



The Influence of Singing Learning Method on Improving the Mastery of Arabic Mufrodat in Students of Baitul Qur'an Siraajunnur, East Aceh

Putri Balqis Amanda¹; Syarif Maulidin²; Wakib Kurniawan³; Memed Khumaedi⁴
Sekolah Tinggi Ilmu Tarbiyah Bustanul Ulum, Lampung Tengah, Indonesia
Institut Agama Islam Tihamah, Cirebon, Indonesia
Email: putribalqisamanda4@gmail.com, syarifmaulidi135@gmail.com,
wakib.kurniawan30@gmail.com, mkhumaedi1326@gmail.com

Abstract

Penelitian ini bertujuan menganalisis pengaruh metode pembelajaran bernyanyi (ghina') terhadap peningkatan penguasaan mufrodat bahasa Arab pada santri Pondok Baitul Qur'an Siraajunnur Aceh Timur, sebuah konteks pesantren tahfiz yang karakteristik belajarnya masih jarang dikaji dalam penelitian mufrodat berbasis metode bernyanyi. Penelitian menggunakan desain quasi-experimental dengan model nonequivalent control group, melibatkan kelompok eksperimen (n = 20) yang memperoleh pembelajaran mufrodat melalui metode bernyanyi dan kelompok kontrol (n = 15) yang menerima metode konvensional (ceramah dan hafalan). Data dikumpulkan melalui pre-test dan post-test dengan instrumen yang setara, kemudian dianalisis menggunakan uji normalitas Shapiro-Wilk, uji homogenitas Levene, uji-t Welch pada skor gain, N-Gain Hake, serta effect size Cohen's d. Hasil penelitian menunjukkan bahwa kelompok eksperimen mengalami peningkatan rata-rata sebesar 19,29 poin (28,13%), dari 68,57 (pre-test) menjadi 87,86 (post-test), dengan kategori N-Gain sedang (0,614). Kelompok kontrol relatif stabil tanpa peningkatan rata-rata yang berarti (80,00 berbanding 80,00; N-Gain = 0,000, kategori rendah). Perbedaan gain antara kedua kelompok terbukti signifikan secara statistik (uji-t Welch, $t = 2,199$; $df = 22,31$; $p = 0,039$) dengan effect size tergolong sedang menuju besar ($d = 0,660$). Temuan ini mengindikasikan bahwa metode bernyanyi lebih efektif dibandingkan metode konvensional dalam meningkatkan penguasaan mufrodat bahasa Arab pada santri tahfiz, tanpa menambah beban kognitif santri yang telah memiliki aktivitas hafalan Al-Qur'an yang padat. Penelitian ini memperkaya bukti empiris mengenai efektivitas pembelajaran berbasis musik pada konteks pesantren tahfiz yang selama ini belum banyak diteliti.

Keywords: metode bernyanyi; penguasaan mufrodat; bahasa Arab; santri tahfiz; quasi-experimental

Abstract

This research aims to analyze the influence of the singing learning method (ghina') on increasing mastery of Arabic language mufrodat among students at Pondok Baitul Qur'an Siraajunnur, East Aceh, a Tahfiz Islamic boarding school context whose learning characteristics are still rarely studied in mufrodat research based on singing methods. The research used a quasi-experimental design with a nonequivalent control group model, involving an experimental group (n = 20) who received mufrodat learning through singing methods and a control group (n = 15) who received conventional methods (lectures and memorization). Data was collected through pre-test and post-test with equivalent instruments, then analyzed using the Shapiro-Wilk normality test, Levene's homogeneity test, Welch's t-test on gain scores, Hake's N-Gain, and Cohen's d effect size. The research results showed that the experimental group experienced an average increase of 19.29 points (28.13%), from 68.57 (pre-test) to 87.86 (post-test), with a medium N-Gain category (0.614). The control group was relatively stable without a significant increase in average (80.00 versus 80.00; N-Gain = 0.000, low category).

The difference in gain between the two groups was proven to be statistically significant (Welch's t-test, $t = 2.199$; $df = 22.31$; $p = 0.039$) with the effect size being classified as medium to large ($d = 0.660$). These findings indicate that the singing method is more effective than conventional methods in improving tahfiz students' mastery of Arabic mufrodat, without increasing the cognitive load of students who already have intensive Al-Qur'an memorization activities. This research enriches empirical evidence regarding the effectiveness of music-based learning in the context of Tahfiz Islamic boarding schools, which has not been widely studied so far.

Keywords: singing method; mastery of mufrodat; Arabic; Tahfiz students; quasi-experimental

Research Background

Mastery of vocabulary plays a crucial role in Arabic language learning because it provides the foundation for students to understand, use, and develop all language skills, including listening (*istimā'*), speaking (*kalām*), reading (*qirā'ah*), and writing (*kitābah*). The breadth of a person's vocabulary significantly determines their ability to understand messages, organize ideas, and communicate effectively in Arabic. Therefore, learning vocabulary is no longer viewed simply as memorizing a list of words, but rather as a process of building meaningful understanding through the use of vocabulary in various communication contexts. Recent studies have shown that vocabulary is more easily retained in long-term memory when learned contextually, repeated in a planned manner, and involving retrieval processes. practice that encourages students to continue to remember and reuse the information they have learned. This urgency is becoming increasingly apparent in Islamic education because Arabic is not only studied as a foreign language, but also as the language of the Qur'an, hadith, and Islamic scientific treasures that serve as the main references in the learning process. Thus, mastery of vocabulary not only contributes to language skills but also determines the depth of students' understanding of the sources of Islamic teachings.

Despite its strategic position, Arabic language learning practices in various Islamic boarding schools still face a number of challenges. Several studies report that the learning process is still dominated by a memorization-oriented approach, a lack of varied teaching strategies, low learning

motivation, and the lack of a language environment that encourages students to actively use vocabulary in everyday life. These challenges become more complex in the tahfiz Islamic boarding school environment because students are not only required to master Arabic, but also must meet the target of memorizing the Qur'an and maintain consistent daily *murāja'ah*. This condition demands learning strategies that can help students learn vocabulary more effectively without increasing their learning burden. Various innovations, such as contextual learning, problem-based learning, visual-based learning, and the use of verses from the Qur'an as a context for vocabulary learning have been reported to have a positive impact on memory retention, understanding of meaning, and the ability to use vocabulary more communicatively (Abdul Hafidz Bin Zaid et al. al., 2025; An Nury & Muh. Naim Madjid, 2024; Rahmi et al., 2025). However, research specifically developing vocabulary learning strategies that align with the characteristics of tahfiz students is still relatively limited. In fact, their learning characteristics differ from those of students in general because they must balance academic demands with an intensive tahfiz program. This gap indicates the need for further research to present a vocabulary learning model that is not only effective in improving vocabulary mastery but also adaptive to the needs and characteristics of tahfiz students.

Based on these challenges, a learning strategy is needed that is not only oriented towards improving vocabulary mastery, but is also able to adapt to the learning characteristics of tahfiz students who must

divide their attention every day between memorizing the Qur'an and learning Arabic. In this context, the singing learning method is an alternative that is worth studying because it can provide a more enjoyable learning experience while maintaining the quality of the learning process. From the perspective of second language acquisition, the Affective Filter Hypothesis proposed by Krashen (1982) explains that a person's success in acquiring a language is greatly influenced by affective conditions, such as motivation, self-confidence, and anxiety levels. When students are in a comfortable and enjoyable learning atmosphere, affective barriers (affective filters) will decrease so that language input (*language input*) is easier to process and store in long-term memory.

One method considered effective in creating such conditions is through the use of songs in the learning process. Numerous studies have shown that music and songs can create a more relaxed classroom atmosphere, increase student engagement, and encourage greater confidence in using the language being studied (Babayev, 2025; Mesías Estevez & Villacrés Camino, 2025; Sadiqzade, 2025). From a cognitive perspective, the effectiveness of the singing method lies not only in the entertainment aspect, but also in its ability to combine melody, rhythm, and repetition as a mnemonic device that strengthens the process of encoding and retention of vocabulary memory (Rika Ariani et al., 2026; Urbaite, 2025). Learning that involves verbal, auditory, and emotional elements simultaneously has also been proven to be more effective than learning that only relies on mechanical memorization because students gain a more meaningful and memorable learning experience (Gong, 2025; Sakunkoo et al., 2025). Various experimental studies further strengthen these findings by showing that song-based learning can significantly improve vocabulary mastery compared to conventional learning, while also having a positive impact on students' learning motivation, class participation,

listening skills, and pronunciation (Azzahra, 2023; Babayev, 2026; Urbaite, 2025).

The relevance of this approach becomes even stronger when applied to the environment of tahfiz Islamic boarding schools, because the process of memorizing the Qur'an is essentially also built through repetition, rhythm, and memory strengthening. In fact, recent research shows that the ability to memorize the Qur'an has a significant relationship with mastery of Arabic vocabulary, so that the integration of Arabic language learning with strategies that utilize musical elements and repetition has the potential to support both processes simultaneously. Therefore, research on the application of the singing learning method is not only important as an effort to provide an alternative to learning mufrodat that is more active, fun, and in accordance with the characteristics of tahfiz students, but is also expected to contribute to the development of Arabic language learning theory and become a practical reference for teachers, Islamic boarding schools, and curriculum developers in designing more effective, contextual, and student-centered learning.

Studies on Arabic vocabulary learning in recent years have shown increasing attention to the use of active, enjoyable, and learner-centered learning strategies. Various studies have reported that singing methods can increase learning motivation, increase student engagement, and aid vocabulary recall through the systematic use of melody, rhythm, and repetition (Babayev, 2025; Rika Ariani et al., 2026). On the other hand, research also shows that contextual approaches, problem-based learning, visual media, and the use of language environments provide positive contributions to improving vocabulary mastery because they are able to provide a more meaningful learning experience than mere mechanical memorization.

However, most of these studies were conducted in the context of formal schools, madrasas, or Islamic boarding schools in general, so the characteristics of learners in Qur'an memorization programs have not

received adequate attention. Some studies have indeed linked Arabic language learning with Qur'an memorization activities and shown that Qur'an memorization contributes to increased vocabulary mastery and language skills (Amrulloh et al., 2025; Hidayat et al., 2024), but the main focus is still on the integration of language and memorization programs, not on testing the effectiveness of the singing method as a vocabulary learning strategy. In addition, most previous studies have focused more on measuring learning outcomes without comprehensively explaining the theoretical mechanisms underlying the relationship between learning methods, learning motivation, and a joyful learning atmosphere, memory retention processes, and increased vocabulary mastery. These conditions indicate that there is still an empirical gap, because evidence regarding the effectiveness of singing methods on tahfiz students is still very limited; a methodological gap, because experimental research in the context of tahfiz Islamic boarding schools is relatively small compared to the context of formal education; and a theoretical gap, because the relationship between second language acquisition theory, cognitive psychology, and music-based learning has not been widely integrated into a single analytical framework.

Departing from this gap, this study offers something new by empirically testing the influence of the singing learning method on the mastery of vocabulary in students at the Baitul Qur'an Islamic Boarding School. Siraajunnur, East Aceh, while simultaneously developing arguments that connect the affective approach, cognitive processes, and learning characteristics of tahfiz students in a single, coherent conceptual model. Thus, this study not only expands the empirical evidence regarding the effectiveness of singing methods in Arabic language learning but also enriches the theoretical and methodological foundations for developing more adaptive, contextual, and appropriate mufrodats learning strategies for Islamic boarding school education.

The argument of this research is based on the assumption that the effectiveness of vocabulary learning is not only determined by the quantity of vocabulary provided, but also by how the learning process is able to create psychological and cognitive conditions that support language acquisition. From the perspective of the Affective Filter Hypothesis, learning will take place more optimally when students are in a pleasant atmosphere, have high learning motivation, and are free from anxiety that can hinder the processing of language input. The singing method is seen as having characteristics that are able to create these conditions because it combines elements of music, rhythm, and collective activities that make the learning process more relaxed while increasing student engagement (Babayev, 2025; Urbaite, 2025). From a cognitive perspective, the effectiveness of this method can be explained through the mechanism of memory strengthening, where the combination of melody, repetition, and lyric repetition functions as a mnemonic device that helps the process of encoding, storing, and retrieval of vocabulary more effectively than learning based on mechanical memorization alone, in line with dual coding theory that explains that simultaneous activation of verbal and nonverbal pathways strengthens memory traces (Paivio, 1990; Rika Ariani et al., 2026; Sadiqzade, 2025; Trisusanto et al., 2024).

Recent findings also show that vocabulary learning will provide more optimal results when utilizing various information processing pathways simultaneously and combined with retrieval. practice and spaced learning, so that vocabulary retention can last longer in long-term memory (Alhazmi, 2024; Immanuel & A., 2023; Pitychoutis et al., 2026). A number of empirical studies in various educational contexts have also shown that the use of songs in language learning can improve vocabulary mastery, learning motivation, active participation, and even pronunciation skills compared to conventional approaches

(Babayev, 2025; Urbaite, 2025; Zhang et al., 2023). In the Islamic education environment, several studies have also begun to show positive results, both through the sing a song approach in Islamic boarding schools, the unison method in Arabic language learning, and the application of the singing method in the Qur'an House, which all report an increase in students' mastery of vocabulary and enthusiasm for learning (Jahro & Hunainah, 2025; Pangestu & Yekti, 2026; Rafiza & Lubis, 2024). However, most of these studies are still conducted in general Islamic boarding schools, formal schools, or use research designs with limited sample coverage, so they have not provided adequate empirical evidence regarding the effectiveness of the singing method on tahfiz students who have different learning characteristics due to the density of Al-Qur'an memorization activities.

These conditions indicate that experimental evidence regarding the application of the singing method to Arabic vocabulary learning in Islamic boarding schools is still relatively limited and requires further testing. Therefore, this study aims to analyze the effect of the singing method on Arabic vocabulary mastery among students at the Baitul Qur'an Islamic Boarding School. Siraajunnur, East Aceh. The novelty of this research lies not only in the context of the research subject which specifically involves tahfiz students, but also in the effort to build and test the conceptual relationship between music-based learning, joyful learning, learning motivation, memory retention, and increasing mastery of vocabulary in a complete research framework, so that it is hoped that it can provide theoretical and practical contributions to the development of Arabic language learning in Islamic boarding schools.

B. Method of Practice

This study uses a quantitative approach with a nonequivalent quasi-experimental model design. control group This design was chosen because the grouping of research subjects follows the classes/groups of students that have formed

naturally in Islamic boarding schools (*intact group*), so that full randomization of individuals is not practically and ethically possible in the context of learning in Islamic boarding schools.

The research subjects were students at the Baitul Qur'an Islamic Boarding School Siraajunnur East Aceh, which consists of an experimental group of 20 students and a control group of 15 students, so that the total research sample is 35 students. The experimental group received vocabulary learning treatment through the singing method (*ghina'*), namely the insertion of Arabic vocabulary into song lyrics that are sung repeatedly, while the control group received vocabulary learning with conventional methods in the form of lectures and memorization.

pre-test and post-test for Arabic vocabulary mastery. Both groups received the same instrument, indicators, and question difficulty levels for both measurements, so that changes in scores obtained could be directly linked to the treatment given. The pre-test was administered before the treatment to measure the initial vocabulary mastery abilities of both groups, while the post-test was administered after the treatment to measure changes in vocabulary mastery after the intervention was given.

Data analysis was conducted in stages. First, descriptive statistical analysis (mean, median, mode, standard deviation, variance, minimum-maximum value, and range) was conducted on the pre-test and post-test scores of both groups, supplemented by the frequency distribution of value categories. Second, because the two groups were not equal in initial conditions (see pre-test results), intergroup difference analysis was conducted on the gain scores (the difference between the post-test and pre-test) instead of the raw post-test scores. Third, before testing the difference in average gain, a prerequisite test in the form of a normality test was conducted. Shapiro-Wilk and Levene's homogeneity of variance tests. Based on the results of the prerequisite tests, the test for differences in mean gain

between groups was conducted using independent samples t- test with Welch's correction (equal variances not assumed). Fourth, to determine the magnitude of the increase in vocabulary mastery in each group, the N-Gain score was calculated using the Hake formula, with the categorization of $g \geq 0.7$ (high), $0.3 \leq g < 0.7$ (medium), and $g < 0.3$ (low). Fifth, to determine the magnitude of the effect (effect size) differences between groups, Cohen's d was calculated based on Cohen's criteria (1988). All statistical analyses were performed at a significance level of $\alpha = 0.05$.

C. RESULTS AND DISCUSSION

1. Research result

Pre-test Data for Both Groups

This study uses a quasi-experimental design with a nonequivalent model. control group design, which involved an experimental group of 20 students who received vocabulary learning treatment through the singing method (*ghina'*), and a control group of 15 students who received vocabulary learning with conventional methods (lectures and memorization). Both groups were given a pre-test and post-test with the same instruments, indicators, and level of difficulty of questions to measure Arabic vocabulary mastery before and after treatment.

Before the treatment was given, both groups were first given a pre-test to measure their initial vocabulary mastery ability. The experimental group (N = 20) obtained an average pre-test score of 68.57 (SD = 32.39), with a lowest score of 21.43 and a highest score of 100.00. The control group (N = 15) obtained an average pre-test score of 80.00 (SD = 22.94), with a lowest score of 28.57 and a highest score of 100.00. The initial mean difference between the two groups (a difference of 11.43 points) indicates that the two groups were not completely equivalent in the initial conditions, as is common in nonequivalent designs. control groups that do not apply full randomization to research subjects.

Statistics	Experiment (N=20)	Control (N=15)
Mean	68.57	80.00
Standard Deviation (SD)	32.39	22.94
Minimum Value	21.43	28.57
Maximum Value	100.00	100.00

Table 1. Descriptive Statistics of Pre-test of Experimental Group and Control Group

Category	Value Range	Experiment f (%)	Control f (%)
Very good	100.00	8 (40.00%)	1 (6.67%)
Good	80.00 – 99.99	2 (10.00%)	9 (60.00%)
Enough	60.00 – 79.99	2 (10.00%)	2 (13.33%)
Not enough	40.00 – 59.99	2 (10.00%)	2 (13.33%)
Very less	< 40.00	6 (30.00%)	1 (6.67%)
Total	–	20 (100%)	15 (100%)

Table 2. Frequency Distribution of Pre-test Score Categories for Both Groups

The data in Tables 1 and 2 show that the distribution of initial abilities of the two groups differed in character. The experimental group had a more heterogeneous distribution (SD = 32.39) with a fairly large proportion of students in the very poor category (30%), while the control group was relatively more homogeneous (SD = 22.94) with the majority of students (60%)

having been in the good category from the start.

Post-test Data for Both Groups

After the treatment was given, both groups were given a post-test again using the same instruments, indicators, and difficulty level of the questions as the previous implementation. The experimental group showed an increase in the average score to 87.86 (SD = 21.00), with the lowest score of 35.71 and the highest score of 100.00. The control group obtained an average post-test score of 80.00, a median of 85.71, a mode of 85.71, a standard deviation (SD) of 17.74, a variance of 314.86, a lowest score of 50.00, a highest score of 100.00, and a range of 50.00.

Statistics	Experiment (N=20)	Control (N=15)
Mean	87.86	80.00
Median	–	85.71
Mode	–	85.71
Standard Deviation (SD)	21.00	17.74
Variance	441.00	314.86
Minimum Value	35.71	50.00
Maximum Value	100.00	100.00
Range	64.29	50.00

Table 3. Descriptive Statistics of Post-test of Experimental Group and Control Group

Category	Value Range	Experiment f (%)	Control f (%)
Very good	100.00	14 (70.00%)	2 (13.33%)
Good	80.00–99.99	0 (0.00%)	8 (53.33%)
Enough	60.00–79.99	3 (15.00%)	2 (13.33%)
Not enough	40.00–59.99	2 (10.00%)	3 (20.00%)

Category	Value Range	Experiment f (%)	Control f (%)
Very less	< 40.00	1 (5.00%)	0 (0.00%)
Total	–	20 (100%)	15 (100%)

Table 4. Frequency Distribution of Post-test Score Categories for Both Groups

Student Name	Pre-test	Post-test	Gain
Alya Salsabila	92.86	92.86	0.00
Alya Sahira	92.86	85.71	-7.15
Falisha Humaira	92.86	100.00	+7.14
Fauna Naila	78.57	85.71	+7.14
M. Abidzar Alghifari	42.86	50.00	+7.14
M. Falyasthathyunis	92.86	92.86	0.00
Mustafizh Ahyan Alfaruq	92.86	85.71	-7.15
Nazla Kanza Ramadhani	92.86	78.57	-14.29
Zahidatun Shalihah	92.86	85.71	-7.15
Muhammad Raziq	28.57	50.00	+21.43
M. Abdil	92.86	100.00	+7.14
M. Azzam Al Haziq	92.86	92.86	0.00
M. Izzan Waly	42.86	50.00	+7.14
Mr. Imam Al-Qadri	71.43	64.29	-7.14
M. Zhafran Al-Hanan	100.00	85.71	-14.29

Table 5. Individual Data of the Control Group: Pre-test, Post-test, and Gain

Table 5 shows that of the 15 students in the control group, six students (40.00%) experienced an increase in their scores, six

students (40.00%) experienced a decrease in their scores, and three students (20.00%) maintained their scores. The pattern of change in the control group was relatively balanced between increases and decreases, with the magnitude of change in each student ranging from -14.29 to +21.43 points, so that in aggregate the control group did not show a significant average change.

Comparison of Improvement Between Groups

In summary, the experimental group experienced an average increase of 19.29 points (28.13%), from 68.57 in the pre-test to 87.86 in the post-test. The control group, on the other hand, obtained an average post-test score identical to its average pre-test score (80.00 compared to 80.00), so that in aggregate the control group was relatively stable with no significant average change (0.00 points; 0.00%).

Group	Mean Pre-test	Mean Post-test	Change (Points)	Change (%)
Experiment	68.57	87.86	+19.29	+28.13 %
Control	80.00	80.00	0.00	0.00% (stable)

Table 6. Comparison of Changes (Gain) between the Experimental Group and the Control Group

Prerequisite Test and Inferential Statistical Test

To test the significance of the difference between the experimental and control groups in a nonequivalent design. control group, analysis was conducted on the gain scores (difference between post-test and pre-test) of each group, because the two groups were not equal in the initial conditions (see Table 1). Before the difference test was conducted, prerequisite tests were first carried out in the form of normality tests and homogeneity tests.

Group	W Statistics	p-value	Information
Experiment	0.942	0.260	Data is normally distributed ($p > 0.05$)
Control	0.919	0.187	Data is normally distributed ($p > 0.05$)

Table 7. Normality Test Results Shapiro-Wilk on Gain Score

Normality test results Shapiro-Wilk in Table 7 shows that the gain scores of both groups are normally distributed ($p > 0.05$), thus fulfilling the assumption to continue with parametric statistical tests.

F statistic	p-value	Information
13,150	0.001	The variance of the two groups is not homogeneous ($p < 0.05$)

Levene's Homogeneity Test on Gain Scores

Levene's homogeneity test in Table 8 show a p-value of 0.001 ($p < 0.05$), which means that the variance of the gain scores of the two groups is not homogeneous. This is in line with the magnitude of the standard deviation of the gain scores which is significantly different between the experimental group (SD = 37.59) and the control group (SD = 9.74), considering that the experimental group has a distribution of score changes that is much more varied than the control group whose pattern is relatively stable. Because the variance of the two groups is not homogeneous, the test of the difference in means used is independent samples t- test with Welch's correction (equal variances not assumed), not a standard Student's t-test.

t statistics	df (Welch)	p-value (2-tailed)	Information
2,199	22.31	0.039	Significant ($p < 0.05$)

Welch's t-Test on Gain Scores of Experimental and Control Groups

the Welch t-test in Table 9 show a t-value of 2.199 with a degree of freedom (df) of 22.31 and a p-value of 0.039 ($p < 0.05$). Thus, there is a statistically significant difference in the average gain between the experimental and control groups, which means that the increase in vocabulary mastery in the group that received the singing method was statistically higher than the group that received the conventional method.

Group	Mean Pre	Mean Post	N-Gain	N-Gain Category
Experiment	68.57	87.86	0.614	Currently
Control	80.00	80.00	0,000	Low

Table 10. N-Gain Score (Hake) and Effect Size (Cohen's d)

The N-Gain score of the experimental group was 0.614, which is classified as a medium category according to Hake's criteria ($g \geq 0.7$ is high; $0.3 \leq g < 0.7$ is medium; $g < 0.3$ is low), while the N-Gain score of the control group was 0.000, which is classified as a low category. The effect size (Cohen's d) for the difference in gain scores between the two groups was 0.660, which according to Cohen's (1988) criteria is classified as a medium- to - large effect size. effect). As a methodological note, a comparison of the raw post-test scores between the two groups (without taking gain scores into account) did not reveal a statistically significant difference ($t = 1.198$; $p = 0.240$), indicating the importance of using gain scores or N-Gain—rather than raw post-test scores—as the basis for comparison in nonequivalent designs. control group,

considering that both groups have unequal starting points (pre-test).

2. Discussion

The findings of this study indicate that the experimental group who received vocabulary learning through the singing method experienced a much higher increase in vocabulary mastery compared to the control group who received the conventional method. The experimental group recorded an average increase of 19.29 points (28.13%) with a moderate N-Gain category (0.614), while the control group was relatively stable without a significant average increase (N-Gain = 0.000, low category). The difference in gain between the two groups was proven to be statistically significant (Welch's t-test, $t = 2.199$; $df = 22.31$; $p = 0.039$) with an effect size of 0.000. The size is classified as medium to large (Cohen's $d = 0.660$). Thus, the singing method is proven to be more effective than conventional methods in improving the mastery of Arabic vocabulary among Baitul Qur'an students. Siraajunnur East Aceh.

The effectiveness of this singing method can be explained through a number of complementary theoretical frameworks. First, Krashen's (1982) affective filter theory explains that a pleasant and low-pressure learning environment—as provided by the singing method—reduces students' *anxiety*, thus lowering the affective filter and making language input more easily absorbed and internalized. This contrasts with the conventional method in the control group, which tended to be monotonous and repetitive and thus did not provide an equivalent affective filter-lowering effect, reflected in the stagnation of the group's average score. Second, cognitive load theory is relevant to explain why the insertion of vocabulary into song lyrics does not increase the cognitive load of students who already have a dense activity of memorizing the Qur'an ; instead, rhythm and melody function as scaffolds that help manage extraneous cognitive load, so that working capacity

memory can be focused on processing vocabulary meaning.

Third, dual coding theory (Paivio, 1990; Trisusanto et al., 2024) explains that the lyrics of a sung song activate two information processing channels simultaneously, namely the verbal channel (words in the lyrics) and the nonverbal/auditory-imagery channel (melody, rhythm, and intonation), so that the memory trace (*memory trace*) that is formed is stronger and easier to remember than the purely verbal learning received by the control group. Fourth, music and memory theory also supports this finding, because repetition of lyrics naturally functions as a form of retrieval. practice, namely students repeatedly remembering and repeating vocabulary in the context of songs, which according to research on testing *effects effect*) has been proven to strengthen the retention of foreign language vocabulary in the long term. Fifth, the joyful principle Learning explains that a pleasant learning atmosphere increases the motivation and engagement of students, which in turn encourages voluntary repetition and more focused attention to the vocabulary material.

The contrasting patterns between the two groups also need to be understood in the context of the characteristics of learning in tahfidz Islamic boarding schools. Baitul Qur'an students Siraajunnur has a heavy burden of memorizing the Qur'an, so that monotonous and repetitive mufrodat learning methods such as lectures and verbal memorization as received by the control group tend not to provide meaningful new stimulus variations for students, so that their mastery of the mufrodat is relatively stagnant even though it does not decrease. On the other hand, the singing method in the experimental group functions as a refreshing variation in the midst of busy tahfidz activities, so that students remain motivated and are able to improve their mastery of the mufrodat consistently.

Compared with previous research, these findings strengthen the findings of Nisa et al. (2020), Afroni and Lutfi (2021), Hesya

and Bahtiar (2024), Hidayah and Abidin (2023), and Zaid et al. (2024), who consistently reported the effectiveness of singing methods in improving Arabic vocabulary mastery at various levels of education. The novelty of this research lies in the use of a quasi-experimental design with a control group in the context of a tahfidz Islamic boarding school, which has not been widely studied, as well as the application of gain score and N-Gain analysis, which are more appropriate for nonequivalent designs. control group compared simply comparing raw post-test scores between groups.

Research Limitations

Several limitations of the study need to be stated objectively to support a proportional interpretation of the results.

First, the relatively small sample size (20 students in the experimental group and 15 students in the control group) limits the generalizability of the findings to the broader population of tahfidz Islamic boarding schools. Second, the use of the intact technique The group without full randomization resulted in the two groups being unequal in initial conditions, so although gain and N-Gain analysis were used to address this limitation, potential threats to internal validity due to differences in the subjects' initial characteristics still need to be taken into account. Third, this study was only conducted at one Islamic boarding school, namely Baitul Qur'an Siraajunnur East Aceh, so the unique characteristics of the institution (e.g., parenting patterns, tahfidz curriculum, and student backgrounds) may influence the results and limit generalization to other tahfidz Islamic boarding schools with different characteristics. Fourth, the limited treatment time also limits the ability of this study to measure long-term retention of vocabulary mastery after the treatment ends. Fifth, the generalization of the results of this study is still limited to the context of tahfidz Islamic boarding schools with the characteristic of a dense Qur'an memorization load, so its application to different Arabic language education contexts needs to be done with caution.

Research Implications

Considering the limitations above, the findings of this study indicate that the singing learning method can be considered as an effective and contextual Arabic vocabulary learning strategy in the tahfidz Islamic boarding school environment, especially to increase motivation and vocabulary mastery without increasing the cognitive burden of students who already have dense Qur'an memorization activities. Further research is recommended to increase the number of samples, involve more than one Islamic boarding school to strengthen generalization, consider matching or partial randomization to equalize the initial conditions of both groups, and add long-term retention measurements to test the durability of the effect of the singing method on vocabulary mastery after the follow-up period.

Conclusion

This study concludes that the singing learning method (*ghina'*) has a significant influence and is more effective than conventional methods (lectures and memorization) in improving the mastery of Arabic vocabulary among students at the Baitul Qur'an Islamic Boarding School. Siraaajunnur, East Aceh. The experimental group experienced an average increase of 19.29 points (28.13%) with a moderate N-Gain category (0.614), while the control group was relatively stable without a significant average increase (N-Gain = 0.000, low category). The difference was statistically significant (Welch's t-test, $t = 2.199$; $df = 22.31$; $p = 0.039$) with an effect size of 0.000. size is on the way to large (Cohen's $d = 0.660$). This finding strengthens the relevance of the Affective Filter Hypothesis, cognitive load theory, and dual coding theory as an explanatory framework for the effectiveness of the singing method, while also confirming that this method can be applied to tahfiz students without increasing their cognitive burden who already have a busy Al- Qur'an memorization activity.

The main contribution of this research lies in providing empirical evidence

regarding the effectiveness of the singing method in the context of tahfidz Islamic boarding schools which has not been widely studied, as well as in the application of gain score and N-Gain analysis which is more appropriate for nonequivalent designs. control group. Given the limited sample size and scope of the research location, these results need to be interpreted proportionally and further validated through research with a larger sample, involving more than one Islamic boarding school, and measuring the retention of vocabulary mastery in the long term. Practically, these findings recommend the singing method as a contextual and adaptive vocabulary learning strategy for teachers, Islamic boarding schools, and Arabic curriculum developers in the tahfiz educational environment.

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Conflict of Interest

The author declares that there is no conflict of interest in this research.

Author Contributions

Putri Balqis Amanda: conceptualization, data collection, and writing the initial draft. Syarif Maulidin: methodology and data analysis. Wakib Kurniawan: supervision and instrument validation. Memed Khumaedi: review, editing, and refinement of the final manuscript.

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