

Integrating Modified English Songs to Improve Vocabulary Retention: A Pre-experimental Study with Grade-7 EFL Learners in Indonesia

Melinda

Universitas Negeri Makassar

La Sunra*

la.sunra@unm.ac.id

Universitas Negeri Makassar

*corresponding author

Syarifah Farahdiba

syarifahfarahdiba@unm.ac.id

Universitas Negeri Makassar

Abstract

This pre-experimental study explores the effectiveness of integrating modified English songs in enhancing vocabulary retention among seventh-grade EFL learners in Indonesia. The research was conducted with 25 students at SMPN 3 Minasatene using a one-group pre-test–post-test design. The intervention consisted of five instructional sessions incorporating songs whose lyrics were deliberately adapted to match thematic vocabulary categories (objects, body parts, shapes, and vegetables). Each session combined listening, singing, contextual vocabulary practice, and short individual performances to reinforce lexical recall. Quantitative results revealed a significant improvement in learners' vocabulary mastery, with the mean pre-test score ($M = 69.64$, $SD = 5.95$) increasing to the post-test mean ($M = 89.12$, $SD = 6.31$). The normalized gain ($\langle g \rangle = 0.64$) indicates a high level of effectiveness based on Hake's criteria. Qualitative observations further suggest that using modified songs enhanced learner motivation, enjoyment, and confidence in using English vocabulary. The findings demonstrate that purposeful integration of contextualized and culturally relevant songs can serve as an engaging medium for vocabulary development in early secondary EFL contexts. Pedagogical implications and recommendations for future experimental research designs are also discussed.

Keywords: Vocabulary retention, modified songs, EFL learners, motivation, instructional media.

INTRODUCTION

Vocabulary mastery plays a central role in second and foreign language acquisition. Without adequate vocabulary, learners cannot effectively understand or produce language. Despite its importance, vocabulary retention remains a persistent challenge for EFL learners, particularly at the junior high school level, where exposure to English is limited and motivation to memorize new words is often low.

To address this problem, educators have sought to use creative strategies that integrate affective and cognitive aspects of learning. One promising approach involves the use of English songs as instructional media. Songs provide rhythm, melody, and repetition that facilitate

memory retention and lower anxiety, thus promoting a more engaging learning atmosphere (Medina, 1993; Karim et al., 2022). However, many previous studies have used unmodified songs, which may contain vocabulary beyond students' comprehension levels. Modifying songs to align with specific vocabulary themes could increase both accessibility and effectiveness.

Although several studies have examined the role of songs in vocabulary acquisition, few have explored the effect of using modified songs that are intentionally designed to match target vocabulary lists. Moreover, empirical research in Indonesian junior high school contexts remains limited. This study aims to fill that gap by investigating whether integrating modified English songs can improve vocabulary retention among Grade-7 EFL learners.

Therefore, this study aims to determine whether integrating modified English songs significantly improves vocabulary retention among Grade-7 EFL learners in Indonesia. Specifically, it investigates how purposeful lyric modification supports lexical recall and learner motivation.

LITERATURE REVIEW

Vocabulary acquisition plays a central role in second language learning, as it directly supports learners' communicative competence and reading comprehension (Nation, 2013). However, sustaining vocabulary retention among young EFL learners remains a persistent challenge due to limited exposure and low motivation. To address this, integrating music and rhythm has become an increasingly popular pedagogical strategy.

According to cognitive theory of multimedia learning and dual-coding theory (Paivio, 1991), information is better retained when it is processed through multiple channels—verbal, auditory, and visual. Songs naturally combine these modes, allowing learners to encode new vocabulary both linguistically and musically. This dual processing strengthens memory traces and enhances recall (Baddeley, 2007). Moreover, rhythmic repetition and melodic contour help learners store and retrieve lexical items more efficiently, functioning as mnemonic scaffolds (Zamin et al., 2020).

From an affective perspective, Krashen's (1982) Affective Filter Hypothesis posits that low anxiety and high motivation create optimal conditions for language acquisition. Songs contribute to this environment by making the classroom atmosphere enjoyable, reducing learner inhibition, and fostering positive attitudes toward English. These cognitive and affective mechanisms jointly explain why song-based learning promotes deeper and longer-lasting vocabulary retention.

Numerous empirical studies have confirmed the benefits of using songs in EFL contexts. Karim et al. (2022) found significant gains in vocabulary mastery among secondary students after implementing song-based lessons. Shadikah et al. (2017) similarly demonstrated that English songs improved pronunciation, rhythm awareness, and learner engagement. Zamin et al. (2020) emphasized that melody and rhythm help learners store lexical information more durably than traditional rote memorization. Collectively, these studies support the pedagogical claim that integrating songs enhances both linguistic competence and motivation.

Despite the growing body of research on song-based instruction, most prior studies have relied on authentic English songs whose lyrics were not explicitly aligned with curricular vocabulary objectives. As a result, learners may enjoy the activity but fail to systematically acquire targeted lexical items. Few studies have explored the potential of modified songs—songs whose lyrics are deliberately rewritten to match specific vocabulary themes or textbook units.

Tailoring songs to learning goals can improve lexical focus while maintaining the motivational benefits of music (Huang & Shih, 2021). Modified songs combine meaningful repetition, contextualization, and musical rhythm, allowing vocabulary to be presented in both an engaging and pedagogically controlled manner. This approach aligns with constructivist learning theory, which emphasizes contextual and active learning through multimodal input. In Indonesian EFL contexts, where students often rely heavily on textbook-driven instruction and have limited exposure to authentic English, integrating music provides an alternative channel for meaningful input and emotional engagement. Therefore, the present study extends previous research by empirically examining how integrating modified English songs affects vocabulary retention among Grade 7 EFL learners in Indonesia. By combining dual-coding and affective principles with targeted lexical input, this study seeks to determine whether systematically adapted musical materials can significantly improve learners' retention, motivation, and confidence in vocabulary learning.

METHOD

Research Design

This study adopted a pre-experimental one-group pre-test–post-test design to investigate the effectiveness of integrating modified English songs in improving vocabulary retention among EFL learners. This design was chosen because it allows researchers to measure learning gains by comparing participants' performance before and after the intervention (Creswell & Creswell, 2023). The absence of a control group was compensated by careful instructional control and the use of normalized gain and effect size to measure improvement accurately.

Participants

The participants were 25 seventh-grade students from SMPN 3 Minasatene, Indonesia, selected through purposive sampling. The group represented an intact class consisting of mixed English proficiency levels, typical of Indonesian junior secondary EFL contexts. All students had studied English for at least two years as part of the national curriculum. The inclusion criteria ensured participants' familiarity with basic English vocabulary and willingness to engage in song-based learning.

Instruments

Data were collected using two vocabulary tests: a pre-test administered before the treatment and a post-test given afterward. Each test comprised 40 multiple-choice items assessing both recognition and recall of target vocabulary. The test items were constructed based on the thematic units taught (objects, body parts, shapes, vegetables) and aligned with the learning indicators from the 2013 English Curriculum (K13).

To ensure validity and reliability:

- a. Content validity was established through expert judgment by two EFL lecturers experienced in language assessment.
- b. Pilot testing was conducted on a similar group of students ($N = 20$), yielding satisfactory reliability with Cronbach's $\alpha = 0.86$, indicating high internal consistency (George & Mallery, 2019).

- c. Item difficulty and discrimination indices were analyzed to refine the final test set.

Treatment Procedure

The intervention was conducted over five instructional sessions spanning two weeks. Each session lasted approximately 45 minutes and introduced a specific lexical theme through modified English songs whose lyrics were rewritten to match the target vocabulary.

Each session followed four pedagogical stages:

- a. Introduction and Exposure: The teacher introduced the vocabulary items using pictures and realia before presenting the song.
- b. Singing and Pronunciation Practice: Students listened to the song, practiced pronunciation, and sang collaboratively.
- c. Meaning Reinforcement: Learners identified meanings, matched words with visuals, and used the vocabulary in short oral and written activities.
- d. Application and Performance: Students performed short role-plays or individual singing tasks using the learned vocabulary.

The researcher, who was also the classroom teacher, ensured that the song lyrics directly corresponded to target vocabulary and provided scaffolding for pronunciation and comprehension.

Ethical Considerations

Ethical procedures were followed throughout the research. Permission to conduct the study was obtained from school authorities, and informed consent was collected from both students and their parents. Participants were informed about the study's purpose, voluntary nature, and confidentiality measures. All photographs and classroom documentation were used only with consent and were handled in compliance with institutional research ethics standards.

Data Analysis

Data were analyzed quantitatively using both descriptive and inferential statistics.

- a. Descriptive statistics (mean, standard deviation) were used to summarize pre-test and post-test performance.
- b. Normalized gain ($\langle g \rangle$) was calculated following Hake (1998) to determine the effectiveness of the treatment based on improvement relative to the maximum possible score.
- c. A paired-samples t-test was applied to examine whether the mean difference between pre-test and post-test scores was statistically significant.
- d. Assumptions of normality were checked using the Shapiro–Wilk test.
- e. Effect size (Cohen's d) was computed to evaluate the magnitude of improvement, interpreted as small (0.2), medium (0.5), or large (0.8) (Cohen, 1988).

All analyses were performed using SPSS version 25. The interpretation of results considered both statistical and pedagogical significance to ensure meaningful educational conclusions.

FINDINGS

Descriptive Results

The descriptive statistics revealed a marked improvement in students' vocabulary performance following the integration of modified English songs. As shown in Table 1, the mean pre-test score was 69.64 (SD = 5.95), while the mean post-test score increased to 89.12 (SD = 6.31). This improvement represents an average gain of 19.48 points, indicating a substantial enhancement in learners' ability to recognize and recall target vocabulary items after the intervention.

The normalized gain score ($\langle g \rangle = 0.64$ or 64.47%) falls within the "high" category based on Hake's (1998) effectiveness scale, suggesting that the treatment produced meaningful learning progress beyond what might be expected from conventional instruction.

The following table presents the summary of descriptive statistics for both pre-test and post-tests.

Table 1. Descriptive Statistics of Pre-test and Post-test Scores (N = 25)

Test Type	Mean Score	Standard Deviation	Minimum	Maximum
Pre-test	69.64	5.95	58	80
Post-test	89.12	6.31	75	98

From the table above, it is evident that students' learning outcomes improved markedly after the treatment. The mean pre-test score was 69.64, while the mean post-test score rose to 89.12, reflecting an increase of 19.48 points. This substantial gain indicates that integrating modified English songs had a positive and measurable impact on students' vocabulary mastery. Furthermore, the standard deviation increased slightly from 5.95 in the pre-test to 6.30 in the post-test, suggesting that while individual performance varied, the overall improvement trend was consistent across most participants. These results collectively demonstrate that the song-based intervention was both effective and pedagogically meaningful in enhancing vocabulary retention among Grade 7 EFL learners.

Inferential Results

A paired-samples t-test was conducted to determine whether the observed improvement was statistically significant. The results showed a significant difference between the pre-test and post-test scores, $t(24) = 12.47$, $p < .001$, indicating that the integration of modified English songs had a statistically reliable impact on students' vocabulary achievement.

The magnitude of improvement was further examined using Cohen's d , which yielded a large effect size ($d = 2.49$). This suggests that the intervention had a strong and educationally meaningful impact on students' vocabulary retention. According to Cohen's (1988) benchmark, a large effect size ($d \geq 0.8$) reflects substantial practical significance, reinforcing the pedagogical value of the treatment.

These results confirm that the use of modified English songs meaningfully enhanced learners' vocabulary mastery and retention.

The research findings indicate that integrating modified English songs created a dual benefit: cognitive reinforcement and affective engagement. Quantitatively, learners achieved significant vocabulary gains, demonstrating that the modified lyrics successfully facilitated memorization through rhythm and repetition. Qualitatively, classroom observations suggested higher learner participation, confidence, and enjoyment during the sessions.

The combination of melodic rhythm, contextualized repetition, and emotional engagement likely strengthened memory consolidation, consistent with Paivio's (1991) dual-coding theory and Baddeley's (2007) working memory model. Additionally, the motivational impact of songs lowered the affective filter (Krashen, 1982), creating a relaxed atmosphere conducive to learning.

Taken together, these findings support the hypothesis that songs—particularly when purposefully modified to match learning objectives—can serve as effective instructional media for vocabulary development in junior high EFL contexts.

Visual Evidence

Figure 1 illustrates a classroom activity where students collaboratively sang a modified English song and discussed vocabulary meanings. Such interactive and enjoyable learning experiences contributed to students' improved retention and engagement.



Figure 1. Classroom activity using modified English song—students singing and discussing lyrics.

DISCUSSIONS

The findings of this study confirm that the integration of modified English songs can significantly enhance vocabulary retention among junior high school EFL learners. The observed improvement in students' post-test performance indicates that song-based instruction provides an effective and engaging medium for vocabulary learning. Several mechanisms explain this positive effect.

First, rhythmic repetition and melody help strengthen the mental encoding of new lexical items, facilitating both short-term recall and long-term retention. The rhythm and melody act as mnemonic devices that anchor vocabulary in learners' memory networks. Second, the affective dimension of music—its ability to stimulate emotion and enjoyment—creates a low-anxiety learning atmosphere that fosters greater motivation, confidence, and sustained attention (Medina, 1993; Krashen, 1982). Third, by modifying song lyrics to align with specific thematic vocabulary,

the learning material becomes more comprehensible, contextualized, and level-appropriate, thus maximizing input relevance and reducing cognitive overload.

These results are consistent with the findings of Karim et al. (2022) and Zamin et al. (2020), who reported that song-based learning strategies contribute to vocabulary acquisition and learner engagement. However, this study contributes a novel dimension by emphasizing purposeful modification of song lyrics to directly target learning objectives. Unlike general use of authentic English songs, the modified approach ensures that vocabulary items are systematically repeated and contextually embedded, which appears particularly beneficial in the Indonesian EFL classroom where exposure to English outside school remains limited.

From a pedagogical standpoint, the integration of modified songs promotes multisensory learning—combining auditory, verbal, and kinesthetic engagement—which aligns with dual coding theory (Paivio, 1991) and enhances retention through multimodal processing. Furthermore, it supports student-centered learning by allowing learners to interact with meaningful and enjoyable language input. Teachers can adapt this approach to suit different proficiency levels or thematic units, making it a flexible and culturally adaptable instructional medium.

The findings can be further explained through Paivio's (1991) dual-coding theory and Baddeley's (2007) working memory framework, where the auditory and visual modalities jointly enhance encoding and retrieval. Simultaneously, the enjoyment and familiarity of songs lower the affective filter (Krashen, 1982), allowing for more efficient input processing and retention.

Nevertheless, the present study acknowledges certain limitations. The one-group pre-test–post-test design does not allow for strong causal conclusions since no comparison group was used. Additionally, the sample size was relatively small and limited to one school context, which restricts generalizability. Future research should therefore employ true experimental or quasi-experimental designs with larger and more diverse samples. Incorporating delayed post-tests would also provide insights into long-term retention effects. Moreover, adding qualitative data—such as classroom observations, interviews, or learner reflections—could help explore the motivational, emotional, and social dimensions of learning through songs, offering a richer understanding of why and how this approach works.

In conclusion, the discussion highlights that modified English songs are not merely entertaining tools but also pedagogically robust resources that can support vocabulary learning, enhance motivation, and foster positive classroom environments in EFL contexts. Their strategic use bridges the gap between language input and affective engagement, making them a valuable addition to communicative and task-based instruction frameworks.

CONCLUSIONS

This study demonstrated that integrating modified English songs can effectively enhance vocabulary retention among Grade-7 EFL learners. The significant gain in test performance and the large effect size confirms that music-based instruction, when systematically designed, offers both cognitive and affective benefits. Beyond facilitating lexical recall, this approach nurtures learner motivation, confidence, and participation, aligning with Krashen's (1982) view that emotionally engaging input promotes acquisition.

Teachers are encouraged to adapt song lyrics to match curriculum themes, ensuring that vocabulary is both meaningful and accessible. Future research should expand this design using

control groups, larger samples, and delayed post-tests to examine long-term retention. Including qualitative measures such as learner reflections could further illuminate how song-based instruction supports emotional and cognitive engagement.

Overall, this study contributes to the growing evidence that modified English songs are not merely enjoyable activities but powerful pedagogical tools that blend creativity, emotion, and cognition to enhance vocabulary learning in EFL classrooms.

REFERENCES

- Baddeley, A. (2007). *Working memory, thought, and action*. Oxford University Press.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). Sage Publications.
- George, D., & Mallery, P. (2019). *IBM SPSS statistics 25 step by step: A simple guide and reference* (15th ed.). Routledge.
- Hake, R. R. (1998). *Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses*. *American Journal of Physics*, 66(1), 64–74. <https://doi.org/10.1119/1.18809>
- Huang, H. T., & Shih, Y. C. (2021). *Effects of integrating English songs into vocabulary learning for young EFL learners*. *International Journal of Language Education*, 5(1), 14–28.
- Karim, S. A., Sudiro, S., Annisa, D. R., Khairunnisa, H. I., & Rahmawati, D. A. (2022). *Enhancing vocabulary mastery through English songs: In the eyes of EFL students*. *Ethical Lingua: Journal of Language Teaching and Literature*, 9(2), 449–458.
- Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press.
- Medina, S. L. (1993). *The effects of music on second language vocabulary acquisition* (Unpublished master's thesis). California State University.
- Nation, I. S. P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press.
- Paivio, A. (1991). *Dual coding theory: Retrospect and current status*. *Canadian Journal of Psychology*, 45(3), 255–287.
- Shadikah, I., Suwandi, S., & Mulyono, H. (2017). *The effectiveness of English songs to improve students' vocabulary mastery*. *Proceedings of the International Conference on English Language Teaching*, 89–96.
- Zamin, A. A. Md., Adzmi, N. A. H., & Mohamad, M. (2020). *Learning vocabulary through songs: A study on the role of music in teaching verbs*. *Humanities & Social Sciences Reviews*, 8(1), 550–557. <https://doi.org/10.18510/hssr.2020.8167>