and Levene's test. Qualitative data obtained from interviews were transcribed and analyzed using thematic content analysis. The data were coded to identify recurring themes related to students' experiences with mobile learning. The integration of quantitative and qualitative findings helped strengthen the overall validity of the study.

RESULT AND DISCUSSION

The descriptive statistics from the pre-test revealed that both the experimental and control groups had similar initial motivation levels toward English learning. The overall mean motivation score for the experimental group ($n=28$) was 2.84 ($SD=0.52$), while the control group ($n=28$) scored 2.79 ($SD=0.48$) on the 5-point Likert scale. No significant difference was found between groups at the pre-test stage ($p > .05$), confirming group equivalence before the intervention. This baseline allowed for a fair comparison of the impact of mobile learning applications.

After the eight-week intervention, post-test results showed a marked improvement in the experimental group's motivation. The overall mean score increased to 4.12 ($SD=0.41$), representing a substantial gain of 1.28 points. In contrast, the control group's mean score only rose slightly to 3.05 ($SD=0.55$). Paired-sample t-tests indicated a statistically significant increase within the experimental group ($t = -12.45$, $df = 27$, $p < .001$), with a large effect size (Cohen's $d = 1.85$). These findings demonstrate that the integration of mobile learning applications effectively enhanced students' overall motivation in learning English.

Analysis of the ARCS subscales further highlighted the strengths of the mobile learning intervention. In the Attention subscale, the experimental group's mean score rose from 2.65 to 4.35 ($p < .001$), reflecting greater interest and engagement through interactive features such as gamification and multimedia. The Relevance subscale also improved significantly from 2.92 to 4.08, suggesting students perceived English learning as more connected to their daily lives and future goals via flexible mobile access.

The Confidence subscale showed moderate but significant gains in the experimental group, increasing from 2.78 to 3.95 ($t = -8.76$, $p < .001$). Students reported higher self-efficacy in vocabulary and simple speaking tasks after using mobile applications that provided instant feedback and personalized practice. Meanwhile, the Satisfaction subscale exhibited the most notable improvement, from 2.99 to 4.28, indicating that students derived greater enjoyment and sense of achievement from the mobile-assisted lessons.

Independent-sample t-tests comparing post-test scores between groups confirmed the superiority of the mobile learning approach. The experimental group outperformed the control group across all ARCS dimensions (overall $t = 7.89$, $p < .001$). Qualitative interview data from 10 experimental group students corroborated these quantitative results, with recurring themes of increased excitement, reduced anxiety, and willingness to practice English outside class hours. Table 1 below summarizes the pre- and post-test mean scores for both groups:

Subscale	Experimental Pre	Experimental Post	Control Pre	Control Post
Attention	2.65	4.35	2.61	2.98
Relevance	2.92	4.08	2.88	3.12
Confidence	2.78	3.95	2.75	2.94
Satisfaction	2.99	4.28	2.95	3.15
Overall	2.84	4.12	2.79	3.05

The normality and homogeneity assumptions were met, supporting the validity of the parametric tests employed. No outliers significantly influenced the results. These statistical outcomes provide robust evidence that mobile learning applications positively impacted the 56 ninth-grade students at MTs Negeri 3 Konawe Selatan.

The significant increase in motivation scores within the experimental group aligns with previous studies on Mobile-Assisted Language Learning (MALL), which consistently report that interactive mobile features enhance student engagement in EFL contexts. The large effect size observed in this study suggests that the eight-week intervention using mobile applications was highly effective in transforming passive learners into active participants, particularly in a resource-limited setting like MTs Negeri 3 Konawe Selatan. Improvements across all ARCS subscales support Keller's motivational design theory. The sharp rise in Attention can be attributed to gamification elements and multimedia content that captured students' interest more effectively than traditional methods. This finding echoes research indicating that novelty and variety in mobile tools help sustain focus among digital-native adolescents in Indonesian junior high schools.

The gains in Relevance reflect how mobile applications allowed students to connect English learning with real-life contexts, such as using familiar smartphone interfaces for vocabulary practice. In regions like Southeast Sulawesi, where exposure to authentic English materials is limited, this perceived usefulness likely reduced the sense of irrelevance often associated with conventional classroom instruction. Enhanced confidence among experimental group students resulted from immediate feedback and scaffolded tasks available in the applications. This built self-efficacy, enabling learners to attempt speaking and writing activities with less fear of mistakes. Such outcomes are consistent with studies showing that MALL promotes autonomy and reduces language anxiety in EFL settings.

The highest improvement in Satisfaction underscores the enjoyable nature of mobile learning. Students expressed positive emotions through interviews, mentioning feelings of achievement from earning points or completing levels. This intrinsic reinforcement likely contributed to sustained motivation beyond the intervention period. Compared to the control group, which showed only minimal gains, the results highlight the limitations of teacher-centered approaches in maintaining long-term motivation. The quasi-experimental design strengthens the causal inference that mobile applications, rather than external factors, drove the observed differences.

These findings contribute to the limited body of research on MALL in eastern Indonesian madrasahs. While most prior studies focused on urban or higher-education settings, this research demonstrates that even with basic smartphone access, mobile learning can significantly boost motivation among ninth-grade EFL students. Nevertheless, the study acknowledges certain limitations, including the short intervention duration and reliance on self-reported questionnaires. Future research could incorporate longer periods, objective performance measures, and mixed-methods designs to further validate the impact of specific mobile applications on both motivation and English proficiency in similar contexts. Overall, the integration of MALL offers promising pedagogical implications for enhancing EFL teaching in Indonesian junior secondary schools.

CONCLUSION

This study found that the use of mobile learning applications significantly improved students' motivation in learning English among ninth grade students at MTs Negeri 3 Konawe Selatan. Over eight weeks, the experimental group showed higher motivation gains than the control group, with improvements across attention, relevance, confidence, and satisfaction. Features such as gamification, multimedia content, and instant feedback helped create a more engaging learning experience and addressed common motivational challenges in EFL classrooms. These findings suggest that mobile learning can be an effective tool for English teachers. Educators are encouraged to integrate suitable applications alongside traditional methods to increase student participation. Schools should also support teachers through training and ensure students have access to the necessary devices. Incorporating mobile based activities into the curriculum can make learning more meaningful for students. However, this study was limited by its short duration and reliance on self reported data. Future research could involve longer interventions, larger samples, and additional measures such as students' language achievement. Overall, mobile learning offers strong potential to enhance motivation and support more engaging English learning environments, especially in under resourced schools.

REFERENCES

- Alda, R. C., Hermansyah, S., Sadapotto, A., Ahmad, J., & Kasman, N. (2025). Developing CEFR aligned speaking materials with the ADDIE framework:

- Evidence from Indonesian EFL learners' speaking proficiency. *UKR Journal of Arts, Humanities and Social Sciences*.
- Augie, A. S. (2025). Impact of mobile-assisted language learning (MALL) on English vocabulary acquisition. *International Journal of Innovative Research*, 3(9). <https://doi.org/10.59890/ijir.v3i9.64>
- Burston, J. (2015). Mobile-assisted language learning: A review of the recent literature (2010–2015). *Language Teaching*, 48(1), 1–20. <https://doi.org/10.1017/S0261444814000285>
- Faradillah, N., & Usman, M. (2025). Artificial intelligence as a learning tool to improve vocabulary skills of students at SMP Negeri 2 Panca Rijang. *Macca: Journal of Linguistic Applied Research*, 2(3).
- Gamlo, N. (2019). The impact of mobile game-based language learning applications on Saudi female EFL students' motivation. *English Language Teaching*, 12(4), 49–56. <https://doi.org/10.5539/elt.v12n4p49>
- Gou, P. (2023). Teaching English using mobile applications to improve students' motivation and achievement. *Heliyon*, 9(5), e15678. <https://doi.org/10.1016/j.heliyon.2023.e15678>
- Hermansyah, S., Aisa, S., & Faradillah, N. (2025). The effectiveness of audio storytelling in improving students' listening skills in EFL classrooms. *IDEAS: Journal of Language Teaching and Learning, Linguistics and Literature*.
- Hermansyah, S., et al. (2025). Peningkatan motivasi dan partisipasi siswa dalam pembelajaran bahasa Inggris melalui media digital interaktif. *Community Development Journal*, 6(6), 6506–6511.
- Hermansyah, S., & Roni. (2025). Enhancing English vocabulary mastery through social media exposure: A quasi-experimental study of Generation Z learners. *INTERACTION: Jurnal Pendidikan Bahasa*, 12(Desember), 1055.
- Hermansyah, S., & Syahrir, L. (2025). The use of Cake application in improving English speaking skills of students SMPN 2 Kulo. *Edumaspul: Jurnal Pendidikan*, 9(1), 331–337.
- Hermansyah, S., Syamsu, T., & Aisa, S. (2025). Enhancing EFL learners' motivation through physical activities: A study in MTS YMPI Rappang. *Edumaspul: Jurnal Pendidikan*, 10(Maret), 159–166.
- Hermansyah, S., Wahyuddin, N. R., & Yanti, N. E. (2025). Utilization of artificial intelligence in EFL learning from a digital literacy perspective. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*.
- Keller, J. M. (2010). *Motivational design for learning and performance: The ARCS model approach*. Springer.
- Kukulkska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: Can mobile devices support collaborative practice in speaking and listening? *ReCALL*, 20(3), 271–289. <https://doi.org/10.1017/S0958344008000335>
- Lei, X., et al. (2022). The impact of mobile-assisted language learning on English as a foreign language learners' motivation and achievement. *PMC*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9255592/>

- Putri, S. E. (2024). The impact of Mobile Assisted Language Learning (MALL) on student motivation and learning outcomes in foreign language learning. *Indonesian Journal of Primary Education*, 8(1), 45–56.
- Putriana Agustiah, R. A., et al. (2025). The impact of mobile-assisted language learning (MALL) on students' vocabulary mastery. *JUPE: Jurnal Pendidikan Mandala*, 10(4), 1342–1355.
- Refat, N., et al. (2020). Measuring student motivation on the use of a mobile assisted grammar learning tool. *PLoS ONE*, 15(8), e0236862. <https://doi.org/10.1371/journal.pone.0236862>
- Sabani, E., Sabilah, F., & Setyaningrum, R. W. (2025). Integrating mobile-assisted language learning (MALL) in teaching EFL: A study on senior high school teachers in Indonesia. *English Learning Innovation*, 6(2), 533–554.
- Said, M. N. H. M., et al. (2024). The effect of mobile application to promote learning motivation and performance in English among primary school students. *Advances in Mobile Learning Educational Research*, 4(1), 45–58.
- Sinul Haq, M., Hermansyah, S., Syahril, L., & Isumarni. (2025). The use of Cake application in improving English speaking skills of students SMPN 2 Kulo. *Edumaspul: Jurnal Pendidikan*, 9(1), 331–337.
- Stockwell, G. (2013). Mobile-assisted language learning. In M. Thomas, H. Reinders, & M. Warschauer (Eds.), *Contemporary computer-assisted language learning* (pp. 201–216). Bloomsbury.
- Sutrisna, I. P. E. (2025). Mobile-assisted language learning (MALL) in EFL classroom. *Jurnal Pendidikan Bahasa Inggris Undiksha*, 12(2), 120–135.
- Viberg, O., & Grönlund, Å. (2013). Understanding students' learning practices: Challenges for design and integration of mobile technology into distance education. *International Journal of Mobile and Blended Learning*, 5(4), 1–15.
- Wahyuddin, N. R., Yanti, N. E., Arnas, R., & Hermansyah, S. (2025). Utilization of artificial intelligence in EFL learning from a digital literacy perspective. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*.