

# Language Maintenance Among Minority Groups in Malaysia: A Bibliometric Analysis

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**Abstract:** The academic field of language maintenance refers to the study of approaches used to preserve minority languages. Malaysia is a multicultural nation comprising various ethnic groups that utilise distinct languages. The Malaysian language serves as the national language, while English is the widely utilised second language; however, some minority groups continue to maintain their heritage languages. The issue of language maintenance is discussed in a variety of research studies that fall under the umbrella of sociolinguistics. This study aims to investigate the scientific output on language maintenance through a bibliometric analysis of Scopus-indexed papers. There are a total of 781 scholarly papers included in the selected sample. The data that were produced from bibliometric analysis reveal that there has been a steady rise in publishing, journals of publication, the organisations and nations that have the greatest publication rates, and the works that are referred to the most frequently. Although language maintenance is now a physical reality, our study reveals that there is still room for improvement in terms of the quality of publications.

**Keywords:** Bibliometric, language, maintenance, shift, sociolinguistics

## Introduction

The term "language maintenance" refers to the efforts made by a language group to protect their native tongue, especially in multilingual contexts where the dominating language could eventually replace it. The gradual replacement of a community's native language with a foreign one is known as a language shift, and according to Fishman (1990), language maintenance includes deliberate efforts to slow this process. These efforts are critical to preserving cultural diversity, linguistic variety, and the distinct worldviews that each language represents. Several techniques can be used to safeguard endangered languages, such as family interaction and involvement, positive attitude towards the native language, the degree and frequency of contact with the homeland, and strong institutional support (Holmes, 2013) Mostefa (2017) defined language maintenance as the retention of a minority language despite regular interaction with the dominant language.

The preservation of minority languages is a pressing issue in the field of language maintenance, and it is the enormous challenge of preserving minority languages in the face of globalisation and the dominance of mainstream national languages. According to UNESCO (2016), many indigenous languages are among the approximately 40% of the world's languages that are in danger of becoming extinct. Countries like North America, Australia, and parts of Africa and Asia where colonial languages were once widely spoken have seen a particularly steep decline in the use of those languages. According to Ong and Said (2021) when a language dies out, the unique cultural knowledge and viewpoints closely

related to that language also die. Underfunding and a lack of official support for many Indigenous languages only make the situation worse. As pointed out by Ong (2021), many Indigenous communities encounter difficulties in maintaining their languages due to a lack of funding for language programs, educators who are not adequately trained, and a scarcity of educational resources. When governments prioritise using dominant national languages in public and educational settings, the situation is often made worse. For instance, Bahasa Minangkabau is the medium of communication between 8.5 million people in West Sumatra, Indonesia (Susi & Saifullah, 2020), however, in Malaysia, Bahasa Malaysia and English are used as a medium of communication among its multilingual communities (Muthusamy & Farashaiyan, 2016). The Minangkabau language in Malaysia is only spoken in some parts of Malaysia, especially in Negeri Sembilan, it is not used as the language of education, employment and any formalities in Malaysia. Therefore, the Minangkabau language is considered a minority language, based on Holmes (2013) who states that when the heritage language is not used in many domains; family, friendship, religion, education and employment, it falls under the minority language.

### *Language maintenance among minority groups in Malaysia*

The linguistic diversity in Malaysia serves as evidence of its multicultural society, characterized by the coexistence of multiple ethnic groups, each possessing its distinct language or dialect. The national language, Malay (Bahasa Malaysia), functions as a unifying medium; however, the government acknowledges the significance of upholding distinct languages to safeguard the cultural identities of its diverse communities (Prime Minister's Office of Malaysia, 2023). Linguistic preservation holds significant importance for minority communities, including the Chinese, Indians, and indigenous populations, who rely on languages such as Mandarin, Tamil, and diverse indigenous dialects. The Malaysian education system facilitates this objective by providing vernacular education in designated national schools, thereby enabling children to acquire proficiency in their native languages in addition to Malay and English (Muthusamy & Farashaiyan, 2016). Likewise, the Orang Asli or the indigenous people in Malaysia, mostly speak the Aslian language, and some of them speak the Austronesian Malay language from the neighbouring country. The attempts to regulate proficiency in the Aslian language are advancing, especially with electronic databases such as E-MELD, DoBES, OLAC, and SEALang, which have facilitated the archiving of recordings of Aslian languages, among other languages. These information management databases have the potential to enhance the preservation of the Aslian language (Intan Suzila & Yusri, 2016).

Nevertheless, the preservation of language in Malaysia encounters substantial obstacles. The decline in the utilisation of minority languages, particularly among the younger demographic, can be attributed to urbanisation, globalisation, and the growing prevalence of English as a global language. A significant number of young Malaysians, particularly those residing in urban regions, tend to prioritise Malay and English languages to enhance their social mobility and access to economic prospects (Ong & Said, 2021). This inclination has resulted in the gradual decline of minority languages. The aforementioned phenomenon is observable within the Orang Asli and indigenous communities residing in East Malaysia, wherein their languages face the imminent threat of extinction as a result of inadequate transmission to subsequent generations (Ghani, 2015).

In Malaysia, language maintenance among minority groups is a crucial issue, as linguistic diversity is deeply tied to cultural identity. The country's minority communities, including the Chinese, Indian, and various indigenous groups, each possess distinct languages and dialects that are integral to their cultural heritage (Ong & Said, 2021; Ghani, 2015). The challenges of language maintenance are particularly among indigenous groups, whose languages are often at risk of extinction. Many Indigenous languages are not transmitted to younger generations, primarily due to socio-economic factors and the migration of younger people to urban areas where Malay and English are more commonly used. To address these challenges, initiatives such as language documentation projects and community-driven language revitalisation efforts have been implemented, aiming to preserve and promote the use of these endangered languages. Schools in Malaysia also put effort into maintaining diverse ethnicities living in Malaysia. To celebrate diversity, the Malaysian Government decided to establish an independent vernacular school. The primary purpose of these vernacular schools is to preserve the culture and heritage of the minority community through generations (Centre for Public Policy Studies, Kuala Lumpur, 2012). For instance, the vernacular Tamil schools in Malaysia teach the

Tamil language to their students as a subject. This language is assessed in examinations such as the Lower Secondary Examination, School Examination Certificate (O level) and Higher School Examination (SPM). Aside from that, the Tamil language has also been taught as a Major and Minor course in universities for the tertiary level. The Tamil language is also offered as alternative proficiency courses in many Malaysian public universities (Muthusamy & Farashaiyan, 2016).

Holmes (2013) states that when the heritage language is not used in many domains, family, friendship, religion, education and employment, it falls under the minority language. The Minangkabau community in Malaysia originated from Sumatra, Indonesia. During the 15th and 16th centuries, some of the Indonesian traders from Sumatra Indonesia settled down within the compound of Malacca, which has been renamed as Negeri Sembilan (Susi & Saifullah, 2020). These people started to mingle with others and expand their culture. Nowadays, the Minangkabau descendants are already scattered all around Malaysia. Some of them still maintain their culture and tradition, while some have forgotten their roots. Thus this paper intends to explore the study of language maintenance from the year 2019 to 2024. This paper employs bibliometric analysis as the research method to thoroughly examine the global issue of language maintenance. This will assist subsequent research in identifying gaps for future investigations. Given the extensive nature of language maintenance, it is essential to emphasise the prevailing trends in this field of study. Donthu, Kumar, Mukherjee, Pandey, and Lim (2021) emphasised that well-executed bibliometric studies can establish robust foundations for the advancement of a discipline in innovative and significant manners—it facilitates scholars to (1) obtain a comprehensive overview, (2) identify knowledge problems, (3) generate original research ideas, and (4) situate their prospective contributions within the field. This paper aims to explore the global study of language maintenance through a bibliometric analysis, in light of Malaysia's emphasis on its importance.

The objective of this bibliometric study is to comprehensively examine the existing body of research on language maintenance to address the aforementioned issues. More precisely, the objectives of this research are:

1. to investigate the trends in language maintenance according to the year of publication
2. to identify the most cited authors
3. to observe the authors' affiliated organisations, and countries
4. to identify authors who write the most cited articles
5. to analyse the co-occurrence of research themes in language maintenance
6. to explore the co-authorship between countries in language maintenance.

## **Methodology**

Bibliometrics involves the collection, management, and analysis of bibliographic data obtained from scientific publications (Verbeek et al., 2002). In addition to basic descriptive statistics such as publication journals, publication year, and primary author classification (Wu and Wu, 2017), it also encompasses sophisticated methodologies like document co-citation analysis. An uninterrupted series of relevant keywords, literature examination, and analysis are essential for an effective literature review, bibliography compilation, and dependable outcomes, respectively (Fahimnia et al., 2015). The subsequent sections address search term adoption, preliminary search result evaluation, and search result refinement. Journals that denote the Clarivate Analytics Journal Citation Reports (JCR) impact factor signify superior journal quality (Meier, 2011). The study aimed to confine its scope to premier publications to attain a theoretical comprehension of the research domain's evolution. Consequently, the study gathered data from the Scopus journal database. Moreover, to guarantee the incorporation of high-calibre publications, only articles published in rigorously peer-reviewed academic journals were deemed relevant, while books and conference proceedings were omitted (Liu et al., 2015).

### *Data search strategy*

The study used a screening sequence to identify search terms for article retrieval. The study began by querying the Scopus database using TITLE-ABS-KEY (language AND maintenance), PUBYEAR >

2019, and PUBYEAR < 2025. AND (LIMIT-TO (SUBJAREA, "ARTS") OR LIMIT-TO (SUBJAREA, "SOCI")) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English")), resulting in a total of 1003 articles. The query string was then revised so that the search terms "language maintenance" or "minority language maintenance" focused on the minority's use of their native language. This process yielded 781 results, which were further scrutinised to include only research articles in English, with article reviews excluded. The final search string refinement yielded 722 articles that were used for bibliometric analysis. As of August 2024, the study included all articles from the Scopus database that were about language and maintenance.

### Data analysis

Data sets comprising the research publication year, publication title, author name, journal, citation, and keyword in PlainText format were obtained from the Scopus database from 2019 to August 2024 and examined with VOSviewer version 1.6.15. This program was used to analyse and create maps using VOS clustering and mapping algorithms. VOSViewer is an alternative to the Multidimensional Scaling (MDS) approach (Van Eck and Waltman, 2010), and it is similar to the MDS approach in terms of its goal, which is to place items in a low-dimensional area so that the relatedness and similarity of any two items are accurately reflected by the distance between them (Appio et al., 2014). Unlike MDS, which focuses on the computation of similarity measures such as Jaccard indices and cosine, VOS employs a more effective approach for normalising co-occurrence frequencies (Van Eck and Waltman, 2007), such as the association strength (AS<sub>ij</sub>), which is computed as:

$$AS_{ij} = \frac{C_{ij}}{W_{ij}}$$

This value is "proportional to the ratio between on the one hand the observed number of cooccurrences of i and j and on the other hand the expected number of co-occurrences of i and j under the assumption that co-occurrences of i and j are statistically independent" (Van Eck, and Waltman, 2010, p. 532). Thus, using this index, VOSviewer arranges things in the shape of a map after lowering the weighted total of the squared distances between all item pairings. According to Appio et al. (2014), LinLog/modularity normalisation was used. Furthermore, by applying visualisation techniques using VOSviewer to the data set, patterns based on mathematical correlations were discovered, and studies such as keyword co-occurrence, citation analysis, and co-citation analysis were done.

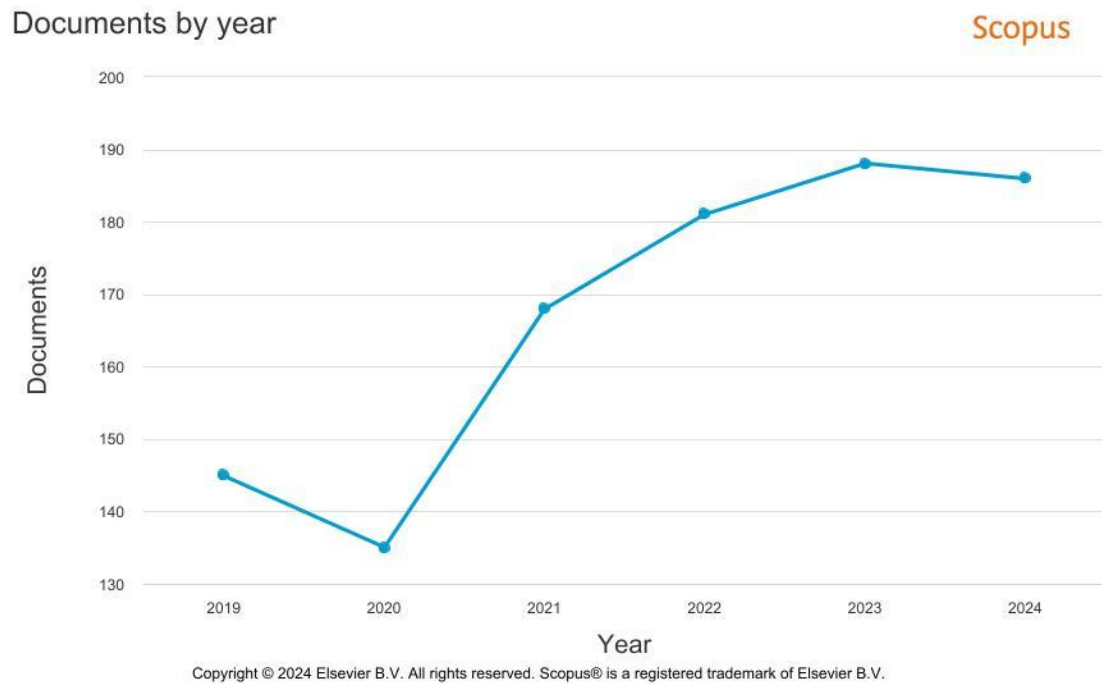
## Findings

### Research Question 1:

*What are the research trends in language maintenance according to the year of publication?*

**Table 1.** Trend in Language Maintenance

Year	Documents
2024	186
2023	188
2022	181
2021	168
2020	135
2019	145



**Fig.1.** Trend in Language Maintenance

Figure 1 and Table 1 show the number of language maintenance published annually between 2019 and 2024. Figure 1 shows that research on language maintenance is significant and relatively stable, ranging from 145 (2019) to 186 (2024). There were 145 articles published in 2019, representing 14.45% of publications; 135 publications in 2020, representing 13.45%; 168 publications in 2021, representing 16.74%; 181 publications in 2022, representing 18.04%; 188 publications in 2023, representing 18.74%; and 186 publications in 2024, representing 18.54%. We notice that more articles were published in 2023 as compared to previous years.

## Research Question 2:

*Who are the most cited authors?*

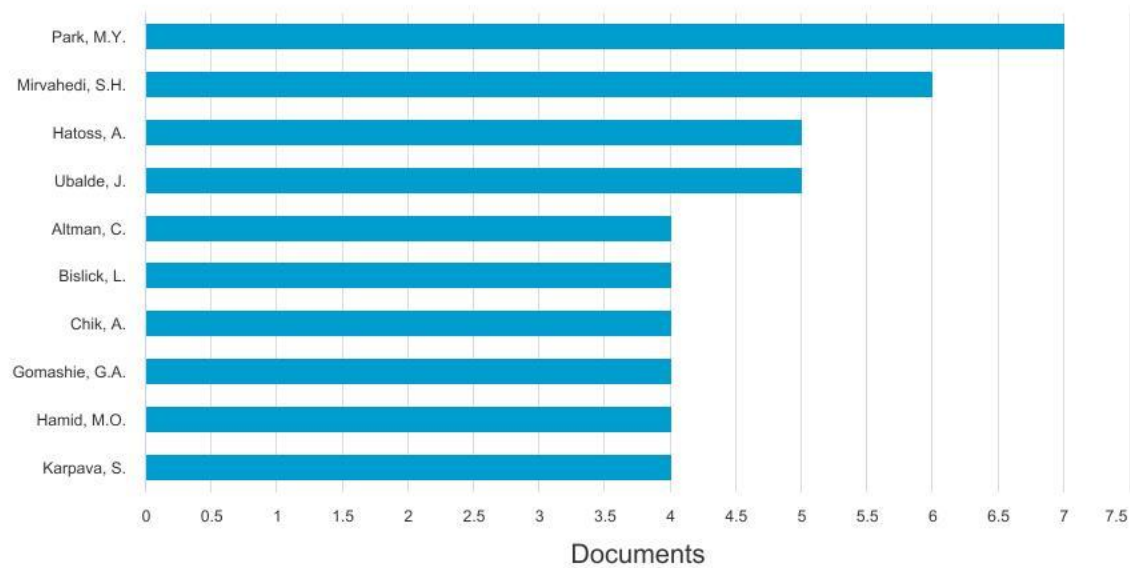
**Table 2.** The cited authors for language maintenance

Author	Documents
Park, M.Y.	7
Mirvahedi, S.H.	6
Hatoss, A.	5
Ubalde, J.	5
Altman, C.	4
Bislick, L.	4
Chik, A.	4
Gomashie, G.A.	4
Hamid, M.O.	4
Karpava, S.	4

## Documents by author

Scopus

Compare the document counts for up to 15 authors.



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**Fig. 2.** The cited authors for language maintenance

Table 2 and Figure 2 show the top 10 most cited authors worldwide, the first author is Park, M.Y. has published 7 publications (29.16%), Mirvahedi, S.H. has published 6 publications (25%), Hatoss, A. with 5 publications (20.83%), Ubalde, J., 5 publications (20.83%), Altman, C. 4 publications (16.66%), Bislick, L. 4 publications (16.66%), Chik, A. 4 publications (16.66%), Gomashie, G.A. 4 publications (16.66%), Hamid, M.O. 4 publications (16.66%), and Karpava, S. 4 publications (16.66%).

### Research Question 3:

*Where are the authors' affiliated organisations, and countries?*

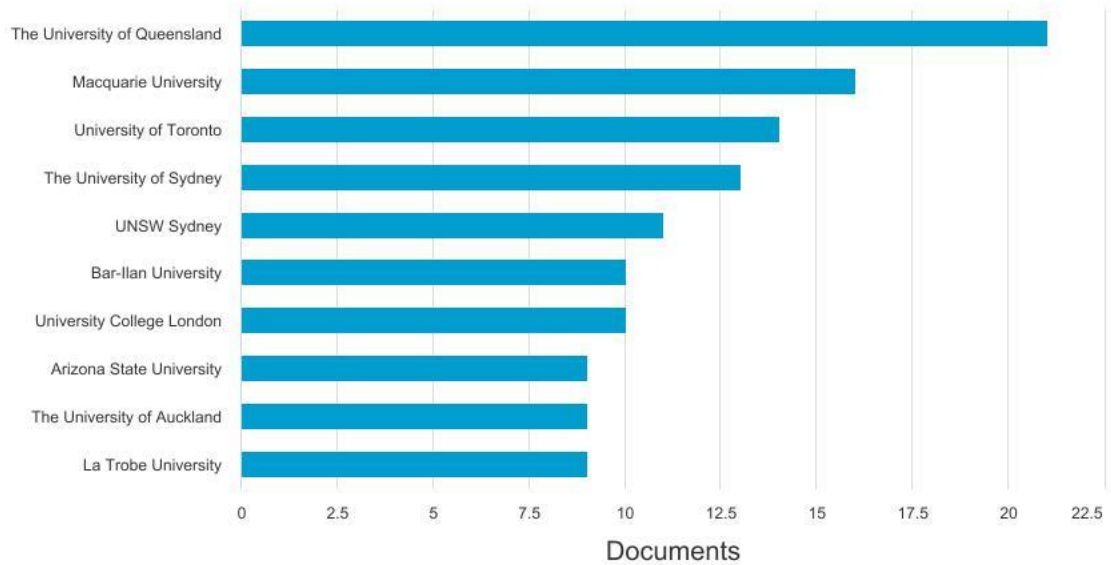
**Table 3.** Authors' affiliation

Affiliation	Documents
The University Of Queensland	21
Macquarie University	16
University Of Toronto	14
The University Of Sydney	13
UNSW Sydney	11
Bar-Ilan University	10
University College London	10
Arizona State University	9
The University Of Auckland	9
La Trobe University	9

## Documents by affiliation

Scopus

Compare the document counts for up to 15 affiliations.



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**Fig. 3.** Authors' affiliation

Based on Table. 3 and Figure. 3, the top ten organisations, institutions or universities that provide great work on language maintenance are mainly The University of Queensland with 21 publications (17.21%), followed by Macquarie University with 16 publications (13.11%), the University of Toronto with slightly lower than Macquarie University with 14 publications (11.47%), The University of Sydney with 13 publications (10.65%), next the fifth university goes to UNSW Sydney with 11 publications (9%), Bar-Ilan University with 10 publications (8.19%), similarly University of College London has published 10 publications (8.19%), Arizona State University, The University of Auckland, and La Trobe University have published 9 publications (7.37%) respectively.

### Research Question 4:

*Who are the authors who write the most cited articles?*

Table 4: Authors who write the most cited articles

Cites	Authors	Title	Year	Source	CitesPerYear
2811	J.C. Scott	The art of not being governed: An anarchist history of upland Southeast Asia	2009	The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia	187.4
2254	J. Lehmann	DBpedia - A large-scale, multilingual knowledge base extracted from Wikipedia	2015	Semantic Web	250.44
1916	D. Paris	Culturally Sustaining Pedagogy: A Needed Change in Stance, Terminology, and Practice	2012	Educational Researcher	159.67

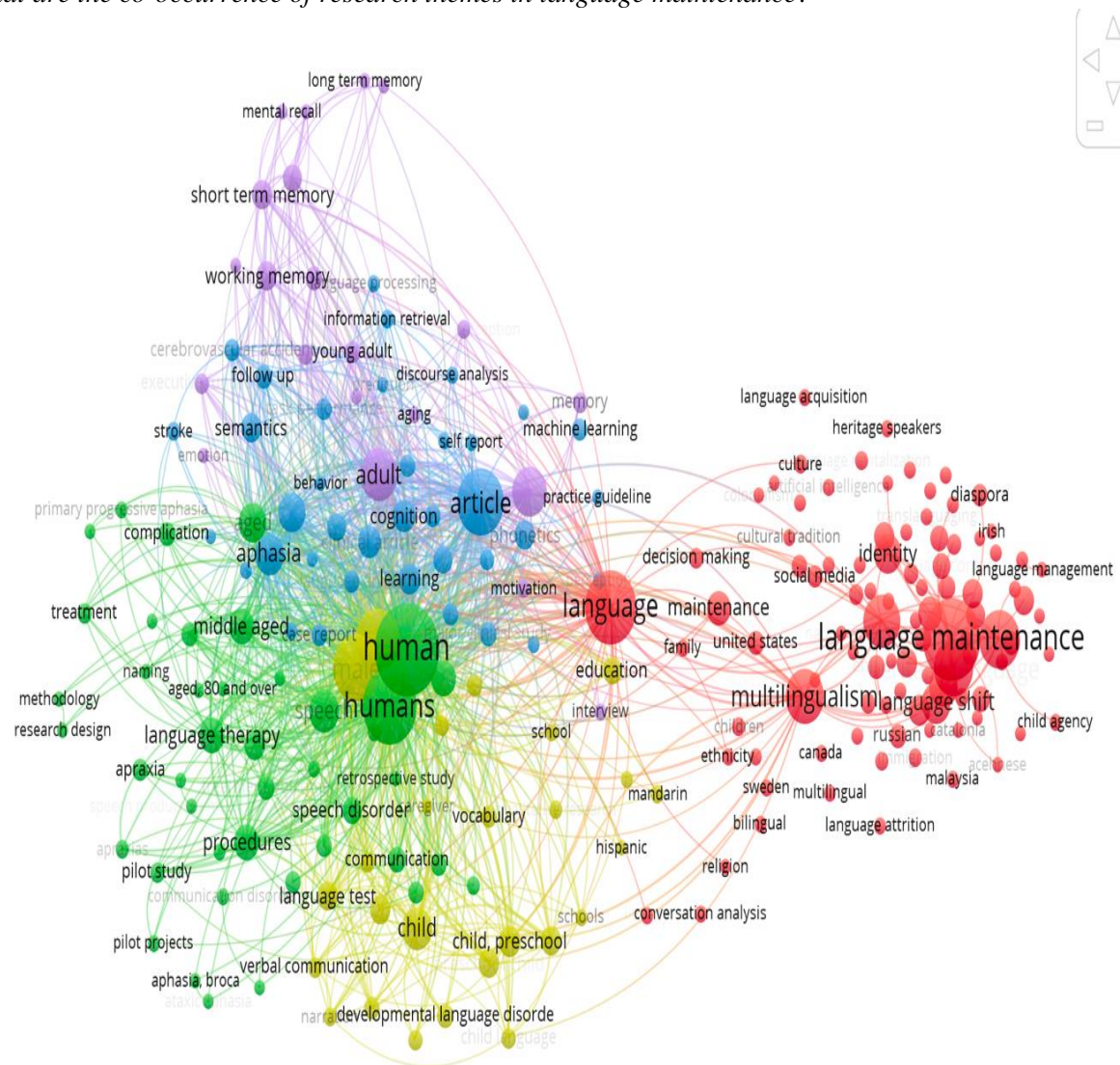
1647	G. Hickok	Dorsal and ventral streams: A framework for understanding aspects of the functional anatomy of language	2004	Cognition	82.35
1561	J.D. Cohen	Temporal dynamics of brain activation during a working memory task	1997	Nature	57.81
1555	M. Bak	SIMPSON: A General Simulation Program for Solid-State NMR Spectroscopy	2000	Journal of Magnetic Resonance	64.79
1543	M. Leonard	The human factor: The critical importance of effective teamwork and communication in providing safe care	2004	Quality and Safety in Health Care	77.15
1267	V.R. Basili	A validation of object-oriented design metrics as quality indicators	1996	IEEE Transactions on Software Engineering	45.25
1190	E.A. Mayer	Gut feelings: The emerging biology of gut-"brain communication	2011	Nature Reviews Neuroscience	91.54

Table 4 shows the top 9 articles cited the most in the field of language maintenance. The first article that has been cited the most is “The Art of Not Being Governed: An anarchist history of Upland Southeast Asia” by Scott (2009) with a total of 2811 cites. The second article, "DBpedia – A large-scale, multilingual knowledge base extracted from Wikipedia” was written by Lehmann (2015) with 2254 citations. Followed by Paris (2012) with 1916 citations of the article “Culturally Sustaining Pedagogy: A Needed Change in Stance, Terminology, and Practice”. These top three articles have been cited over 100 times per year by many scholars worldwide. Inversely, there are no distinctive differences in the number of citations or citations per year for the other seven articles; (4) Dorsal and ventral streams: A framework for understanding aspects of the functional, Hickok (2004) with 1647 citations; (5) Temporal dynamics of brain activation during a working memory task, Cohen (1997) with 1561 citations; (6) SIMPSON: A General Simulation Program for Solid-State NMR Spectroscopy, Bak (2000) with 1555 citations; (7) The human factor: The critical importance of effective teamwork and communication in providing safe care, Leonard (2004) with 1543 citations; (8) A validation of object-oriented design metrics as quality indicators by Basili (1996) with 1267 citations; and (9) Gut feelings: The emerging biology of gut-"brain communication by Mayer (2011) with 1190 citations overall.



### Research Question 5:

What are the co-occurrence of research themes in language maintenance?

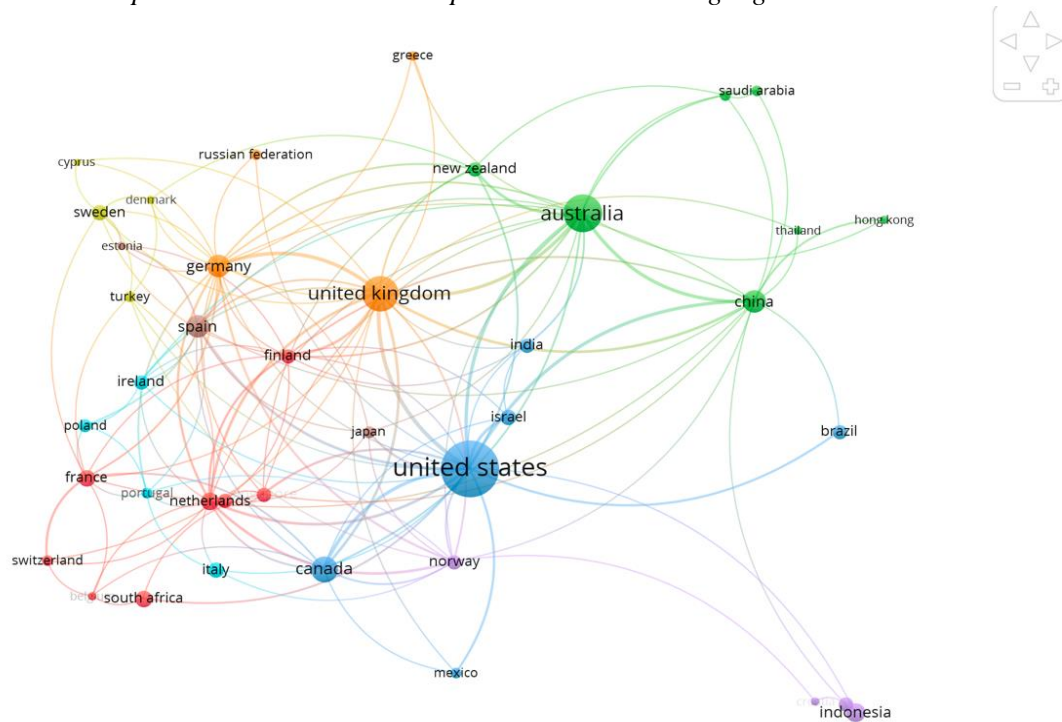


**Fig. 4.** Themes and co-occurrence

The largest cluster is the red cluster with 97 keywords. Words like Achenese, agency, Arabic, artificial intelligence, Australia, bilingual, bilingual education, and bilingualism. The green cluster is the second one with 43 keywords. These include age, apraxia, autism, communication, communication disorder, comparative study, complication, hearing impairment, human, and interpersonal communication. The third is the blue cluster, with 37 keywords, namely: aphasia, article, behaviour, case report, cerebrovascular accident, clinical article, cognition, cognitive defect, comprehension, controlled study, discourse analysis, follow up and forecasting. The fourth-largest cluster is yellow, with 26 keywords, adolescent, caregiver, child, child language, developmental language, education, female, Hispanic language development, language test, linguistic, narration, mandarin and female were the most used keywords in research. Last but not least, the purple-coloured cluster falls under the fifth cluster with 21 keywords, ranging from, adult, ageing, attention, emotion, executive function, human experiment, interview, memory, long-term, short-term, mental recall, motivation, normal human, and physiology. These findings highlight the importance of language maintenance in today's study to improve conserving heritage language via the integration of collaboration tools and artificial intelligence.

### Research Question 6:

*What is the relationship between the co-authorship and countries in language maintenance?*



**Fig. 5.** Authors' co-authorship in language maintenance worldwide

Figure 5 shows the countries whose authors collaborate on language maintenance worldwide. The similarity among the clusters representing these countries indicates that researchers are working together on language maintenance worldwide. At the end of the graph, the countries that have weak cooperation with other countries/clusters in the network, are generally developing countries. According to the total link strength (TLS) value, the six most influential countries in terms of collaboration are the United States of America, the United Kingdom, Australia, Germany, China, and the Netherlands. There are a total number of eight clusters, namely, cluster (1) Belgium, Finland, France, Iran, Netherlands, Singapore, South Africa, and Switzerland; cluster (2) Australia, China, Hong Kong, New Zealand, Saudi Arabia, South Korea, and Thailand; cluster (3) Brazil, Canada, India, Mexico, and the United States; cluster (4) Cyprus Denmark, Sweden, and Turkey; cluster (5) Croatia, Indonesia, Malaysia, and Norway; cluster (6) Ireland, Italy, Poland, and Portugal; cluster (7) Germany, Greece, Russian Federation, and the United Kingdom; cluster (8) Estonia, Japan, and Spain.

### Discussion

The findings show that from year 2019 to 2020 there was a significant decline in the number of publications per year. Surprisingly, by 2021 to 2023, there was a noticeable increase in the number of publications from 135 publications to 188 publications per year. By the year 2024, the number of publications drop to 186 publications per year.

The most cited author in the field of language maintenance is Park, M. Y., who has published seven publications. Park, M. Y., is from the University of Auckland and has published articles on language maintenance, particularly in Korean as the heritage language among marriage-immigrants and mixed-heritage children in South Korea (Park, 2019). Most of the top 10 universities are from the Western country, namely, The University of Queensland, Macquarie University, the University of Toronto, The University of Sydney, UNSW Sydney, Bae-Ilan University, University College London, Arizona State University, The University of Auckland, and La Trobe University. Despite Malaysia's cultural and racial melting pot status, its global citation count remains insignificant.

The majority of research in the domain of language maintenance is obsolete, as the most frequently cited journal annually, “The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia” by Scott J. C., was published in 2009 and has received 2811 citations. The highly cited journal article “DBpedia - A large-scale, multilingual knowledge base extracted from Wikipedia” by Lehman J. was published in 2015 and has received 2254 citations. The study of language maintenance necessitates contemporary studies to maintain its relevance in sociolinguistics, especially in Malaysia as it is not listed in the findings.

The themes and co-occurrence of studies related to language maintenance with a broad number of keywords. Most repeated keywords are bilingual, cognitive, human, interpersonal disorder, and child language. These findings highlight the importance of language maintenance in today’s study to improve conserving heritage language via the integration of collaboration tools and artificial intelligence.

Countries engaged in global collaboration on language maintenance research exhibit no significant differences. Researchers are collaborating closely in this field of study, encompassing both Western and Asian perspectives globally. Malaysia is listed in cluster five collaborating with Croatia, Indonesia, and Norway.

## Conclusion

The study presented a thorough review of the literature on language maintenance over five years (2019-2024), using bibliometric analysis techniques. Valuable insights are provided into the role of scientific journals, academicians, and institutions in understanding and promoting language maintenance research in the fields of social science. It also motivates and provides opportunities for social studies researchers to investigate the remaining gaps in information, knowledge, skills, and technology, as well as their implementation.

## Suggestions for Future Research

Considering the key aspects highlighted in this study, the work does not include any reference to the role of technology in language maintenance. During this advanced technological era, technology integration should be emphasised as one of the platforms for reducing language death among minority groups. Moreover, it has been shown that Malaysia is not among the pioneers in the field of language maintenance when compared to other advanced countries. The diverse racial and ethnic composition of Malaysia should serve as a benchmark for scholars in the country to explore the sociolinguistic dimensions of our society.

## Co-Author Contribution

The authors confirmed that there is no conflict of interest in this article. Author 1 carried out the fieldwork and prepared the literature review. Authors 2 and 3 wrote the research methodology and analysed and interpreted the results statistically. Whereas authors 4 and 5 amended the necessary outcome in this study.

## References

- Appio, F.P., Cesaroni, F. and 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.
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>

- Fishman, J.A. (1990). What is reversing language shift and how can it succeed? *Journal of Multilingual and Multicultural Development*, 11, 5-36.
- Susi, F. D., & Saifullah, H., (2020). *Serba Serbi Perantau Rao Rawa di Malaysia*. GrePublishing. Ed.; 1st ed., Vol,1, 2-229
- Ghani, A. A. (2015). The Teaching of Indigenous Orang Asli Language in Peninsular Malaysia. *Procedia - Social and Behavioral Sciences*, 208, 253–262. <https://doi.org/10.1016/j.sbspro.2015.11.201>
- Gogonas, N. (2009). Language shift in second generation Albanian immigrants in Greece. *Journal of Multilingual and Multicultural Development*, 30(March), 95–110. <https://doi.org/10.1080/01434630802307908>
- Holmes, J. (2013). *An Introduction to Sociolinguistics* (4th ed.). Routledge. <https://doi.org/10.4324/9781315833057>.
- Intan Suzila S, T. T., S, T. K., & Yusri N, M. M. (2016). Indigenous Language Knowledge Management: Indexing Phonemes Acoustically. *Gading Journal for the Social Sciences*, 1(2), 1–4. <http://www.elar-archive.org/>
- Park, M. Y. (2019). Challenges of maintaining the mother’s language: marriage-migrants and their mixed-heritage children in South Korea. *Language and Education*, 33(5), 431–444. <https://doi.org/10.1080/09500782.2019.1582662>
- Meier, M. (2011). Knowledge management in strategic alliances: a review of empirical evidence. *International Journal of Management Reviews*, 13(1), 1-23.
- Muthusamy, P., & Farashaiyan, A. (2016). Language Change and Maintenance of Tamil language in the Multilingual Context of Malaysia. *International Journal of Humanities and Social Science Invention*, 5(12), 55–60.
- Mostefa, A. (2017). Language Maintenance Factors: Reflections on the Arabic Language. *3rd Asia Pacific Conference on Contemporary Research (APCCR- 2017)*, 110–121. [www.apiar.org.au](http://www.apiar.org.au)
- Ong, T. W. S. (2021). Family language policy, language maintenance and language shift: Perspectives from ethnic Chinese single mothers in Malaysia. *Issues in Language Studies*, 10(1), 59–75. <https://doi.org/10.33736/ils.3075.2021>
- Ong, T. W. S., & Said, S. (2021). Selective language maintenance in multilingual malaysia. In *Research Anthology on Bilingual and Multilingual Education* (pp. 558– 579). IGI Global. <https://doi.org/10.4018/978-1-6684-3690-5.ch029>
- Prime minister’s Office of Malaysia. Prime Minister’s Office of Malaysia. (2023, October 25). <https://www.pmo.gov.my/2023/10/govt-depts-reminded-not-to-entertain-letters-written-in-language-other-than-national-language/>
- Sook, C., & Ong, B. (2011). Impact of Chinese vernacular medium of instruction on unity in multi-ethnic Malaysia. *Pertanika Journal of Social Science and Humanities*, 21(3), 1039–1063. <https://www.researchgate.net/publication/285703113>
- UNESCO. (2016). Education 2030: Incheon declaration and framework for action for the implementation of sustainable development goal 4. Retrieved 3<sup>rd</sup> September, 2024, from UNESDOC Digital Library: <https://unesdoc.unesco.org/ark:/48223/pf0000245656>
- VOSviewer, a computer program for bibliometric mapping, *Scientometrics*, 84(2), 523-538.
- Van Eck, N.J. and Waltman, L. (2007). Bibliometric mapping of the computational intelligence field”, *International Journal of Uncertainty, Fuzziness and Knowledge- Based Systems*. 15(5), 625-645.
- 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.
- Wu, Y.C.J. & Wu, T. (2017). A decade of entrepreneurship education in the Asia Pacific for future directions in theory and practice. *Management Decision*, 55(7), 1333-1350.