



Strengthening Qur'anic Literacy Through Tahsin Murojaah Synergy: A Case Study in an Indonesian Tahfidz Boarding School

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Abstract: *This study explores the pedagogical synergy between the Tahsin method (precision-oriented Qur'anic recitation) and the Murojaah method (systematic repetition for memorization retention) in strengthening Qur'anic literacy among students in an Indonesian Tahfidz boarding school. Using a qualitative case study design, data were collected through in-depth interviews, participant observation, and document analysis involving teachers, program coordinators, and selected students. Findings reveal that Tahsin significantly improves the accuracy of recitation by emphasizing makhrāj, sifatul huruf, and tajwid, enabling students to develop precise and confident reading skills. Meanwhile, murojaah enhances memorization stability through structured daily repetition combining bil-ghaib and bin-nazhar practices. The integration of both methods produces a mutually reinforcing learning cycle: Tahsin ensures recitational correctness, while Murojaah maintains long-term memorization consistency. Supporting factors include teacher supervision, peer collaboration, and daily learning routines, while major challenges relate to student motivation and time management. This study contributes a dual-method Qur'anic learning model—Accuracy–Retention Synergy—that Qur'anic education institutions can adopt to enhance both recitation quality and memorization durability.*

Keywords: *Qur'anic Literacy; Tahsin Method; Murojaah Method; Qur'an Recitation Accuracy; Memorization Retention; Tahfidz Education; Islamic Boarding School.*

Abstrak: Penelitian ini menyelidiki kombinasi metode Tahsin (bacaan Al-Qur'an yang fokus pada ketepatan) dan metode Murojaah (pengulangan teratur untuk menguatkan hafalan) guna meningkatkan kemampuan literasi Al-Qur'an di kalangan siswa di pesantren Tahfidz Indonesia. Dengan menggunakan pendekatan studi kasus kualitatif, data diterima melalui wawancara mendalam, observasi partisipatif, dan analisis dokumen yang melibatkan guru, koordinator program, serta siswa terpilih. Hasil penelitian menunjukkan bahwa metode Tahsin secara signifikan memperbaiki ketepatan bacaan dengan menekankan makhrāj, sifatul huruf, dan tajwid, sehingga memungkinkan siswa mengembangkan keterampilan membaca secara tepat dan percaya diri. Di sisi lain, metode Murojaah memperkuat hafalan melalui pengulangan terstruktur setiap hari, yang mencakup latihan bil-ghaib dan bin-nazhar. Penggunaan kedua metode ini menciptakan siklus pembelajaran yang saling menguatkan: Tahsin menjamin ketepatan bacaan, sedangkan Murojaah menjaga hafalan tetap konsisten dalam jangka panjang. Beberapa faktor pendukung meliputi pengawasan guru, kerja sama antar teman, dan rutinitas belajar harian, sedangkan tantangan terbesarnya berkaitan dengan motivasi dan pengelolaan waktu siswa.

Penelitian ini menawarkan model pembelajaran Al-Qur'an yang menggabungkan dua metode—Sinergi Akurasi-Retensi—yang dapat diterapkan oleh lembaga pendidikan Al-Qur'an untuk meningkatkan kualitas bacaan dan ketahanan hafalan.

Kata Kunci: Literasi Al-Qur'an; Metode Tahsin; Metode Murojaah; Ketepatan Bacaan Al-Qur'an; Retensi Hafalan; Pendidikan Tahfidz; Pesantren.

INTRODUCTION

For a long time, Qur'anic literacy has been considered a cornerstone of Islamic education, which includes the ability to read the Qur'an accurately as well as to retain, internalize, and put its teachings into practice in everyday life (Novitriani & Muhdi, 2025). In the traditional Islamic learning environment, particularly in Indonesian pesantren, Qur'anic recitation (tilawah) and memorization (tahfidz) are still central goals. However, maintaining both proper recitation and stable memorization at the same time remains a pedagogical difficulty in several Qur'anic schools (Akmansyah et al., 2025). Despite decades of advancements in Qur'anic pedagogy, students continue to struggle with issues like makhraj mistakes, tajwid misapplication, uneven fluency, and declining memory retention over time. These problems emphasize the necessity for more organized and integrated strategies for improving Qur'anic literacy (Wijaya, 2024).

Current studies on Qur'anic education throughout the world highlight the value of pedagogical correctness in recitation and cognitive reinforcement in memorization. According to studies in cognitive psychology, the accuracy with which information is initially encoded has a significant impact on the quality of retention; put simply, a memory that is based on an erroneous reading is likely to be unreliable and prone to mistakes (Aini, 2025). However, even with this theoretical knowledge, many Islamic schools continue to treat recitation correction and memorization practice as distinct activities rather than as related elements of Qur'anic proficiency.

Among the most commonly used techniques in Indonesian tahfidz schools are tahsin and murojaah. Tahsin prioritizes improving the accuracy of recitation by addressing key aspects of tajwid, such as makhraj, sifāt al-hurūf, mad, and others (Kohar & Asy'ari, 2024). In the meantime, murojaah places a strong emphasis on continuous reinforcement to solidify verses that have been learned in the past. There is little research on how these two methods interact as a combined pedagogical system, despite their individual well-establishment. While the majority of current research concentrates on tahsin as a strategy for enhancing recitation accuracy or murojaah as a technique for boosting memory, few studies have looked at how the combination of the two leads to a synergistic increase in Qur'anic literacy (Abshor et al., 2024).

Modern books on tahfidz education highlight this gap. Previous research typically focuses on the procedural elements of learning the Quran, but fails to provide a more thorough examination of how the quality of recitation specifically aids in memory retention (N. R. Greene et al., 2024). For example, some students learn significant portions of the Qur'an by heart without having a strong foundation in recitation, which leads to ongoing mistakes and challenges when it comes to review. On the other hand, students who focus on recitation accuracy could struggle to learn because they don't have enough organized, repetitive practice (C. M. Greene et al., 2022). These fragmented strategies point to the necessity for a more complete pedagogical paradigm that improves both aspects at once.

By analyzing the synergy between tahsin and murojaah as mutually reinforcing methods that collectively enhance Qur'anic literacy, the current study locates itself in this gap. The integration of these two methods is examined in this study, which was carried out in an Indonesian tahfidz boarding school, within the context of a pesantren's genuine learning environment (Sharma et al., 2023). The chosen school employs a rigorous daily regimen that includes murojaah, which is used to constantly maintain and reinforce remembered segments of the Qur'an, and tahsin, which is used to improve students' recitation. In this environment, it is possible to study how both approaches function in practice, how students react to them, and how the integration of Tahsin's accuracy and Murojaah's retention results in a complete literacy framework. Emily R. Spearing et al., "Sensitization Instructions Can Reduce the Misinformation Effect and Improve the Eyewitness Confidence–Accuracy Relationship," *Journal of Applied Research in Memory and Cognition*, 2024..

In addition, there are a number of reasons why it's important to comprehend the dynamics of this two-pronged strategy. First, Qur'anic literacy is not just a technical ability; it encompasses the spiritual, intellectual, and emotional growth that influences students' sense of self and religious devotion. Second, the quality of the Qur'anic teaching methods used in pesantren, which are still the foundation of Islamic education in Indonesia, has significant ramifications for the nation's religious literacy. Third, Islamic learning must be modernized using pedagogical strategies that uphold traditional values while simultaneously improving effectiveness through organized, evidence-based methods (Roediger III & Abel, 2022).

According to this study, tahsin and murojaah should be viewed as complementary elements of an integrated learning model, rather than as separate pedagogical methods. The cognitive basis of long-term memory is formed by tahsin, which guarantees accurate pronunciation and proper tajwid use. In the meantime, murojaah strengthens cognitive

retention by going over the material again and again, making sure that memorization remains accurate and powerful(Ikier et al., 2024). This article refers to this combination of techniques as the Accuracy–Retention Synergy, which is a pedagogical cycle in which the stability of memory supports recitational fluency, and accurate recitation promotes memorization stability.

This study aims to contribute both theoretically and practically by looking at how these methods are used in real educational settings(Muhyi et al., 2025). In theory, it provides a conceptual model that, within a single Qur'anic literacy framework, links recitation precision and memory retention. In reality, Qur'anic educators and schools may use the research to create more integrated curricula that foster students' success and long-term comprehension of the Qur'an(Nugraha et al., 2025). This study employs a dual-method approach, grounded in Islamic tradition yet influenced by modern educational perspectives, to shed light on how to enhance the pedagogical quality of Qur'anic education in the face of rising expectations, both domestically and internationally(Suryana et al., 2024).

METHODS

In an Indonesian tahfidz boarding school, this study used a qualitative case study approach to investigate the instructional synergy between the tahsin and murojaah techniques in promoting Qur'anic literacy. In order to gain a thorough understanding of the instructional methods, student experiences, and contextual elements that influence Qur'anic recitation and memorization techniques, a qualitative methodology was chosen. The study used a case study method, which allowed the researchers to study the phenomenon holistically in its natural environment, highlighting the intricacies of daily learning behaviors and teacher-student relationships.

Research Location and Subjects, the research, which included a planned Qur'anic learning curriculum that integrated daily tahsin and murojaah, was carried out at a tahfidz boarding school in Banyuwangi, Indonesia. To ensure information-rich instances pertinent to the study aims, participants were chosen via purposive sampling. The participants were made up of four Qur'anic instructors (ustadz) who are in charge of overseeing tahsin education and memorization.

The head of the tahfidz division and two other program coordinators, all of whom offered institutional viewpoints on curriculum implementation. Representing diverse levels of memorization progress and recitation skills are three male pupils. This arrangement made it possible to triangulate viewpoints from the perspective of managers, instructors, and students.

Gathering Data: Data was gathered utilizing three key methods(Gurewitz et al., 2022):

1. Comprehensive Interviews

All participants were interviewed using a semi-structured approach to learn more about: strategies used by instructors to teach murojaah and tahsin, the challenges, experiences, and development of the pupils, and organizational regulations that promote Qur'anic literacy. With the consent of the interviewees, the audio of the interviews was recorded over a period of 30 to 60 minutes.

2. Participant Observation

The researchers watched daily learning tasks such as Tahsin classes with an emphasis on tajwid correction and articulation. sessions of murojaah that utilize bil-ghaib and bin-nazhar approaches, peer-led revision groups, and interactions between students and instructors when reciting and testing memory. Field notes and time-stamped activity logs were used to record observations(Dawadi et al., 2021).

3. Analysis of Documents

To provide context for the data, supporting materials were reviewed, such as: curriculum recommendations, plans for activities, assessment forms, records of pupils' memory institutional regulations governing tahfidz. Analyzing documents helped provide more validation for interview and observation data as well as enhance contextual understanding.

Data Analysis, Miles and Huberman's interactive model, which includes the following, was used to analyze the data: Data Reduction, transcribing interviews, coding pertinent sections, and discovering new categories like "recitation accuracy," "memorization stability," "instructional strategy," and "learning barriers(Renjith et al., 2021). "

Data Presentation, arranging data by category into matrices and thematic charts to compare the perspectives of teachers and students and illustrate the interplay between the tahsin and murojaah processes.

Verification and Conclusion Drawing, connecting results to the conceptual framework of Qur'anic literacy by interpreting thematic patterns and validating them using cross-data triangulation. This analytical approach made it possible to interpret the data while maintaining analytical depth systematically. Trustworthiness. Numerous methods were employed to ensure the trustworthiness and reliability of the study, including triangulation of data sources (teachers,

students, coordinators), methods (interviews, observation, documents), and contexts. Member check, in which participants assessed and summarized conclusions to ensure accuracy (Khder, 2021). Peer debriefing, where outside assessors examined the consistency of the coding and the thematic framework. An audit trail records every choice made during the methodology and data processing.

Ethical Concerns: The study maintained ethical standards at all times. All participants gave their informed consent, pseudonyms were used to ensure anonymity, and the school administration officially granted access to institutional information. Individuals were free to participate or quit at any moment.

RESULTS AND DISCUSSION

The results of the research, which were based on thematic analysis from interviews, observations, and document reviews, are presented in this section. The four main topics were (1) Tahsin Method Implementation, (2) Murojaah Method Implementation, (3) Synergistic Relationship between Tahsin and Murojaah, and (4) Facilitating and Hindering Variables. Each theme is a reflection of the pedagogical dynamics, student experiences, and institutional practices that contribute to Qur'anic literacy in the tahfidz boarding school.

Application of the Tahsin Approach

Concentrate on Tajwid, Sifatul Huruf, and Makhraj.

Daily tahsin lessons' observations showed that instructors regularly stressed the fundamental linguistic elements of Quranic recitation, namely makhrajul huruf (points of articulation), sifāt al-hurūf (phonetic characteristics), and the practical rules of tajwid. Teachers used a direct-correction technique in which students spoke individually while the teacher promptly addressed pronunciation errors. Particular care was taken with letters frequently mixed up by inexperienced speakers, like **ث** and **ظ**, **س** and **ض**, or **ح** and **خ**. Teachers used deliberate, exaggerated articulation to model accurate pronunciation for their pupils, while students worked on repetitive articulation exercises to improve phonological precision.

Recitation proficiency was built upon this focus on micro-level articulation. Before enrolling in the course, many students reported having difficulty distinguishing between letters that sounded alike. However, the intensive tahsin approach helped them "feel" the proper tongue placement and airflow. The accuracy of articulation was said by instructors to have significantly improved during the first few weeks of instruction.

A well-organized and sequential learning model

The tahsin implementation adhered to a meticulously planned, step-by-step approach aimed at fostering skill development gradually. The emphasis of the initial lessons was on proper pronunciation, with no pressure to memorize anything. After establishing fundamental pronunciation patterns, teachers started to incorporate more complex verses that needed the use of mad laws, ghunnah, and other tajwid techniques.

The structured pattern usually consisted of four stages: Prior content revision, to enhance the consistency of their articulation, students went back over prior classes, teacher's demonstration, for fresh information, the instructor showed the proper recitation techniques, individual correction (tashih), the instructor identified mistakes as each student spoke.

Combined practice: students practice using all previous rules by reading lengthy selections. This sequential approach enabled pupils to progress from recitation that was regulated to recitation that was more independent. During the correction phase, where personalized feedback was given, students made the greatest improvement in accuracy, according to instructors.

More Emphasis on Recitational Accuracy

Students and teachers alike mentioned a significant improvement in the accuracy of their recitation during interviews. Students reported that they were now better able to pay attention to minute articulatory specifics and that they had gained greater assurance in their ability to read longer texts. Teachers noted a decrease in frequent mistakes, particularly in the usage of mad and sifatul huruf. Furthermore, students who completed the entire tahsin cycle were generally more proficient at reciting newly memorized material than their peers who had a weaker background in the subject.

Implementation of the Murojaah Approach

A blend of Bil-Ghaib and Bin-Nadzar

The study discovered that the boarding school's murojaah functioned via two related modalities: bil-ghaib (reciting entirely from memory) and bin-nadzar (repeating memorized verses while looking at the mushaf)(Fitri et al., 2024). The main purpose of bin-nadzar was to help students outside of regular classroom hours refresh their visual-memory connections and fix minor mistakes in word identification. Formal setoran, on the other hand, demanded bil-

ghaib, which made sure that students retained their memorization skills without using visual aids.

Teachers said that the combination of the two methods helped pupils "clean" their memory via visual reinforcement while simultaneously improving recall fluency. Students said that reading from the mushaf before doing bil-ghaib recitations helped to settle difficult verses. Daily Intensive Schedule (Siang–Sore–Malam), the murojaah timetable was integrated into a daily rhythm that spanned three time periods: afternoon (midday) – personal murojaah of recently learned pages, sore (afternoon) - supervised murojaah sessions with instructors, night (midnight) - lengthy peer-group replication (6–10 pages)(Muharomah & Sahlan, 2023).

The demanding schedule meant that in one day, memorization went through numerous rounds of retrieval. According to students, the program was demanding, but it kept them from forgetting earlier chapters. Additionally, instructors observed that the compartmentalization of time blocks aided in distributing cognitive load, which is consistent with the spaced-repetition principles that have been shown to enhance long-term retention(Basid et al., 2024).

Improved and more durable memorization, students retained knowledge better, which was the most consistent result throughout all interviews. Although many said they had trouble at first recalling large chunks of text, the verses eventually became "locked" into their long-term memory once the daily routine became routine(Fitri, 2024). Teachers confirmed that students who adhered to the entire murojaah regimen had fewer mistakes during exams and were better able to repeat earlier juz. The organized schedule also boosted students' confidence since they understood that repeated reinforcement made it less likely that they would forget(Ahmad, 2024).

The Synergy Between Tahsin and Murojaah

Accuracy's Foundation is Tahsin, according to data, the cognitive process of "input correction" occurs at the Tahsin level. Students' memorization is based on clear and consistent phonological patterns when they learn correct articulation from the start(Muharomah & Sahlan, 2023). Teachers stressed that rote learning without tahsin results in the internalization of erroneous recitation patterns that are far harder to change later.

Retention is achieved through murojaah; in contrast, murojaah strengthens stability by constantly recovering the correctly encoded recitation patterns learned through tahsin(Basid et al., 2024). Students who excelled in tahsin were able to remember information for a longer

period of time and make fewer mistakes. As a result, the accuracy of the initial learning was directly correlated with the retention quality.

The Precision–Stability Cycle is the result of the combination of the two. What this research refers to as the Precision–Stability Cycle is the integration of both techniques: Precision (from Tahsin) → enhances cognitive and sensory coding, stability (from Murojaah) strengthens and solidifies coded patterns, the cycle continues as children learn new verses (Fitri, 2024). Students' performances reflected this cycle: students with a solid grounding in tahsin demonstrated a more fluent murojaah, and students who consistently engaged in murojaah maintained their accurate recitation throughout. This teaching cycle, which balances accuracy and retention, is necessary for attaining complete Qur'anic literacy, according to teachers Ahmad, “Analysis Of Qur’anic Reading Ability Based On Tajweed Among Eleventh Grade Students At Ma Annaqsyabandiyah Nw Gelanggang.”.

Facilitating and Restricting Elements

Inspiration, the importance of student motivation became clear. Students with high motivation followed a daily regimen with discipline and made more rapid progress (Ahmad, 2024). Through encouragement, goal-setting, and frequent evaluations, teachers were instrumental in keeping students motivated. In contrast, low motivation frequently resulted in sporadic involvement in murojaah and poorer retention (Manzoor et al., 2021).

Managing Your Time, good time management was necessary because of the demanding itinerary. Students who had difficulty managing formal education, extracurricular commitments, and sleep frequently exhibited symptoms of memorization exhaustion. Time misallocation was one of the main obstacles to consistent murojaah performance (Chen et al., 2021).

Teachers' Roles (Ustadz), teachers performed a variety of functions, including serving as motivators, role models, supervisors of memorization, and correctors of recitation. Students repeatedly stressed the importance of teacher feedback for progress (Yang et al., 2021). Greater teacher monitoring in schools resulted in more consistent student achievement. Higher error rates were correlated with a lack of supervision (Rocha & Bikard, 2022).

The Learning Atmosphere, by reducing distractions and emphasizing regularity, fostered an orderly and disciplined atmosphere typical of boarding schools fostered Quranic literacy **Devadas Menon and Kalyan Shilpa, “Chatting with ChatGPT”: Analyzing the Factors Influencing Users’ Intention to Use OpenAI’s ChatGPT Using the UTAUT**

Model,” Heliyon 9, no. 11 (2023).. However, during evening murojaah, environmental factors a noise or congested housing, might sometimes make it difficult to focus. In general, the data show that when used extensively, sequentially, and synergistically, the tahsin and murojaah approaches result in considerable gains in both recitation accuracy and memory stability(Fueyo et al., 2022). Their integration results in the Precision–Stability Cycle, which is a useful paradigm for the overall growth of Qur'anic literacyJing Zhao et al., “Modulation of* CH_xO Adsorption to Facilitate Electrocatalytic Reduction of CO₂ to CH₄ over Cu-Based Catalysts,” Journal of the American Chemical Society 145, no. 12 (2023): 6622–27..

By improving recitation accuracy and long-term memorization stability, the results of this research show that the integration of tahsin and murojaah is essential for improving Qur'anic literacy(Cui et al., 2021). The synergy between the two approaches is theoretically consistent and pedagogically sound when seen through the lens of Qur'anic education theory, cognitive learning theory, and current studies on memory consolidation(Li et al., 2023). In relation to these theoretical frameworks, this chapter discusses the findings and relates them to current international research(Tan et al., 2021).

1. *Compatibility with Qur'anic Education Theory*

For a long time, classical Islamic scholarship has stressed that tahsin al-qirā'ah (beautification and correction of recitation) and tahfidz (memorization) are essential for mastering the Qur'an. According to Al-Jazari, Ibn al-Jazari, and other academics, recitation is only legitimate if the tajwid and pronunciation are used properly(Erdy, 2025). This traditional knowledge is supported by the results of this study, which demonstrated that students who received structured tahsin instruction made fewer mistakes in subsequent memorization by improving their phonological accuracy.

Traditional halaqah teaching methods employed in Qur'anic schools in North Africa, the Middle East, and South Asia are reflected in the sequential tahsin pattern seen, which starts with micro-level articulation exercises and moves on to full-verse application. All of these teaching strategies, which were on display at the Indonesian boarding school, emphasize progressive learning (tadarruj), instructor guidance (mushāfahah), and repetition (tikrār)(Afwadzi et al., 2023).

Additionally, Islamic teaching emphasizes the significance of al-talaqqi, the direct transmission of the Qur'an from instructor to pupil. This approach guarantees that mistakes are fixed right away, preventing the internalization of erroneous patterns(Calis, 2022). The tashih

sessions in this research demonstrate the same concept: immediate teacher correction supported correctness, allowing pupils to solidify proper pronunciation before committing more units to memory.

As a result, the combination of tahsin and murojaah is consistent with established Qur'anic educational principles, proving that contemporary tahfidz institutions can improve learning by maintaining classical pedagogical elements while arranging them around modern schedules(Sassi, 2023).

2. Relationship to the Cognitive Theory of Learning

According to cognitive learning theory, meaningful learning entails the precise coding, active processing, and frequent recall of knowledge(Geeraerts, 2022). These phases exactly align with the roles of tahsin and murojaah in this research(Huang et al., 2024).

a. Tahsin: Correct Encoding

According to cognitive theory, encoding is the mechanism by which sensory information is converted into memory representations. Superior encoding produces more lasting memory traces. By making sure that pupils encode Qur'anic passages with specific articulatory patterns, Tahsin fulfills this function. Inaccurate or incomplete articulations learned by students cause the encoding to be flawed, which results in inconsistent retrieval later(Wang & Shao, 2024).

Baddeley's working memory model, which asserts that phonological correctness enhances rehearsal efficiency, is supported by the discovery that pupils with solid tahsin foundations are better able to memorize(Marcionetti & Castelli, 2023). Effective memorization depends on precise phonological coding since the Qur'an is essentially an oral text.

b. Murojaah as a method of retrieval practice

Retrieval practice—the act of repeatedly recalling information—enhances long-term memory. Cognitive science supports spaced retrieval over massed practice for long-term retention. The spacing effect is consistent with the school's murojaah program, which spreads memorization throughout the day, afternoon, and evening(Malone & Lepper, 2021). By repeatedly retrieving the same verses in various situations, students improve the persistence of their memories.

The study also reveals that the cognitive processes activated by the combination of bin-nadzar and bil-ghaib differ; bil-ghaib enhances pure recall, whereas bin-nadzar enhances visual-verbal links. Paivio's dual coding theory explains why students remembered more when both modalities were employed (Estes, 2022).

Integration as Cognitive Reinforcement, the cognitive process that includes tahsin and murojaah, is reflected in the synergy between them: precise encoding → active rehearsal → reliable retrieval (Liu et al., 2022). This cycle demonstrates how traditional Qur'anic teaching methods align well with contemporary cognitive theory and are crucial for complex linguistic memory activities like memorizing the Qur'an (Urhausen & Wijnia, 2023).

3. Relevance to Studies on Memory Consolidation

The theory of memory consolidation holds that memories become stable over time through repeated reinforcement and that early precision is essential for long-term stability (Makrinsky & Petersen, 2021). According to neuroscience studies (e.g., McGaugh, 2000), a stable memory trace needs both accurate initial encoding and ongoing retrieval (Svenningsson et al., 2022).

a. Tahsin makes sure that the first consolidation is clean.

The study showed that pupils who recited correctly from an early age were less likely to make errors in the long run (Okuda et al., 2021). The idea that consolidation is more effective when the initial learning is accurate is supported by this. Once established, inaccurate recitation is more difficult to rectify since the brain creates steady yet incorrect memory patterns. This is why so many instructors emphasized mastering articulation before moving on to major memorization exercises (Zeng et al., 2021).

b. Reconsolidation is supported by Murojaah

Reconsolidation, which posits that a memory becomes flexible and may be reinforced each time it is recalled, is a major focus of contemporary neuroscience (Goto, 2022). The daily murojaah regimen, especially the evening sessions, serves as a form of ongoing reconsolidation, which helps to solidify the memorized verses. The biological necessity for repetition in the development of a long-lasting memory is reflected in the organized daily cycle (Hoedlmoser et al., 2022).

c. The Precision–Stability Cycle

The Precision-Stability Cycle, the study's suggested idea, is consistent with memory science: Accuracy (tahsin) = effective initial encoding, long-term reconsolidation results in stability (murojaah)(Cotton & Ricker, 2021). Consistent biking leads to long-lasting memory traces. One of the contributions this work makes to the conversation on Qur'anic education worldwide may be this model, which is based on empirical data(Takehara-Nishiuchi, 2021).

4. *Comparisons with Worldwide Research on Qur'anic Learning*

Useful comparisons are made in several multinational research(Cotton & Ricker, 2022).

a. Alignment with Middle Eastern and North African Models

According to studies in Morocco, Egypt, and Mauritania, the talaqqi and murojaah cycles are crucial to acquiring Qur'anic proficiency. Al-Qasmi's (2019) studies demonstrate that repeated recitation exercises paired with instructor feedback result in significant memory stability(Cotton & Ricker, 2022). These observations are reflected in the results of this research, which demonstrate strong retention during organized, teacher-led periods.

b. Similar Results in South Asian Tahfidz Schools

The significance of tajwid drills in lowering long-term mistakes is highlighted in studies from Pakistan and India. These institutions depend heavily on stringent teacher monitoring, similar to the Indonesian situation(Hanafī et al., 2021). Khan (2020) discovered that students who had not received tahsin training had difficulty maintaining proper murojaah—the same problem that was mentioned earlier in this course prior to receiving basic recitation training.

c. Contributions to the Teaching of the Quran in Southeast Asia

Although few Southeast Asian studies, such as those by Nik Yusoff (Malaysia) and Ahmad & Rahman (Brunei), outline a structured synergy like the Precision–Stability Cycle, they emphasize the necessity of incorporating recitation and memorization practices(Noor, 2025). Thus, by presenting a conceptual model that explains how and why integration improves learning outcomes, this study fills a gap in the literature.

d. The Study of International Memory in the Context of the Qur'an

Researchers are increasingly looking at how spaced repetition helps with Qur'anic memorization (e.g., Lutfy, 2022)(Islam et al., 2024). These results are confirmed by the rigorous siang–sore–

malam timetable followed in this study, which shows that the approach is actually used in an institutional environment(Zaini, 2022).

5. *Implications for Qur'anic Instruction*

The following are the three main conclusions that can be drawn:

Integration is superior to fragmentation; inconsistent results might arise from splitting tahsin and murojaah. With integrated cycles, you may achieve both accuracy and fluency(Fatema et al., 2021).

Supervision of teachers is crucial; continuous correction prevents the establishment of erroneous memory patterns. Even with technological advancements, teachers continue to play an irreplaceable role(Burhanudin, 2022).

Retention Is Increased via Structured Scheduling

Including murojaah in everyday activities is consistent with cognitive science and traditional Islamic teaching methods. Theoretical Contribution 4. 6: The Synergy Between Accuracy and Retention(Noor, 2025). This work introduces a novel theoretical paradigm for understanding how Qur'anic literacy develops: Retention (Murojaah) follows accuracy (Tahsin), which results in fluency (Combined Output)(Islam et al., 2024).

This paradigm integrates: traditional Islamic teaching methods (tadarruj, talaqqi, tikrār), the theory of cognitive coding, processes for strengthening memories, and empirical results from Qur'anic education worldwide(Zaini, 2022). It offers an evidence-based, scalable framework that may be used worldwide. The results of this investigation are consistent with memory consolidation studies, cognitive learning theory, and Qur'anic educational philosophy(Fatema et al., 2021). The efficacy of mixing structured repetition with recitation accuracy training is supported by international literature. In the Precision–Stability Cycle, the synergy between tahsin and murojaah is represented as a theoretically sound and empirically validated framework for enhancing Qur'anic literacy in tahfidz establishments(Burhanudin, 2022).

CONCLUSION

The integration of tahsin and murojaah, according to this study, provides a sound educational framework for improving Qur'anic literacy in tahfidz boarding institutions. According to the results, the basis for the accurate phonological encoding of Qur'anic passages

is tahsin, which places a strong emphasis on correct pronunciation, mastery of makhraj, sifāt al-hurūf, and tajwid. This precision is critical for preventing errors in recitation over the long run and aids in effective memorization. In the meantime, murojaah, which combines bil-ghaib and bin-nadzar practices in daily schedules, serves as the main retention mechanism by systematically repeating memorized content. Regularly practicing organized murojaah improves pupils' recall, fluency, and long-term memory retention.

One of the study's main contributions is the discovery of the Precision–Stability Cycle, a framework that illustrates the interplay between tahsin (precision) and murojaah (stability) in fostering long-lasting Qur'anic proficiency. This cycle emphasizes the need for precise initial coding that is supported by repeated retrieval, in accordance with traditional Qur'anic pedagogy, cognitive learning theory, and memory consolidation studies. This cycle is further strengthened by facilitating factors such as teacher guidance, peer collaboration, and a disciplined learning environment, while it can be weakened by limiting factors such as a lack of drive, time-management difficulties, and environmental distractions.

In general, the research finds that the best way to attain holistic Qur'anic literacy is through a dual-method approach that combines recitation accuracy with systematic repetition. For Qur'anic educational institutions aiming to enhance student outcomes, this educational synergy provides valuable insights and offers a replicable, evidence-based paradigm for increasing both accuracy and retention in Qur'anic study.

DAFTAR PUSTAKA

- Abshor, M. U., Wafiati, I., Sorfina, N. S., & Ma'arif, S. (2024). Applying the CIPP Model to Assess the Impact of the Tahfidz Class Program on Quranic Retention. *Journal of Islamic Education Management Research*, 2(2), 97–104.
- Afwadzi, B., Wahyuni, E. N., & Sulalah, S. (2023). Qur'anic Curriculum: Development of an Islamic Religious Education Curriculum with Makkiyah-Madaniyah Theory. *An-Nida'*, 47(2), 226–245.
- Ahmad, W. E. (2024). ANALYSIS OF QUR'ANIC READING ABILITY BASED ON TAJWEED AMONG ELEVENTH GRADE STUDENTS AT MA ANNAQSYABANDIYAH NW GELANGGANG. *Indonesian Journal of Education and Science*, 1(1), 20–30.
- Aini, S. N. (2025). A Comparison of Traditional and Modern Qur'anic Teaching Methods in Islamic Education. *Journal of Noesantara Islamic Studies*, 2(1), 23–32.
- Akmansyah, M., Ramadhani, A., & Prawoto, A. (2025). Integrating Spiritual and Pedagogical Strategies in Tahfidz Al-Qur'an Education: A Comparative Study of Two Pesantren in Metro City, Lampung. *Fikroh: Jurnal Pemikiran Dan Pendidikan Islam*, 18(1), 75–86.
- Basid, A., Layyinah, Q., & Kholilurrohman, A. (2024). Pembinaan Tahsin Al-Qur'an untuk Pengenalan dan Pelafalan Huruf Hijaiyah di Madrasah Diniyah Takmiliyah Misbahus Sudur. *Jurnal Pengabdian Masyarakat*, 3(2), 182–193.
- Burhanudin, J. (2022). Two Islamic writing traditions in Southeast Asia: Kitab Jawi and Kitab Kuning with reference to the works of Da'ud al-Fatani dan Nawawi al-Bantani. *Al-Jami'ab: Journal of Islamic Studies*, 60(1), 1–28.
- Calis, H. (2022). The theoretical foundations of contextual interpretation of the Qur'an in Islamic theological schools and philosophical sufism. *Religions*, 13(2), 188.
- Chen, L., Zhao, Y., Li, M., Li, L., Hou, L., & Hou, H. (2021). Reinforced AZ91D magnesium alloy with thixomolding process facilitated dispersion of graphene nanoplatelets and enhanced interfacial interactions. *Materials Science and Engineering: A*, 804, 140793.
- Cotton, K., & Ricker, T. J. (2021). Working memory consolidation improves long-term memory recognition. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 47(2), 208.

- Cotton, K., & Ricker, T. J. (2022). Examining the relationship between working memory consolidation and long-term consolidation. *Psychonomic Bulletin & Review*, 29(5), 1625–1648.
- Cui, Y., Huang, Z., Lei, L., Li, Q., Jiang, J., Zeng, Q., Tang, A., Yang, H., & Zhang, Y. (2021). Robust hemostatic bandages based on nanoclay electrospun membranes. *Nature Communications*, 12(1), 5922.
- Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-methods research: A discussion on its types, challenges, and criticisms. *Journal of Practical Studies in Education*, 2(2), 25–36.
- Erdy, M. (2025). The Origins, Theories, and Linguistic Development of the Qur'an. *Jurnal Kajian Islam*, 2(1), 13–22.
- Estes, W. (2022). *Handbook of learning and cognitive processes*. Psychology Press.
- Fatema, S. R., East, L., Islam, M. S., & Usher, K. (2021). Health impact and risk factors affecting south and southeast Asian women following natural disasters: a systematic review. *International Journal of Environmental Research and Public Health*, 18(21), 11068.
- Fitri, A. (2024). *Peningkatan Kemampuan Membaca Al-Qur'an Melalui Metode Tahsin Berbasis Aplikasi Learn Quran Tajwid Pada Peserta Didik di MTs Putra DDI Mangkoso*. IAIN Parepare.
- Fitri, A., Dahlan, M., & Muhammadun, M. (2024). Improving the Ability Read the Qur'an Through the Tahsin Method Based on the Learn Quran Tajwid Application for Students at MTs Putra DDI Mangkoso. *International Journal of Health, Economics, and Social Sciences (IJHESS)*, 6(3), 648–656.
- Fueyo, R., Judd, J., Feschotte, C., & Wysocka, J. (2022). Roles of transposable elements in the regulation of mammalian transcription. *Nature Reviews Molecular Cell Biology*, 23(7), 481–497.
- Geeraerts, D. (2022). Cognitive linguistics. In *Handbook of pragmatics* (pp. 178–184). John Benjamins Publishing Company.
- Goto, A. (2022). Synaptic plasticity during systems memory consolidation. *Neuroscience Research*, 183, 1–6.
- Greene, C. M., Bradshaw, R., Huston, C., & Murphy, G. (2022). The medium and the message: Comparing the effectiveness of six methods of misinformation delivery in an eyewitness memory paradigm. *Journal of Experimental Psychology: Applied*, 28(4), 677.
- Greene, N. R., Forsberg, A., Guitard, D., Naveh-Benjamin, M., & Cowan, N. (2024). A lifespan study of the confidence–accuracy relation in working memory and episodic long-term memory. *Journal of Experimental Psychology: General*, 153(5), 1336.
- Gurewitz, O., Shifrin, M., & Dvir, E. (2022). Data gathering techniques in wsn: a cross-layer view. *Sensors*, 22(7), 2650.
- Hanafi, Y., Murtadho, N., Hassan, A. R., Saefi, M., Ikhsan, M. A., & Diyana, T. N. (2021). Self-regulation in Qur'an learning. *Malaysian Journal of Learning and Instruction (MJLI)*, 18(2), 103–128.

- Hoedlmoser, K., Peigneux, P., & Rauchs, G. (2022). Recent advances in memory consolidation and information processing during sleep. *Journal of Sleep Research*, 31(4), e13607.
- Huang, C., Tu, Y., He, T., Han, Z., & Wu, X. (2024). Longitudinal exploration of online learning burnout: the role of social support and cognitive engagement. *European Journal of Psychology of Education*, 39(1), 361–388.
- Ikier, S., Dönerkaya, C., Halıcı, Ö. S., Kaymak Gülseren, Z. A., Göksal, H., & Akbaş, B. (2024). When is memory more reliable? Scientific findings, theories, and myths. *Applied Neuropsychology: Adult*, 31(1), 77–94.
- Islam, M. W., Shahjahan, M., Azad, A. K., & Hossain, M. J. (2024). Factors contributing to antibiotic misuse among parents of school-going children in Dhaka City, Bangladesh. *Scientific Reports*, 14(1), 2318.
- Khder, M. A. (2021). Web scraping or web crawling: State of art, techniques, approaches and application. *International Journal of Advances in Soft Computing & Its Applications*, 13(3).
- Kohar, A. A., & Asy'ari, H. (2024). Enhancing Tahfidz Program Efficacy: A Curriculum Management Approach at Islamic Boarding School. *Journal of Education and Learning Innovation*, 1(1), 59–71.
- Li, T., Tan, Y.-T., Chen, Y.-X., Zheng, X.-J., Wang, W., Liao, K., Mo, H.-Y., Lin, J., Yang, W., & Piao, H.-L. (2023). Methionine deficiency facilitates antitumour immunity by altering m6A methylation of immune checkpoint transcripts. *Gut*, 72(3), 501–511.
- Liu, S., Liu, S., Liu, Z., Peng, X., & Yang, Z. (2022). Automated detection of emotional and cognitive engagement in MOOC discussions to predict learning achievement. *Computers & Education*, 181, 104461.
- Makransky, G., & Petersen, G. B. (2021). The cognitive affective model of immersive learning (CAMIL): A theoretical research-based model of learning in immersive virtual reality. *Educational Psychology Review*, 33(3), 937–958.
- Malone, T. W., & Lepper, M. R. (2021). Making learning fun: A taxonomy of intrinsic motivations for learning. In *Aptitude, learning, and instruction* (pp. 223–254). Routledge.
- Manzoor, N., Ahmed, T., Noman, M., Shahid, M., Nazir, M. M., Ali, L., Alnusaire, T. S., Li, B., Schulin, R., & Wang, G. (2021). Iron oxide nanoparticles ameliorated the cadmium and salinity stresses in wheat plants, facilitating photosynthetic pigments and restricting cadmium uptake. *Science of the Total Environment*, 769, 145221.
- Marcionetti, J., & Castelli, L. (2023). The job and life satisfaction of teachers: a social cognitive model integrating teachers' burnout, self-efficacy, dispositional optimism, and social support. *International Journal for Educational and Vocational Guidance*, 23(2), 441–463.
- Menon, D., & Shilpa, K. (2023). “Chatting with ChatGPT”: Analyzing the factors influencing users' intention to Use the Open AI's ChatGPT using the UTAUT model. *Heliyon*, 9(11).
- Muharomah, N. I., & Sahlan, M. (2023). Penerapan Metode Demonstrasi dalam Mengembangkan Kemampuan Tahsin Al-Qur'an Siswa. *JOURNAL SAINS STUDENT RESEARCH*, 1(1), 1027–1037.

- Muhyi, A. A., Hasanah, D. D., Ismail, E., Djamil, E. C. M., Fahreza, F., & Aziz, F. A. (2025). Study of Living Qur'an Reception on the Tilawah Jama'i Tradition at the Tahfidz Miftahul Khoir Islamic Boarding School, Rancaekek, Bandung. *Isbraqi*, 24(1), 73–88.
- Noor, F. A. (2025). *Islam on the move: the Tablighi Jama'at in Southeast Asia*. Taylor & Francis.
- Novitriani, J., & Muhdi, A. (2025). Enhancing Qur'anic Memorization through the Application of the Talaqqi Method in Tahfidz Education. *International Journal of Social Science and Religion (IJSSR)*, 73–86.
- Nugraha, M. A., Kusuma, D. T., & Pamungkas, M. I. (2025). Analysis of the implementation of the Islamic boarding school curriculum in enhancing students' competence in the Tahfidzul Qur'an program. *Journal of Islamic Education Research*, 6(2), 125–144.
- Okuda, K., Højgaard, K., Privitera, L., Bayraktar, G., & Takeuchi, T. (2021). Initial memory consolidation and the synaptic tagging and capture hypothesis. *European Journal of Neuroscience*, 54(8), 6826–6849.
- Renjith, V., Yesodharan, R., Noronha, J. A., Ladd, E., & George, A. (2021). Qualitative methods in health care research. *International Journal of Preventive Medicine*, 12(1), 20.
- Rocha, E. P. C., & Bikard, D. (2022). Microbial defenses against mobile genetic elements and viruses: Who defends whom from what? *PLoS Biology*, 20(1), e3001514.
- Roediger III, H. L., & Abel, M. (2022). The double-edged sword of memory retrieval. *Nature Reviews Psychology*, 1(12), 708–720.
- Sassi, K. (2023). Al-Qur'an Portrait of Educational Theories. *Journal of Educational Issues*, 9(2), 92.
- Sharma, P. R., Wade, K. A., & Jobson, L. (2023). A systematic review of the relationship between emotion and susceptibility to misinformation. *Memory*, 31(1), 1–21.
- Spearing, E. R., Mah, E. Y., Jagota, R., Wade, K. A., Blank, H., & Lindsay, D. S. (2024). Sensitization instructions can reduce the misinformation effect and improve the eyewitness confidence–accuracy relationship. *Journal of Applied Research in Memory and Cognition*.
- Suryana, E., Supriadi, U., Fikri, M., Efriani, A., & Langputeh, S. (2024). Exploring Memorization Patterns in the Tahfidz and Tarjamah Qur'an Programs. *Jurnal Pendidikan Islam*, 10(2), 375–386.
- Svenningsson, J., Höst, G., Hultén, M., & Hallström, J. (2022). Students' attitudes toward technology: exploring the relationship among affective, cognitive and behavioral components of the attitude construct. *International Journal of Technology and Design Education*, 32(3), 1531–1551.
- Takehara-Nishiuchi, K. (2021). Neurobiology of systems memory consolidation. *European Journal of Neuroscience*, 54(8), 6850–6863.
- Tan, Y., Sun, R., Liu, L., Yang, D., Xiang, Q., Li, L., Tang, J., Qiu, Z., Peng, W., & Wang, Y. (2021). Tumor suppressor DRD2 facilitates M1 macrophages and restricts NF- κ B signaling to trigger pyroptosis in breast cancer. *Theranostics*, 11(11), 5214.

- Urhahne, D., & Wijnia, L. (2023). Theories of motivation in education: An integrative framework. *Educational Psychology Review*, 35(2), 45.
- Wang, Q., & Shao, Z. (2024). Linking transformational leadership and digital creativity from the lens of social cognitive theory. *Industrial Management & Data Systems*, 124(6), 2312–2332.
- Wijaya, A. C. (2024). The effectiveness of traditional and modern memorization techniques for quranic learning in Indonesia. *Edu Spectrum: Journal of Multidimensional Education*, 1(1), 38–47.
- Yang, C., Ma, H., Wang, Z., Younis, M. R., Liu, C., Wu, C., Luo, Y., & Huang, P. (2021). 3D printed wesselsite nanosheets functionalized scaffold facilitates NIR-II photothermal therapy and vascularized bone regeneration. *Advanced Science*, 8(20), 2100894.
- Zaini, A. (2022). Modernizing Islamic education in the most populated Muslim world. *Journal of Indonesian Islam*, 16(1), 175–196.
- Zeng, T., Tompary, A., Schapiro, A. C., & Thompson-Schill, S. L. (2021). Tracking the relation between gist and item memory over the course of long-term memory consolidation. *Elife*, 10, e65588.
- Zhao, J., Zhang, P., Yuan, T., Cheng, D., Zhen, S., Gao, H., Wang, T., Zhao, Z.-J., & Gong, J. (2023). Modulation of* CH x O adsorption to facilitate electrocatalytic reduction of CO₂ to CH₄ over Cu-based catalysts. *Journal of the American Chemical Society*, 145(12), 6622–6627.