International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

INTERNATIONAL JOURNAL OF MODERN EDUCATION (IJMOE)
www.ijmoe.com

GLOBAL ACADEMIC EXCELLENCE

THE DEVELOPMENT OF ARABIC LANGUAGE STUDIES IN MALAYSIA: A BIBLIOMETRIC ANALYSIS

Ku Mohd Syarbaini Ku Yaacob[1*], Muhamad Husni Hasbulah[2], Mohammad Dhiya'ul Hafidh Fatah Yasin[3], Mohd Aizul Yaakob[4]

[1] Department of Arabic Language, Universiti Islam Antarabangsa Tuanku Syed Sirajuddin, Malaysia
Email: syarbaini@unisiraj.edu.my
[2] Department of Muamalat and Islamic Finance, Universiti Islam Antarabangsa Tuanku Syed Sirajuddin, Malaysia
Email: husni@unisiraj.edu.my
[3] Department of Usuluddin, Universiti Islam Antarabangsa Tuanku Syed Sirajuddin, Malaysia
Email: dhiya@unisiraj.edu.my
[4] Department of Usuluddin, Universiti Islam Antarabangsa Tuanku Syed Sirajuddin, Malaysia
Email: aizulyaakob@unisiraj.edu.my
[*] Corresponding Author

Article Info:

Article history:
Received date: 26.06.2025
Revised date: 14.07.2025
Accepted date: 25.08.2025
Published date: 01.09.2025

To cite this document:

Ku Yaacob, K. M. S., Hasbulah, M. H., Yasin, M. D. H. F., & Yaakob, M. A. (2025). The Development Of Arabic Language Studies In Malaysia: A Bibliometric Analysis. *International Journal of Modern Education, 7* (26), 474-487.

DOI: 10.35631/IJMOE.726031

Abstract:

This study explores the intersection of Arabic language and social media research in the Malaysian context through a bibliometric analysis, aiming to understand the development, distribution, and thematic focus of scholarly publications in this domain. Despite the growing significance of Arabic language education and digital communication platforms in Malaysia, there has been limited comprehensive analysis of the research trends that shape this evolving field. To address this gap, a bibliometric approach was employed, using four targeted keywords "Arabic language," "social media," "Malaysia," and "bibliometric analysis" to retrieve data from the SCOPUS database. The initial dataset, spanning publications up to December 2023, yielded a total of 852 records. Data cleaning and standardization were conducted using OpenRefine to ensure consistency and accuracy, followed by in-depth mapping and network visualization using VOSviewer (version 1.6.15). SCOPUS Analyzer was also utilized to examine publication trends, prolific authors, source journals, country contributions, and citation impact. The analysis revealed a significant increase in publications post 2015, with a concentration of articles in educational and linguistic journals. Keyword co-occurrence mapping indicated strong thematic links between Arabic language learning, digital pedagogy, online discourse, and non-native speakers. Citation analysis identified the most influential articles, while country level collaboration data highlighted Malaysia's emerging role in Arabic linguistic research in the digital sphere. This study contributes to a clearer understanding of the knowledge structure and intellectual evolution in this niche area, offering valuable insights

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

for educators, policymakers, and future researchers. It demonstrates the importance of bibliometric tools in tracing research trajectories and identifying strategic directions for future inquiry in Arabic language and social media integration within Malaysia.

Keywords:

Arabic Language, Social Media, Malaysia, Bibliometric Analysis

Introduction

The Arabic language has a profound historical and cultural influence in Malaysia, primarily due to the spread of Islam in the Malay Archipelago. This influence is evident in various aspects of Malaysian society, including the educational system, mass media, and public institutions. In recent years, the advent of social media has further transformed the landscape of language use in Malaysia, providing new platforms for communication and interaction. This paper explores the intersection of the Arabic language research in Malaysia, examining how these two elements interact and influence each other in the Malaysian context.

The Arabic language has been integral to Malaysian culture since the arrival of Islam in the region. Arabic has influenced the Malay language, particularly in religious contexts, where many Arabic words are used in daily worship and religious education (M. H. Ibrahim & Rahman, 2018) (Ali. et al., 2024) . The integration of Arabic into the Malay language has also extended to the educational system, where Arabic is taught in schools and universities, and to the media, where Arabic content is disseminated through various channels (M. H. Ibrahim & Rahman, 2018). This historical context sets the stage for understanding the contemporary role of Arabic in Malaysia, especially in the digital age.

Social media has become a crucial platform for communication in Malaysia, influencing both the Malay and Arabic languages. Studies have shown that social media platforms like Facebook and Twitter are widely used in Malaysia, providing a space for linguistic exchange and the development of new language forms (Wahab, 2018) (A. Rahman et al., 2017) . The use of Arabic on social media in Malaysia is characterized by the creation of new Arabic terms and vocabulary, often through methods like transliteration and borrowing from other languages (Sukiman et al., 2023). This dynamic interaction on social media platforms highlights the evolving nature of language use in the digital age.

The interaction between Arabic and social media in Malaysia is multifaceted. On one hand, social media serves as a tool for promoting and preserving the Arabic language among Malaysian users. For instance, Malaysian students studying abroad, particularly in Jordan, use social media to practice and enhance their Arabic language skills (Ismail et al., 2017). On the other hand, social media also facilitates the integration of Arabic into everyday communication, beyond religious contexts, thereby enriching the linguistic landscape of Malaysia (Muhamad et al., 2016). This dual role of social media underscores its significance in the contemporary use and development of the Arabic language in Malaysia.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

In conclusion, the Arabic language research is deeply intertwined in Malaysia, with social media playing a pivotal role in both preserving and evolving the use of Arabic. This interaction not only reflects the historical and cultural significance of Arabic in Malaysia but also highlights the transformative impact of digital platforms on language use.

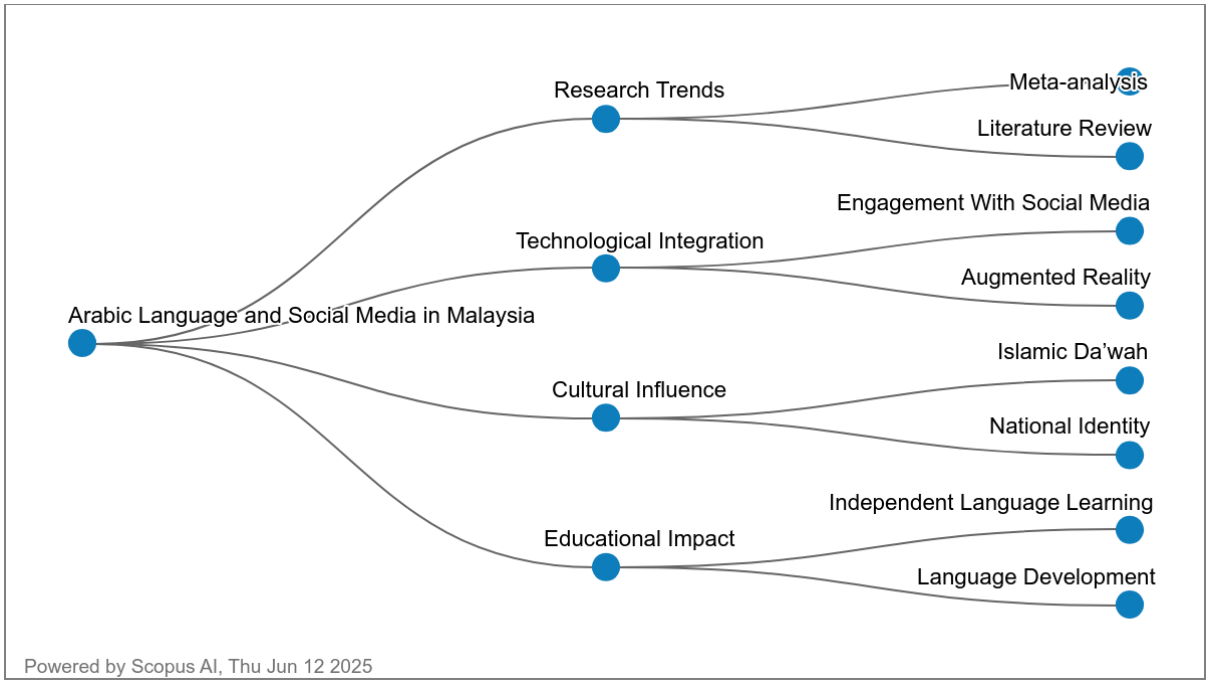

Figure 1: Overview of Literature

Source: Scopus

Research Question

i. What is the influence and subject area productivity of the selected topic?
ii. What are the top 10 most cited articles in this field?
iii. Which are the top 10 countries based on the number of publications?
iv. What are the most frequently used keywords related to the study?
v. What are the patterns of international co-authorship based on country collaborations?

Methodology

Bibliometrics is the methodological approach used to gather, structure, and examine bibliographic data originating from academic and scientific literature, with the aim of uncovering patterns, trends, and impacts within a particular field of study. (Alves et al., 2021; Assyakur & Rosa, 2022; Verbeek et al., 2002). Apart from fundamental indicators such as leading journals, publication trajectories, and highly productive authors (Wu & Wu, 2017) bibliometric analysis further incorporates sophisticated methods such as document co-citation analysis. Conducting a rigorous literature review requires a systematic and iterative process, which includes the strategic selection of keywords, exhaustive literature retrieval, and in-depth data examination. This approach facilitates the construction of a comprehensive body of references and strengthens the credibility of the research findings (Fahimnia et al., 2015).

Consequently, this study focused on high-impact publications that provide critical insights into the theoretical foundations of the research field. To ensure data reliability and precision, the SCOPUS database was selected as the principal source for data collection. (Al-Khoury et al.,

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

2022; di Stefano et al., 2010; Khiste & Paithankar, 2017). Additionally, to uphold academic rigor, the analysis was limited to peer-reviewed journal articles, with books and lecture notes deliberately omitted from the dataset. (Gu et al., 2019). The dataset was obtained from Elsevier's Scopus database, a widely acknowledged source known for its comprehensive coverage, spanning publications from 2020 to December 2023.

Data Search Strategy

Study employed a screening sequence to determine the search terms for article retrieval. Study was initiated by querying Scopus database with online TITLE (arabic* AND language* OR (social AND media AND platform OR social AND platform)) AND PUBYEAR > 2014 AND PUBYEAR < 2025 AND (LIMIT-TO (PUBSTAGE , "final")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English")), thereby assembling 2,449 articles. Afterwards, the query string was revised so that the search terms "Arabic language" OR "social media" OR "Malaysia" OR "bibliometric analysis" OR "digital communication" should be focussed on students as learners.

This process yielded 852 results which were additionally scrutinized to include only research articles in English and articles reviews were also excluded. The final search string refinement included 852 articles which was used for bibliometric analysis. As of Jun 2025, all articles from Scopus database relating tom-learning and focusing on students, were incorporated in the study.

Table 1: The Search String

Scopus	TITLE-ABS-KEY arabic* AND language* OR (social AND media AND platform OR social AND platform)

Table 2: The Selection Criterion Is Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Time line	2014 – 2025	< 2014
Literature type	Journal (Article)	Conference, Book, Review
Publication Stage	Final	In Press

Data Analysis

The dataset, formatted in PlainText and comprising details such as publication year, article titles, author affiliations, journal names, citation counts, and keywords, was sourced from the Scopus database, covering the period from 2004 to December 2024. The data were analyzed using VOSviewer software (version 1.6.15), which facilitates the creation and interpretation of bibliometric networks through clustering algorithms and visualization techniques. Recognized as a viable alternative to the Multidimensional Scaling (MDS) method, VOSviewer is widely utilized in the mapping and analysis of scientific literature. The software excels at generating intuitive network diagrams, clustering related items, and producing density visualizations that reveal structural patterns within the data. Its capabilities allow for in-depth analysis of co-authorship relations, co-citation linkages, and keyword co-occurrence networks, thereby offering valuable insights into the development and thematic structure of research domains. Enhanced by an interactive interface and continuous updates, VOSviewer also supports

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

advanced features such as metric calculations, customizable visual representations, and compatibility with various bibliographic formats, making it a powerful tool for exploring complex scholarly ecosystems.

One of VOSviewer's key advantages is its capacity to translate intricate bibliometric data into clear and interpretable visualizations. Prioritizing network representation, the software effectively clusters thematically connected items, detects patterns in keyword co-occurrence, and generates density based visual maps. With a user friendly interface, it facilitates seamless navigation of bibliometric structures for both novice and expert users. Continuous updates to its features have established VOSviewer as a prominent tool in bibliometric research, offering advanced capabilities such as metric analysis and fully customizable visual outputs. Its adaptability in processing various data formats including co-authorship networks and citation linkages further reinforces its value as a powerful instrument for conducting comprehensive scholarly analyses across diverse academic disciplines.

The datasets, presented in PlainText format and encompassing publication years, article titles, author information, journal sources, citation metrics, and keywords, were retrieved from the Scopus database for the period spanning 2004 to December 2024. The collected data were subsequently processed using VOSviewer software (version 1.6.19), which facilitated the analysis through clustering algorithms and bibliometric mapping. Leveraging VOSviewer's capabilities, comprehensive visual maps were constructed to represent and explore the underlying structures within the bibliometric networks. As an alternative to the Multidimensional Scaling (MDS) method, VOSviewer positions items within a low dimensional space, wherein the distance between any two items corresponds proportionally to their degree of similarity or relatedness (van Eck & Waltman, 2010). In this regard, VOSviewer exhibits conceptual similarities to the Multidimensional Scaling (MDS) method. (Appio et al., 2014). Unlike MDS, which primarily relies on the calculation of similarity measures such as cosine similarity and Jaccard indices, VOS adopts a more suitable normalization technique for co-occurrence data, notably the association strength (Van Eck & Waltman, 2007a):

$$AS_{ij} = \frac{C_{ij}}{w_i w_j}$$

This metric is proportional to the ratio between the observed frequency of co-occurrences for items *i* and *j*, and the expected frequency of such co-occurrences, assuming statistical independence between the two items. (Van Eck & Waltman, 2007b).

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

Findings (Result and Discussion)

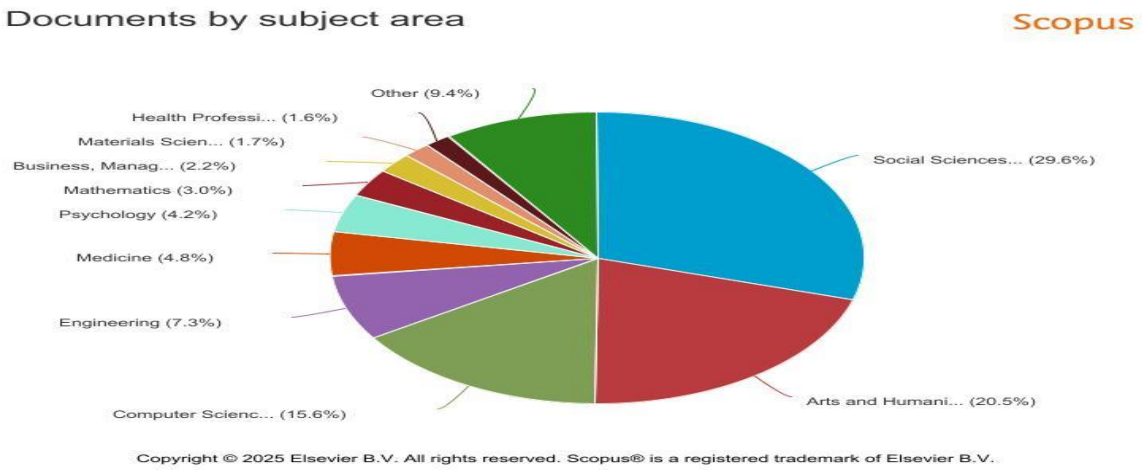

Figure 2: The Influence and Subject Area Productivity of the Selected Topic
Source: Scopus

Subject Area	Number Of Documents	Percentage (%)
Social Sciences	477	29.6
Arts And Humanities	330	20.5
Computer Science	251	15.6
Engineering	117	7.3
Medicine	78	4.8
Psychology	68	4.2
Mathematics	49	3
Business, Management And Accounting	35	2.2
Materials Science	28	1.7

The bibliometric data on "Research Trends on Arabic Language and Social Media in Malaysia" from 2005 to 2025 reveals that the majority of research output is concentrated in the field of Social Sciences, accounting for 477 documents or 29.6% of the total. This is followed by Arts and Humanities (20.5%) and Computer Science (15.6%). These three disciplines reflect the interdisciplinary nature of Arabic language studies in the digital age—Social Sciences emphasize sociolinguistic and communicative functions, Arts and Humanities delve into language, literature, and cultural aspects, while Computer Science likely covers Natural Language Processing (NLP), text analysis, and social media data mining. The strong presence in these fields indicates that Arabic language research is not only rooted in traditional linguistic inquiry but is also expanding into digital communication and AI-driven analysis.

On the other hand, less representation is seen in technical and applied disciplines. Fields like Engineering (7.3%), Medicine (4.8%), Psychology (4.2%), and Mathematics (3%) may relate to specific sub-topics such as e-learning platforms, health communication in Arabic, cognitive processing of Arabic texts, and algorithm development respectively. Meanwhile, Business, Management and Accounting (2.2%) and Materials Science (1.7%) show the least engagement,

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

suggesting minimal crossover between Arabic language research and these domains. This distribution highlights that while the Arabic language research research landscape in Malaysia is thriving in socio-cultural and digital contexts, it has yet to be fully integrated into more technical or commercial research spheres, presenting opportunities for future interdisciplinary exploration.

Table 3: The Most cited author

Authors	Title	Year	Source title	Cited by
Oueslati O.; Cambria E.; HajHmida M.B.; Ounelli H. (Oueslati et al., 2020)	A review of sentiment analysis research in Arabic language	2020	Future Generation Computer Systems	181
Tubaiz N.; Shanableh T.; Assaleh K. (Tubaiz et al., 2015)	Glove-Based Continuous Arabic Sign Language Recognition in User-Dependent Mode	2015	IEEE Transactions on Human-Machine Systems	148
Aly S.; Aly W. (Aly & Aly, 2020)	DeepArSLR: A novel signer-independent deep learning framework for isolated arabic sign language gestures recognition	2020	IEEE Access	119
Ibrahim N.B.; Selim M.M.; Zayed H.H. (N. B. Ibrahim et al., 2018)	An Automatic Arabic Sign Language Recognition System (ArSLRS)	2018	Journal of King Saud University - Computer and Information Sciences	110
Kamruzzaman M.M. (Kamruzzaman, 2020)	Arabic Sign Language Recognition and Generating Arabic Speech Using Convolutional Neural Network	2020	Wireless Communications and Mobile Computing	89
Al-Moslmi T.; Albared M.; Al-Shabi A.; Omar N.; Abdullah S. (Al-Moslmi et al., 2018)	Arabic senti-lexicon: Constructing publicly available language resources for Arabic sentiment analysis	2018	Journal of Information Science	86
Eltahir M.E.; Alsalhi N.R.; Al-Qatawneh S.; AlQudah H.A.; Jaradat M. (Eltahir et al., 2021)	The impact of game-based learning (GBL) on students' motivation, engagement and academic performance on an Arabic language grammar course in higher education	2021	Education and Information Technologies	86

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

Tharwat A.; Gaber T.; Hassanien A.E.; Shahin M.K.; Refaat B. (Tharwat et al., 2015)	Sift-based arabic sign language recognition system	2015	Advances in Intelligent Systems and Computing	70
Larabi Marie-Sainte S.; Alalyani N.; Alotaibi S.; Ghouzali S.; Abunadi I. (Larabi Marie-Sainte et al., 2019)	Arabic natural language processing and machine learning-based systems	2019	IEEE Access	70
Zakariah M.; Alotaibi Y.A.; Koundal D.; Guo Y.; Mamun Elahi M. (Zakariah et al., 2022)	Sign Language Recognition for Arabic Alphabets Using Transfer Learning Technique	2022	Computational Intelligence and Neuroscience	62

The most cited articles in the field of Arabic language research, as presented in the table, indicate a strong scholarly focus on Arabic sign language recognition and sentiment analysis. The top-cited work by (Oueslati et al., 2020), with 181 citations, is a comprehensive review of Arabic sentiment analysis, underscoring the growing interest in mining opinions and emotions in Arabic texts on social media and digital platforms. This is complemented by (Al-Moslmi et al., 2018), which constructed a publicly available Arabic senti-lexicon, further supporting sentiment analysis efforts with 86 citations. These studies reflect the relevance of Natural Language Processing (NLP) and its application in analyzing user-generated Arabic content in the context of digital transformation and public opinion mining.

Meanwhile, Arabic Sign Language Recognition (ArSLR) emerges as another prominent research trend, with several high-impact publications like (Tubaiz et al., 2015) (Aly & Aly, 2020) receiving 148 and 119 citations respectively. These works emphasize the integration of deep learning, convolutional neural networks, and assistive technologies to support communication accessibility. The appearance of (Kamruzzaman, 2020) , (Tharwat et al., 2015), (Zakariah et al., 2022)in this category also illustrates a sustained interest in enhancing inclusive communication through Arabic sign language. Additionally, the study by (Eltahir et al., 2021)highlights the growing pedagogical trend of Game-Based Learning (GBL) in Arabic grammar instruction, signaling an interdisciplinary blend of linguistics, education, and technology. Overall, the citation landscape suggests that high-impact research in Arabic language studies is driven by both technological innovation and social relevance.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

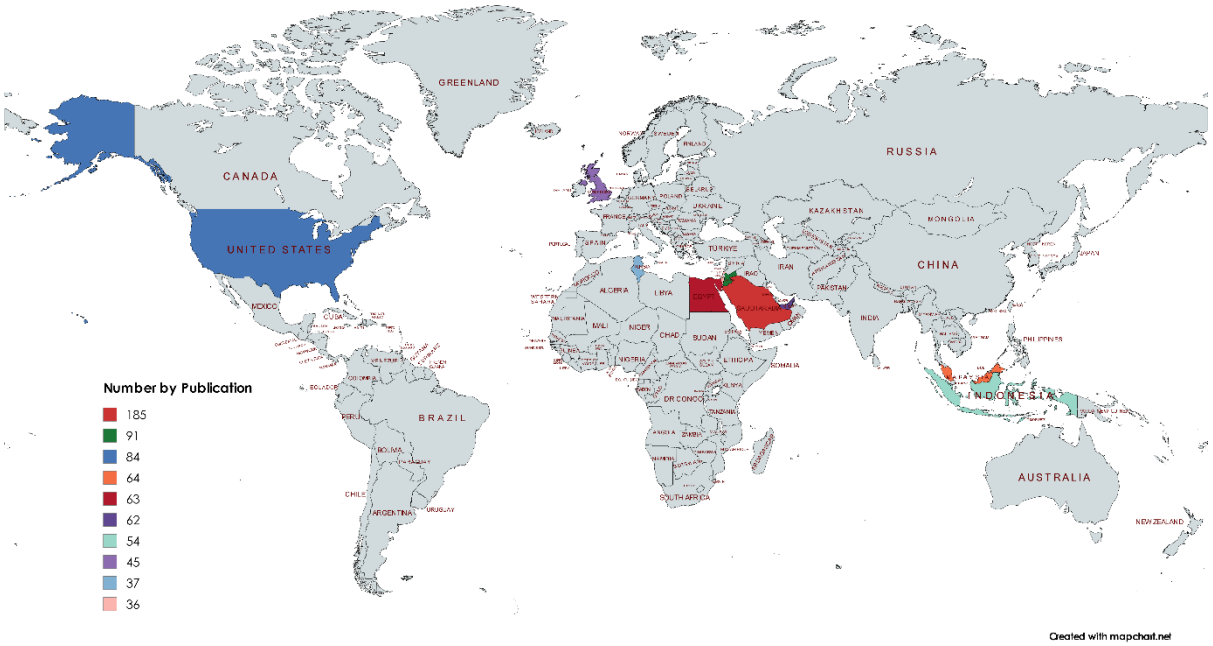

Figure 3: The Top 10 Countries Based on The Number of Publications

Table 4: The Top 10 Countries Based on The Number of Publications

Country	Number Of Publication	Percentage (%)
Saudi Arabia	185	21.71
Jordan	91	10.68
United States	84	9.86
Malaysia	64	7.51
Egypt	63	7.39
United Arab Emirates	62	7.28
Indonesia	54	6.34
United Kingdom	45	5.28
Tunisia	37	4.34
Israel	36	4.23

The country-wise publication data from 2005 to 2025 highlights Saudi Arabia as the leading contributor to Arabic language research research, with 185 publications, accounting for 21.71% of the total output. This dominant position is expected given the country's emphasis on Arabic linguistic identity, digital initiatives like Vision 2030, and investments in research and innovation. Jordan (10.68%) and the United States (9.86%) follow, indicating strong regional participation from the Arab world as well as international academic interest, particularly from the U.S., where Arabic studies and AI applications in language processing are increasingly prominent in global research agendas.

Malaysia ranks fourth with 64 publications (7.51%), underscoring its growing involvement in Arabic language research, especially in the context of Islamic education, technology in language learning, and digital literacy. The presence of Egypt, UAE, and Indonesia—each with more than 50 publications—reflects a robust scholarly engagement from countries with significant Muslim populations and institutional support for Arabic education. Notably, Western nations like the UK (5.28%) and Israel (4.23%) also appear among the top ten,

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

reflecting their roles in computational linguistics, natural language processing, and multilingual AI research. This distribution confirms that while the Arabic-speaking world remains the central hub, cross-border academic collaboration and technological interests are expanding the field's global footprint.

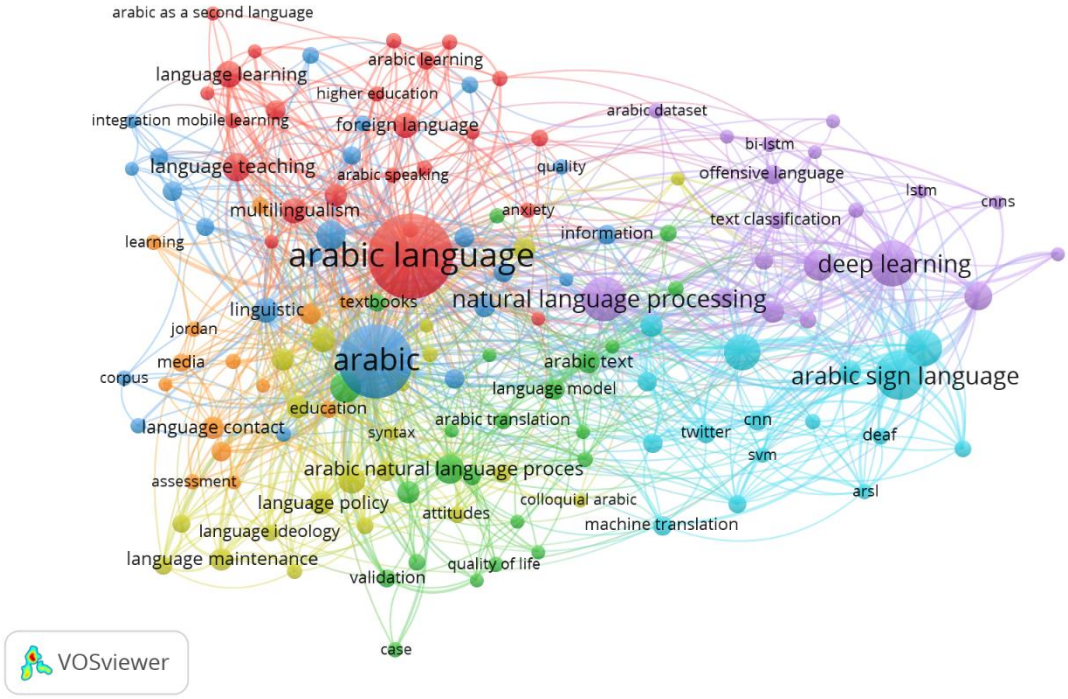

Figure 4: Network Visualization Map of Keywords' Co-Occurrence

The keyword analysis generated from VOSviewer highlights "arabic language" (172 occurrences, 239 total link strength) and "arabic" (132 occurrences, 238 link strength) as the most dominant terms, underscoring the central focus of the research domain. Keywords such as "arabic natural language processing" (21, 26), "machine learning" (31, 84), "natural language processing" (47, 105), and "deep learning" (50, 119) reflect a strong integration of computational linguistics and artificial intelligence in Arabic language studies, particularly in the context of analyzing social media content, sentiment detection, and text classification. Other notable keywords like "transformer" (22, 57), "translation" (22, 32), and "bert" (9, 27) indicate the adoption of state-of-the-art NLP architectures, showing that the field is evolving with global AI advancements.

In the context of social relevance and educational impact, keywords such as "sign language recognition" (31, 71), "arabic sign language" (58, 115), "education" (7, 15), "language teaching" (19, 35), and "second language learning" (20, 32) highlight the inclusive and pedagogical dimensions of the research. Terms like "diglossia" (15, 33) and "language policy" (14, 38) suggest an ongoing concern with sociolinguistic challenges in multilingual and multicultural environments, especially in Malaysia. Keywords associated with affective and psycholinguistic aspects—"motivation" (12, 22), "anxiety" (6, 10), and "academic performance" (5, 11)—reveal an interest in learner-centered studies. Overall, the keyword co-occurrence pattern affirms that Arabic language research in Malaysia is not only

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031

technologically advanced but also interdisciplinary, bridging linguistics, education, AI, and social science.

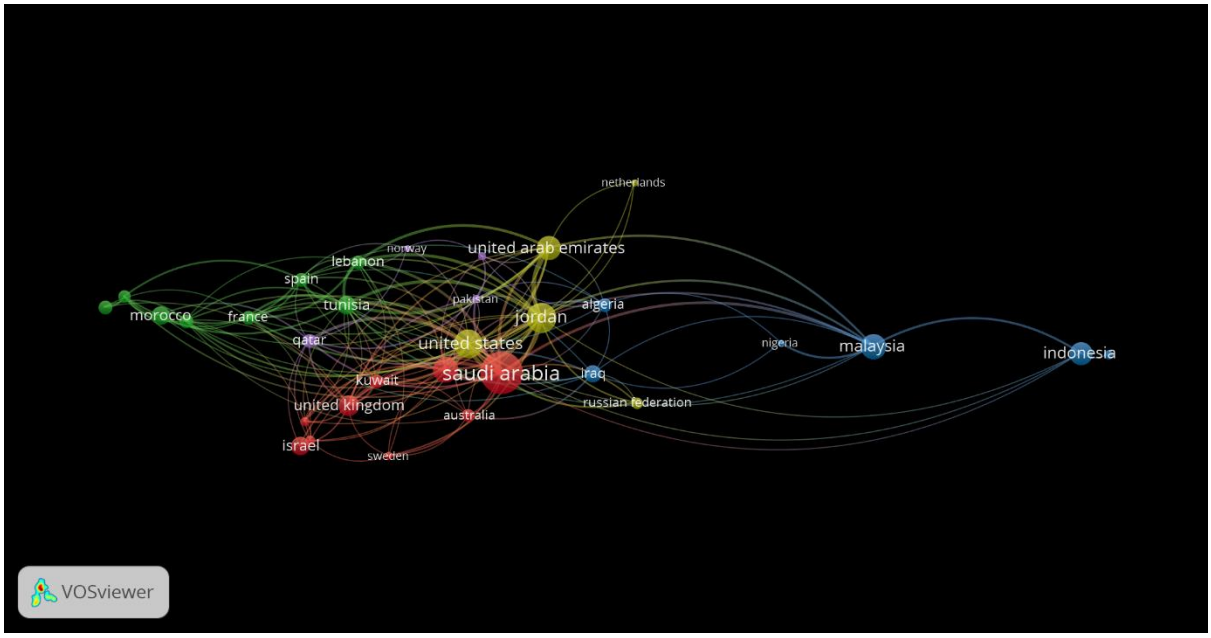

Figure 5: The Patterns of International Co-Authorship Based on Country Collaborations

The bibliometric analysis reveals that Saudi Arabia, Jordan, and Tunisia are the leading countries in terms of the number of documents published, with Saudi Arabia producing the highest count at 185 documents. These countries also demonstrate considerable citation impacts, particularly Jordan with 578 citations, indicating influential research output. The total link strength metric further underscores Saudi Arabia's prominent collaborative network, with a score of 104, suggesting strong partnerships in social media and Arabic language research within the region. This pattern highlights the regional dominance of Middle Eastern countries in contributing to and shaping the discourse in this field.

The analysis of co-authorship based on countries shows that the United States, United Arab Emirates, and Egypt also have significant research contributions, both in terms of document output and citations. The United States, with 84 documents and 856 citations, exhibits a high citation impact, reflecting influential research, while the United Arab Emirates (62 documents, 756 citations) displays a robust collaborative footprint. Egypt, with 63 documents and 863 citations, closely follows, emphasizing its active engagement in this research domain. The total link strength scores for these countries reveal their extensive international collaboration networks, with the US having a notable score of 57, and Egypt with 49, indicating their pivotal roles in fostering global research partnerships.

Furthermore, European countries such as France, Spain, and Germany are also present in the co-authorship network, albeit with lower document counts but meaningful citation numbers, signifying their participation in this research area. France and Spain, with total link strength scores of 26 and 24 respectively, suggest active engagement in collaborative projects, likely with Middle Eastern and North African countries. The data indicates a diverse and interconnected international research landscape, with Middle Eastern and North American

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031
countries leading, and European nations contributing through collaborative efforts. This global network underscores the importance of cross-country partnerships in advancing understanding of Arabic language research in Malaysia, fostering a rich exchange of ideas and expertise across borders.

Conclusion

The objective of this study was to examine the research landscape surrounding the Arabic language and its intersection with social media in the Malaysian context using a bibliometric approach. This investigation sought to identify trends in subject productivity, influential publications, contributing countries, keyword patterns, and collaboration networks within the field. The analysis of 852 articles retrieved from the SCOPUS database, covering the period from 2014 to 2023, revealed several important findings. Social Sciences, Arts and Humanities, and Computer Science emerged as the most active disciplines, reflecting both the cultural and technological dimensions of the topic. Malaysia ranked among the top contributors globally, while Saudi Arabia, Jordan, and the United States demonstrated strong research output and collaborative engagement. Thematic analysis through keyword co-occurrence highlighted areas such as Arabic natural language processing, machine learning, Arabic sign language, and pedagogical applications in second-language acquisition. These findings indicate a growing interdisciplinary interest in Arabic language studies, especially within digital communication environments. This research provides a valuable contribution by mapping the scholarly evolution of Arabic language discourse in a digital age, offering strategic insights for academic institutions, language educators, and technology developers.

In practical terms, the results may inform the design of future language programs, the integration of Arabic in digital learning platforms, and policy development in language education. However, certain limitations should be acknowledged, including the exclusive reliance on English-language articles and SCOPUS-indexed sources, which may exclude relevant regional contributions. Future studies could expand the scope to include multilingual databases and alternative bibliometric techniques. Overall, this study affirms the value of bibliometric analysis in tracking scholarly dynamics, highlighting emerging themes, and supporting evidence-based decisions in Arabic language education and digital communication research.

Acknowledgements

The authors would like to express their sincere appreciation to the Research Management and Innovation Centre (RMIC), Universiti Islam Antarabangsa Tuanku Syed Sirajuddin (UNISIRAJ) for their invaluable support and guidance in encouraging academic staff to enhance their scholarly writing. Special thanks are also extended to our colleagues from the Faculty of Islamic Studies and Faculty of of Muamalat and Islamic Finance for their continuous encouragement and motivation throughout the completion of this paper. Jazakum Allahu khayran.

References

A. Rahman, N. A., Hj. Hassan, M. S., Osman, M. N., & Waheed, M. (2017). Research on the state of social media studies in Malaysia: 2004-2015. Jurnal Komunikasi: Malaysian Journal of Communication, 33(4), 38–55. https://doi.org/10.17576/JKMJC-2017-3304-03

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031
Ali., A.S.S., Alduagishi, & S.S.A. (2024). The Islamic Dimension in The National Identity of The Malay Language. Global Journal Al-Thaqafah, 2024.

Al-Khoury, A., Hussein, S. A., Abdulwhab, M., Aljuboori, Z. M., Haddad, H., Ali, M. A., Abed, I. A., & Flayyih, H. H. (2022). Intellectual Capital History and Trends: A Bibliometric Analysis Using Scopus Database. Sustainability (Switzerland), 14(18). https://doi.org/10.3390/su141811615

Al-Moslmi, T., Albared, M., Al-Shabi, A., Omar, N., & Abdullah, S. (2018). Arabic senti-lexicon: Constructing publicly available language resources for Arabic sentiment analysis. Journal of Information Science, 44(3), 345–362. https://doi.org/10.1177/0165551516683908

Alves, J. L., Borges, I. B., & De Nadae, J. (2021). Sustainability in complex projects of civil construction: Bibliometric and bibliographic review. Gestao e Producao, 28(4). https://doi.org/10.1590/1806-9649-2020v28e5389

Aly, S., & Aly, W. (2020). DeepArSLR: A novel signer-independent deep learning framework for isolated arabic sign language gestures recognition. IEEE Access, 8, 83199–83212. https://doi.org/10.1109/ACCESS.2020.2990699

Appio, F. P., Cesaroni, F., & Di Minin, A. (2014). Visualizing the structure and bridges of the intellectual property management and strategy literature: a document co-citation analysis. Scientometrics, 101(1), 623–661. https://doi.org/10.1007/s11192-014-1329-0

Assyakur, D. S., & Rosa, E. M. (2022). Spiritual Leadership in Healthcare: A Bibliometric Analysis. Jurnal Aisyah : Jurnal Ilmu Kesehatan, 7(2). https://doi.org/10.30604/jika.v7i2.914

di Stefano, G., Peteraf, M., & Veronay, G. (2010). Dynamic capabilities deconstructed: A bibliographic investigation into the origins, development, and future directions of the research domain. Industrial and Corporate Change, 19(4), 1187–1204. https://doi.org/10.1093/icc/dtq027

Eltahir, M. E., Alsalhi, N. R., Al-Qatawneh, S., AlQudah, H. A., & Jaradat, M. (2021). The impact of game-based learning (GBL) on students' motivation, engagement and academic performance on an Arabic language grammar course in higher education. Education and Information Technologies, 26(3), 3251–3278. https://doi.org/10.1007/s10639-020-10396-w

Fahimnia, B., Sarkis, J., & Davarzani, H. (2015). Green supply chain management: A review and bibliometric analysis. In International Journal of Production Economics (Vol. 162, pp. 101–114). https://doi.org/10.1016/j.ijpe.2015.01.003

Gu, D., Li, T., Wang, X., Yang, X., & Yu, Z. (2019). Visualizing the intellectual structure and evolution of electronic health and telemedicine research. International Journal of Medical Informatics, 130. https://doi.org/10.1016/j.ijmedinf.2019.08.007

Ibrahim, M. H., & Rahman, A. K. A. (2018). Teaching of arabic in Malaysia. Intellectual Discourse, 26(1), 189–206. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85049138483&partnerID=40&md5=8bb7ebb289744388701b4d673f4b96f4

Ibrahim, N. B., Selim, M. M., & Zayed, H. H. (2018). An Automatic Arabic Sign Language Recognition System (ArSLRS). Journal of King Saud University - Computer and Information Sciences, 30(4), 470–477. https://doi.org/10.1016/j.jksuci.2017.09.007

Ismail, W., Zailani, M. A., Awad, Z. A. M., Hussin, Z., Faisal, M., & Saad, R. (2017). Academic and social media practices of arabic language among malaysian students. Turkish Online Journal of Educational Technology, 16(3), 1–10. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85025112969&partnerID=40&md5=5358ca839153301e7173af9e1f3deedd

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 474-487
DOI: 10.35631/IJMOE.726031
Kamruzzaman, M. M. (2020). Arabic Sign Language Recognition and Generating Arabic Speech Using Convolutional Neural Network. Wireless Communications and Mobile Computing, 2020. https://doi.org/10.1155/2020/3685614

Khiste, G. P., & Paithankar, R. R. (2017). Analysis of Bibliometric term in Scopus. International Research Journal, 01(32), 78–83.

Larabi Marie-Sainte, S., Alalyani, N., Alotaibi, S., Ghouzali, S., & Abunadi, I. (2019). Arabic natural language processing and machine learning-based systems. IEEE Access, 7, 7011–7020. https://doi.org/10.1109/ACCESS.2018.2890076

Muhamad, I., Yusof, C. M. Z., & Mat, A. C. (2016). Preserving the use of arabic words in the malay language. Social Sciences (Pakistan), 11(18), 4432–4434. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84998849967&partnerID=40&md5=21d90a696e112d981ae5c422bc20cbf0

Oueslati, O., Cambria, E., HajHmida, M. B., & Ounelli, H. (2020). A review of sentiment analysis research in Arabic language. Future Generation Computer Systems, 112, 408–430. https://doi.org/10.1016/j.future.2020.05.034

Sukiman, U., Zainuddin, G., & Ramlan, S. R. (2023). ARABIC NEOLOGISMS IN INDONESIAN AND MALAYSIAN ARABIC MEDIA. Al-Jami'ah, 61(2), 365–392. https://doi.org/10.14421/AJIS.2023.612.365-392

Tharwat, A., Gaber, T., Hassanien, A. E., Shahin, M. K., & Refaat, B. (2015). Sift-based arabic sign language recognition system. Advances in Intelligent Systems and Computing, 334, 359–370. https://doi.org/10.1007/978-3-319-13572-430

Tubaiz, N., Shanableh, T., & Assaleh, K. (2015). Glove-Based Continuous Arabic Sign Language Recognition in User-Dependent Mode. IEEE Transactions on Human-Machine Systems, 45(4), 526–533. https://doi.org/10.1109/THMS.2015.2406692

Van Eck, N. J., & Waltman, L. (2007a). Bibliometric mapping of the computational intelligence field. International Journal of Uncertainty, Fuzziness and Knowldege-Based Systems, 15(5), 625–645. https://doi.org/10.1142/S0218488507004911

Van Eck, N. J., & Waltman, L. (2007b). Bibliometric mapping of the computational intelligence field. International Journal of Uncertainty, Fuzziness and Knowldege-Based Systems, 15(5), 625–645. https://doi.org/10.1142/S0218488507004911

van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. Scientometrics, 84(2), 523–538. https://doi.org/10.1007/s11192-009-0146-3

Verbeek, A., Debackere, K., Luwel, M., & Zimmermann, E. (2002). Measuring progress and evolution in science and technology - I: The multiple uses of bibliometric indicators. International Journal of Management Reviews, 4(2), 179–211. https://doi.org/10.1111/1468-2370.00083

Wahab, K. A. (2018). Communicative features and functions of Sabahan Malay on social media. Jurnal Komunikasi: Malaysian Journal of Communication, 34(4). https://doi.org/10.17576/JKMJC-2018-3404-04

Wu, Y. C. J., & Wu, T. (2017). A decade of entrepreneurship education in the Asia Pacific for future directions in theory and practice. In Management Decision (Vol. 55, Issue 7, pp. 1333–1350). https://doi.org/10.1108/MD-05-2017-0518

Zakariah, M., Alotaibi, Y. A., Koundal, D., Guo, Y., & Mamun Elahi, M. (2022). Sign Language Recognition for Arabic Alphabets Using Transfer Learning Technique. Computational Intelligence and Neuroscience, 2022. https://doi.org/10.1155/2022/4567989