

BIBLIOMETRIC ANALYSIS: E-BOOK AND READING COMPREHENSION IN EFL IN THE LAST DECADE

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Abstract: This study examined the analysis of e-books and reading comprehension in EFL in the last ten years. Academics have teaching-learning procedures. In learning one of the skills required in education is reading. Reading is necessary for students' personal and academic development, and reading comprehension is also essential. Reading comprehension is a student's understanding of a text's meaning and value. One learning media that may increase students' reading comprehension in the classroom is the e-book. An E-book is an electronic version of a printed book. The study employs bibliometrics to assess a research trend. This analysis utilizes Scopus information from 2012 to 2022 using PoP, VosViewer examines the metadata, and Tableau Public visualizes the VosViewer findings. This analysis reveals publishing trends, most cited authors and articles, journal rank, publication categories, article pages, nations, and keywords. This study discovered that the map from 29 datasets has 117 terms and 85 items, 13 clusters, and 263 links with 265 link strengths. Some keywords have big circles, such as "English," "Comprehension," "E-book," and "effect," which are the keywords that occur most in the thirteen clusters formed. Each cluster shows a trend with the emergence of numerous keywords that are more distinctive to each cluster. In addition, the keyword "e-book" and "reading comprehension" is also related to the keyword "EFL learners," which is the focus analysis of this study. It shows that keywords are significant research points for e-books and EFL reading comprehension. However, the research has significant drawbacks. The researchers need thus do further investigations.

Keywords: *e-book, reading comprehension, bibliometric analysis, EFL*

Abstrak: Studi ini mengkaji analisis e-book dan pemahaman bacaan di EFL dalam sepuluh tahun terakhir. Akademisi memiliki prosedur belajar-mengajar. Dalam pembelajaran salah satu keterampilan yang dibutuhkan dalam pendidikan adalah membaca. Membaca diperlukan untuk pengembangan pribadi dan akademik siswa, dan pemahaman membaca juga penting. Pemahaman membaca adalah pemahaman siswa tentang makna dan nilai sebuah teks. Salah satu media pembelajaran yang dapat meningkatkan pemahaman membaca siswa di kelas adalah e-book. E-book adalah versi elektronik dari buku cetak. Studi ini menggunakan bibliometrik untuk menilai tren penelitian. Analisis ini menggunakan informasi Scopus dari 2012 hingga 2022 menggunakan PoP, VosViewer memeriksa metadata, dan Tableau Public memvisualisasikan temuan VosViewer. Analisis ini mengungkapkan tren penerbitan, penulis dan artikel yang paling banyak dikutip, peringkat jurnal, kategori publikasi, halaman artikel, negara, dan kata kunci. Studi ini menemukan bahwa peta dari 29 dataset memiliki 117 istilah dan 85 item, 13 cluster, dan 263 tautan dengan 265 kekuatan tautan. Beberapa kata kunci memiliki lingkaran besar, seperti "Bahasa Inggris", "Pemahaman", "Buku elektronik", dan "efek", yang merupakan kata kunci yang paling banyak muncul dalam tiga belas kelompok yang terbentuk. Setiap cluster menunjukkan tren dengan munculnya banyak kata kunci yang lebih khas untuk setiap cluster. Selain itu, kata kunci "e-book" dan "pemahaman membaca" juga terkait dengan kata kunci "pembelajar EFL", yang menjadi fokus analisis penelitian ini. Ini menunjukkan bahwa kata kunci adalah poin penelitian yang signifikan untuk e-book dan pemahaman membaca EFL. Namun, penelitian ini memiliki kelemahan yang signifikan. Oleh

karena itu peneliti perlu melakukan penelitian lebih lanjut.

Kata kunci: *e-book, pemahaman bacaan, analisis bibliometrik, EFL*

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INTRODUCTION

Bibliometrics is the operation of statistical methods to analyze books, articles, and other publications, specifically considering scientific content. Jan et al. (2016), bibliometrics is a quantitative method for analyzing the flow of written information. It implies that bibliometrics is a collection of quantitative methods for studying scientific and technical processes. *Bibliometrics* may be defined as "the use of mathematical and statistical tools in books and other communication mediums." (Pritchard, 1969, as cited in Wankhade and Siddiqui, 2022: 107). The method combines statistical and mathematical tools to collect data about the contributions of researchers. Bibliometric methods are quantitative by nature but are used to make pronouncements about qualitative features (Wallin, 2005, p. 261). Shortly, all bibliometric activities aim to transform ethereal (scientific grade) into a quantitative item. Besides, bibliometrics is a magnifying lens through which the critical review of a research document is carried out (Jan et al., 2016). That means bibliometrics can serve as a sketch for a selective journal, paper, or other academic and research document.

Moreover, Subramanyam (1983) examined that the bibliometric approach uses regression, correlation, and factor analysis to investigate the link between research cooperation, research issue, and environmental factors. Hence, bibliometrics was a crucial aid for students and researchers to complete definitive studies of numerous institutions and scholars from multiple perspectives.

E-book and Reading Comprehension

Developments in academics and technology are rapid today. In academics itself, there are teaching-learning processes for education. *Learning* is an activity undertaken to acquire knowledge, master specific competencies, and form student attitudes (Puspitarini & Hanif, 2019). Because of that, learning is the most necessary process in education to ensure the student gets their information, knowledge, and skill.

In learning one of the skills required in education is reading. Reading is an activity to get information from the text and understand the subject or topic. Besides, according to Mckee (2012), reading is an essential skill that individuals need to process to succeed in

life. Mckee also states that reading keeps individuals informed, up-to-date, and thinking. Since taking a look at the function of reading, it can be mentioned that reading is one of the tools to get some information, idea, or value from a text. Putri and Tiarina (2021) examine that reading allows one to extract either a literal or a non-literal meaning from a word or written text, meanings that the reader may then express or share with others. In line with this, Syarief et al. (2020) stated that reading is often the most challenging subject for students since it requires them to articulate what they have learned and why they are learning it. Thus, reading is necessary for students' personal and academic development, and reading comprehension is also essential. Reading comprehension is the capacity to read and interpret a text which is reader takes facts, information, or ideas from written sources, analyzes the author's intended meaning, and determines how they link to prior knowledge and the learner's goals that depend on its analytical processes, "process" or "product" conceptualization, and measurement "instrument." (Rankin, 1962; Mckee, 2012; Veravagu et al., 2016)

Moreover, reading comprehension is a student's grasp of a text's meaning and value, a process that requires a solution to reduce students' trouble reading English textbooks. Creative media makes learning more exciting and may enhance student motivation since it is engaging, and teachers should determine which learning media to use while teaching reading comprehension. Learning media is an instrument used to convey curriculum to students better with well-designed learning material that will assist students to succeed with a tool or equipment to apply learning processes that appropriately transfer information.

One learning media that can be used in the classroom to help student reading comprehension is the e-book. The e-book is an abbreviation of an electronic book or a book in the form of an electronic version of a traditional book in print. It is suitable to Vassiliou and Rowley (2008) that an e-book is a digital object that contains text and other content created by integrating the features you can provide in an electronic environment with the familiar concept of a book. They also describe that e-book typically has features such as search and cross-references, hypertext links, bookmarks, annotations, highlights, multimedia objects, and interactive tools. Therefore, the e-book is one of the early stages of innovation in education.

Moreover, the use of technology is very high today, and it means being well-

prepared to use technology in education. Moreover, Swanson et al. (2020) define an e-book as any form of electronic text that contains key features of print books, either narrative or expository. Because of that, Adam and Suprpto (2019) exclaim that the technology to support the media should be well-developed.

Overall, e-book and reading comprehension have been widely studied in various forms of research. However, research using bibliometric analysis has not been used, and we are interested in conducting research using the title "Bibliometric Analysis: E-book and Reading Comprehension in EFL in the last ten years. The novelty of this research is to deliver a new potential gap between e-books and reading comprehension. Besides, the purpose of this study is to present the gap in various reading materials concerning e-books associated with the reading classroom with EFL classroom in the last decade.

METHODS

In this study, the metadata used came from Scopus-indexed journals. According to Pomerantz (2015), metadata represents an item's complexity in a more easily understandable manner. The metadata extracts using Publish or Perish (PoP) Software. Harzing (2007) describes Publish or Perish as the citation and analysis software that uses a combination of data sources to gather raw citations, then analyzes them and provides metrics like the number of publications, total citations, and h-index. In the PoP application, the metadata obtained was 29 articles. On the 29 metadata, each has information about authors, year of publication, title, journal, type, and rank according to the available data. In the PoP, the search is focused on the keywords section ("e-books", "reading comprehension", "English language") to find relevant studies or research.

The 29 metadata is around ten years, from 2012 to 2022. The metadata has the type of documents in the format of articles, conference papers, book chapters, and reviews. This study analyzes by entering it into the VosViewer application. VOSviewer is a program developed for constructing and viewing bibliometric maps (Van Eck & Waltman, 2010). According to Van Eck and Waltman (2010), VOSviewer can use to create a map of authors and journals based on co-citation data or a map of keywords based on co-occurrence data. They also stated that VOSviewer would expose maps in various ways, highlighting different aspects of the map. After the processing, the data analyzes using VosViewer into several types of data visualization, such as Network, Overlay, and Density. The processed data uses Citation and Co-Occurrence. Citation

analysis was used in this study to analyze data about authors, articles, years, journals, institutions, and countries, and co-occurrence analysis uses for the most frequently used words and keywords in abstracts.

After being analyzed through VosViewer, as the final stage, the results visualized the uses of Tableau Public as a state of data implementation in this study. Datig and Whiting (2018) define Tableau Public as a data visualization software package with multiple interactive features. They also examine Tableau Public as a wide variety of charts available, including standard bar, line, and pie charts, heat maps, highlight tables, and tree maps. Hence, the high-impact visuals can create in Tableau Public which has the potential for readers to improve their understanding of the data presented.

RESULT

This study shows that the dataset extracted from the Scopus database consists of 29 metadata journal articles published between 2012 until 2022. The current investigation result presents in this section of the report.

Publication Trend

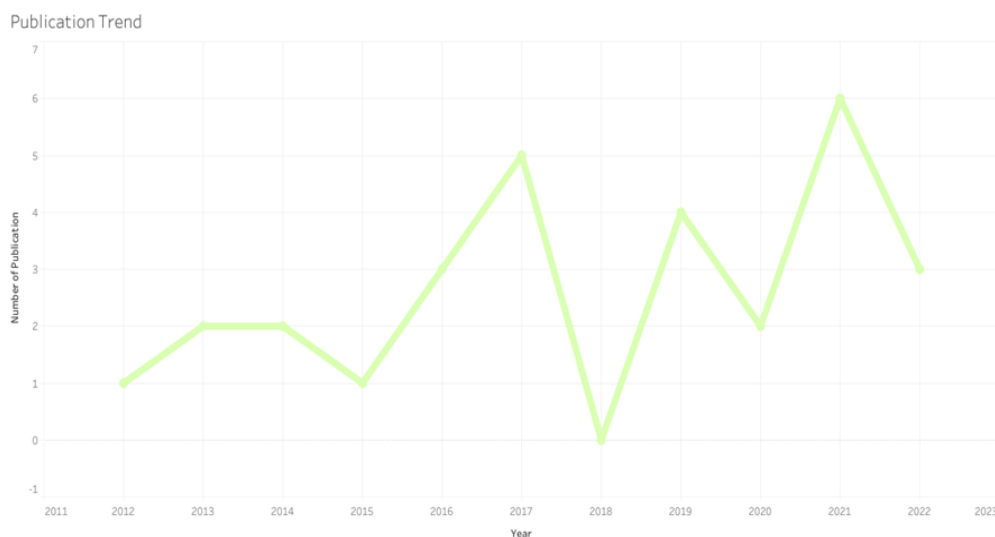


Figure 1. Publication Trend Chart's

The line charts above give information about publication trends in this study. The analysis of publication trends concerning e-books and reading comprehension in EFL in the last ten years (2012-2022), which have around one to ten number of publication yearly, has a fluctuating chart, according to Figure 1. Previously in 2012

(publication: 1), it increased slightly in 2013 (publication: 2) and 2014 (publication: 2) but fell again in 2015 (publication: 1). However, there has been a constant growth over the two years, 2016 (publication: 3) and 2017 (publication: 5). Yet, in 2018 publications dropped drastically due to the lack of publications in that year. Then, it moved up again in 2019 (publication: 4) and dropped short in 2020 (publication: 2), increased again in 2021 (publication: 6), and decreased temporarily in 2022 (publication: 3). Shortly, this line chart with concerning in this study generally have the highest season of publication in 2016 and 2017, but contrast with that, the line chart shows that the lowest season of publication the paper of this study with this concerning was in 2018.

Rank of Journal

Journal ranking is the result of analysis of the relationship between the number of citations from a journal which in this study focuses on e-books and reading comprehension in EFL. Figure 2 below shows that the ranking of the top 5 journals is sequential from the top-ranked journals to the journals with the lowest rank. From Figure 2, the journal *Psychonomic Bulletin and Review* got the highest rank (rank 1, citation: 51), followed by the journal *Interactive Learning Environments* (rank 2, citation: 30). Then, the *Journal of Early Childhood Literacy* is in third place (rank 3, citation: 26), and not much different in the number of citations, the *Journal of Experimental Psychology: Learning Memory and Cognition* followed in fourth place (rank 4, citation: 24). Last, the *Journal of Research in Childhood Education* has in the lowest rank (rank 5, citation: 16). Thus, the conclusion from that information is the more citations the journal cited, the more increased the ranking of the journal got.

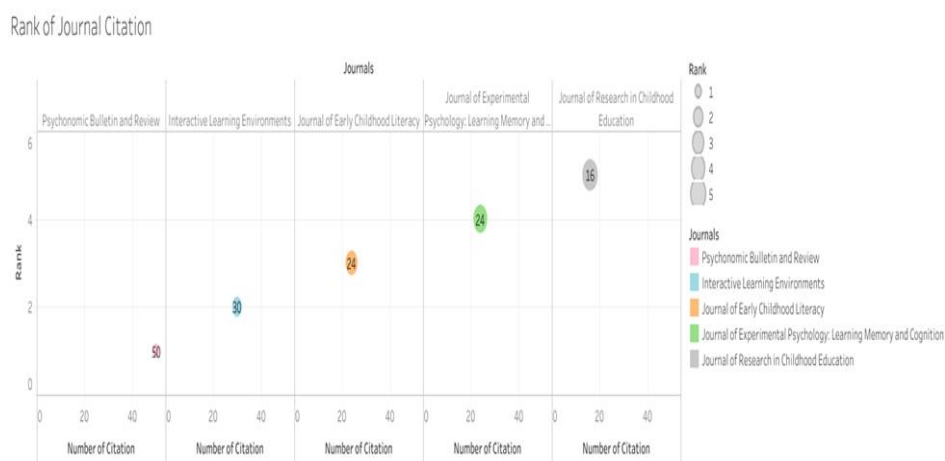


Figure 2. Top 5 Rank of Journal Citation

Most Cited Author

This study also found that several authors have the most citations based on the analysis. Figure 3 shows the top 5 authors whose work corresponds to e-books and reading comprehension in EFL cites. In addition, Figure 3 also includes the origins of these authors' universities and the number of their publications. The top 5 authors sort by the most cited works where the top one is C. Edgington from the University of Pittsburgh (publication: 1, citation: 51), followed by the most publication is T.T. Wu from the National Yunlin University of Science and Technology (publication: 3, citation: 26). Next, there is A. Ito from the University of Singapore (publication: 1, citation: 26), and followed with not much different in the citation, O.Korat (publication: 1, citation: 24), then the lowest in top five most cited and publication author is S.Brown from Georgia Southern University (publication: 1, citation: 16). In summary, the most cited author is the highest rank in the top five in this study concern.

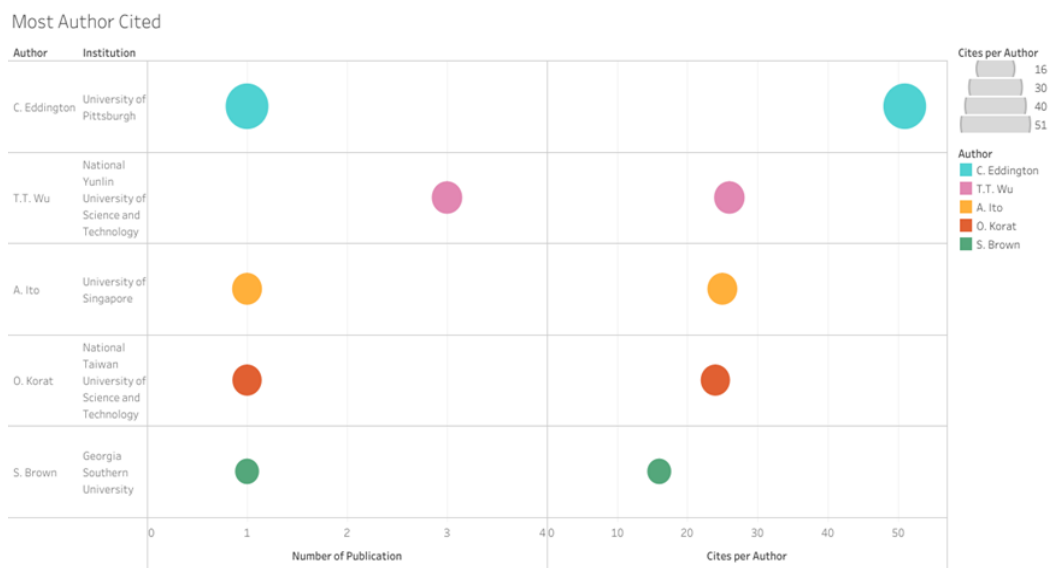


Figure 3. Top 5 Most Cited Author

Most Cited Articles

Most Cited Article



Figure 4. Top 10 of Most Cited Article

Based on the data analyzed in this study presented in Figure 4, the top 10 articles concerned with e-books and reading comprehension in EFL have the most citations. The table gives information about the most article cited according to the data. The most citations were found in articles by C. Eddington (2014) (Citation: 50, citation/year: 6.25) as a rank one, and the lowest citation in the top 10 was by M.R.A. Chen (2021) (Citation: 7, citation/year: 7.00). There are two articles with not too different citations, and there is the work of A. Ito (2017) (Citation: 25, citation/year: 5.00) and O.Korat (2019) (Citation: 24, citation/year: 8.00). Besides, also there are two articles with the exact citations, such as S. Brown (2016) (Citation: 16, citation/year: 2.67) and T.T.Wu (2016) (Citation: 16, citation/year: 2.67). In short, the highest rank in the top ten most cited articles is sorted by the article that many people cited.

Publication Type

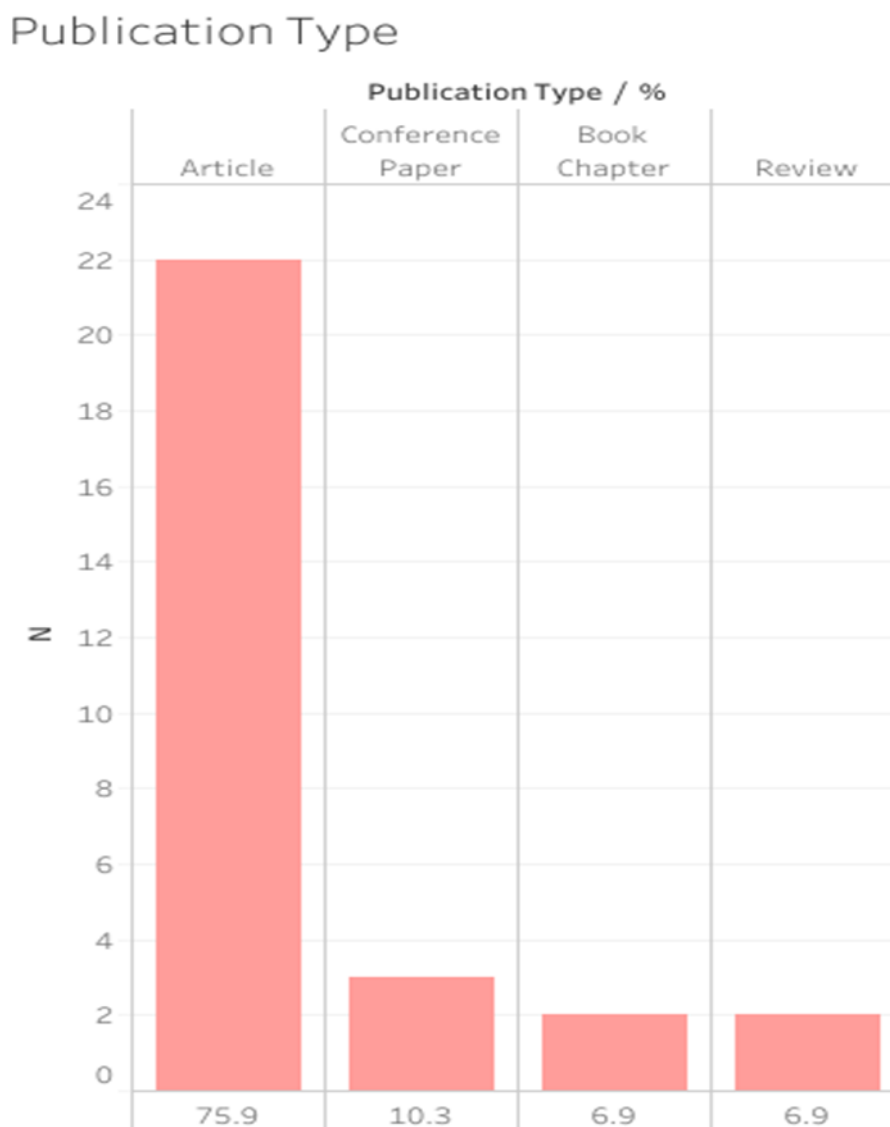


Figure 5. Publication Type

This research investigates the analysis of e-books and reading comprehension in English as a Foreign Language (EFL) also have the result. Publications such as articles, conference papers, book chapters, and reviews are all types of work that are considered to be within the scope of Figure 5, which can be found above. There are a total of 29 entries among four different publications type. The Article type accounts for 22 of the pieces (75.9%), followed by the Conference Paper type with 3 pieces (10.3%), and then the Book Chapter type with 2 pieces (6.9%) and the Review type with likewise 2 pieces (6.9%). The Book Chapter and the Review types are the two that have the least amount

of significance. In summary, the chart concludes that the article utilized in this study is the form of publication that focuses on a specific subject and has the most instances of it being published.

Number of Article Pages

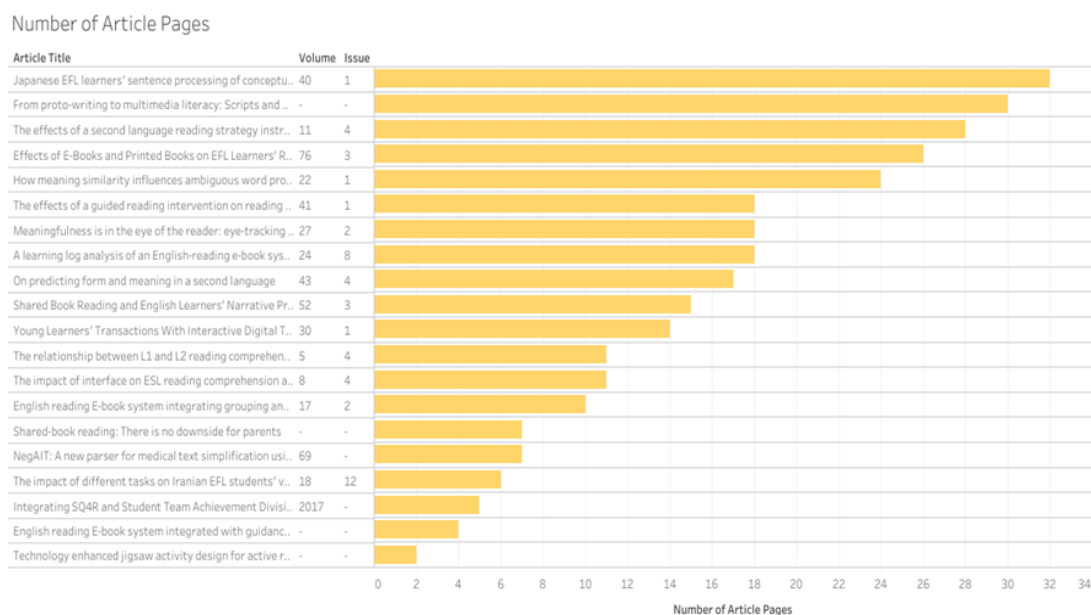


Figure 6. Number of Article Pages

Figure 6 displays the Analysis Number of Article Pages used in this research. The article that has the most pages is an article titled "Japanese EFL learners' sentence processing of conceptual plurality: An analysis focusing on reciprocal verbs" (Volume: 40, Issue: 1, pages: 32). Followed by "From proto-writing to multimedia literacy: Scripts and orthographies through the ages" (Volume: -, Issue: -, pages: 30). Seven article titles have the same pages: 18, 11, and 7. There are "The effects of a guided reading intervention on reading comprehension: A study on young Chinese learners of English in Hong Kong" (Volume: 41, Issue: 1, pages: 18), "Meaningfulness is in the eye of the reader: eye-tracking insights of L2 learners reading e-books and their pedagogical implications" (Volume: 27, Issue: 2, pages: 18), "A learning log analysis of an English-reading e-book system combined with a guidance mechanism" (Volume: 24, Issue: 4, pages: 18), "The relationship between L1 and L2 reading comprehension and language and reading proficiency at the tertiary level" (Volume: 5, Issue: 4, pages: 11), "The impact of interface on ESL reading comprehension and strategy use: A comparison of e-books and paper texts" (Volume: 8, Issue: 4, pages: 11), "Shared-book reading: There is

no downside for parents" (Volume: -, Issue: -, pages: 7), and "NegAIT: A new parser for medical text simplification using morphological, sentential and double negation" (Volume: 69, Issue: -, pages: 7).

Most Frequency Country

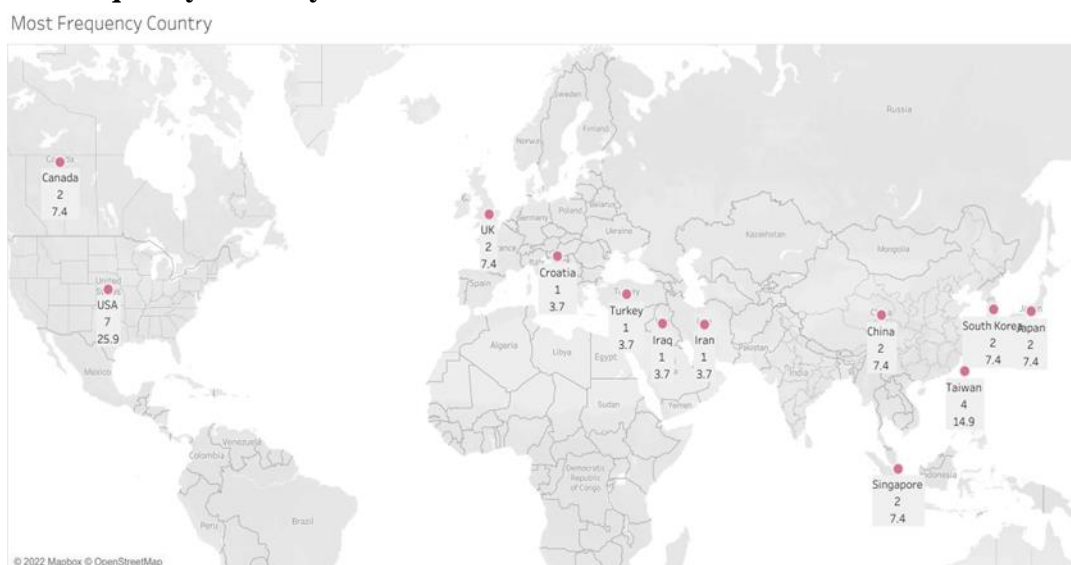


Figure 7. Most Frequency Country

Figure 7 is a map that was created as a consequence of the study of the Most Frequency Country, which refers to the nation that has the most articles that have been published. Figure 7 shows that the highest country is the USA (frequency: 7, percentage: 25.9%), followed by Taiwan (frequency: 4, percentage: 14.9%). Besides, there 6 countries that have the same frequency in the published article about this study which concerns e-book and reading comprehension in EFL, such as the UK (frequency: 2, percentage: 7.4%), Canada (frequency: 2, percentage: 7.4%), China (frequency: 2, percentage: 7.4%), Japan (frequency: 2, percentage: 7.4%), South Korea (frequency: 2, percentage: 7.4%), Singapore (frequency: 2, percentage: 7.4%). However, there are also the lowest countries in published, such as Croatia (frequency: 1, percentage: 3.7%), Iran (frequency: 1, percentage: 3.7%), Iraq (frequency: 1, percentage: 3.7%) and Turkey (frequency: 1, percentage: 3.7%). In conclusion, the countries with the most published have the highest frequency of publishing articles.

Network Visualization Mapping

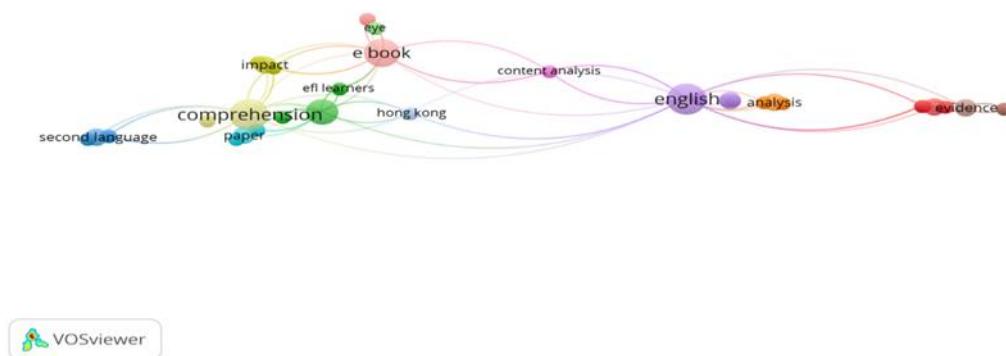


Figure 8. Network Visualization Mapping by Vosviewer

According to Figure 8, this study has shown the visualization, which was analyzed using VOS viewer software with the keywords e-book, reading comprehension, and EFL as references. This visualization map has 117 terms and 85 items, 13 clusters, and 263 links with 265 link strengths. Figure 8 shows that some keywords have big circles, such as "English" (occurrence: 6), "Comprehension" (occurrence: 6), "E-book" (occurrence: 5), and "effect" (occurrence: 4). The four circles are the keywords that appear the most in the thirteen clusters generated by VosViewer as a whole. Each cluster shows a trend with the emergence of various keywords that are more specific to each of these clusters. Meanwhile, the keywords that are still occasionally used are "role" (occurrence: 2), "second language" (occurrence: 2), "impact" (occurrence: 2), "guidance mechanism" (occurrence: 2), "paper" (occurrence: 2), "analysis" (occurrence: 2), and "evidence" (occurrence: 2). In addition, other keywords that are still rarely used can be researched again in the future.

Overlay Visualization Mapping

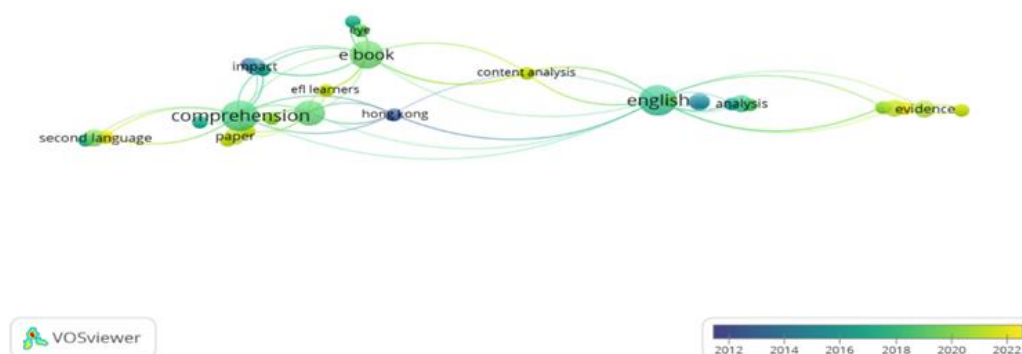


Figure 9. Overlay Visualization Mapping by Vosviewer

According to Figure 9, this study has shown the visualization, which was analyzed using VOS viewer software with the keywords e-book, reading comprehension, and EFL latest ten years as references. In Figure 9 above, the keywords used are "Hongkong" in 2012, followed by "Impact" in 2014, then "English" in 2016, "E-book" and "Comprehension" in 2020, and the last, "Evidence" in 2022. Based on this, it can be seen that in 2022 and the year to come, research can be carried out between the most frequently researched keywords and those rarely researched. The keyword "English" with "evidence" can still be researched clearly. The keywords "comprehension" and "role" can still be researched freely. The keywords "e-book" and the keyword "English," in addition to being more specific, can be combined with the keyword "active reading" for more extensive research. The keyword "comprehension" with "English learners" can still be done because the previous research was carried out around 2019. In addition, the keyword "e-book" and "reading comprehension" is also related to the keyword "EFL learners," which is the focus analysis of this study. Hence, with 85 items but 14 exceptions to items (most keywords - keywords are occasionally used), there is still much research that can be done by considering these keywords because there are still few research papers in this scope.

Density Visualization Mapping

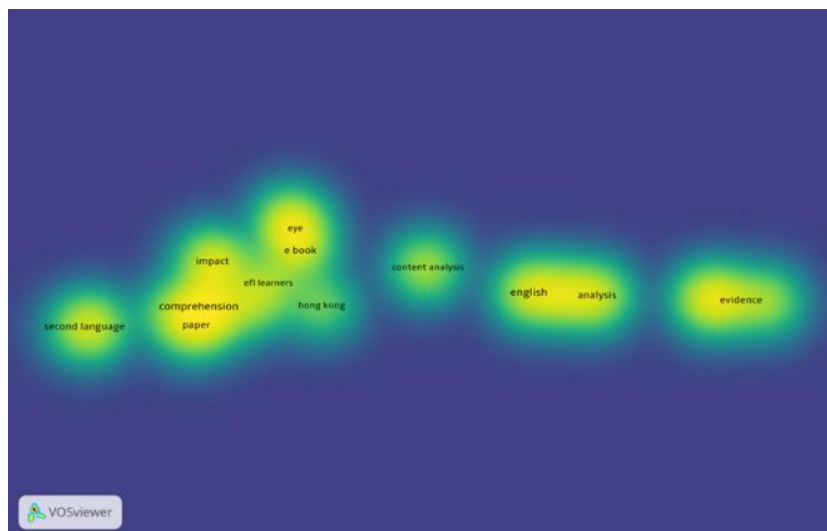


Figure 10. Density Visualization Mapping by Vosviewer

According to Figure 10, this study has shown the visualization, which was analyzed using VOS viewer software with the keywords e-book, reading comprehension, and EFL latest ten years as references. In Figure 10, the most used keywords are "Comprehension," followed by "English," then "Analysis," "Eye," and "Evidence." The circle sorts it with a brighter yellow colour than others. In addition, the analysis results based on keywords using density visualization show the depth of research. More research is produced on these keywords, and the shadier and brighter colours appear in the circle. Figure 10 shows that "English," "e-book," and "comprehension" have higher link strength values than other keywords because they have the brightest yellow lighting colour. Other keywords also appeared, such as "evidence," "analysis," "eye," "impact," "paper," and "second language," which has a yellow lighting colour, although not as dense as the previously mentioned keywords. Therefore, it reveals that keywords are essential points that have been, are currently, and still need to be researched regarding the scope of research focus on e-books and reading comprehension in EFL.

DISCUSSION

In this study, the analysis held was the keywords co-occurrence analysis over the last decade in e-books and reading comprehension in the EFL area. The keyword co-occurrence analysis indicates the following four the most study topics:

English: English has become the main topic of various studies connected with various

other studies. It is because English is the academic language used as a reference throughout the world. Therefore, learning English is important, and people all over the world are deciding to learn it as a second language (Iyosovna, 2020, p. 22).

Comprehension: Comprehension has the same position as the main topic that is mostly researched. It is because comprehension requires knowledge, and the way knowledge enters into the present model is through the grouping of propositions on the basis of the facts to which they belong (Kintsch, 1979, p. 22). Thus, in a language, comprehension skill becomes an important role.

E-book: E-books are one of the learning media in language. Research on e-books shows that the learning process is experiencing various advances following the times. The utilization of technology in the learning process, especially the use of electronic books, certainly has a major influence on the learning process (Sari et al., 2022, p. 2).

Effect: Effect is often a research topic because of its role, such as the cause of the research being conducted. In academia, "effect" often refers to the relationship between two variables, either positive or negative. In short, the effect becomes a research topic in measuring the influence of specific factors.

However, as information technology advances and the field tends to change over time, several new keyword topics emerge at various times with some of the main research topics such as:

Comparison: It has become a hot topic recently, where digital books are often compared to conventional books. Electronic reading lessons could significantly improve the learners' reading comprehension skills and develop their language acquisition (LA) (Liman Kaban & Karadeniz, 2021, p. 9). Therefore, many studies have been conducted to prove the difference between digital and conventional books in learning English. However, Lim et al. (2021) found that interactive elements in digital books that are not intended to aid comprehension can divert students from their reading assignments, impairing understanding. Besides that, Park and Lee (2021) also found that digital books are preferable for

quick, superficial learning, whereas physical books are better for in-depth reading.

English with Technology: As time passes, research on English related to technology is being conducted. In 2017, Wang et al. (2017) stated that the effectiveness of explicit, accidental, and purposeful learning circumstances on reading comprehension in a multimedia context, specific e-books, was explored. This study found that students were quite happy with their eBook-based teaching techniques and valued group heterogeneity and interactive activities. Then, Yang et al. (2022) in China, researchers looked at the influence of bilingual discussion with feedback from a multimedia interactive e-book on parent-child co-reading for young English learners aged 3-7. They discovered that multimedia interactive e-books accompanied by bilingual conversation guides have the potential to be helpful teaching aids for families with various linguistic origins.

Language and Literacy: Recently, this topic has also become the focus of studies as a subject of much research. In general, this topic often relates to how a particular country learns English. Tamura et al. (2019) found out how Japanese EFL students who are not native speakers of languages with a mandatory morphological number marking handle conceptual plurality. Then in the following year, Fathi and Shirazizadeh (2020) investigated young Iranian English as a Foreign Language (EFL) learners' reading comprehension and anxiety concerning the impact of second language reading strategy education.

Based on the things discussed, as time goes by, more and more new research keywords and topics in conducting research also develop. Therefore, it is necessary to update information in this research field continuously. However, there are weaknesses in the sources of this research. The source of this data is only Scopus which does not

index from other data sources, such as the Web of Science. In addition, other recently published articles are not included in the data due to information delays. Hence, further studies with other data from various sources are needed.

CONCLUSION

This paper examines the study by focusing on e-books and reading comprehension in English First Language (EFL) last ten years using bibliometrics analysis. This study conducted the data from the Scopus index using PoP software. After that, the data analysis uses VosViewer. Finally, in the last step, the data was visualization using Tableau Public. Overall, this study shows information from the research conducted. First, the publication had a dynamic trend but was constant in 2016, 2017, and 2019. Second, this study found the top 5 journals with the most citation and publications than others in this focusing study. Third, this study also found the highest author with the most citation, C. Eddington from the University of Pittsburgh. Besides, this study also shows that most article cited is from C.Eddington (2014) with 50 Citation and 6.25 citation/year. In addition, this study shows that most type is an articles with 22 pieces (75.9%). The article that has the most pages is an article titled "Japanese EFL learners' sentence processing of conceptual plurality: An analysis focusing on reciprocal verbs" (Volume: 40, Issue: 1, pages: 32). On the other hand, this study also have the result which the country with the highest published article is the USA with frequency: 7 (25.9%). This study also shows the visualization map by VosViewer with three types: Network Visualization Mapping, Overlay Visualization Mapping, and Density Visualization Mapping.

Moreover, this study found that the map from 29 datasets has 117 terms and 85 items, 13 clusters, and 263 links with 265 link strengths. Then, some keywords have big circles, such as "English," "Comprehension," "E-book," and "effect," which the four circles are the keywords that appear the most in the thirteen clusters generated, and each cluster shows a trend with the emergence of various keywords that are more specific to each of these clusters. Based on this, it can be seen that in 2022 and the year to come, research can be carried out between the most frequently researched keywords and those rarely researched. In addition, the keyword "e-book" and "reading comprehension" is also related to the keyword "EFL learners," which is the focus analysis of this study. It reveals that keywords are essential points that have been, are currently, and still need to

be researched regarding the scope of research focus on e-books and reading comprehension in EFL. However, several limitations of the study need to be acknowledged. Because of that, the researcher must conduct more studies in the future.

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