Bibliometric analysis of the efforts for mother tongue education before and after the Covid-19 pandemic

Adile Yilmaz[1]

Mazhar Bal[2*]

Ayşegül Ünal[3]

_____

[1]Asst. Prof., Akdeniz University, Faculty of Education, Antalya, Turkey
[2]Assoc. Prof., Akdeniz University, Faculty of Education, Antalya, Turkey
[3]Teacher, Ministry of Education, Antalya, Turkey

Bibliometric analysis of the efforts for mother tongue education before and after the Covid-19 pandemic

Adile Yilmaz[1], Mazhar Bal[2]*, Ayşegül Ünal[3]

[1]Asst. Prof., Akdeniz University, Faculty of Education, Antalya, Turkey
[2]Assoc. Prof., Akdeniz University, Faculty of Education, Antalya, Turkey
[3]Teacher, Ministry of Education, Antalya, Turkey
*Corresponding author

ABSTRACT
The purpose of this study is to present a bibliometric analysis of the efforts for mother tongue education before and after the COVID-19 pandemic. Unlike other studies in the literature, this study compares the publications made before and after the pandemic. The data set were created via searching the keywords "mother tongue education", "teaching mother tongue", "first language education", and "teaching first language". As a result of the search, 90 articles before the pandemic and 19 articles after the pandemic were identified in the Web of Science (WoS) database. The articles were evaluated in terms of inter-country collaboration and keyword networks. Visualizations were obtained using the VOSviewer program. The results revealed that there was a greater emphasis on mother tongue education and literacy before the pandemic. South Africa was found to be the leading country among the countries studied. After the pandemic, the focus shifted towards cognitive linguistics, discussion, artistic creativity, communication, competence, educational tasks, and independent thinking. South Africa and Turkey were found to be the leading countries among the countries studied.

Keywords: Language education, mother tongue education, COVID-19 pandemic, bibliometric analysis

1. INTRODUCTION

With the onset of the COVID-19 pandemic, many changes have occurred in the field of education worldwide. According to UNESCO documents, more than 1.5 billion students have been affected by the pandemic. The rapid increase in COVID-19 cases led to the closure of schools first (Estrella, 2023) and then to the switch to distance education (Moorhouse and Kohnke, 2021). However, many teachers, students, and administrators were not adequately prepared for online education. Internet and infrastructure problems, difficulties accessing online platforms, and a lack of necessary equipment for distance learning (Salakhova, Shukshina, Belyakova, Kidinov, Morozova & Osipova, 2022) were some of the problems faced by students. Despite all these difficulties, with the pandemic, distance education became more popular and its positive aspects were also explored (Veraksa, Chursina & Gavrilova, 2021; Weldon, Ma, Ho, and Li, 2021; Gama, Chipeta, and Chawinga, 2022; Bokayev, Torebekova, Davletbayeva & Zhakypova, 2021; Shamir-Inba & Blau, 2021). Based on these, it can be said that during the COVID-19 pandemic almost the entire world was affected and there were both positive and negative aspects of conducting education remotely and online.

With the outbreak of the pandemic, mother tongue education has also been disrupted. Turkish language teachers point out that the most challenging skill to teach is writing, and there are difficulties with attendance and repeating classes, and interaction is low (Aydoğan & Şentürk, 2022). Mother tongue teachers suggest that their textbooks should be adapted to online learning; content and materials should be enriched; maximum attendance in classes should be ensured and digital skills should be improved (Süğümlü, 2021). Hedman & Mannish (2022) conducted a research on online mother tongue education in Sweden during the pandemic and presented similar opinions on language, literature, and collaboration. Another study on mother tongue education in Portugal (Leurquin & Marcalo, 2022) analyzed the perceptions of mother tongue teachers regarding their initial training during the pandemic, and found that students were not fully able to learn, and there were problems such as noise and interference from third parties during remote learning. Based on all these studies, it can be said that both teachers and students faced many difficulties in mother tongue education during the pandemic, and as a result, it was not possible to reach the desired learning outcomes.

Many countries around the world switched to distance education, immediately, in order to avoid further spread of the disease during the pandemic. This situation, which was unusual until then, also led researchers to conduct

new studies on the pandemic and language teaching (Denardi, Marcos & Stankoski, 2021; Wong & Moorhouse, 2021; Kerras & Salhi, 2021; Nazari, Ghanizadeh & Mirzaee, 2023). However, it is seen that during the pandemic, most of the studies focused mainly on second language teaching. Among these studies, only a few were conducted on mother tongue education (Hedman & Mannish, 2022; Leurquin & Marcalo, 2022; Süğümlü, 2021; Skar, Graham & Huebner, 2022). The limited number of studies on mother tongue education, mainly focused on how the pandemic affected mother tongue education, the difficulties teachers and students faced during this period, and how distance education affected teaching language skills.

After the pandemic, schools reopened and educational implementations started to be carried out in classrooms and face-to-face again. However, distance education practices, which entered our lives with the pandemic, have remained to continue on the agenda of education and language research. It can be observed that the studies conducted after the pandemic generally focused on education practices (Ulla & Perales, 2022), teacher roles (Gao & Cui, 2022), and foreign language teaching (Qiu, 2022) rather than on mother tongue education.

Examining the studies conducted before and after the pandemic in general, it was seen that there were few studies specifically on mother tongue education. In addition, only one study comparing pre-pandemic and post-pandemic periods was found in the research (Skar et al., 2022). This study dwelled on the writing skills of Norwegian first-grade students, and no comparative studies related to the pandemic and mother tongue education were found other than this study. With this study, mother tongue education was comparatively examined in the pre-pandemic and post-pandemic periods. In this respect, the study differs from other studies in the literature. In addition, through the bibliometric analysis method, the status of mother tongue education in the pre-pandemic and post-pandemic periods has been attempted to be revealed through keyword and country analysis.

To sum up, the aim of this research is to examine mother tongue education in terms of pre-pandemic and post-pandemic periods using the bibliometric analysis method. In line with this aim, the following research question "What is the structure of the common word or concept network in publications related to mother tongue education before the pandemic?" is sought to be answered:

2. METHODOLOGY
2.1. Research Design
In the study, bibliometric analysis is utilized as the research methodology. Bibliometric analysis is a highly preferred method for the discovery and analysis of large-scale and unstructured data (Naveen Donthu, Satish Kumar, Debmalya Mukherjee, Nitesh Pandey, Weng Marc Lim, 2021). The publications on mother tongue education before and after the pandemic were analyzed using co-occurrence author keywords and co-authorship countries to reveal the relationships between the studies. The analysis of the common keyword network shows which key concepts were emphasized in pre- and post-pandemic studies and which areas of mother tongue education were focused on. The analysis of collaboration among countries shows the collaboration between the countries where research was conducted before and after the pandemic. These analyses are important in guiding future studies on mother tongue education and providing guidance on which areas require more research or trends in this field.

2.2. Sampling and Procedure
A bibliometric analysis based on articles in the Web of Science (WoS) database was conducted to obtain information and research trends related to mother tongue education literature before and after the pandemic. The research data was obtained from the WoS database on February 5, 2023. Keyword search strategy was used to collect data.

To access pre-pandemic data, the keywords "mother tongue education," "first language education," "mother tongue teaching," and "first language teaching" were written into the WoS database and searched. As a result, a total of 345 publications were identified, including 277 articles, 29 proceeding papers, 14 book chapters, 7 book reviews, 7 review articles, 6 early access, 2 editorial materials, 1 bibliography, 1 biographical-item, and 1 letter. Publications from 2020, 2021, and 2022 were excluded, and only articles were included in this study from all types of data. Data from 1978 to 2019 were examined, and no articles were found before 1978. 138 articles unrelated to the topic were excluded, and a total of 90 relevant articles were analyzed using bibliometric analysis methods. The selected articles were examined in terms of keyword density and international collaboration among countries.

To obtain data on the literature and research trends related to mother tongue education in the pre- and post-pandemic periods, a bibliometric analysis based on articles in the WoS database was conducted. The research data was obtained from the WoS database on February 5, 2023. Initially, keyword search strategies were used to access pre-pandemic data by typing the keywords "mother tongue education", "first language education", "mother tongue teaching", and "first language teaching" into the WoS database. In the initial search, a total of 345 publications were identified, including 277 articles, 29 proceeding papers, 14 book chapters, 7 book reviews, 7 review articles, 6 early access, 2 editorial materials, 1 bibliography, 1 biographical item, and 1 letter.

Results from 2020, 2021, and 2022 were excluded, and only articles from all data types were included in this study. Data from 1978 to 2019 was analyzed, and no articles were found before 1978. A total of 90 relevant articles were examined using bibliometric analysis, after excluding 138 articles unrelated to the subject. The selected articles were examined based on keyword density and international collaboration among countries.

To access post-pandemic data, the same keyword search strategy was used in the Web of Science (WoS) database, resulting in a total of 345 publications. Only data from 2020, 2021, and 2022 and from the article type were included in this study, after excluding 16 articles unrelated to the subject. A total of 19 articles were analyzed using bibliometric analysis.

Before analyzing the dataset, the keywords used in pre-pandemic studies were corrected as: "language-in-education policy" to "language in education policy"; "mother-tongue education" to "mother tongue education"; "trans-lation teaching" to "translation teaching"; "reading and text production" to "reading production" and "text production". Finally, the data were analyzed using the VOSviewer application to create countries co-authorship network and keyword co-occurrence network, and the results were interpreted.

3. FINDINGS
Findings are presented through the categorization below:
3.1. Based on Keyword Analysis of Pre-Pandemic Publications
Co-occurrence keywords were analyzed to examine common words used in research. This is shown in Figure 1.
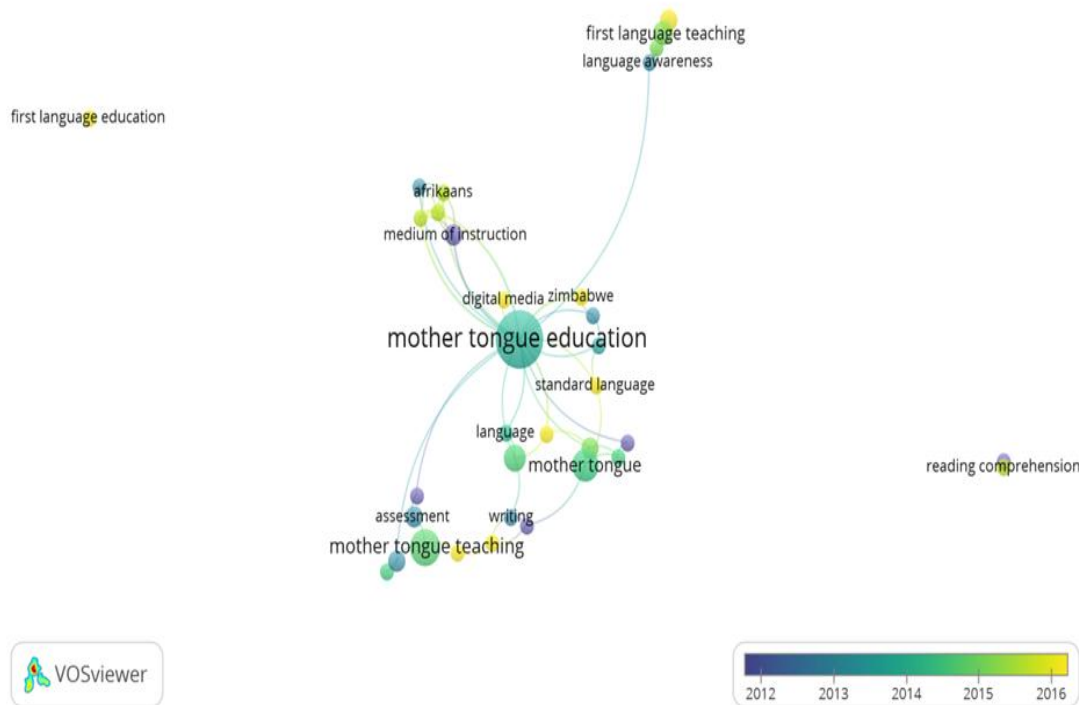

Figure 1. Keyword analysis of pre-pandemic publications

At least two common keywords were selected in the articles included in the study. 34 out of 304 keywords were able to meet this criterion. As a result, the network relationship shown above emerged. 8 clusters were identified as a result of the keyword network relationship. The keywords that make up 2 of these clusters are related to most of the keywords in the clusters. The keywords "reading comprehension and spelling" in Cluster 7 and "first language education" in Cluster 8 are not related to other clusters. The central keywords in Figure 1 are "mother tongue education, mother tongue teaching, mother tongue" concepts. It can be seen that these most prominent keywords belong to the years 2013-2015. The oldest keywords studied in this field are "medium of instruction, argumentation, indigenous language, teaching, spelling". The keywords used in recent studies are "digital media, Zimbabwe, grammar, Uganda, standard language, South Africa, reading, first language education".

3.2. Based on International Collaboration in Pre-Pandemic Publications

Ninety articles in the dataset were conducted in 30 different countries. The network relationship between these countries provides important clues about the level of study on this subject and the universality of the topic. Figure 2 shows the collaboration network between countries.
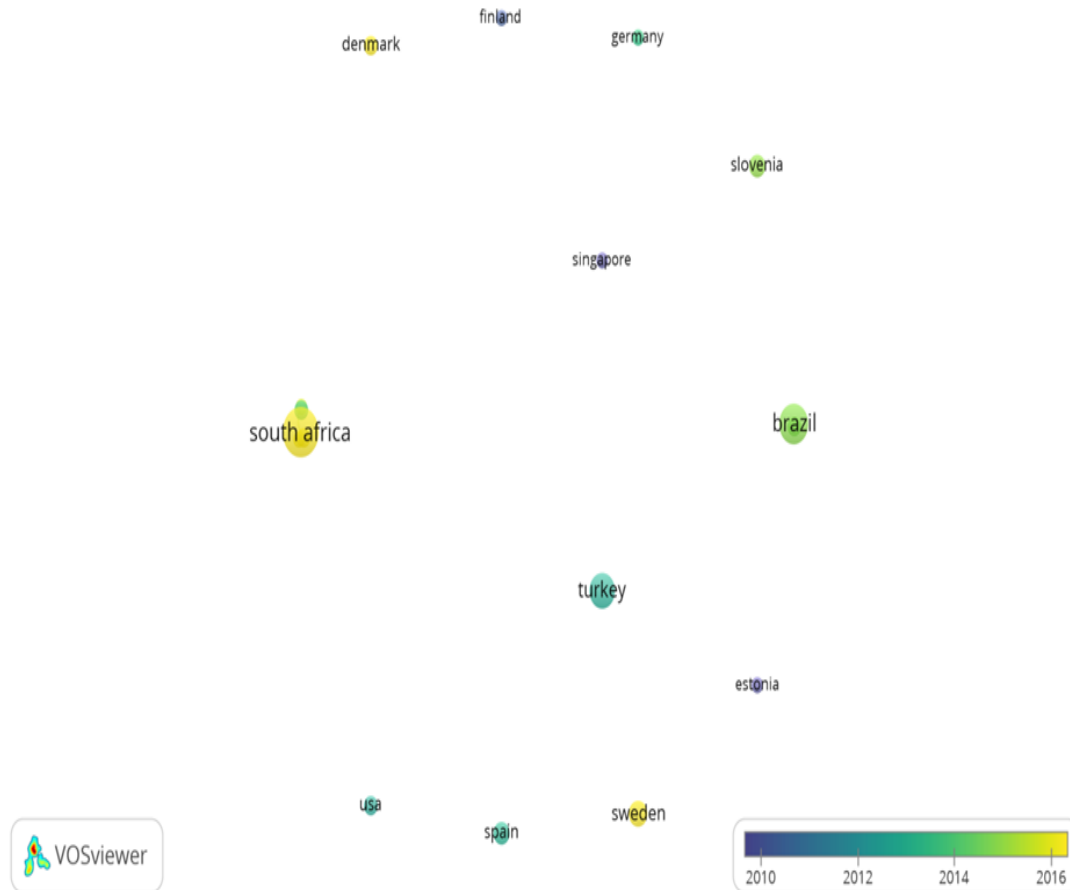

Figure 2. Country analysis of pre-pandemic publications

To reveal the inter-country relationship network, it was preferred to have at least two articles and at least two citations related to the topic. 17 out of 30 countries were able to fulfill this requirement. Including all inter-country connections, the relationship network in Figure 2 was revealed. It was determined that the country network relationship was between 2010 and 2016. It was found that the two-year time periods (2010-2012; 2012-2014; 2014-2016) were distributed approximately equally in terms of intensity. 17 countries and 13 clusters were identified. Three of the countries in these clusters are related to other countries. The countries that make up the remaining 14 clusters are not related to any country in terms of publication count. The countries in a relationship with each other are South Africa, Uganda, Zimbabwe; Brazil, England; Australia, Philippines. The countries that are not in a relationship with any country are Denmark, Estonia, Finland, Germany, Singapore, Slovenia, Spain, Sweden, Turkey, USA.

3.3. Based on the Keyword Analysis of Post-Pandemic Publications

At least one common word was chosen to be included in the articles included in the study. As a result of the inclusion of 88 words, the relationship network shown in Figure 3 below has emerged.
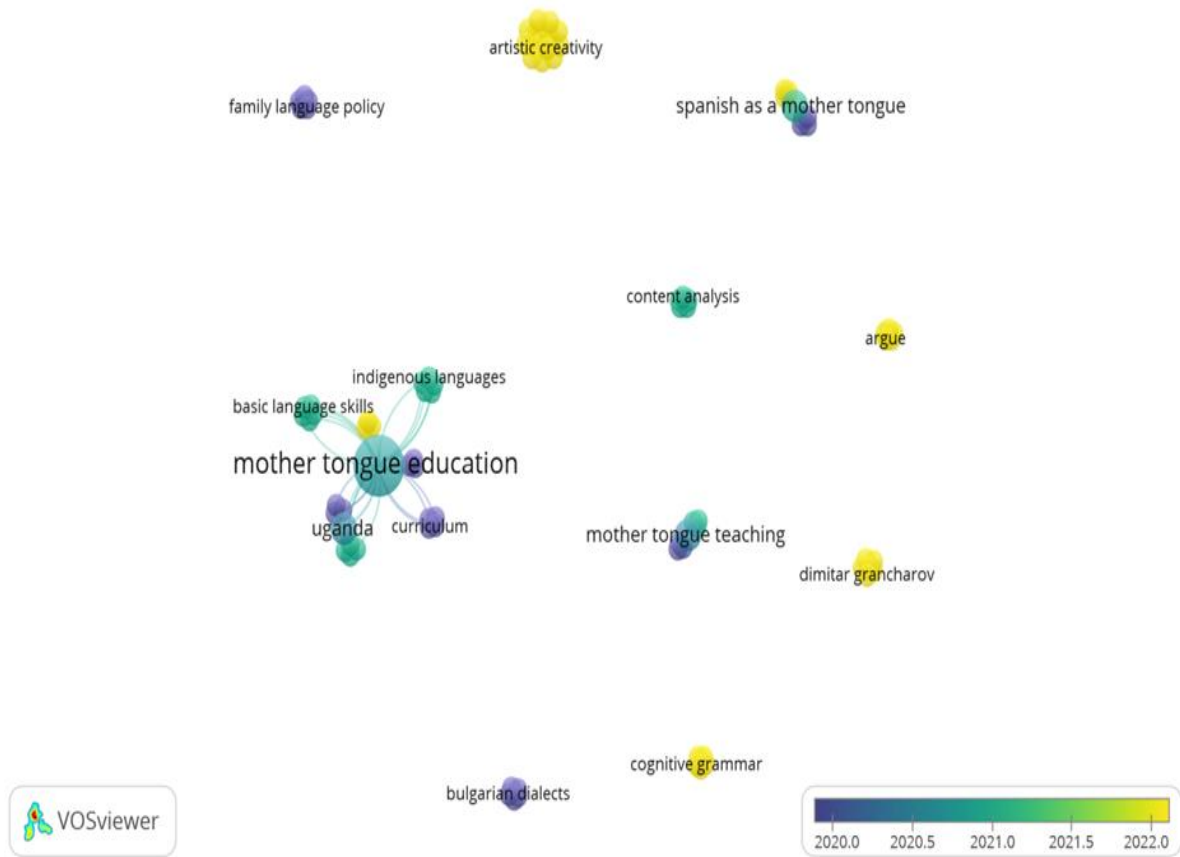
Figure 3. Keyword analysis of post-pandemic publications

14 clusters were identified as a result of the keyword network analysis. Each cluster contains related keywords within itself. The cluster with the highest network relationship has 13 keywords and is cluster 1, while the cluster with the lowest network relationship has 4 keywords and is cluster 14. The most noticeable keyword in Figure 3 is "mother tongue education." This concept is seen to belong to the years 2020.5-2021. The oldest key concepts worked in this area after the pandemic are "Bulgarian dialects, curriculum, family language policy, language revitalization, language vitality model, translanguaging, language education policy, cataphora, anaphora, proverbs, textual deixis, training of teaching materials, dialogical analysis of discourse, training of critical readers, history of Bulgarian education, late 19th century, history of Bulgarian dialectology, Bulgarian language teaching, linguistic minorities, language policy, classroom power relations, thinking skills, higher-order thinking skills, curriculum outcomes, literacy, school dropout rate, teacher training. It is seen that the concepts used more recently are "cognitive grammar, Dimitar Grancharov, argue, artistic creativity, creativity, communication, competence, personality development, thinking, educational tasks, independent thinking, compound sentence, text, speech activity, educational goal, scientific creativity, linguistic competence, translation teaching, translator training, curricula, didactic, dialectical, rhetorical, Pavel Getov, Petar Lakov, Petko Tsonev, Lyuben Georgiev, native language teaching, linguistic analysis, use, constructions, first language teaching, critical sociolinguistics, language ideologies, linguistic ethnography."

3.4. Based on International Collaboration of Post-Pandemic Publications

The 19 articles in the dataset were conducted in 14 different countries. The relationship network between these countries provides important clues about how much this topic is studied and its universality. To reveal the inter-country relationship network, it was preferred that there be at least one article and one citation related to the topic. Seven out of 14 countries were able to meet this requirement. Figure 4 shows the collaboration network between countries.
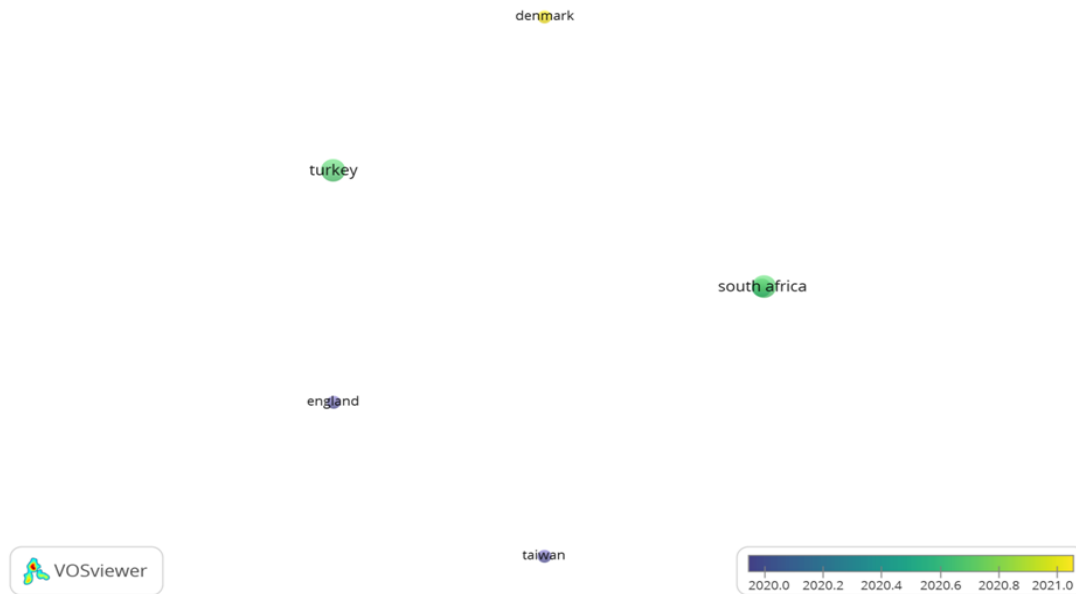
Figure 4. Country analysis of post-pandemic publications

In order to reveal the inter-country relationship network, it was preferred that there be at least one article and one reference on the topic related to each country. 19 articles in the dataset were conducted in 14 different countries. The relationship network between these countries provides important clues about how much this topic is studied in the world and the universality of the topic. To reveal the inter-country relationship network, it was preferred that there be at least one article and one reference on the topic related to each country. 7 out of 14 countries were able to meet this requirement. The relationship network among countries, including all connections between them, resulted in the relationship network shown in Figure 4. It was determined that the country network relationship was between 2020 and 2021. In addition, as a result of the data analysis, 5 clusters were identified. Only one of these clusters is related to each other in terms of the number of publications. The countries that make up 4 clusters are not related to any other country in terms of the number of publications. The countries that are related to each other are Israel, South Africa, and Uganda. The countries that are not related to any other country are Denmark, England, Taiwan, and Turkey.

4. CONCLUSION AND DISCUSSION

Aiming to present a bibliometric analysis of the studies conducted on mother tongue education before and after the pandemic the study discussed many resaerches in the literature on mother tongue (Ozoemena, Johnkene, Ngwoke & Nwokolo, 2021; Sibanda, 2019; Özşahin & Karakaş Yıldırım, 2020; Türkben, 2018; Yüceer, 2020; Mose & Kaschula, 2019; Mandillah, 2019). These studies generally consist of mother tongue teaching, education, and research on this subject. However, in this study, studies conducted on mother tongue education before and after the pandemic are discussed together. In this respect, it is considered different from other studies on mother tongue education. In addition, it is thought that the information obtained through the bibliometric analysis method will be useful for researchers who are interested in future studies on mother tongue.

Based on the findings of the keyword analysis of pre-pandemic publications, a multiple relationship was identified in 31 out of 34 keywords. Only three keywords had a limited relationship. One of these three keywords, "first language education," directly serves the purpose of the study. This shows that the direct keyword network for first language education is limited and that the number of keywords directly serving this purpose is also relatively low in the literature. The oldest key concepts were found to date back to 2012. These key concepts cannot be said to be directly related to first language education, as they are mostly general concepts related to teaching. Studies conducted in the last years of the pre-pandemic period can be said to have focused more on first language education. This may be due to South Africa standing out in country analysis before the pandemic. In South Africa, there is no language spoken by the majority, and 11 languages have been granted official language status (Akbulut, 2012). Therefore, it can be said that there are studies aimed at revitalizing indigenous languages that are under the influence of foreign languages. The studies in the literature support this finding (Bornman, Pauw, Potgieter, & van Vuuren, 2017; Sibanda, 2019; Bornman, Pauw & Potgieteret, 2015; Magocha, Mutasa, & Rammala, 2019). Based on the findings of the keywords used in studies between 2012 and 2016, it is seen that studies in this field have focused more on first language education and teaching (Bornman et al., 2015; Ssentanda, 2013) and literacy (Le Cordeur, 2012) areas.

The findings of pre-pandemic publications on cross-country collaboration shows that South Africa, Uganda, and Zimbabwe are related to each other. The number of related countries is quite low. These countries are only Brazil, England, Australia, and the Philippines. The most notable country among the countries is South Africa. South Africa is the leading country in terms of document, link, and citation. The reason for this is that many social, political, cultural, and economic variables affect mother-tongue education in South Africa, and the negative impact on these variables can be eliminated by eliminating the hegemony of other languages in mother-tongue education in South Africa (Magocha et al., 2019). This is also one of the main factors that lead to an increase in studies on mother-tongue education in South Africa.

Based on the findings of keyword analysis in publications after the pandemic, 88 keywords have been identified and it is seen that these keywords form 14 different clusters. These clusters have relationships with different keywords within themselves. The largest cluster has 13 keywords, while the smallest cluster has 4 keywords. The oldest concepts after the pandemic belong to the year 2020. It would not be correct to say that these concepts are directly related to mother tongue education; rather, they seem to be more related to curriculum and language policies. The reason for this may be that the trend of studies in the field of language education in the world before the pandemic has changed. The reasons for this change are based on various factors such as social, political, and human rights. It can be said that changes at the level of curriculum and policies have become necessary both to maintain the existence of world languages in mother tongue education and to continue their vitality arising from cultural interaction.

According to the findings of the research, it can be seen that the key concepts directly related to the subject, such as mother tongue education, mother tongue policy, and first language policy, began to lose their relevance after 2020. In the post-pandemic process, it is observed that the key concepts have shifted towards topics such as cognitive language skills, discussion, artistic creativity, communication, proficiency, educational tasks, and independent thinking. With the pandemic, the implicit benefits of face-to-face education provided through the curriculum have been revealed as deficiencies in remote education. It can be said that especially high-level thinking skills and cognitive abilities have become important. In this sense, it is seen that mother tongue education focuses on studies related to the fundamental elements of education, rather than a limited perspective on basic language skills. The studies in the literature also support this finding (Gil & Siqueira, 2022; Ozmutlu, 2020; Durand, 2022; Tiun, 2020; Kurbonova, 2022).

The findings of the post-pandemic publications on international cooperation illustrates that South Africa and Turkey stand out as the key countries. It is also seen that Israel, South Africa and Uganda are collaborating with each other. Apart from these, there is no related country in the study. Denmark, Turkey, Taiwan, and England are seen to conduct their studies independently from other countries.

Although the findings of this research are based on WoS data, the situation in Scopus, Australian Education Index, British Education Index, Journals Indexed in Eric, H.W. Wilson databases can also be investigated. In addition, this study generally focuses on the key concept of mother tongue education. Bibliometric analyses can also be conducted separately for the four basic language skills.

REFERENCES

1. Akbulut, O. (2012). Resmi dil ve anayasalarda düzenlenişi. Ankara Barosu Dergisi, (3), 155-182.
2. Aydoğan, F. & Şentürk, B. The examination of the visual-text harmony of Istanbul for teaching Turkish to foreigners. International Journal of Education, Technology and Science, 2(1), 544–567.
3. Bokayev, B., Torebekova, Z., Davletbayeva, Z. & Zhakypova, F. (2021). Distance learning in Kazakhstan: estimating parents' satisfaction of educational quality during the coronavirus. Technology Pedagogy and Education, 30(1), 27-39. 10.1080/1475939X.2020.1865192
4. Bornman, E., Pauw, J. C. & Potgieter, P. H. (2015). Attitudes and opinions regarding mother-tongue education and the choice of a university: Afrikauns-speaking students at Unisa. Tydskrif Vir Geesteswetenskappe, 54(4), 596-609.
5. Bornman, E., Pauw, J. C., Potgieter, P. H. & van Vuuren, H. H. J. (2017). Mother-tongue education, mother-tongue learning and identity: Reasons for and problems with choosing Afrikaans as the language of teaching. Tydskrif Vir Geesteswetenskappe, 57(3), 724-746. 10.17159/2224-7912/2017/v57n3a4
6. Denardi, D. A. C., Marcos, R. A. & Stankoski, C. R. (2021). Impacts from COVID-19 pandemic in English language classroom. Ilha Do Desterro-A Journal of English Language Literatures in English and Cultural Studies, 74(3), 113-143. 10.5007/2175-8026.2021.e80733
7. 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. DOI: 10.1016/j.jbusres.2021.04.070

8. Durand, G. (2022). Argumentative knowledge in first-language teaching and assessment in France and in Spain nowadays. Cedille-Revista De Estudios Franceses, 21, 219-241. 10.25145/j.cedille.2022.21.12

9. UNESCO. (13.02.2023). Education: From School Closure to Recovery Retrieved From https://Www.Unesco.Org/En/COVID-19/Education-Response.

10. Estrella, F. (2023). Foreign language anxiety of an Ecuadorian polytechnic university's English undergraduate students during the COVID-19 pandemic. Journal of Applied Research in Higher Education, 15(1), 169-184. 10.1108/JARHE-10-2021-0399

11. Gama, L. C., Chipeta, G. T. & Chawinga, W. D. (2022). Electronic learning benefits and challenges in Malawi's higher education: A literature review. Education and Information Technologies, 27(8), 11201-11218. 10.1007/s10639-022-11060-1

12. Gao, Y. & Cui, Y. (Online First, January, 27, 2022). English as a foreign language teachers' pedagogical beliefs about teacher roles and their agentic actions amid and after COVID-19: a case study. Relc Journal. 10.1177/00336882221074110.

13. Gil, M. M. & Siqueira, M. (2022). The concept of 'construction' and the practice of linguistic analysis in first language teaching: potentialities and challenges focusing on the use. Revista De Estudos Da Linguagem, 30(2), 635-660. 10.17851/2237-2083.27.4.635-660

14. Hedman, C. & Mannish, S. (2022). Student agency in relation to space and educational discourse. The case of English online mother tongue instruction. English in Education, 56(2), 160–173. https://doi.org/10.1080/04250494.2021.1955618© 2021.

15. Kerras, N. & Salhi, S. E. (2021). University education in Algeria during the COVID-19 pandemic: limitations and challenges. Arab World English Journal, 12(3), 16-35. 10.24093/awej/vol12no3.2

16. Kurbonova, K. K. (2022). The role of creativity and thinking in personal development. Journal of Pharmaceutical Negative Results, 13(6), 257-262. 10.47750/pnr.2022.13.S06.038

17. Le Cordeur, M. (2012). One nation, eleven languages: improving literacy and numeracy in South Africa through mother-tongue education. L1 Educational Studies in Language and Literature, 12(SI), 1-23. 10.17239/L1ESLL-2012.02.10

18. Leurquin, E. & Marcalo, M. J. (2022). The Portuguese language teachers training and the challenges of the classroom in times of COVID-19. Studia Universitatis Babes-Bolyai Philologia, 67(2), 347-360. 10.24193/subbphilo.2022.2.20

19. Magocha, M., Mutasa, D. E.& Rammala, J. R. (2019). Mother-tongue education in South Africa: A highly contested terrain of the 21st century. South African Journal of African Languages, 39(3), 253-262.

20. Mandillah, L. (2019). Kenyan curriculum reforms and mother tongue education: issues, challenges and implementation strategies. Education as Change , 23, 1-18. https://doi.org/10.25159/1947-9417/3379

21. Moorhouse, B. L. & Kohnke, L. (2021). Responses of the English-language-teaching community to the COVID-19 pandemic. Relc Journal, 52(3), 359–378. 10.1177/00336882211053052

22. Mose, P. N. & Kaschula, R. H. (2019). Developing mother tongues as academic languages in primary schools in Kenya: exploring extent and indispensability. Journal of Language, Identity & Education, 18(5) 329–342.

23. Nazari, F., Ghanizadeh, A. & Mirzaee, S. (2023). EFL teachers' coping strategies amidst the COVID-19-19 virtual education and their association with work engagement and teacher apprehension. Educational Research for Policy and Practice, 22(1), 1-22. 10.1007/s10671-022-09317-0

24. Ozoemena, J. A., Ngwoke, F. U. & Nwokolo, B. O. (2021). Prospects of mother tongue as a medium of instruction in Nigerian primary level education. English Language Teaching, 14(4), 1-8.

25. Özmutlu, E. B. (2020). The distribution of the mother tongue curricula learning outcomes based on the thinking skills. Cukurova University Journal of Faculty of Education, 49(1), 185-224. 10.14812/cufej.623935

26. Özşahin, M. & Karakaş Yıldırım, Ö. (2020). Çok dilli devlet şartlarında ana dili eğitimi: Başkurt Türkçesi örneği. Gazi Türkiyat, 27, 71-83.

27. Qiu, F. (2022). Reviewing the role of positive classroom climate in improving English as a foreign language students' social interaction in the online classroom. Frontiers in Psychology, 13, 1-8. 10.3389/fpsyg.2022.1012524

28. Salakhova, V. B., Shukshina, L. V., Belyakova, N. V., Kidinov, A. V., Morozova, N. S. & Osipova, N. V. (2022). The problems of the COVID-19 pandemic in higher education. Frontiers in Education, 7, 1-9. 10.3389/feduc.2022.803700

29. Shamir-Inba, T. & Blau, I. (2021). Facilitating emergency remote k-12 teaching in computing-enhanced virtual learning environments during COVID-19 pandemic-blessing or curse? Journal of Educational Computing Research, 59(7), 1243-1271. 10.1177/0735633121992781

30. Sibanda, R. (2019). Mother-tongue education in a multilingual township: Possibilities for recognising lok'shin lingua in South Africa. Reading & Writing-Journal of the Reading Association of South Africa, 10(1), 1-10.

31. Skar, G. B. U., Graham, S. and Huebner, A. (2022). Learning loss during the COVID-19 pandemic and the impact of emergency remote instruction on first grade students' writing: a natural experiment. Journal Of Educational Psychology, 114(7), 1553-1566. 10.1037/edu0000701

32. Sentanda, M. E. (2013). Exploring connections: Reflections on mother-tongue education in postcolonial Uganda. Stellenbosch Papers in Linguistics Plus-Spil Plus, 42(SI), 281-295. 10.5842/42-0-163

33. Süğümlü, Ü. (2021). A case study on teaching Turkish through distance education. International Journal of Psychology and Educational Studies, 8(1), 174-190. http://dx.doi.org/10.17220/ijpes.2021.8.1.278

34. Tiun, H. K. (2020). Mother tongues first: planning Taiwanese native languages education policy for language revitalization. Journal of Research in Education Sciences, 65(1), 175-200. 10.6209/JORIES.202003_65(1).0007

35. Türkben, T. (2018). Ana dili eğitimi ve öğretimi sürecinde masalların çocuk gelişimine katkılarına ilişkin öğretmen görüşlerinin incelenmesi. Turkish Studies , 13(19), 1821-1841.

36. Ulla, M. B. & Perales, W. F. (2022). Hybrid teaching: conceptualization through practice for the post COVID-1919 pandemic education. Frontiers in Education, 7, 1-8. 10.3389/feduc.2022.924594

37. Veraksa, A., Chursina, A. & Gavrilova, M. (2021). The effect of distance teaching experiences on educators' attitudes toward distance education for preschoolers. Education Sciences, 11(10), 1-14. 10.3390/educsci11100650

38. Weldon, A., Ma, W. W. K., Ho, I. M. K. & Li, E. (2021). Online learning during a global pandemic: Perceived benefits and issues in higher education. Knowledge Management & E-Learning- An International Journal, 13(2), 161–181. https://doi.org/10.34105/j.kmel.2021.13.009

39. Wong, K. M. &Moorhouse, B. L. (2021). Digital competence and online language teaching: Hong Kong language teacher practices in primary and secondary classrooms. System, 103. 10.1016/j.system.2021.102653

40. Yüceer, D. (2020). Diyalojik öğretim ve ana dili eğitimi. Türkiye Sosyal Araştırmalar Dergisi, 24(3), 701-712.