



RESEARCH ARTICLE

Systematic Review and Meta-analysis of Book Reading for Preschool Children

Nhung Tran Thi¹, Sau Nguyen Thi Ut¹, Huyen Nguyen Thi Thanh², Hoai Cao Thi Thu¹, Thuy Vu Thi¹

¹ Department of Early Childhood Education, Thai Nguyen University of Education, Vietnam

² Department of Educational Psychology, Thai Nguyen University of Education, Vietnam

ARTICLE INFO	ABSTRACT
Received: Oct 24, 2024	This article aims to provide an overview of reading to preschool children to offer a systematic and comprehensive perspective on book reading for preschool children. We used the PRISMA (The Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework and the VOSviewer tool to search for and analyze 33 valuable articles meticulously. The research results show that: Articles on reading to preschool children have been on the rise, especially since 2020; The United States leads in the number of articles and journals, but the group of authors from the Netherlands is the most influential in this field; The most frequently addressed issue by researchers is shared book-reading; The biggest limitation in the studies is the failure to consider other factors (45.5%). The results of this research serve as a reference for researchers, teachers, and those interested in selecting future research topics and forming appropriate orientations in reading to preschool children.
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<p>*Corresponding Author:</p> <p>nhungtt@tinue.edu.vn</p>	

INTRODUCTION

Reading activities for preschool children are valuable educational activities that have attracted the interest of many researchers worldwide since the latter half of the 20th century (Dickinson & Keebler, 1989; Phillips & McNaughton, 1990). To this day, this remains an issue that attracts a great deal of research interest (Adisti et al., 2023; Esmaeeli, 2023; Grøver et al., 2023; Mohammed et al., 2023; Myrberg & Lundeborg Hammarström, 2023; Nasiopoulou et al., 2023; Williamson et al., 2023). Reading to preschool children includes various forms such as picture book reading (Schoppmann et al., 2023; Wang et al., 2023), storytelling (Mohammed et al., 2023), dialogue reading (Hoel & Jernes, 2023), interactive reading (Bıçakçı et al., 2017), shared reading (Gavora, 2022; Grøver et al., 2020), guided reading (Bulunuz & Koç, 2019), read-aloud (Schmidt et al., 2023), and buddy reading (Christ & Wang, 2012).

Reading to preschool children positively impacts several aspects of their comprehensive development. Firstly, reading to preschool children helps them develop emergent literacy skills. This has been confirmed in previous studies (Dicaldo et al., 2022; Grolig et al., 2020; Hutton et al., 2020; Maureen et al., 2020). Additionally, reading to preschool children positively impacts their language development by expanding their vocabulary, helping them learn about the grammar of the language, and enhancing their storytelling abilities (Bojczyk et al., 2016; Cárdenas et al., 2020; Grolig et al., 2020; Noble et al., 2018). Reading activities also have a positive impact on other cognitive activities of children, such as supporting the development of bilingualism by simultaneously enhancing both their first and second language skills (Grøver et al., 2020), helps develop their

mathematical abilities, (Maričić et al., 2017), familiarizes them with printed words (Cetin & Bay, 2015; Ezell et al., 2000), enhances their creativity and problem-solving skills (Rahiem, 2021), and improves their communication and critical thinking abilities (Mota et al., 2020; Williamson et al., 2023). Reading to preschool children also has a positive impact on their socio-emotional development (Justice & Pullen, 2003; Rahim & Rahiem, 2012; Taylor et al., 2016; Yang et al., 2022). The influence of reading to preschool children extends beyond the age of 6 and impacts academic achievement (Esmaeeli, 2023; McConnell & Wackerle-Hollman, 2015), and their long-term reading habits (Sénéchal et al., 2017). Therefore, it is evident that reading to preschool children has numerous advantages and positive effects on their comprehensive development. However, preschoolers cannot read independently and rely on adults for reading, so research on reading activities for preschool children helps emphasize the positive impacts of reading to children and identifies solutions to enhance the effectiveness of reading activities for children.

A comprehensive overview study has been conducted by some researchers to observe the results of previous studies, evaluate the effectiveness of reading to preschool children, analyze various methods of reading to preschool children, and identify factors influencing reading to preschool children. For instance, previous comprehensive studies focused on specific aspects of reading to preschool children such as joint book reading (Bus et al., 1995), shared book reading (Dowdall et al., 2020; Lorio et al., 2022), interactive read-aloud (Grøver et al., 2023; Lennox, 2013), shared interactive book reading (Towson et al., 2021), E-book reading (López-Escribano et al., 2021) or the effects of these reading methods on specific aspects such as emergent literacy skills (Bus et al., 1995; López-Escribano et al., 2021) language development (Dowdall et al., 2020; Lennox, 2013; Wasik et al., 2016) or the overall role of interactive reading with preschoolers (Grøver et al., 2023), or parent-child reading interventions (Lorio et al., 2022). This indicates that previous comprehensive studies only provided an overview of individual aspects of reading to preschool children without a systematic overview of the general issue of reading to preschool children.

The current study utilized the PRISMA method to gather data on studies related to reading to preschool children and employed a systematic review method to comprehensively and objectively synthesize information from 33 collected studies. This study is unique, and its results can serve as a reference for researchers in similar studies, helping researchers in this field understand systematically the strengths and limitations of previous studies to address remaining research gaps. We attempted to answer the following research questions (RQ):

RQ1: What is the quantity of literature and the trend of growth in studies on reading to preschool children?

RQ2: How do different countries, journals, and authors contribute to this field?

RQ3: What are the main topics addressed and resolved in studies on reading to preschool children?

RQ4: What are the main limitations of studies on reading to preschool children?

Answering these research questions will provide a systematic basis for examining the research results achieved in reading to preschool children. Thus, educators, parents, and researchers can better understand the current research trends and have appropriate directions for future studies.

METHOD

This study aims to provide a comprehensive and objective synthesis of various studies related to reading to preschool children. Therefore, we utilized the methods of systematic review research (research synthesis). Systematic evaluation was conducted to explore all relevant articles concerning the research questions and focused on studies reporting data to provide recommendations ensuring scientific objectivity, transparency, and value (Aromataris & Pearson, 2014). PRISMA statement (The Preferred Reporting Items for Systematic Reviews and Meta-Analyses) was applied to provide a list of articles for the authors' assessment (Moher et al., 2009; Page et al., 2021). The steps involved in this systematic evaluation were conducted following the approach of The Cochrane Collaboration, including (1) Review question and inclusion criteria; (2) Searching for studies; (3) Study selection and critical appraisal; (4) Data extraction and synthesis; (5) Interpretation of findings and recommendations (Aromataris & Pearson, 2014).

During the study design phase, our main research question was: What is the list of publications on reading to preschool children indexed in the Scopus database?

Data Search Stage: The author team conducted searches from the Scopus database using advanced search options to ensure that search terms and operators matched the syntax of the search tool. Keywords for searching in the field of reading to preschool children include: (((literary* OR literacy OR (literature AND work*) OR (child* AND literature) OR (poe* AND work*) OR (stor* AND work*) OR (stor* AND tell*) OR book* OR folklor*) AND ((preschool* AND child*) OR (early AND child* AND education) OR (kinder AND garten))))). Symbol "*" represents any group of characters in Scopus data search syntax. The search is limited to the document title. Document type is restricted to English-language articles that are open access and sourced from journals. The data query string through Scopus is as follows: TITLE (((literary* OR literacy OR (literature AND work*) OR (child* AND literature) OR (poe* AND work*) OR (stor* AND work*) OR (stor* AND tell*) OR book* OR folklor*) AND ((preschool* AND child*) OR (early AND child* AND education) OR (kinder AND garten)))) AND (LIMIT-TO (OA, "all")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (LANGUAGE, "English")). The results obtained include 156 documents (Data collected on April 16, 2024).

Data Selection and Evaluation Stage: To determine the relevance to the research topic, the lead author of the article personally reviewed the titles and abstracts of the documents obtained. When unable to make a clear judgment, the first author discussed with the research team to reach a final decision. After data filtering, the remaining number of records is 33. The collected data has been cleaned to enhance the quality of analysis. Some synonymous terms with different spellings have been adjusted, for example: "pre-school" was corrected to "preschool," "children book" was corrected to "children's book."

Figure 1 depicts the flow of information through the stages of the systematic review process using PRISMA. The results of the search for titles, abstracts, and related keywords yielded 62,654 records. Subsequently, studies with irrelevant titles were excluded (62,047 records). Thus, 607 relevant titles were considered for review. Records without open access full-text, not journal articles, not sourced from journals, or not written in English were excluded. Therefore, 156 full-text records were retrieved. Among these 156 records, 1 study in Korean and 1 study in Japanese were excluded. Then, 119 studies with inappropriate titles and 2 studies with irrelevant content were excluded. Finally, 33 articles were included in this study.

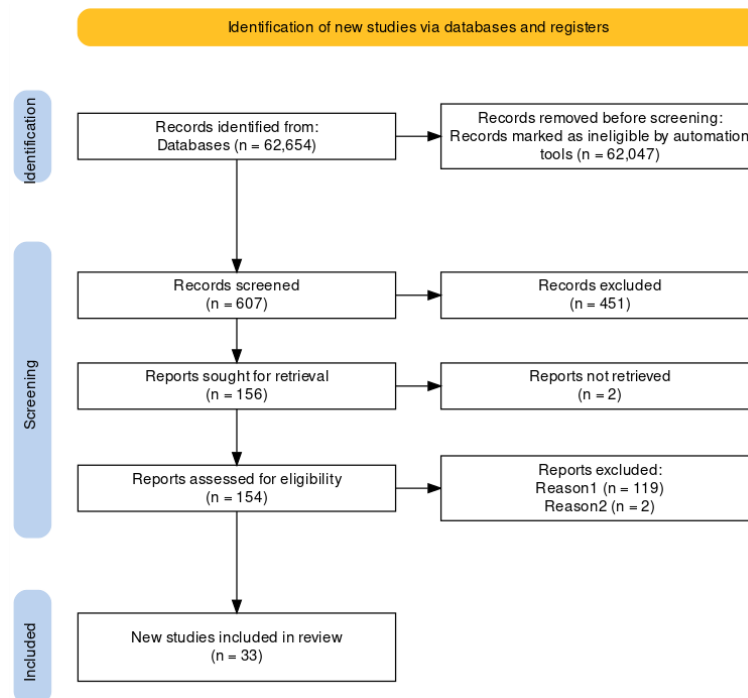


Figure 1. PRISMA diagram illustrating the flow of information through different stages of the systematic review process.

Stage of data extraction and synthesis: To analyze the data collected in this article, we used VOSviewer software to extract information about the number of publications per year, publication trends, top-publishing journals, most reputable authors/organizations, co-authorship between countries, and keyword clusters in the studies (Van Eck & Waltman, 2010). In addition, we employed qualitative data synthesis methods and content analysis to address the research questions. To facilitate critical appraisal, information from each article was coded and entered into a table by the first and third authors. Information extracted from the articles included: research contributions, study designs and sample sizes, limitations of the studies, implications of the studies, and directions for future research.

Interpreting Findings and Recommendations Stage: We relied on the overall findings to evaluate and make recommendations to enhance the quality of early childhood reading activities in both family and school environments, helping preschool teachers and parents understand the roles, forms, and effective methods of early childhood reading.

RESULTS

The number of publications and growth trends

Figure 2 shows that the number of studies on reading to preschool children collected is 33 articles. These articles were published from 2011 to 2023, with no articles included in the data collection before 2011. This indicates that although the issue of reading to preschool children has been studied for a long time, it has only received significant attention after 2011. During the period from 2020 to 2023, the number of articles increased significantly compared to before. If from 2011 to 2019, the average number of articles per year was 1.33 articles/year, then from 2020 to 2023, the number of articles increased nearly fivefold (averaging 5.25 articles/year). This indicates that in the last four years, especially in 2020, researchers have been very interested in the issue of reading to

preschool children. In 2020, the number of studies increased fourfold compared to 2019, partly due to the impact of the Covid-19 pandemic. In 2023, the number of publications was 7 studies, indicating that reading to preschool children remains a field of interest for researchers worldwide.

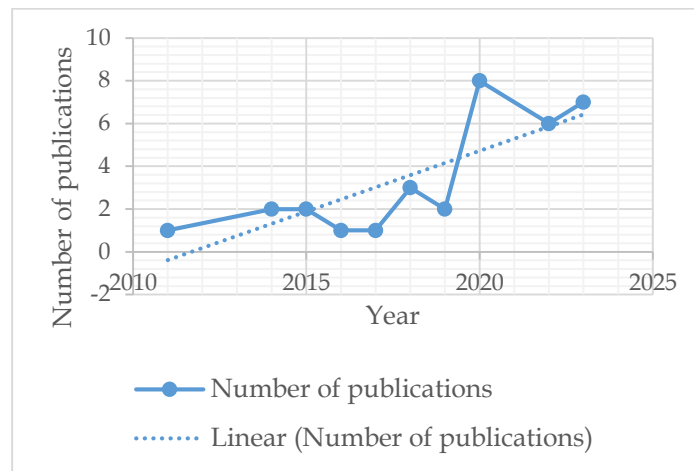


Figure 2. Distribution of publications on reading to preschool children in the searched database from 2011 to 2023

Contribution of countries, journals, and authors

Figure 3 illustrates the number of articles by country (from 2011 to 2023) in the field of early childhood reading. The research shows that the United States is the country with the highest contribution compared to other countries (8 articles, 171 citations). The second-ranked country is Indonesia (5 articles, 77 citations). In third place is Sweden (4 articles, 38 citations). Both the Netherlands and Norway contributed 3 articles each, but their citation counts are higher than those of documents from Sweden (Netherlands: 64 citations, Norway: 45 citations). Figure 3 has mapped the academic collaboration on early childhood reading research among authors from 21 countries, and the overall strength of co-authorship connections with other countries will be calculated. The countries with the largest overall co-authorship strength are represented in 5 clusters.

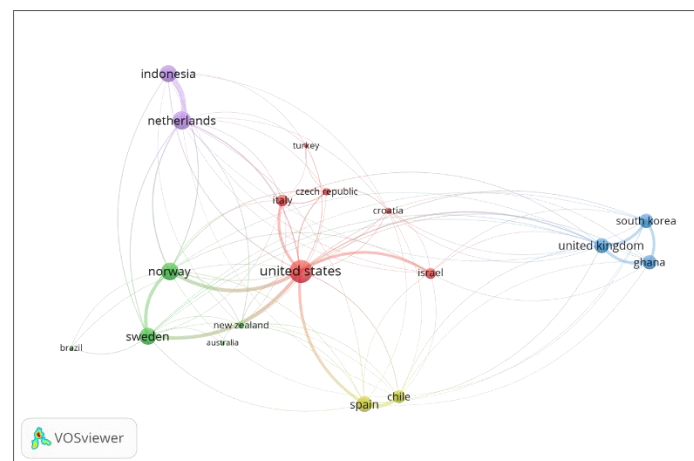


Figure 3. Network of collaboration among partner countries in the field of early childhood reading

(The number of selected countries is 21. The minimum number of articles from one country is 1 article.)

Table 1 describes the quality in the top 10 journals with the highest citation counts related to the field of children's book reading. These journals are arranged in descending order of citation counts. The journal with the highest citation count is the Journal of Clinical Child and Adolescent Psychology from the United States with the study Engaging fathers in effective parenting for preschool children using shared book reading: A randomized controlled trial [22]. Two journals with more articles than other journals are the International Journal of Early Childhood and First Language (each contributing 2 articles) [33, 82-84]. In this list of top 10 journals, there are 9 Q1 journals, and 1 Q2 journal according to the Scimagojr ranking. Among the 10 journals publishing articles in this field, 5 journals fall within the scope of education, while others belong to the fields of Developmental and Educational Psychology; Linguistics and Language; Pediatrics, Perinatology and Child Health; Sociology and Political Science, Communication and Psychology (miscellaneous). These fields all contribute to improving the quality of care, nurturing, and education for preschool children. Regarding the publishing countries, the top 10 journals include 5 journals from the United States, 3 journals from the United Kingdom, 1 journal from Netherlands and 1 journal from Mauritius.

Table 1. Top 10 journal of the book reading for preschool children order by number of citations

Source	Country	Documents	Citations	Total link strength	h index	Q*	Scope
Journal of Clinical Child and Adolescent Psychology	United States	1	64	4	157	Q1	Developmental and Educational Psychology
International Journal of Early Childhood	Netherlands	2	62	14	30	Q1	Education
First Language	United Kingdom	2	38	30	51	Q1	Linguistics and Language
Acta Paediatrica, International Journal of Paediatrics	United States	1	33	8	135	Q1	Pediatrics, Perinatology and Child Health
Child Development	United States	1	25	16	289	Q1	Education
Journal of Applied Behavior Analysis	United States	1	21	0	89	Q1	Sociology and Political Science
International Journal of Educational Research	United Kingdom	1	20	8	80	Q1	Education
International Journal of Science Education	United Kingdom	1	12	0	126	Q1	Education
Cyberpsychology, Behavior, and Social Networking	United States	1	11	10	180	Q1	Communication

International Journal of Learning, Teaching and Educational Research	Mauritius	1	11	3	18	Q3	Education
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Q* information of journals was referred from Scimagojr on 6 May 2024.

Regarding the contribution of authors, the group of authors De Jong, Ton; Maureen, Irena Y., and Van Der Meij, Hans published 2 articles and ranked 2nd in citation count (62 citations) (Maureen et al., 2018, 2020). Author Rowe, Meredith I., and colleagues contributed 2 articles in 2014 and 2022 with 23 citations (Dicataldo et al., 2022; Leech & Rowe, 2014). The group of authors Chacko, Anil; Doctoroff, Greta I.; Fabiano, Gregory A.; Fortson, Beverly only had 1 article but had the highest citation count (64 citations) (Chacko et al., 2018).

Figure 4 illustrates the academic collaboration network among authors based on the total strength of connections. This network displays 15 research groups with close relationships with each other. The center of some research groups consists of scientists from the United States, New Zealand, Chile, and Brazil, working at prestigious research institutes such as author De Jong, Ton (University of Auckland, UoA, New Zealand), Carroll, Jane (University of Otago, Dunedin, New Zealand), Rowe, Meredith I. (Harvard University, United States), Cárdenas, Karina (Universidad de La Frontera, Chile), Chacko, Anil (Centers for Disease Control and Prevention, United States), Arteche, Adriane Xavier (Federal University of Pelotas, Brazil). Figure 4 also shows that researchers from research institutes/schools in the United States account for a large number (14/20 top authors).

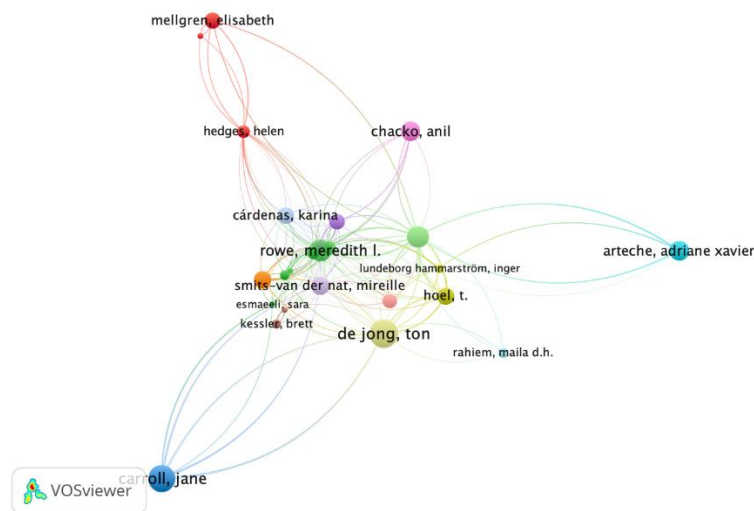


Figure 4. Academic collaboration network among authors based on the total strength of connection

The main topics of interest addressed in the studies

The network diagram in Figure 5 illustrates the interconnectedness of author keywords in the 33 studies. Out of 119 author keywords, 49 keywords are linked together as shown in Figure 5. This keyword network consists of 7 clusters. Among the keywords, *early childhood education* appears most frequently (7 times/33 articles) (Adisti et al., 2023; Cárdenas et al., 2020; Girbés-Peco et al., 2023; Hansson et al., 2020; Maureen et al., 2020; Rahiem & Rahim, 2020; van der Wilt et al., 2022; Williamson et al., 2023), *emergent*

literacy appears 3 times (Dicataldo et al., 2022; Hutton et al., 2020; Maureen et al., 2020), keywords *digital storytelling* (Maureen et al., 2018, 2020), *kindergarten* (Mangen et al., 2019; Timperley et al., 2022), *print awareness* (Cetin & Bay, 2015; Treiman et al., 2016), *shared reading* (Mangen et al., 2019; Timperley et al., 2022), *home literacy environment* (Dicataldo et al., 2022; Kotrla Topić et al., 2020), *shared book reading* (Kucirkova et al., 2014; Leech & Rowe, 2014), *children’s books* (Cengiz & Duran, 2017; Cetin & Bay, 2015), *children’s literature* (Cetin & Bay, 2015; Maureen et al., 2018) each appear twice among the 33 articles. Figure 5 also indicates that from 2021 onwards, studies on preschoolers' book reading have focused more on issues such as interactive book reading, causal reasoning, minority students, dialogic reading, classic literature, literacy, teacher knowledge, storybook reading, and pedagogical content knowledge. This demonstrates recent research interest in effective forms of reading for preschoolers and emphasizes the competency of teachers, the interaction between parents/teachers/caregivers, children, and books in preschoolers' reading activities.

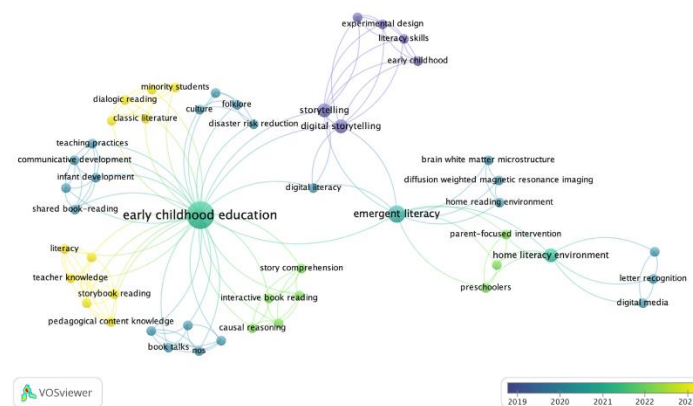


Figure 5. Network of author keywords (The colors of the clusters correspond to research trends over the past 5 years)

Table 2 describes the contributions of 33 studies on various topics in the field of early childhood reading based on the Scopus database. These studies have demonstrated the positive impacts of reading activities for young children and analyzed factors that help improve the effectiveness of reading for them. Topics that have received considerable attention and been addressed by many researchers include dialogue reading, shared book-reading, strategies focusing on parents, building a reading environment, and the genre/quality of books/documents (printed books, digital books, etc.) used in reading for young children. Areas that have not been extensively researched include the effects of reading on psychological development, life skill development, and physical development in children. These could be areas for future research to delve into, contributing to a more comprehensive understanding of early childhood reading.

Table 2. Contributions of studies on topics in the field of reading for preschool children

Problems addressed		Documents
The impact of	Enhancing emergent literacy skills	(Dicataldo et al., 2022; Esmaeeli, 2023; Hansson et al., 2020; Maureen et al., 2018, 2020; Mohammed et al., 2023)

reading activities on children	Developing language	(Dicataldo et al., 2022; Grøver et al., 2020; Kucirkova et al., 2014; Singer-Dudek et al., 2011; van der Wilt et al., 2022)
	Mathematical proficiency	(Maričić et al., 2017; Mohammed et al., 2023)
	Understanding the world around them	(Hansson et al., 2020; McLean et al., 2015; Rahiem & Rahim, 2020)
	Developing life skills	(Rahiem & Rahim, 2020)
	Psychological development	(Gomes et al., 2022; Rahiem & Rahim, 2020; Yang et al., 2022)
	Emotional-social competence development	(Cárdenas et al., 2020; Girbés-Peco et al., 2023; Gomes et al., 2022; Grøver et al., 2020; Mohammed et al., 2023; Timperley et al., 2022)
	Physical development	(Mohammed et al., 2023)
Factors contributing to enhancing the effectiveness of book reading for preschool children	Reading dialogues/interactions	(Chacko et al., 2018; Dicataldo et al., 2022; Girbés-Peco et al., 2023; Hansson et al., 2020; Kotrla Topić et al., 2020; Kucirkova et al., 2014; Leech & Rowe, 2014; Mangen et al., 2019)
	Shared Book-Reading	(Cárdenas et al., 2020; Chacko et al., 2018; Dicataldo et al., 2022; Gavora, 2022; Gomes et al., 2022; Grøver et al., 2020; Leech & Rowe, 2014; Mangen et al., 2019; Myrberg & Lundeborg Hammarström, 2023; Timperley et al., 2022; van der Wilt et al., 2022)
	Improving teacher quality	(Cárdenas et al., 2020; Grøver et al., 2020; Hansson et al., 2020; Mota et al., 2020; Nasiopoulou et al., 2023; Timperley et al., 2022; van der Wilt et al., 2022; Williamson et al., 2023)
	Parent-focused strategies	(Chacko et al., 2018; Dicataldo et al., 2022; Esmaeeli, 2023; Gavora, 2022; Gomes et al., 2022; Grøver et al., 2020; Kotrla Topić et al., 2020; Leech & Rowe, 2014; Myrberg & Lundeborg Hammarström, 2023; Timperley et al., 2022)
	Building environment	(Cárdenas et al., 2020; Dicataldo et al., 2022; Esmaeeli, 2023; Gavora, 2022; Hutton et al., 2020; Kotrla Topić et al., 2020; Mangen et al., 2019; Myrberg & Lundeborg Hammarström, 2023; Nasiopoulou et al., 2023; Singer-Dudek et al., 2011)
	Types/quality of books/materials (print books, digital books, etc.) used in book reading for preschool children	(Adisti et al., 2023; Cárdenas et al., 2020; Cengiz & Duran, 2017; Cetin & Bay, 2015; Esmaeeli, 2023; Girbés-Peco et al., 2023; Gomes et al., 2022; Hansson et al., 2020; Kucirkova et al., 2014; Leech & Rowe, 2014; Mangen et al., 2019; Maričić et al., 2017; Maureen et al., 2018; McLean et al., 2015; Mota et al., 2020; Rahiem & Rahim, 2020; Sofyan & Anggereini, 2019; Treiman et al., 2016)

Limitations of the study

Table 3 illustrates the limitations of studies on early childhood reading. The most common gap in these studies is the failure to consider other factors (45.5%), followed by limitations regarding subjective factors based on parental/caregiver reports (27.3%). Small sample size is also a common limitation in the studies (27.3%).

Regarding the limitation of not considering other factors, studies have identified several factors that could impact research outcomes but have not been considered, such as parental attitudes toward education and cultural practices (Mohammed et al., 2023), social support for child-rearing from fathers (Chacko et al., 2018), a range of activities in

preschool classrooms (Gavora, 2022), additional confirming factors (Gomes et al., 2022), study designs that do not allow for describing the effects of all factors related to intervention (Grøver et al., 2020), etc. This limitation raises the issue that future studies may need to explore multiple factors rather than just one factor in interventions for early childhood reading. This would help to make research results more objective and comprehensive, while also identifying the factors that influence the effectiveness of early childhood reading more accurately.

Regarding the limitation related to subjective factors, the authors of the studies (Cengiz & Duran, 2017; Esmaeli, 2023; Kotrla Topić et al., 2020; McLean et al., 2015; Mohammed et al., 2023; Mota et al., 2020; Myrberg & Lundeborg Hammarström, 2023; Nasiopoulou et al., 2023; Yang et al., 2022) have all addressed this issue in their articles. These authors suggest that some respondents may have exaggerated their interactions with their children or the abilities of the children, and these implicit biases may have distorted the estimates provided (Mohammed et al., 2023). As a result of caregiver self-reports, there is a risk that reports of pre- and post-intervention reading times and screenings do not reflect the actual circumstances in some cases (Myrberg & Lundeborg Hammarström, 2023), etc. This is a common issue in research on preschool children because preschoolers cannot often answer survey questions. To address this limitation, researchers may consider increasing the sample size, using standardized measures, or combining surveys with experimental studies, along with incorporating observation methods and expert techniques.

The third limitation mentioned in these studies is the small sample size. Therefore, expanding the sample size in future studies is one of the recommendations made by researchers (Cárdenas et al., 2020; Kotrla Topić et al., 2020; Maureen et al., 2018).

Other research gaps mentioned include limited study design/assessment tools, lack of experimental studies, time constraints, data decline after the study, convenience sampling, restricted focus on certain books, providing information only on intervention impacts, lack of control groups, experimenter bias, inability to control reading duration, children's school attendance time, the impact of the Covid-19 pandemic preventing library visits, lack of postoperative assessment, inconsistent language proficiency among children, inability to access standardized vocabulary tools or thorough testing in the first language, failure to engage fathers, significant effects not found in all samples, and lack of controlled studies.

These limitations indicate there are still many gaps for future research. Therefore, future researchers may explore this issue using prospective study designs (Chacko et al., 2018; Kotrla Topić et al., 2020; Mohammed et al., 2023; Nasiopoulou et al., 2023); utilize control groups (Gomes et al., 2022; Nasiopoulou et al., 2023); conduct experimental research (Esmaeli, 2023); longitudinal studies (Esmaeli, 2023; Kotrla Topić et al., 2020)...

Table 3. A summary of the research limitations identified in the 33 papers reviewed

Limitations	References
Failing to consider other factors	(Cárdenas et al., 2020; Cengiz & Duran, 2017; Chacko et al., 2018; Esmaeli, 2023; Gavora, 2022; Gomes et al., 2022; Grøver et al., 2020; Hansson et al., 2020; Kotrla Topić et al., 2020; Leech & Rowe, 2014; Mangen et al., 2019; Mohammed et al., 2023; Mota et al., 2020; Rahiem & Rahim, 2020; Williamson et al., 2023)
Subjective factors based on	(Cengiz & Duran, 2017; Esmaeli, 2023; Kotrla Topić et al., 2020; McLean et al., 2015; Mohammed et al., 2023; Mota et al., 2020;

parental/caregiver reports	Myrberg & Lundeberg Hammarström, 2023; Nasiopoulou et al., 2023; Yang et al., 2022)
Small sample size	(Cárdenas et al., 2020; Grøver et al., 2020; Kotrla Topić et al., 2020; Maureen et al., 2018; McLean et al., 2015; Mota et al., 2020; Rahiem & Rahim, 2020; Singer-Dudek et al., 2011; Williamson et al., 2023)
Research design/regime evaluation scale	(Cárdenas et al., 2020; Esmaeeli, 2023; Gavora, 2022; Grøver et al., 2020; Myrberg & Lundeberg Hammarström, 2023; van der Wilt et al., 2022; Yang et al., 2022)
No experimental studies	(Adisti et al., 2023; Cengiz & Duran, 2017; Maričić et al., 2017; Rahiem & Rahim, 2020; Sofyan & Anggereini, 2019; Treiman et al., 2016)
Time limit	(Gomes et al., 2022; Leech & Rowe, 2014; McLean et al., 2015; Nasiopoulou et al., 2023; van der Wilt et al., 2022)
Decrease in data	(Dicataldo et al., 2022; Grøver et al., 2020; Hutton et al., 2020; Myrberg & Lundeberg Hammarström, 2023; Timperley et al., 2022)
Convenient sample	(Kotrla Topić et al., 2020; Leech & Rowe, 2014; Mohammed et al., 2023; Treiman et al., 2016)
Limited research in a few books	(Cengiz & Duran, 2017; Cetin & Bay, 2015; Gomes et al., 2022; Leech & Rowe, 2014)
Only information about impacts during the intervention	(Chacko et al., 2018; Esmaeeli, 2023; McLean et al., 2015)
No subsamples	(Gomes et al., 2022; Nasiopoulou et al., 2023)
No control group	(Singer-Dudek et al., 2011; van der Wilt et al., 2022)
Others	(Cárdenas et al., 2020; Grøver et al., 2020; Kucirkova et al., 2014; Maureen et al., 2018, 2020; Myrberg & Lundeberg Hammarström, 2023; Yang et al., 2022)

DISCUSSION

The current system review has examined 33 studies on book reading for preschool children to provide a comprehensive overview of this issue based on reputable databases. Our study evaluated the system in terms of the number of documents and the growth trends of studies on book reading for preschool children, the contributions of countries, journals, and authors in this field, the main topics addressed and resolved in studies on book reading for preschool children, the research samples used in these studies, and the main limitations of studies on book reading for preschool children. Our research findings differ from some recent system reviews (Dowdall et al., 2020; Grøver et al., 2023; López-Escribano et al., 2021; Lorio et al., 2022; Towson et al., 2021; Wasik et al., 2016). Our study differs from the system review (Lorio et al., 2022) in several key aspects: Our document search was conducted on the Scopus database, while the review by the authors was conducted on four databases (PubMed, ComDisDome, PsycINFO, and ERIC). The overview by this author group examined 12 studies on interventions, including opportunities for shared reading practice between parents and children aged from infancy to 3 years old. Our study differs from the comprehensive review by Barbara A. Wasik et al. (2016), which deeply analyzed 31 articles from academic databases such as Elsevier, ERIC, Google Scholar, Psych Info, PubMed, and Scopus to evaluate high-quality experimental studies on shared reading practices in preschool age children impacting vocabulary growth to provide effective practice information (Wasik et al., 2016). Our research findings also differ from the study by Vibeke Grøver and colleagues (2023). Vibeke Grøver's study (2023) included 58 studies in the search and 9 manually searched studies on databases such as EBSCO, ERIC (Ovid), and APA PsycInfo (Ovid) to evaluate the benefits of interactive reading for young children in terms of socio-emotional skills and social

cognition (SEL), storytelling skills, grammar, and world knowledge (Grøver et al., 2023). In the comprehensive study by Jacqueline A. Towson and colleagues (2021), the author group synthesized data from 23 studies on databases such as ERIC, EBSCO, and ProQuest to evaluate studies on shared interactive reading and indicated that this is a feasible intervention to positively impact the language skills of children with disabilities or developmental delays (Towson et al., 2021). Dowdall et al.'s (2020) comprehensive review evaluated the system on shared picture book reading interventions for children's language development based on 20 studies and affirmed that shared reading interventions have a small impact on both expressive and receptive language and are closely related to caregivers' sharing ability (Dowdall et al., 2020). The study by López-Escribano Carmen et al. (2021) synthesized 14 studies and showed that electronic storybooks improve phonemic awareness compared to traditional stories and regular educational programs (López-Escribano et al., 2021).

Our research results for the first research question show the number of publications and the distribution trends of studies on book reading for preschool children. Among these 33 studies, the majority were published after 2019, and to date, this issue is still receiving attention. This result differs from the findings in studies with articles reviewed before 2019 (Bus et al., 1995; Dowdall et al., 2020; Lennox, 2013; Lorio et al., 2022; Wasik et al., 2016). This research result partially resembles the findings of Grøver Vibeke and colleagues (2023). This comprehensive study has 15 out of 67 studies published from 2019 to 2023 (Grøver et al., 2023).

For the second research question, we analyzed the contributions of countries, journals, and authors in the field of book reading for preschool children, thereby showing the leading countries in this field as well as indicating the absence of researchers from developing and slow-developing countries on this issue. This is also reflected in the study by (Grøver et al., 2023).

For the third research question, we identified the topics that researchers are concerned about when discussing book reading for preschool children and the contributions of studies in addressing issues related to book reading for preschool children. Some issues have been addressed in previous overview studies such as Shared Book Reading (Bus et al., 1995; Dowdall et al., 2020; Lorio et al., 2022), Book reading and vocabulary development (Wasik et al., 2016), Interactive Read-Alouds (Grøver et al., 2023; Lennox, 2013; Towson et al., 2021). The current study indicates that, in addition to these topics, studies on book reading for preschool children also address many other issues. In particular, the study shows that, since 2021, studies on book reading for preschool children have been interested in issues such as causal reasoning, minority students, dialogic reading, classic literature, literacy, teacher knowledge, storybook reading, and pedagogical content knowledge.

Finally, we highlighted the limitations of these studies as well as some directions for future research. Previous overview studies did not focus on this issue. The explanation for the difference between the current study and previous overview studies partly lies in the database and research design. Therefore, researchers may consider the reasons for this difference and apply them appropriately to their research.

Our study has several noteworthy limitations. Firstly, it collected data from the Scopus database, so it may have overlooked studies from other sources. Secondly, the study only considered fully open-access articles, journal articles, written in English. Therefore, some studies that are not fully open access, not journal articles, not from journals, and not written in English may have been excluded. Hence, future studies may expand the search scope, and reduce exclusions to increase the comprehensiveness of the system review on

book reading for preschool children.

This study presents a systematic review of book reading for preschool children based on the Scopus database. The PRISMA model was used as a guide for conducting the research. After processing steps, 33 publications were included in the study. The results show a significant increase in research on book reading for preschool children from 2020 to the present. These studies are mainly distributed in the Americas, Asia, and Europe, with the United States leading in research on book reading for preschool children. The study shows that journals from the United States, United Kingdom, and Switzerland contribute the most to the field of book reading for preschool children. Meanwhile, authors from the Netherlands, United States, and Norway have the most contributions to this field. In terms of research themes, studies focus on 131 main keywords, with the most prominent issues in the last five years being interactive book reading, causal reasoning, minority students, dialogic reading, classic literature, literacy, teacher knowledge, storybook reading, and pedagogical content knowledge. The studies address various issues regarding the role of dialogue reading, shared book-reading, the role of parents, and the reading environment, as well as the types/quality of books/documents used in book reading for preschool children. The most frequently used study samples are preschool children, followed by parents and then teachers. Overall, the sample sizes are relatively small. This study also identifies research gaps that have not been addressed, including the failure to consider other factors (45.5%), limitations related to subjective factors based on reports from parents/caregivers (27.3%), and small sample sizes (27.3%). Additionally, there are many other research gaps that researchers should address in future studies. Therefore, the results of this study can be used as a reference guide for researchers in similar studies, especially in the field of book reading for preschool children.

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