Bibliometric Paper

Quran Memorisation in Education: A Bibliometric Analysis

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Abstract: Quran memorisation (hifz) remains a foundational component of Islamic education, historically preserved through oral tradition and now increasingly examined for its educational, cognitive, and spiritual benefits. Despite its significance, the academic discourse on Quran memorisation remains fragmented, with limited bibliometric studies mapping its scholarly development. This study addresses this gap by conducting a bibliometric analysis of Scopus-indexed, English-language publications on Quran memorisation between January 2015 and May 2025. Using VOSviewer 1.6.19, the analysis applied full counting with a minimum keyword occurrence threshold of 5. A total of 104 peer-reviewed journal articles met the inclusion criteria (as of May 2025) after systematic filtering. The analysis examined publication trends, document types, source distribution, authorship patterns, country and institutional contributions, and keyword co-occurrence networks. Results indicate a steady rise in research output, with the highest number of publications recorded in 2024. Southeast Asian countries, particularly Malaysia and Indonesia, emerged as dominant contributors, supported by institutions such as IIUM and USIM. Most documents were journal articles, with limited review studies, suggesting a need for theoretical consolidation. Authorship patterns revealed moderate collaboration, while keyword mapping identified "students" and "e-learning" as central themes, reflecting the increasing integration of digital technology in Quranic education. This analysis highlights both the growth and the structural limitations of the field. To advance the scholarship on Quran memorisation, future research should prioritise systematic reviews, cross-regional collaboration, and interdisciplinary approaches that bridge pedagogy, cognitive science, and Islamic studies.

Keywords: Quran memorisation; hifz; tahfiz; bibliometric analysis; Islamic education; spiritual education; cognitive development

Introduction

The memorisation of the Quran, known as *hifz*, occupies a central place in Islamic tradition and education. From the time of Prophet Muhammad (PBUH), Quran memorisation has long been revered as both a spiritual and intellectual endeavour, producing individuals known as *huffaz* who preserve the Quran in its entirety through oral transmission. The Quran remains preserved to this day. This protection does not mean that Allah directly managed the stages of its compilation, but rather that He entrusted His servants with safeguarding it, particularly through memorisation by those known as *Huffaz al-Quran* (Ku Fatahiyyah et al., 2019). In contemporary times, memorisation is pursued not solely for religious merit but also for its educational, cognitive, and health-related benefits. Studies have shown a strong association between Quran memorisation and reduced prevalence of chronic diseases such as hypertension and depression among older men, suggesting cognitive and psychological benefits of sustained memorisation practices (Saquib et al., 2017). Research has also has

linked Quranic memorisation to improved developmental outcomes in children across cognitive, linguistic, and moral domains (Hanafi et al., 2021), as well as to enhanced memory performance and IQ in adolescents (Ishak et al., 2021). While these findings are promising, they represent a relatively small body of work and should therefore be interpreted with caution.

Despite its enduring tradition and recent technological interventions aimed at facilitating memorisation, research highlights gaps in maintaining memorisation quality and achieving deeper comprehension. Applications such as ITQAN and EzHifz have been developed to improve memorisation through mind mapping, topical interpretation, and learning style adaptation (Almosallam et al., 2015; Mustafa et al., 2021). Moreover, augmented reality (AR) tools like mAR-Quran have been introduced to support special needs learners (Ahmad et al., 2019), and gamification frameworks are being designed to enhance engagement and retention in Quranic memorisation (Hassan et al., 2023). However, many of these innovations are predominantly technology-focussed, often lacking a pedagogical foundation grounded in memorisation sciences or learner psychology. These developments highlight the growing need to evaluate the landscape of Quran memorisation research from a bibliometric perspective, in order to uncover prevailing trends, knowledge gaps, and future research directions.

To date, no focused bibliometric synthesis of Quran memorisation exists; prior work has generally treated "memory" in broad or interdisciplinary terms (e.g., Ardiansyah et al., 2024). This absence of a dedicated bibliometric mapping has left the scholarly landscape of Quran memorisation fragmented. Bibliometric methods help address this gap by providing a structured overview of publication trends, key contributors, thematic concentrations, and collaboration networks, thereby advancing the field beyond narrative or thematic accounts.

Accordingly, this study aims to conduct a bibliometric analysis of Scopus-indexed, English-language publications on Quran memorisation between January 2015 and May 2025. Scopus was selected as the primary database for this study because of its extensive coverage of peer-reviewed literature and its reputation as a reliable source for bibliometric research. Baas et al. (2020) emphasised that Scopus is a curated, high-quality bibliometric data source, explicitly designed to support robust and reproducible quantitative analyses in science studies. Similarly, Moed et al. (2021) highlighted that Scopus's advanced citation tracking and analytical features make it particularly valuable for assessing research impact and mapping scholarly influence. In addition, Falagas et al. (2008) compared major bibliographic databases and concluded that Scopus provides broader journal coverage than Web of Science in several disciplines, making it especially effective for identifying emerging trends and diverse international contributions. Taken together, these evaluations highlight that Scopus offers a strong foundation for bibliometric analysis, enabling precise mapping of intellectual structures, collaboration networks, and keyword distributions through integration with tools such as VOSviewer. Building on this foundation, the study addresses the following research questions:

i. RQ1. What are the annual publication trends in Quran memorisation research between 2015 and 2025?
ii. RQ2. What is the distribution of document types and publication sources in the field?
iii. RQ3. Which countries have contributed most significantly, and how are these contributions geographically distributed?
iv. RQ4. Which institutions are the leading contributors based on publication output?
v. RQ5. Who are the most prolific and influential authors in this area of research?
vi. RQ6. What are the most prevalent keywords and thematic clusters in Quran memorisation research?

This study contributes by systematically mapping the academic discourse on Quran memorisation. Through bibliometric analysis, it identifies major contributors, trends, and collaboration networks, while also highlighting structural limitations in the field. The findings provide a foundation for advancing Quran memorisation scholarship through cross-regional collaboration, interdisciplinary engagement, and evidence-based educational strategies.

Literature Review

Quran memorisation (*hifz*) represents a foundational pillar of Islamic pedagogy and cultural identity, with deep historical and spiritual roots. Traditional practices have long emphasised repetition and oral recitation, yet recent scholarship challenges simplistic characterisations of *hifz* as rote learning. Pilotti et al. (2020) distinguished between verbatim and analytical learning, showing that effective memorisation is closely associated with time-constrained study management and self-efficacy. Similarly, Sidek et al. (2020) proposed a thematic-based text structure approach using Surah Yasin, suggesting that segmenting verses thematically may enhance both retention and comprehension. These contributions broaden the understanding of *hifz* as a flexible cognitive process, though they remain context-specific and lack comparative breadth across different educational settings.

Beyond pedagogy, some studies have linked Quran memorisation to developmental or neurocognitive outcomes. For example, Hanafi et al. (2021) found memorisation to positively influence early childhood development across moral, physical, cognitive, and linguistic domains, while Rahman et al. (2020) reported greater brain tissue preservation among *huffaz* compared with non-memorisers. Although noteworthy, such findings should be interpreted with caution. Within this review, they are considered less as evidence of clinical impacts and more as illustrations of the diverse disciplinary contexts such as education, psychology, and neuroscience in which *hifz* is being examined.

Technological innovations have also begun to reshape the memorisation landscape. Mustafa et al. (2021) introduced EzHifz, a digital tool that applies mind-mapping and adaptive learning; Pranata et al. (2020) developed gamified iLearning systems to sustain engagement; Rajagede and Hastuti (2021) applied Siamese LSTM networks for independent verification of recitation accuracy; and Suryana et al. (2021) designed monitoring systems to track student progress. Integrating Quranic applications into the teaching process provides a valuable instructional tool that promotes active learning and motivates students to develop a deeper understanding of the Quran (Siti Mastura et al., 2021). Collectively, these initiatives demonstrate the intersection of Quran memorisation with educational technology and computer science. However, most emphasise functionality over pedagogy and lack long-term empirical validation, underscoring the need for systematic synthesis of this growing body of work.

Despite these advances, no focused bibliometric synthesis of Quran memorisation exists. The only substantial effort, by Ardiansyah et al. (2024), examined broader trends in memory and learning research but did not isolate Quran memorisation as a distinct domain. Bibliometric methods are well suited to fill this gap. By applying systematic frameworks such as PRISMA-S for transparent search reporting (Rethlefsen et al., 2021) and established practices in counting methods, keyword thresholds, and reproducibility protocols (Fahimnia et al., 2015), scholars can produce replicable analyses of the field. Furthermore, applying classic bibliometric indicators such as Bradford's law to identify core journals, Lotka's law to assess author productivity, and collaboration indices to measure co-authorship patterns adds interpretive depth and situates Quran memorisation research within established bibliometric traditions.

In sum, existing studies highlight the educational, cognitive, and technological dimensions of Quran memorisation but remain fragmented and methodologically inconsistent. This study therefore applies a bibliometric approach using Scopus data and VOSviewer to map publication trends, co-authorship networks, and thematic clusters. To ensure transparency in the literature search and selection process, the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines were adapted only as a supporting reference to document the inclusion procedures systematically. Although originally designed for systematic reviews, PRISMA has also been adopted in recent bibliometric studies (e.g., Pham & Le, 2024; Page et al., 2021) to strengthen reporting clarity and reproducibility.

Methodology

This research employs bibliometric methods, a powerful tool for gathering, organising, and analysing bibliographic data from scientific literature (Verbeek et al., 2002; Assyakur & Rosa, 2022; Alves et al., 2021). Our approach includes both foundational descriptive metrics, such as publication year, source journals, and lead authorship, and more advanced techniques including document co-citation analysis (Wu & Wu, 2017). To

ensure a systematic and thorough review, we developed a targeted set of keywords, carried out an extensive literature search, and compiled a comprehensive bibliography (Fahimnia et al., 2015). The analysis focuses on high-impact papers to uncover key theoretical contributions shaping the field.

To ensure data credibility, we sourced information exclusively from the Scopus database (G. di Stefano et al., 2010; Khiste & Paithankar, 2017; Al-Khoury et al., 2022), recognised for its extensive academic coverage. The dataset comprises peer-reviewed journal articles published between 1 January 2015 and 1 May 2025. Books and non-peer-reviewed conference proceedings were intentionally excluded to maintain consistency and scholarly quality (Gu et al., 2019).

Our methodology integrates quantitative bibliometric measures with network analysis techniques. Specifically, we examined publication trends, performed citation analysis to highlight influential works and researchers, applied co-citation analysis to reveal the intellectual structure of the field, explored keyword co-occurrence to detect emerging topics, and analysed collaboration networks to study patterns of international research cooperation. These analyses were conducted using VOSviewer, which facilitated the visualisation of bibliometric networks.

Although this study provides a solid, data-driven perspective, it has some drawbacks, most notably the use of only one database and the exclusion of non-journal sources. Ethical standards were upheld by using only publicly accessible data. Through these advanced bibliometric strategies, the study aims to map current trends, spotlight key contributors, and guide future research in the evolving domain of Quran memorisation.

1. Data Search Strategy

The adapted PRISMA flow diagram in Figure 1 illustrates the process of identification, screening, and inclusion that resulted in the final dataset of N articles. An iterative screening procedure was applied to refine search terms and identify relevant publications. The initial Scopus search using the query "Quran" AND "memorisation" returned 141 articles. After applying additional filters to limit publication years to 2015–2025 and narrowing the scope to specific criteria, the final dataset was reduced to 119 articles. Further screening excluded review papers and non-English publications, resulting in a curated set of 104 peer-reviewed research articles for bibliometric analysis. Thus, as of May 2025, all pertinent studies on Quran memorisation indexed in Scopus were comprehensively gathered for inclusion in this research. The search string used to retrieve for articles or database references is provided in Table 1.

Table 1. The search string used to search for articles or database references

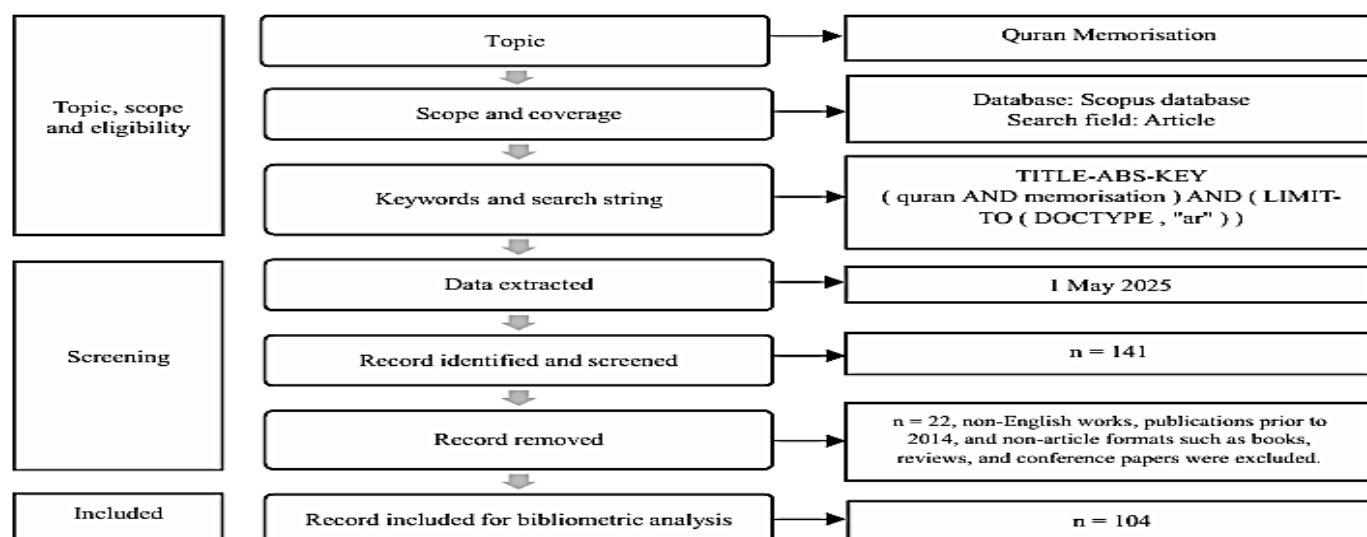| Database	Search String
Scopus	TITLE-ABS-KEY (quran AND memorisation) AND PUBYEAR > 2015 AND PUBYEAR < 2025 AND (LIMIT-TO (LANGUAGE , "English"))

Figure 1. The PRISMA flow diagram to search articles or database references

2. Data Analysis

VOSviewer is a widely recognised bibliometric analysis tool developed by Nees Jan van Eck and Ludo Waltman at Leiden University in the Netherlands (Eck & Waltman, 2017; Eck & Waltman, 2010). Renowned for its user-friendly design, the software is extensively employed to visualise and analyse academic literature, offering robust capabilities for network mapping, item clustering, and density visualisation. Its functionality extends across co-authorship, co-citation, and keyword co-occurrence networks, providing researchers with in-depth insights into scientific landscapes. The interactive and regularly updated interface allows both novice and advanced users to efficiently explore large datasets. VOSviewer also supports metric computations, while its compatibility with multiple data formats and ability to generate customised visualisations make it a staple tool in bibliometric research.

One of VOSviewer's strengths lies in its ability to convert complex bibliometric data into accessible visualisations. The software excels in mapping research structures, clustering keywords, and generating density maps based on co-occurrence patterns. Its reliance on visualisation of similarity (VOS) techniques offers a refined alternative to Multidimensional Scaling (MDS), aiming to represent the relatedness between items through spatial proximity (Eck & Waltman, 2010; Appio et al., 2014). Unlike MDS, which uses similarity measures like cosine and Jaccard indices, VOSviewer employs the association strength (ASij), calculated as:

$$\text{ASij} = \frac{Cij}{Wiwj}$$

As explained by Eck and Waltman (2007), this measure evaluates the observed co-occurrence of two items against the expected frequency under an assumption of independence. The algorithm minimises the weighted squared distances between items to construct accurate bibliometric maps. Enhancements such as LinLog/modularity optimisation (Appio et al., 2014) further support precise visual representation of relationships in the dataset.

For this study, bibliometric data, including publication year, title, authors, journals, citations, and keywords, were retrieved from the Scopus database, covering the period from January 2015 to May 2025. These records, saved in PlainText format, were analysed using VOSviewer version 1.6.19. The software's mapping and clustering capabilities facilitated various analyses, including keyword co-occurrence, citation trends, and document co-citation patterns.

Keyword co-occurrence analysis is crucial for tracking evolving research themes and identifying emerging topics over time (Zhang et al., 2022; Gu et al., 2019). Similarly, citation analysis helps pinpoint influential studies, methodological trends, and central issues within a field (Allahverdiyev et al., 2017). Document co-citation analysis, grounded in network theory (Appio et al., 2014; Fahimnia et al., 2015; Bai et al., 2021), uncovers the intellectual structure of research domains, offering a deeper understanding of knowledge development across disciplines.

The Findings

The scholarly classification analysis in this study covers a range of dimensions, including document and source types, annual publication trends, language distribution, subject areas, keyword usage, country-level research output, authorship patterns, and citation metrics. The results are primarily presented using statistical indicators such as frequencies and percentages, supplemented by charts, graphs, and visualisation maps for clearer interpretation.

1. Documents by Year

Figure 2 illustrates annual trends of publications related to Quran memorisation from 2015 to 2025. From 2015 to 2017, research activity remained stable, with six publications each year, suggesting a modest but steady academic interest during this early phase. A noticeable increase began in 2018, culminating in a peak of 16 documents in 2021. This upward trend likely reflects growing recognition of Quran memorisation as a

significant area of interdisciplinary inquiry, particularly within educational, cognitive, and religious studies. The peak period may also have been influenced by technological advancements and a shift toward digital learning, especially during the COVID-19 pandemic, which encouraged the exploration of online memorisation methods. A sudden dip occurred in 2022, with only eight publications, possibly due to shifting research priorities or temporary reductions in funding. However, the field rebounded in 2023 and reached its highest publication count in 2024 with 19 documents, indicating renewed scholarly engagement and interest. The steep drop to just one document in 2025 should be interpreted cautiously, as it is likely a result of partial-year data, given that the search was conducted in May 2025.
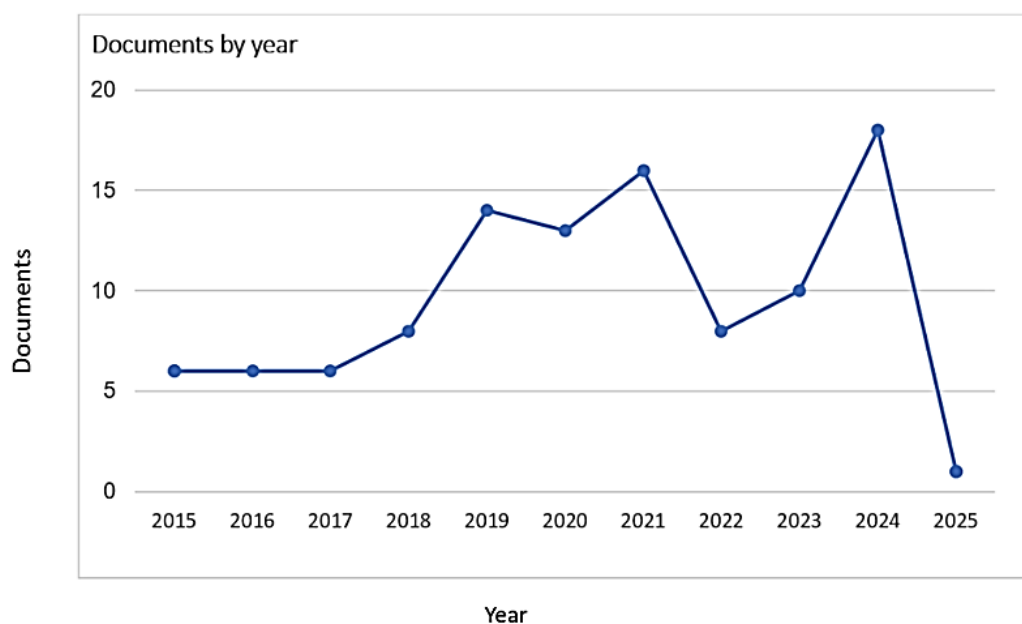

Figure 2. Documents by year

The steep drop to just one document in 2025 should be interpreted cautiously, as it likely reflects partial-year data, given that the bibliometric search was conducted in May 2025. Publications indexed in databases like Scopus often lag behind actual submission and acceptance dates due to long peer-review processes, meaning that many 2025 studies are yet to be published or indexed.

In addition to this technical limitation, the decline may also be influenced by broader shifts in research priorities. Given the global academic shift towards artificial intelligence (AI), sustainability, and post-pandemic recovery themes, traditional domains such as Quran memorisation may temporarily receive less visibility or funding unless integrated with emerging interdisciplinary trends. Furthermore, short-term declines in research output may be caused by adjustments to funding allocations, institutional reorganisation, or regional policy focus, particularly in major contributing nations. However, given the rebound seen in 2023 and 2024, the decline in 2025 appears to be more of a temporal anomaly than a sustained trend.

2. Documents Per Year by Source
Figure 3 provides insights into the distribution of Quran memorisation research across various academic journals and conference proceedings from 2016 to 2024. Each coloured line represents a different publication source, highlighting their respective contributions over the years. The journal Religions demonstrated a notable contribution in 2022, publishing two documents on the topic, reflecting its growing focus on faith-based educational and cognitive studies. Contemporary Islam appeared earlier in 2016 and showed renewed activity in 2019 and 2021, indicating sustained, though intermittent, scholarly attention to Quran memorisation in the context of modern Islamic thought. Intellectual Discourse maintained a steady presence, contributing one document each in 2018, 2020, 2021, and again in 2024, suggesting a consistent, albeit limited, engagement with the topic over time.

Among conference sources, the AIP Conference Proceedings began contributing in 2023 and continued into 2024, signalling a recent expansion of interest in Quran memorisation within scientific or multidisciplinary conference settings. In the same way, the Journal of Physics Conference Series contributed to the field in 2019 and 2021. This might be because experimental or technical research methods, such as memory improvement techniques, are being used in religious learning settings.
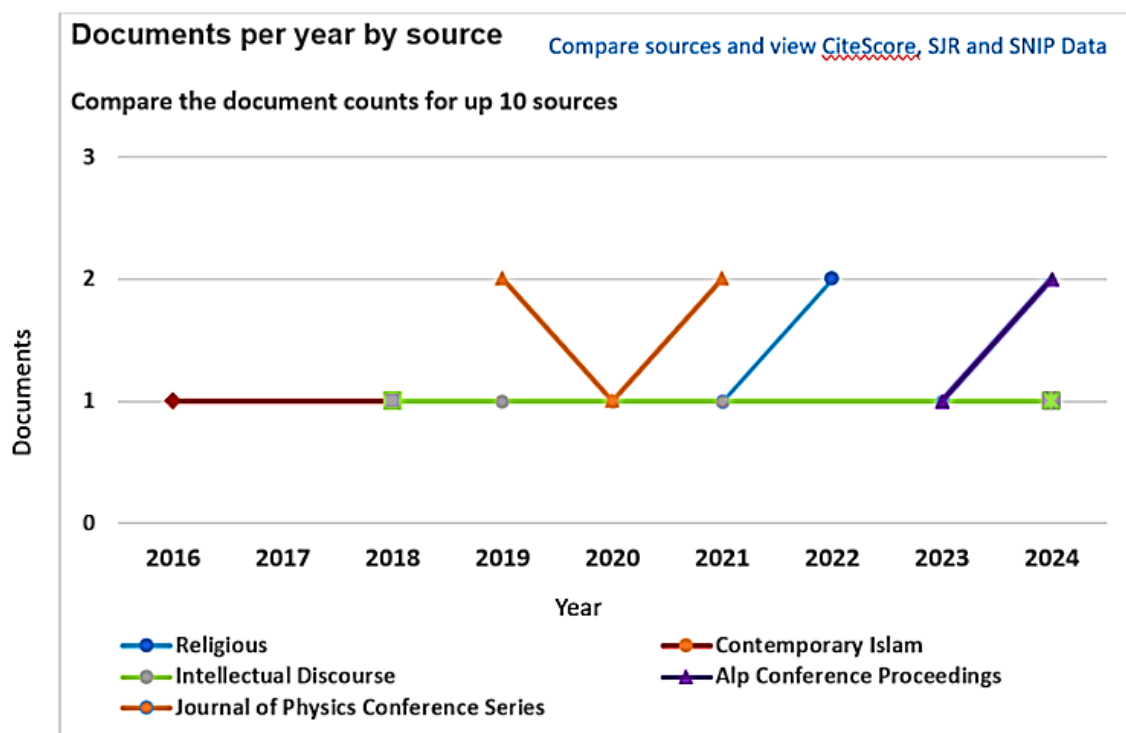

Figure 3. Documents per year by source

3. Country Contributions Analysis

The prominence of Malaysia in Quran memorisation research is not incidental but reflects deliberate national strategies and policy support. Key frameworks such as the *Dasar Pendidikan Islam* and the Malaysian Education Blueprint 2013–2025 emphasise Quranic education as a cornerstone of national identity and moral development. Further, the implementation of the *Dasar Pendidikan Tahfiz Negara* (DPTN) in 2016 institutionalised Quran memorisation within formal education, providing infrastructure, funding, and curricular guidance for *tahfiz* programs. Agencies such as JAKIM and state religious departments actively support memorisation initiatives, while public universities integrate Quranic studies as core research areas. This policy-driven environment has fostered a sustained and structured academic interest in *hifz*, positioning Malaysia as a global leader in the scholarly production of Quran memorisation research.

Saudi Arabia and the UK appear on the map, albeit less intensely, indicating moderate yet substantial intellectual interest. Saudi Arabia's contribution is expected, given its status as a centre of Islamic heritage and scholarship. The presence of the United Kingdom, however, underscores a growing interest in Islamic education within Western contexts, particularly through diaspora communities and interfaith academic research. The spatial distribution also reveals opportunities for international collaboration. While Malaysia and Indonesia currently dominate the landscape, their proximity to other visible contributors like Saudi Arabia and the UK indicates potential for stronger academic partnerships. Such collaborations could enhance cross-cultural understanding of memorisation techniques, digital learning tools, and pedagogical innovations within Quranic studies.

Figure 4 illustrates a network visualisation map generated through VOSviewer, highlighting the countries that have contributed most significantly to scholarly publications on Quran memorisation. The map uses a density format; yellow represents higher levels of publication activity, while blue to green indicate lower contributions. Malaysia and Indonesia appear as the most prominent contributors, represented by intense yellow cores. This corresponds with their dominant document counts from the Scopus analysis and reflects a strong national focus on Quranic education and memorisation, embedded within both traditional and modern educational systems.
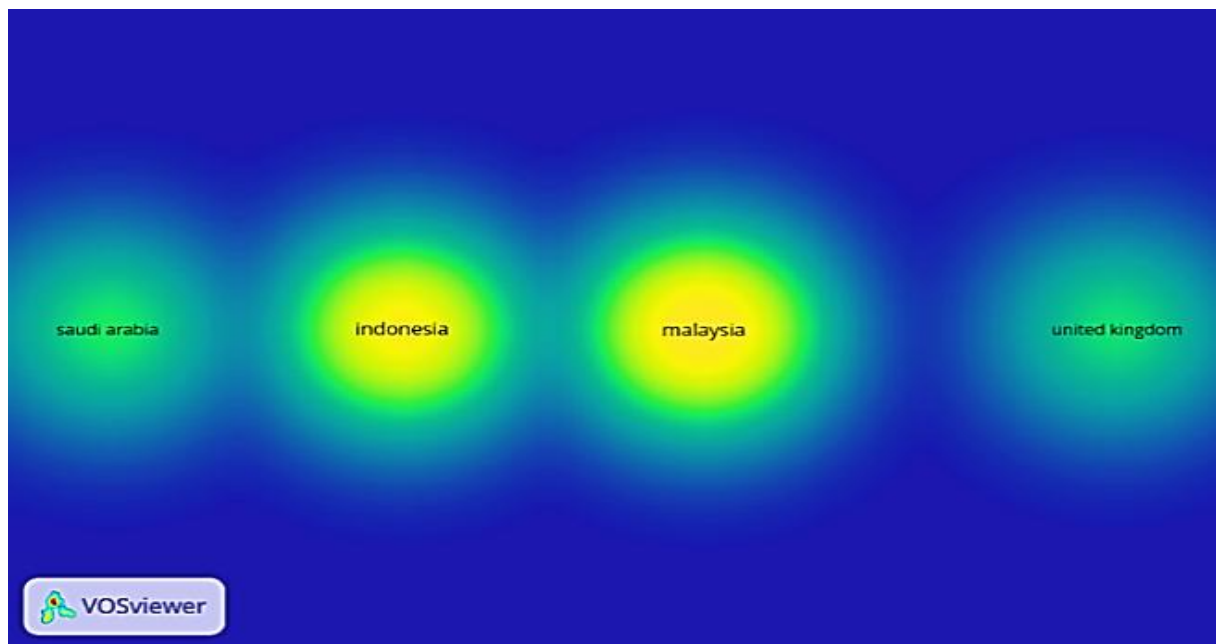

Figure 4. Country contributions analysis

4. Documents by Affiliation

Figure 5 presents the top contributing institutions in the field of Quran memorisation research, as identified through the Scopus database. The International Islamic University Malaysia (IIUM) emerges as the leading institution, contributing 10 publications, a figure that significantly surpasses the other affiliations. IIUM's strong presence reflects its strategic emphasis on Islamic studies, Quranic education, and integration of religious scholarship with contemporary academic research. Close followers include Universiti Kebangsaan Malaysia (UKM) and Universiti Sains Islam Malaysia (USIM), each with 6 documents, highlighting their role as key research hubs in the domain of Islamic education and memorisation.

Other notable institutions such as Universiti Malaya, Universiti Sultan Zainal Abidin, and Universiti Teknologi MARA each contributed 5 publications, suggesting a broad academic engagement across major Malaysian universities. These institutions have likely benefitted from national support for Islamic research and the increasing integration of Quranic memorisation into academic inquiry, often supported by government-backed initiatives or specialised religious faculties.

A number of other Malaysian universities like Universiti Putra Malaysia, Universiti Pendidikan Sultan Idris, and Universiti Islam Selangor, each generated 4 publications, further affirming Malaysia's overall prominence in this subject matter. Interestingly, Beyond Labels Ltd, a non-academic or possibly private research entity, also appears with 3 documents, indicating that contributions are not limited to universities and may include think tanks or private institutions exploring Quran memorisation from alternative angles such as cognitive science, learning strategies, or educational technology.
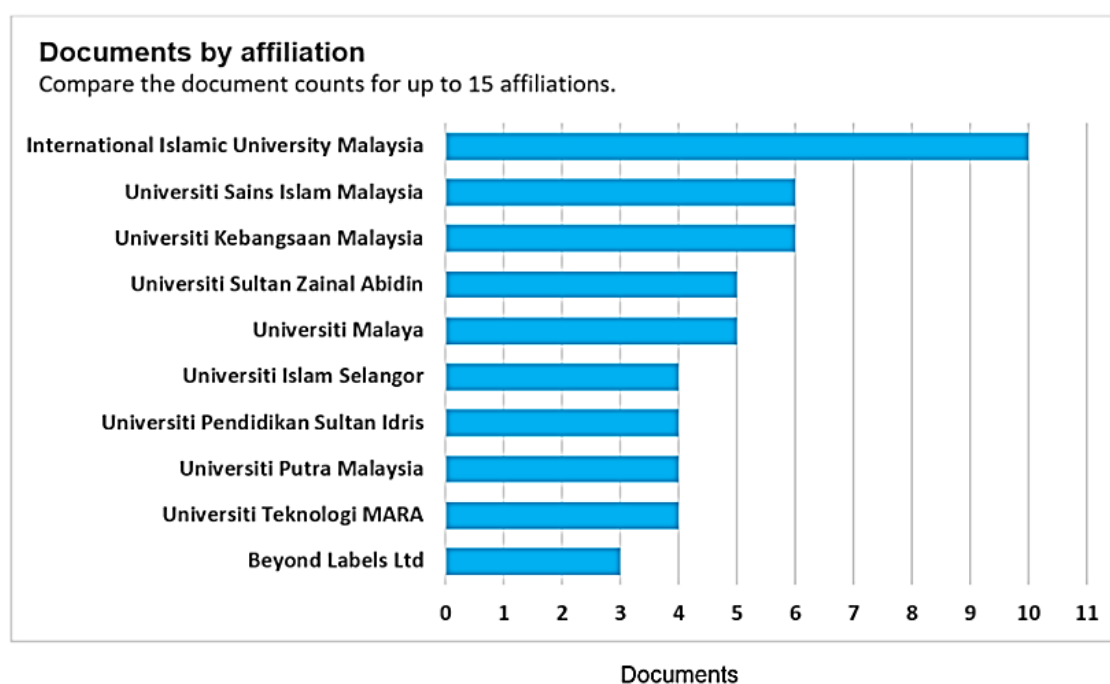
Documents by affiliation
Compare the document counts for up to 15 affiliations.

Figure 5. Documents by affiliation

5. Authorship Analysis

Table 2 analysis highlights the most prolific contributors to research on Quran memorisation. Based on the 23 Scopus-indexed data analysed, Gent, B., Hardaker, G., and Yusof, N.H. each authored three documents, accounting for 13.04% of the total corpus (3/23 = 13.04%) representing the highest individual contributions. Their consistent presence suggests they are leading voices or active researchers in this domain, possibly involved in recurring projects, collaborative networks, or interdisciplinary studies spanning education, cognitive science, and Islamic studies.

Table 2. Documents by Author

Author Name	Number of Document	Percentages (% of total, n= 23)
Gent, B.	3	13.04
Hardaker, G.	3	13.04
Yusof, N.H.	3	13.04
Ardyanto, T.D.	2	8.7
Ariffin, S.	2	8.7
Basri, M.	2	8.7
Berglund, J.	2	8.7
Che Azemin, M.Z.	2	8.7
Din, N.C.	2	8.7
Embong, R.	2	8.7

In addition to these top contributors, a second tier of authors, including Ardyanto, T.D., Ariffin, S., Basri, M., Berglund, J., Che Azemin, M.Z., Din, N.C., and Embong, R., have produced two papers, contributing 8.7% of the total (2/23 = 8.70%), respectively. This indicates a relatively balanced spread of scholarly engagement, where multiple researchers are contributing meaningfully without a single dominant author monopolising the field. The presence of authors from diverse geographical and institutional backgrounds also

reflects the growing global interest in Quran memorisation, not only within traditionally Islamic regions but also across Western academic institutions.

6. Document Type Analysis

To understand the nature and distribution of research outputs related to Quran memorisation, we conducted a document type analysis using the Scopus Analyser. The results are visually represented in Figure 5, which illustrates the proportions of various publication formats retrieved from the Scopus database.
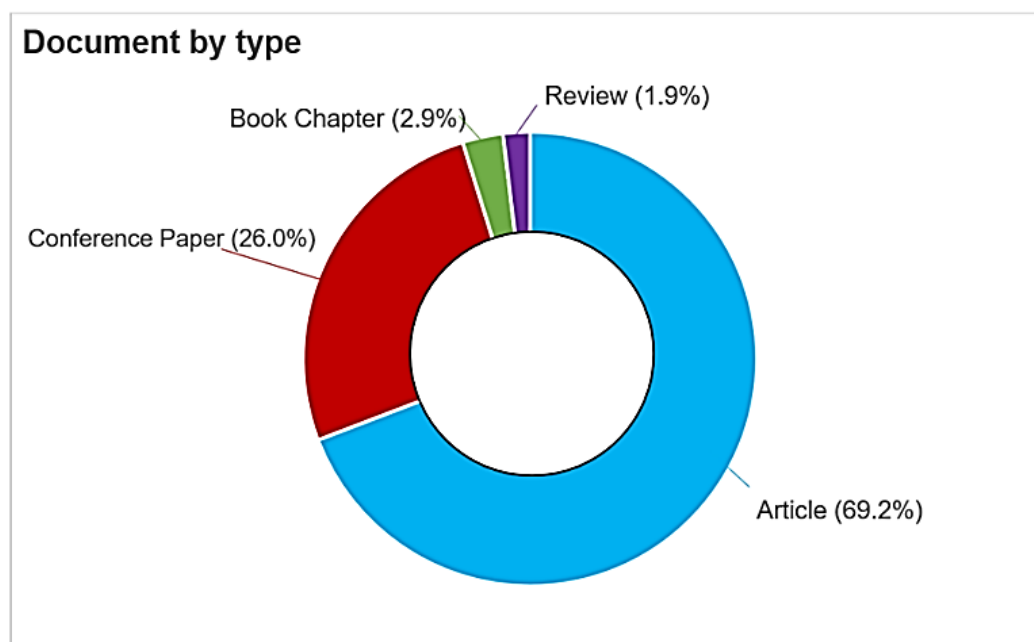

Figure 5. Document type analysis

The analysis revealed a total of 104 documents published between 2015 and 2025, categorised into four primary types:

i. Articles (69.2%): The majority of publications (72 out of 104) are peer-reviewed journal articles. This dominance indicates that Quran memorisation is largely explored in the context of formal academic research. Articles typically undergo rigorous peer review, suggesting that a significant portion of the literature on this topic meets established scholarly standards. These works often focus on empirical studies, theoretical advancements, and pedagogical methods.

ii. Conference Papers (26.0%): A notable portion of the publications (27 documents) consists of conference proceedings. These contributions reflect the active engagement of researchers in presenting preliminary findings, innovative methodologies, and emerging trends at academic conferences. Conference papers may not always undergo the same level of peer review as journal articles, but they often serve as early indicators of research directions and collaborative initiatives.

iii. Book Chapters (2.9%): A smaller segment of the dataset (3 publications) is represented by book chapters. These are typically included in edited volumes or handbooks and may provide comprehensive discussions or contextual insights that complement empirical findings. Their lower frequency could be attributed to the exclusion of books and non-peer-reviewed material in this study's methodology.

iv. Review Papers (1.9%): Only two documents are categorised as review papers. This suggests that while original research on Quran memorisation is relatively well represented, there is a gap in systematic reviews or meta-analyses that synthesise existing findings. Increasing the number of review studies could enhance our understanding of the field's evolution and theoretical underpinnings.

7. Keywords Analysis

The network visualisation map generated using VOSviewer in Figure 6 provides a graphical representation of the co-occurrence relationships among keywords in the literature on Quran memorisation. Three distinct clusters were identified, each representing a thematic orientation of research focus within this domain.
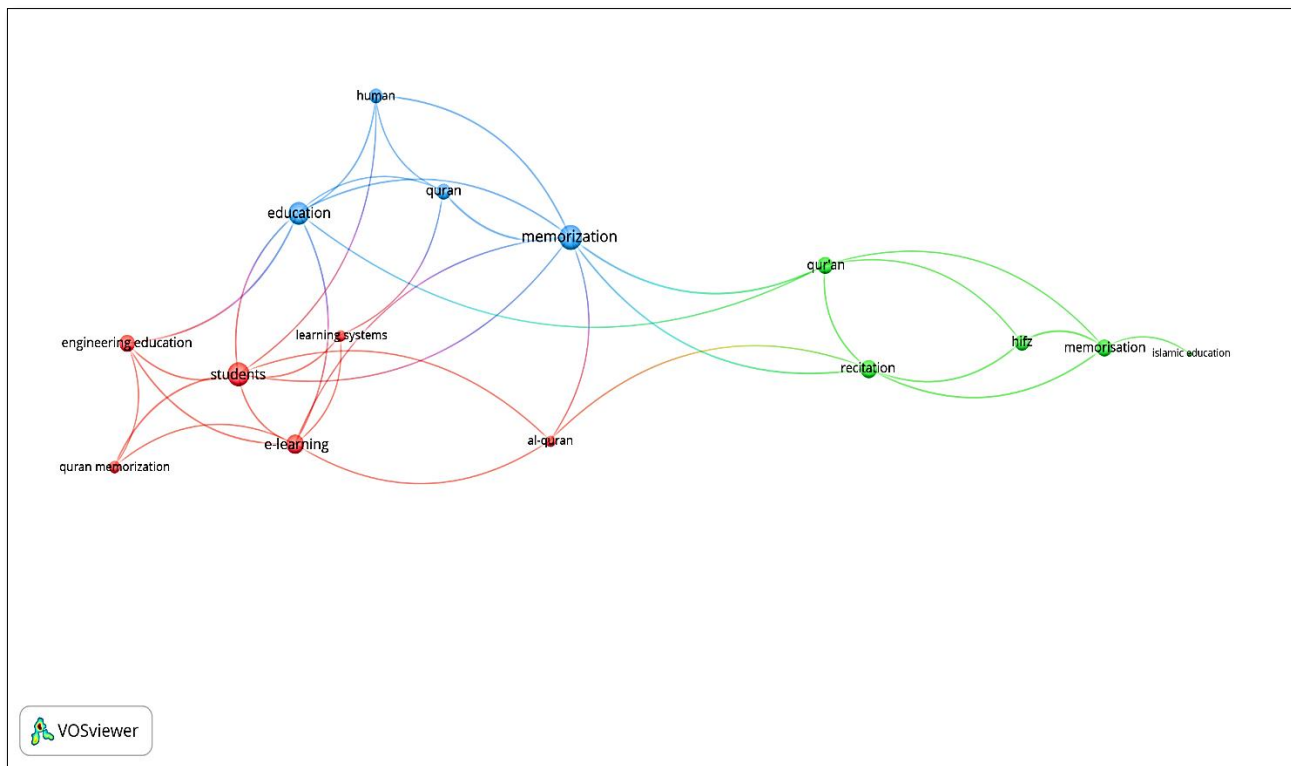

Figure 6. Keywords analysis

The red cluster, which includes the keywords "students," "e-learning," "learning systems," "engineering education," and "Quran memorization," reflects the educational and technological dimension of the field. The central position of "students" within this cluster indicates that most studies concentrate on learners, particularly in relation to technology-assisted memorisation and digital learning systems. The close connection between "students" and "e-learning" suggests a strong pedagogical trend where online and interactive tools are increasingly utilised to support Quranic memorisation in educational settings.

The blue cluster, consisting of "memorization," "education," "Quran," and "human," represents the cognitive and pedagogical perspective of the research landscape. The presence of "human" at the periphery suggests that while cognitive, psychological, and behavioural aspects are acknowledged, they receive less empirical attention compared to educational and technological themes. This cluster indicates an emerging interest in exploring human memory processes, learning behaviour, and mental engagement during Quranic memorisation.

The green cluster, comprising the keywords "hifz," "recitation," "Quran," and "Islamic education," highlights the religious and institutional context of Quranic memorisation studies. The strong link between "hifz" and "Islamic education" demonstrates that many publications focus on the practices of memorisation within tahfiz schools and formal Islamic education systems. Overall, the map reveals a multidisciplinary landscape that connects educational technology, human cognition, and Islamic pedagogy, indicating the evolution of Quran memorisation research from traditional to contemporary, technology-enhanced approaches.

Discussion

The bibliometric analysis of Quran memorisation research from 2015 to 2025 reveals a field experiencing notable growth, yet still in the process of defining its academic coherence. Publication trends indicate a rising trajectory, particularly after 2018, with a sharp increase in 2024. This growth coincides with global interest in digital learning and cognitive development, especially in Islamic education. The keyword co-occurrence network places "students" and "e-learning" at the core of the literature, highlighting a research focus on learner engagement and technological integration. The predominance of Southeast Asian countries, especially Malaysia and Indonesia, points to strong institutional backing and educational investments in Quran memorisation, positioning the region as a key driver of research output. However, this regional concentration may also lead to epistemological insularity, where localised perspectives dominate the discourse at the expense of broader, comparative frameworks.

Critically, the field suffers from fragmentation in both disciplinary alignment and publication outlets. The scattered distribution of sources, ranging from religious to scientific and educational journals, demonstrates interdisciplinary engagement but also reflects a lack of theoretical centrality. While this multidisciplinary landscape offers diverse entry points, it impedes the accumulation of cohesive academic knowledge, as studies often operate in isolation rather than dialoguing across domains. Furthermore, despite the growth in article production, the field is heavily empirical and application-oriented, with minimal emphasis on theoretical development or conceptual clarity. The near absence of review articles further compounds this issue, signalling a missed opportunity to consolidate findings and guide future research directions with intellectual rigour.

The dominance of technological themes such as gamification, e-learning platforms, and mobile applications suggests a growing reliance on digital tools to enhance memorisation processes. Yet, many of these studies prioritise technical functionality over pedagogical rigour and rarely engage with cognitive science, learning theories, or long-term outcome evaluation. This points to a critical oversight: the under-theorisation of Quran memorisation as a complex cognitive and spiritual practice. Additionally, while authorship data shows distributed scholarly participation, the lack of transnational and inter-institutional collaboration underscores the field's limited global integration. There is a pressing need to move beyond isolated, institutionally bounded studies and toward collaborative frameworks that engage scholars from a broader range of academic and cultural contexts.

To elevate the academic maturity of Quran memorisation research, future studies must adopt a more strategic orientation. This includes producing systematic reviews to clarify research trajectories, constructing theoretical models rooted in both Islamic pedagogy and modern learning science, and promoting cross-cultural comparisons to contextualise memorisation practices globally. Moreover, engagement with under-represented regions, particularly the Middle East, North Africa, and non-Muslim majority countries with significant Muslim populations, can help diversify the epistemic base of the field. Without addressing these structural and intellectual gaps, the field risks becoming technologically innovative but theoretically superficial. A more cohesive, critically reflective, and globally inclusive approach is essential to establish Quran memorisation as a recognised and impactful academic domain within interdisciplinary scholarship.

Although Bradford's and Lotka's laws are frequently employed in bibliometric studies to validate patterns of journal concentration and author productivity, this study did not apply such triangulation. The decision was primarily based on the scope and size of the dataset, which was limited and not sufficiently large to yield statistically meaningful distributions under these laws. Instead, the focus of this study was to provide a descriptive mapping of publication trends, research productivity, and thematic orientations in Quran memorisation. The selected methodological approach is therefore adequate to address the research objectives without the additional application of classical bibliometric laws.

Conclusion

This bibliometric analysis has critically mapped the current landscape of Quran memorisation research, revealing a field that is growing but continues to evolve in conceptual depth and global reach. The data indicates

a strong focus on learner-centred and technology-driven approaches, particularly within Southeast Asian academic institutions. While this regional concentration has catalysed innovation and scholarly output, the field remains fragmented, under-theorised, and limited in terms of international collaboration and interdisciplinary integration.

The findings of this study should be interpreted with awareness of several limitations. First, the analysis relied on a single database (Scopus), which, while comprehensive, excludes works indexed elsewhere. Second, only English-language publications were included, thereby omitting significant contributions from Arabic, Malay, and Indonesian scholarship. Third, despite expanding the search string to include multiple synonym and orthographic variations, there remains a possibility of missing relevant works due to unindexed or variant terminology. Fourth, indexing lag in Scopus may underrepresent publications from 2025 at the time of data collection (May 2025). Finally, the conference–journal mix may influence the results, as conference papers are often preliminary and less cited, affecting citation-based indicators.

To advance the scholarly development of Quran memorisation studies, future research should adopt a more integrative and comparative approach. Comparative analyses across different regions including the Middle East, North Africa, and diaspora contexts would provide a broader epistemic base. Stronger bridges between pedagogy and cognitive science are needed to develop theoretical models that explain memorisation processes beyond descriptive accounts. Future work should also examine the long-term cognitive, motivational, and spiritual impacts of Quran memorisation, moving beyond short-term educational outcomes. In addition, the integration of AI-assisted learning analytics such as adaptive platforms, speech-recognition assessment, and personalised feedback offers a promising avenue for enhancing both pedagogy and research. By addressing these gaps, the field can progress toward becoming a more cohesive, interdisciplinary, and globally relevant domain within educational scholarship.

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