

Mapping the Evolution of Arabic Language Education Research through Bibliometric Analysis in the Scopus Database (1980-2023)

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Abstract

Objective: The objective of this research is to analyze the evolution and trends in Arabic Language Education Research as documented in Scopus-indexed publications.

Methodology: A bibliometric analysis approach was employed to investigate publications on Arabic Language Education within the Scopus database, spanning the period from 1980 to 2023. The analysis involved utilizing Excel and R/R-Studio, with VOSviewer employed for visualizing the co-occurrence of keywords and document citations. A total of 576 publications meeting specified criteria were identified.

Findings: The study reveals an annual growth rate of 9.26%, reaching its peak in 2021 with the highest number of publications on Arabic Language Education. The United States, particularly with affiliations from the International Islamic University Malaysia, emerges as the leading contributor to these publications. Notably, Shohamy, E stands out as the most prolific author in the field.

Implications/Novelty/Significance: This research provides a concise overview of the literature available to educators and researchers in the field of education, offering insights and recommendations for future research endeavors.

Keywords: Education, Arabic, Speech, Linguistics, Translation, Bilingualism.

Introduction

Arabic is one of the world's languages (Halabi, 2022; Saxena, 2011) that has experienced social development (Aroshidze & Aroshidze, 2021) society (Amara, 2021) and science (Summers et al., 2019). Arabic in historical (Bahry & Olimnazarova, 2023; Benrabah, 2007) studies belongs to the Semitic language family (Eviatar et al., 2018) that is, the language families spoken by the peoples living around the Tigris and Furat rivers, the plains of Syria and the Arabian Peninsula (Middle East) (Abdelhay et al., 2016; Razem & Pandor, 2023; Ritonga et al., 2020).

Mastery of Arabic is very important. Learning Arabic is a religious (Moore, 2016) obligation (Kamarul, 2015). Because being able to understand Arabic is a requirement and tool to be able to understand the teachings of Islam well. Gillaby said that Arabic is words expressed in Arabic with a specific purpose (Amayreh, 2003) and delivered orally and is the language of the Quran (Anwar et al., 2021), some hadiths (Sulistio et al., 2023), and some poems made by the Arabs.

Therefore, Arabic language learning especially at the education unit level is an important part in expanding students' understanding of the Arabic language and the richness (Paradis et al., 2020) of Islamic culture (Fean, 2012). Effective learning methods can help students develop four skills (Muhamad et al., 2013) important in language ('anashirul lughoh); hearing (Amayreh, 2003), speaking (Amniana & Gadour, 2007; Maluch et al., 2015; Mashaqba et al., 2020; Ritonga et al., 2022; Sarid et al., 2022; Suárez, 2016), reading (Abu-Rabia, 2005; Al Mamouri et al., 2020; Alotaibi et al., 2019; Bensoussan, 2009; Sarid et al., 2022), and writing (Abu-Rabia, 2005; Al-Ali, 2006) in Arabic.

This study delves into the evolution of Arabic Language Education Research, a pivotal area considering the language's cultural, religious (García-Sánchez, 2010; Kamarul, 2015; Moore, 2016), and historical significance. It explores the growth trajectory from 1980 to 2023, capturing vital data about publications in Scopus. By focusing on Arabic Language Education, the study examines the methodologies and educational techniques crucial in enhancing students' grasp (Shendy, 2019) of the language, including its religious and cultural dimensions.

Previous research by scholars like Aroshidze & Aroshidze (2021), Eviatar et al. (2018), Abdelhay et al. (2016), Razem & Pandor (2023), Ritonga et al. (2020), and Kamarul (2015) has laid the foundation for understanding the social, historical, and religious importance of Arabic language education. These works form the backdrop against which this study explores the trends and development (Soliman & Khalil, 2022) in Arabic Language Education Research.

This study's novelty lies in its comprehensive analysis of Arabic Language Education Research, utilizing bibliometric techniques to uncover patterns, trends, and prolific contributors. By highlighting the growing annual rate (9.9%) and

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pinpointing significant years like 2021 with a high number of publications, the study offers fresh insights into the field's evolution. Furthermore, the examination of effective learning methods, especially the comparison between book-based and multimedia-based approaches, adds an innovative dimension, addressing the contemporary challenges in language education.

Literature Review

The literature review establishes the foundation for this study. Prior research by Aroshidze & Aroshidze (2021) and Kamarul (2015) emphasizes the religious obligation of learning Arabic due to its integral role in understanding Islam. Eviatar et al. (2018) and Abdelhay et al. (2016) contribute insights into Arabic's historical and linguistic significance. Additionally, works by Razem & Pandor (2023) and Ritonga et al. (2020) provide context about the broader social and cultural aspects of Arabic language education.

Method

This study employed bibliometric analysis techniques, utilizing the Boolean search engine to extract data from the Scopus database spanning the period 1980 to 2023. The investigation was initiated on August 05, 2023, at 09:30 WIB. The researchers utilized a suite of tools including R, RStudio, VOSviewer, and Microsoft Excel to perform tasks such as citation analysis, examination of document content, and networking. The research process unfolded in three distinct stages.

In the initial stage, a literature review was conducted on relevant themes to ensure alignment with bibliometric topics. This review also aided in identifying suitable keywords, defining the research scope, and employing boolean operators (TITLE-ABS-KEY: "LANGUAGE AND ARABIC AND EDUCATION") for a Scopus search, yielding 1,508 documents. Subsequently, a filtration process using boolean operators (LIMIT-TO (SUBJAREA, "soci")) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "english")) AND (LIMIT-TO (SRCTYPE, "j")) narrowed down the results to 571 final documents within the subject area of Social Science, specifically articles, sourced exclusively from journals, and in English.

During the third stage, a comprehensive analysis was carried out on the final set of documents utilizing Scopus analyzer, R, and RStudio. This analysis aimed to extract key statistics regarding the number of documents per year and their distribution across various journals, authorship details, affiliations, countries, and subject categorization. Additionally, a network-level analysis of documents was performed, visualized through VOSviewer and processed using Microsoft Excel. The research procedure is illustrated in Figure 1 below.

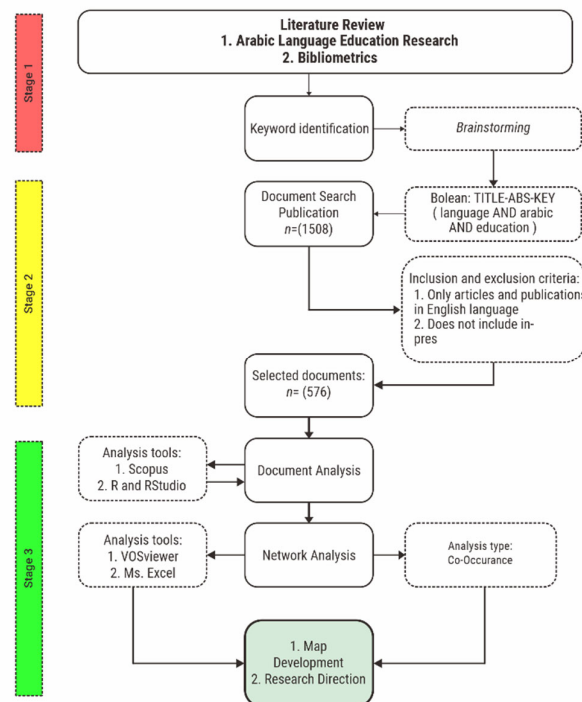


Figure 1. Research Work Flow

Results And Discussion

Document Analysis

Table 1 furnishes a summary of 571 documents amassed over a span of 43 years. The compilation involves 1278 authors, among whom 212 are sole authors, reflecting an international authorship collaboration rate of 18.21%. The collected documents encompass a total of 23671 references, with an average of 7285 citations per document.

Table 1. Document Analysis

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1980:2023
Sources (Journals, Books, etc)	328
Documents	571
Annual Growth Rate %	9,9
Document Average Age	6,18
Average citations per doc	7,285
References	23671
DOCUMENT CONTENTS	
Keywords Plus (ID)	752
Author's Keywords (DE)	1799
AUTHORS	
Authors	1278
Authors of single-authored docs	203
AUTHORS COLLABORATION	
Single-authored docs	212
Co-Authors per Doc	2,45
International co-authorships %	18,21
DOCUMENT TYPES	
article	571

Documents By Year

Figure 2 shows the progress of publications in the theme of Arabic language education by year. Documents appeared since 1980 with 1 document, Publications with the theme Arabic Language Education stagnated from 1980 to 2008, The peak of publications was experienced in 2022 with 86 documents.

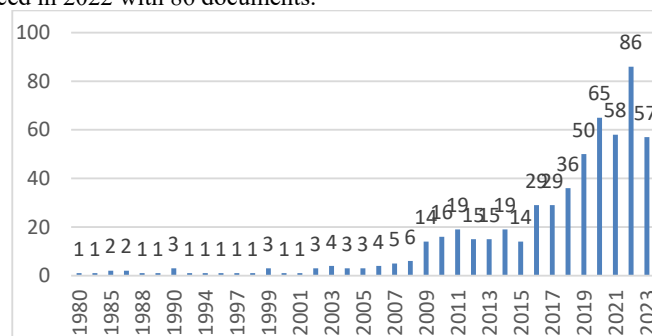


Figure 2. Graphic of Documents Over the Years

Most Relevant Authors

Figure 3 shows the ten most influential authors in publications on Arabic Language Education. Shohamy, E leads with 6 publications, followed by Amara, M, Ritonga M, and Schwartz, M with 5 documents each. Continued by Tannenbaum, M with the same number of documents as many as 4 documents, and followed by 4 other researchers including Al-Qatawneh, S. Asfaha, Y.M., Deeb, I., Dubiner, D., Ghani, M.T.A. with the same number of documents, namely 3 documents each.

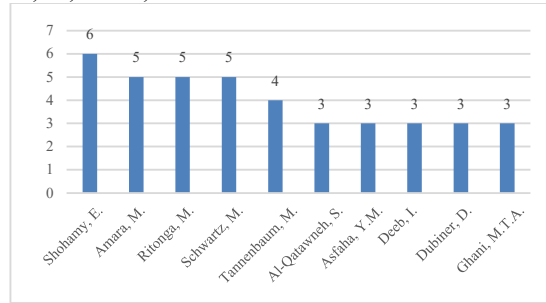


Figure 2. Graphic of most relevant authors

Documents By Affiliation

Figure 3 illustrates the number of documents published by the top 10 influential affiliations in the field of Arabic Language Education. The University of Haifa and The University of Jordan, Both are leading with 14 publications each, followed by Tel Aviv University have 13 publications. The other affiliations have between 8 and 11 publications each. The graph indicates the relative productivity and impact of different affiliations in the field of Arabic Language Education.

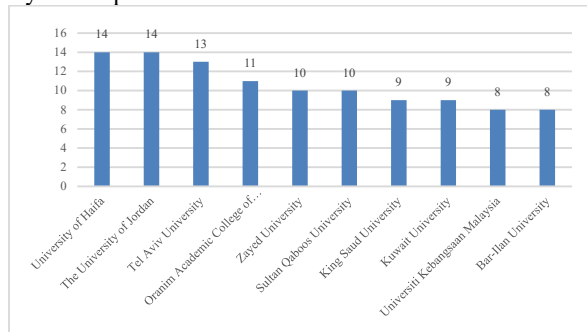


Figure 3. Graphic of Documents by affiliation

Documents By Country

Figure 4 shows publications by country with the theme Arabic Language Education. The US led publications with 84 documents. Israel followed with 61 documents. Asian countries lead with representation from 6 nations, followed by European countries in the second position. This indicates a prevalence of research focused on Arabic Language Education conducted by countries in the Asian continent.

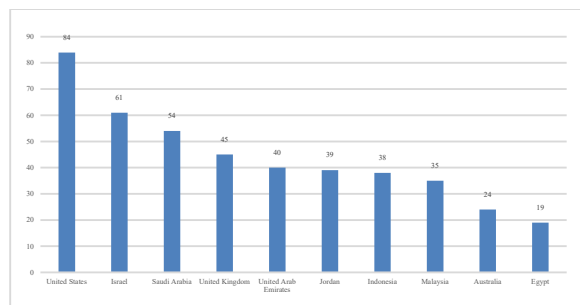


Figure 4. Graphic of Documents by country

Documents By Source

Figure 5. shows a publication based on sources with the theme Arabic Language Education. "Family Planning Prespective" led the publication with a total value of 65. Followed by "Religions" with value 53.

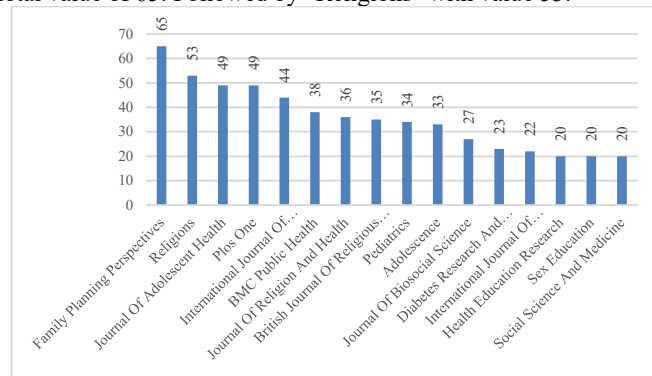


Figure 5. Graphic of Documents by source

Three Field Plot

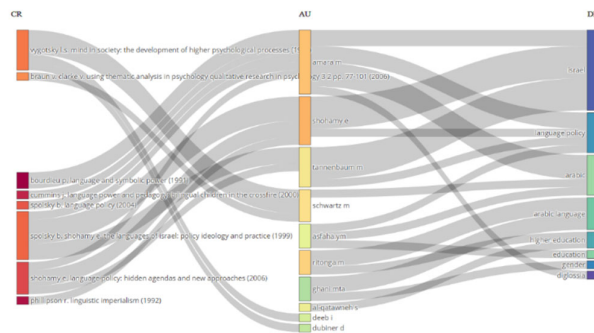


Figure 6. Three Field Plot

Figure 5 has three components: references, author name and keyword. They are joined by gray lines that show the connections among them. The journal name indicates which authors frequently contribute to their publications, especially on the topic of Arabic Language Education.

The plot size reflects the relevance of the publication to the topic. There are 8 journals in the picture. The one that has the most research on Arabic Language Education is "The Languages of Israel: Policy ideology and Practice", which is shown in dark red and linked to authors like Amara M, Shohamy E, and Tannenbaum M.

Corresponding Author's Countries

The largest SCP is found in the state of Israel with 3 documents, followed by the USA with 11 documents, and the United Kingdom (UK) with 9 documents. The largest MCP is in the United Kingdom (UK) with a total MCP of 11 documents, then followed by the USA with 9 MCPs, then Saudi Arabia with a total of 8 MCPs. From this it can be concluded that the highest SCP was achieved by the state of Israel located on the Asian continent, while the highest MCP was achieved by two countries from the American continent.

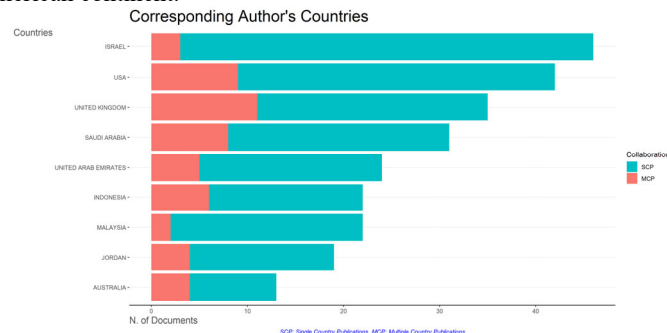


Figure 7. Corresponding Author's Countries

Most Global Cited Document

Barak M, 2016, Comput Educ is the most cited document with a total of 219 citations, as well as the highest total citations per year achieved by him. In this study, total citations do not always affect the total citations per year (TC per year), nor does the year of publication always affect the number of documents cited each year.

Tabel 2. Most Global Cited Document

Paper	Total Citations	TC per Year	Normalized TC
Barak M, 2016, Comput Educ	219	27,38	17,26
Domahs F, 2010, Cognition	158	11,29	7,18
Rahman Tta, 2009, Geriatr Gerontol Int	147	9,80	6,14
Belhiah H, 2015, Lang Policy	128	14,22	6,12
Findlow S, 2006, Br J Sociol Educ	96	5,33	2,78
Alqahtani M, 2015, Turk Onl J Edu Tech	65	7,22	3,11
Al-Khaledi M, 2009, J Fluency Disord	65	4,33	2,72
Wagner Da, 1989, Appl Psycholinguist	62	1,77	1,00
Suliman Wa, 2007, Nurse Educ Today	61	3,59	2,33
Sovacool Bk, 2012, Environ Sci Policy	58	4,83	5,54

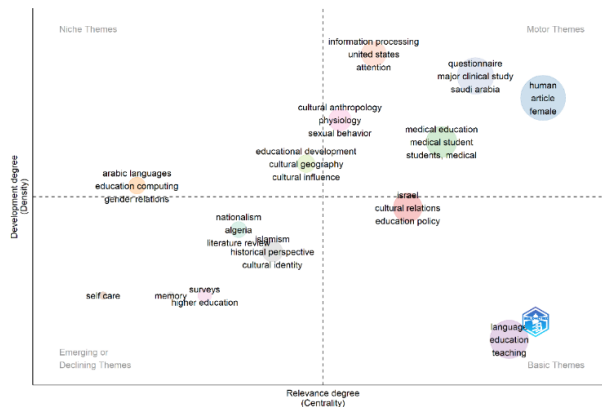


Figure 8. Corresponding Author's Countries

The theme map seen in Figure 4.1. consists of Basic Themes, Motor Themes, Niche Themes, Emerging or Declining Themes. Basic themes are a category that includes the basic themes of existing research, in the data provided, the "Language" cluster (Cluster 1) Basic themes are often the main focus of research that gets widespread attention from researchers.

Motor Themes: These are pivotal themes driving research development. For instance, the "Human" cluster (Cluster 4) exemplifies this concept within the dataset. Entrepreneurship is an actively researched theme that significantly influences the trajectory of entrepreneurship-related studies. These themes shape the evolution of research and publications over time.

Niche Themes: These themes are more specific and specialized compared to basic and motor themes. The "Labor Market" cluster (Cluster 6) in this dataset is an example of a niche theme. Themes like the labor market and women's status fall into this category due to their limited research volume or relevance to specific groups of researchers.

Emerging or Declining Themes: This category encompasses themes that are either gaining or losing popularity in research and publications. In this dataset, the "Curriculum" theme (Cluster 3) is emerging, signified by its substantial occurrences, although not as prominent as "Education" (Cluster 1) or "Entrepreneur" (Cluster 4). Conversely, themes like "Human" (Cluster 5) and "Labor Market" (Cluster 6) are declining, as the number of related studies or publications is diminishing.

Through this classification analysis, we gain insights into the distribution and trends of themes in existing research or publications. This categorization aids in identifying dominant themes, emerging topics, and themes warranting further attention and research within specific fields.

Network Analysis

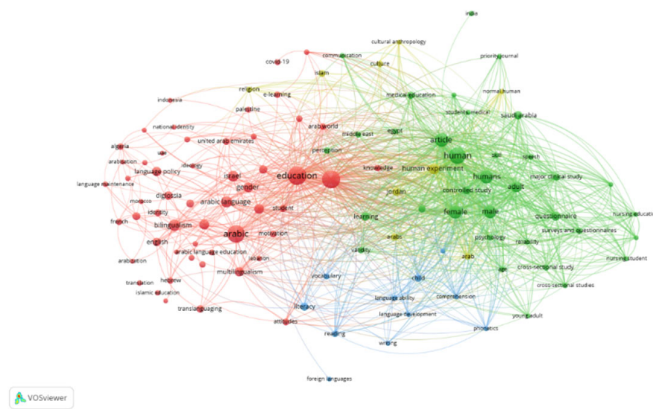


Figure 9. Network Analysis

The picture above is a occurrence analysis of research on *Arabic Language Education*, with a minimum cluster size of 9) with 4 clusters with the following details: Cluster 1 (54 items), Cluster 2 (35 items) Cluster 4 (11 items), Cluster 4 (9 items). The keyword "Education" is the dominating keyword with a total of 1742 strength links.

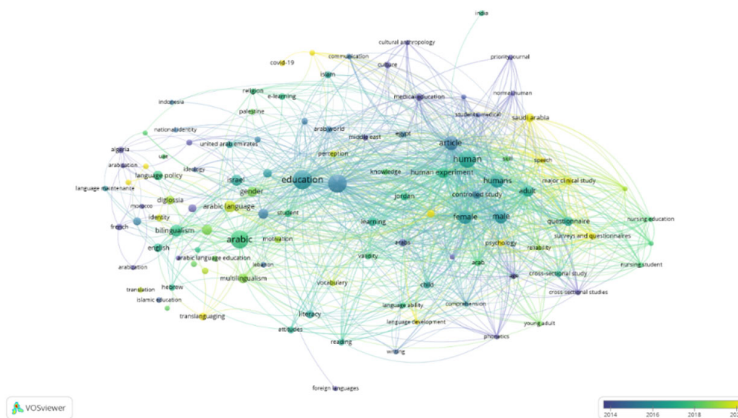


Figure 10. network analysis based on an overlay

The Figure above shows a keyword network analysis based on an overlay. It can be seen that the keywords covid 19, Language use, Language education, Translanguaging, and Social media are keywords with usage in the latest year. While the keywords priority journal, phonetics and foreign language are keywords with relatively long usage ranging from 2009-2010.

The keywords that have the highest density or are most often researched are "Education", "language", "arabic", "article", "human". While the keywords "Foreign language", "Indonesia" and "India are keywords that are rarely researched.

Tabel 3. Occurrenceance in each cluster

	keyword	occurrences	cluster
1.	Education	70	
2.	Language	67	
3.	Arabic	64	1
4.	Bilingualim	26	
5.	Teaching	20	
1.	Human	55	
2.	Article	38	
3.	Adult	24	2
4.	Questionnaire	16	
5.	Saudi Arabia	14	
1.	Literacy	13	
2.	Child	10	
3.	Reading	8	3
4.	Vocabulary	7	
5.	Writing	5	
1.	Human Experiment	23	
2.	Islam	10	
3.	Arab	8	4
4.	Cultur	8	
5.	Religion	7	

The table above shows the occurrenceance in each cluster that represents the main theme in the field of research in the field of Arabic Language Education, the theme in the first cluster is Education of Teaching Arabic Language, the theme in the second cluster is Article of Human in Saudi Arabia. The theme in the third cluster is Child reading and Writing Vocabulary, and the theme in the fourth cluster is Islamic culture and religion in Arabic.

Conclusion

Publications with the theme of Arabic language education experienced a peak in 2022 with a total of 86 documents. The most relevant author is Shohamy, E with 6 published documents. The affiliation with the most publications is the University of Haifa & University of Jordan with 14 documents each. The country with the most publications is the United States (US) with 84 documents. Israel followed with 61 documents. The largest MCP is the state of Israel. Barak M, 2016, Comput Educ is the most cited document with a total of 219 citations, as well as the highest total citation per year achieved by him with a TC per year of 27.38 times. The basic theme in the research "Arabic Language Education" is "Language". The keyword "Education" is the dominating keyword with a total of 1742 strong links.

Limitations This study only explores data sets indexed by Scopus and only analyzes documents with English-language journal article types without considering other global indexation, languages, and document types other than articles.

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