

Systematic Review of Reading Proficiency among Preschool Pupils Using PRISMA

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Abstract

The mastery of reading and writing plays a pivotal role in an individual's personal growth and is intrinsically linked to the acquisition of listening, speaking, reading, and writing skills—a critical facet of a child's language development. This study conducts a systematic review of reading strategies utilized in promoting reading proficiency among preschoolers. The study meticulously explores reputable databases, including Google Scholar, Web of Science, and Scopus for reliable research papers. The review followed PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. This search yielded a total of 63 relevant articles published between 2008 and 2022. Following an in-depth assessment, 22 articles were identified and selected as most pertinent to the study's objectives. The findings of this systematic review indicate that various reading strategy approaches, including Montessori, pedagogical, e-book, and child-centered methods, wield a positive impact on children's reading skills. Notably, these approaches contribute significantly to decoding, fluency, and comprehension abilities among preschool learners. The implications of these findings underscore the potential for educators to employ these strategies effectively in preschool environments, fostering the development of young children's reading skills.

Keywords: *Preschool Pupils, Assessment, Reading Proficiency, PRISMA, Pupils, Systematic Review, Pedagogy*

INTRODUCTION

The ability to listen, speak, read, and write are all important aspects of a child's language development. Learning to read and write is essential for an individual's growth and the benefit of society as a whole (UNESCO, 2007). According to the National Reading Panel (2008), many scholars, educators, and parents believe that children's failure to read has long-term consequences for their academic progress and beyond. Learning to read is a skill that is necessary for success in life, a talent that must be acquired (Scott and Saaiman, 2016). Children who have weak literacy skills are more likely to lag behind and drop out of high school, according to Ferrandino and Tirozzi (2014). Early language learners should begin reading as soon as they can because reading develops literate individuals capable of excelling in

the classroom and contributing to society (Scott & Saaiman, 2016; Xiao & Hu, 2019). Reading is essential for giving readers additional knowledge and experience to understand how the world works (Yusof, 2021). The best time for parents and teachers to promote and enhance early reading skills is during a child's early development to ensure a good start to formal schooling. The development of reading skills should be viewed as a key component of the early childhood curriculum because the ability to read fluently is a prerequisite for academic achievement in formal education.

Children read in a variety of ways, requiring a variety of training methods and strategies (Hill-Clarke & Robinson, 2004). Due to the multiple domains in reading such as phonemic awareness, phonics, and the concept of print, teachers' knowledge of the strategies needed to teach reading and other literacy abilities is essential (Phelps & Schilling, 2017). Teachers can construct an appropriate balance of instructional strategies to fulfill the different needs of learners, according to a comprehensive knowledge base of multiple instructional strategies and an in-depth understanding of learners' needs (International Reading Association Position Statement, 2014). Instructors must implement effective strategies and create opportunities to foster the development of reading skills in young children, emphasizing their critical importance (Liu et al., 2020).

Further, the majority of research to date has largely focused on secondary schools, with the literature frequently examining reading practices among secondary schools (Molotja & Themane 2020), (Becirovic & Brdarevic, 2017; Banditvilai, 2020; Salam & Sukarti, 2020; Kose & Gunes, 2021), higher education institutions, and special education (Thangarajathi, 2020; Grindle & Kurzeja, 2020; Karasu, 2020; Quezada, 2021). Even if there is a specification on the kinds of reading strategies that are most beneficial to use in teaching in the preschool education setting, it appears that the use of reading strategies in the preschool education setting is neglected. To help preschool instructors effectively teach reading abilities, researchers have called for greater research to identify effective reading practices (Wong & Aziz, 2019; Xiao & Hu, 2019; Tobia & Bonifacci, 2020). More efficient reading strategies must be implemented in schools due to the rise in the number of poor readers (Wong & Aziz, 2019; Xiao & Hu, 2019; Tobia & Bonifacci, 2020; Salisu et al. 2024). Despite extensive literature on reading skills, preschools rarely focus on reading strategies. Despite substantial study on reading strategies, few investigations of the teaching methods employed in the preschool reading curriculum have been made (Chan & Sylva, 2015). Additionally, based on the fundamental components of reading techniques, how effective the strategy is. The main objective of this study is to identify the most beneficial reading strategies that can be adapted to improve preschoolers' reading abilities.

METHODOLOGY

1. Methodological Framework of SLR Using PRISMA

This study adopted Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), which is used as a reference when choosing the literature for the systematic literature review. In order to conduct systematic literature reviews and meta-analyses, researchers frequently refer to PRISMA (Shamseer & Moher, 2015; Tawfik & Dila, 2019; Page & McKenzie, 2020; Utaminingsih et al., 2023). This methodology enables researchers to compile the necessary information that is supported by specifics and combine parts of research articles to assess how a topic is treated in various ways (Shamseer & Moher, 2015; Tawfik & Dila, 2019; Page & McKenzie, 2020). As outlined by Qureshi et al. (2020) and Bamiro et al. (2024), systematic reviews provide a reliable method for consolidating original research and addressing focused research questions. Additionally, reviewing the present literature enables the exploration of potential gaps as well as the comprehension of the breadth and depth of existing publications. (Xiao & Watson, 2019; Bamiro et al., 2023).

2. Preferred Reporting

The study uses a systematic analysis of the literature to evaluate pertinent articles that discuss promoting reading proficiency among preschool pupils. Rethlefsen et al. (2021) outlines that the PRISMA framework offers a standardized method with a comprehensive set of guidelines for conducting

systematic literature reviews.

3. Formulation of the Research Question

The main goal of this study is to undertake a comprehensive review of the body of knowledge that already exists on the subject under consideration, namely, promoting reading proficiency among preschool pupils. It is imperative to formulate an appropriate research inquiry that not only offers guidance but also serves as the structural underpinning for the entirety of the systematic review process. The subsequent research query has been selected for this purpose:

1. What are the reading strategies used in teaching reading skills in preschool?
2. How effective are these strategies based on the three basic elements of teaching strategy: Decoding, Fluency, and Comprehension?

4. Systematic Search Strategy

The identification phase, screening phase, and eligibility phase were the three steps of the systematic search technique used for this study.

5. Identification Phase

In the identification phase, the process entails the careful selection of appropriate keywords and search terms to locate articles that are relevant to the research question. The utilization of an extensive range of keywords serves to enhance the likelihood of finding articles that are more aligned with the review's objectives. This step holds significant importance as it guarantees a focused and directly pertinent search to address the research question, as highlighted by Bramer et al. (2018), Komalasari et al. (2023), and Fajrie et al. (2024). The following databases were used to identify relevant journals for the systematic review; Google Scholar, Web of Science, and Scopus. The keywords used are, “reading strategies”, “preschool education”, and “preschool reading strategy”. The study's keywords are displayed in Table 1.

6. Screening Phase

In this phase, we review all documents downloaded from the database to identify and exclude unwanted documents. Duplicate articles downloaded from Google Scholar, Web of Science, and Scopus were all discarded. At this point, a total of four duplicate articles, five non-English articles, seven conference papers, and twenty-five articles were eliminated due to the title of the article, leaving us with 22 papers that made it to the next phase.

7. Eligibility Phase

The purpose of this phase was to ensure that all articles that made it through the first screening phase met the requirements, as seen in Table 2. At this point, the journal article titles and abstracts were examined to see if they were still appropriate for review. At this point, only papers that fully satisfied the requirements were chosen for evaluation. Books, book series, book chapters, conference papers, articles written in languages other than English, and those published before 2008 were all included. This is further illustrated in the PRISMA flow chart in Figure 1.

Table 1 Study’s Keywords

Database	Keywords	Identification	Inclusion
Google Scholar	“Reading strategies”	32	11
Web of Science	“Preschool education”	13	5
Scopus	“Preschool reading strategy”	18	6

Table 2 Eligibility and Exclusion Table

Criterion	Eligibility	Exclusion
Types of Literature	Research articles	Conferences, books, articles, theses, dissertations, reports, and documentaries
Language Choice	English Language	Other languages
Time Range	2008-2022	2008 and earlier
Education	Preschool Education	Secondary and higher education, special needs, and adult education
Country	Global	

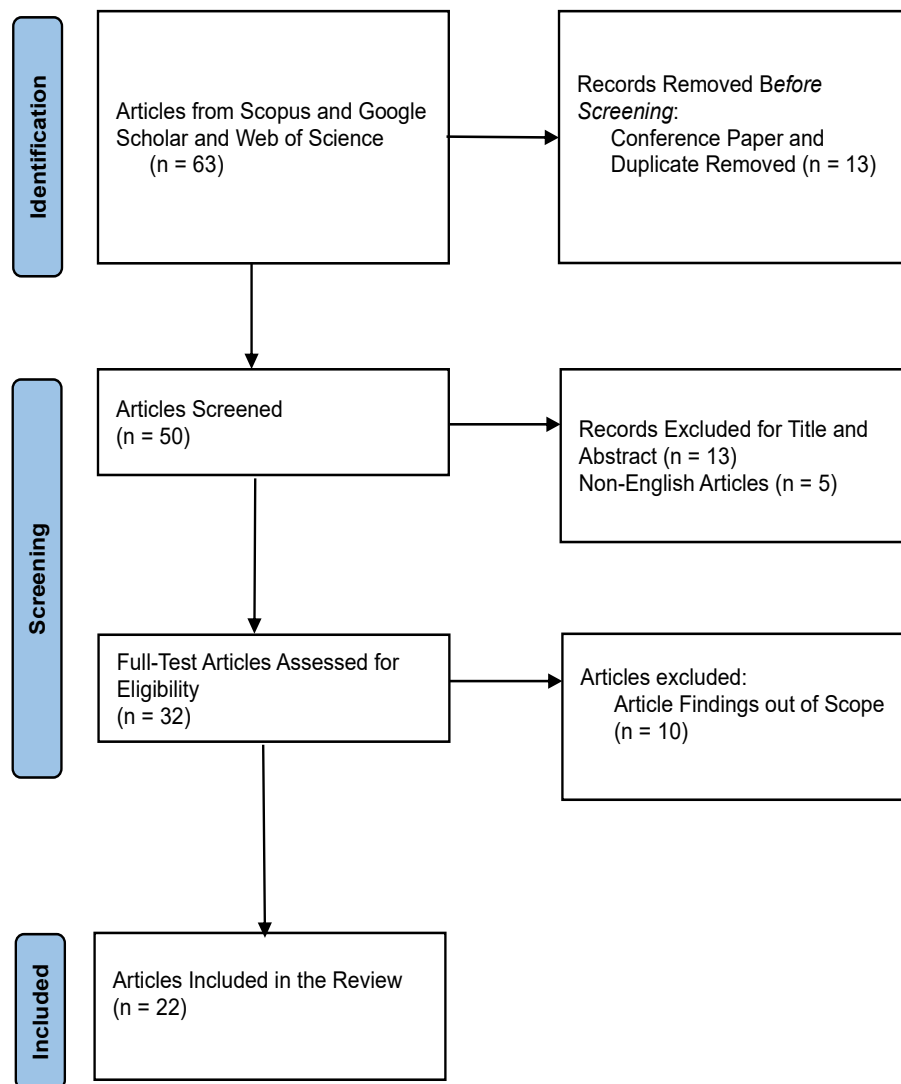


Figure 1 PRISMA Flow Chart

DATA EXTRACTION AND ANALYSIS

In Table 3, an analysis of the remaining papers that met the criteria for this systematic review was conducted. From these papers, we extracted the following data: authors' names, year of publication, title, research methodology, country, findings, and reading strategies.

Table 3 Data Extraction and Analysis

S/N	Authors & Year	Reading Strategies	Country	Impact	Method
1	Osei et al. (2016)	Pedagogical Approach	Ghana	Preschool reading skills.	Quantitative
2	Augustine (2015)	Montessori Approach (Music and Movement activities)	Malaysia	Preschoolers overall reading skills	Quantitative
3	Pillinger & Vardy (2022)	Pedagogical Approach	United Kingdom	Language and reading skills for children < 5 years	Qualitative
4	Korat & Segal-Drori (2016)	E-book	Israel	Children's early reading	Quantitative
5	Huennekens & Xu (2016)	Pedagogical Approach (Dialog Strategy)	Spain	Student's reading skills	Quantitative
6	Baştuğ & Demirtaş (2016)	Child-Centered Approach	France	Improve student with low reading literacy achievement.	Quantitative
7	Abbott et al. (2017)	Pedagogical Approach	U.S.A	Reading readiness skills	Quantitative
8	Blom-Hoffman et al. (2017)	Pedagogical Approach (Dialogic Reading)	USA	Children of parents who learned Dialogic Reading strategies talked more about books	Quantitative
9	Chow et al. (2008)	Pedagogical Approach (Dialogic Reading and Morphology Training)	Hong Kong	Greater gains in vocabulary and greater improvement in character recognition and morphological awareness.	<i>Quantitative</i>
10	López-Escribano et al. (2021)	E-book Approach	Spain	Development of reading skills.	Quantitative
11	Pilonieta et al. (2020)	Decoding strategy	USA	Kindergarten Reading Skills	Quantitative
12	Heang et al. (2021)	Montessori Approach (Play)	Malaysia	Preschool vocabulary	Quantitative and Qualitative (Mixed Method)
13	Nur & Ahmad (2017)	Pedagogical Approach	Indonesia	Students' efficacy and creativity	Quantitative
14	Kelly et al. (2019)	Pedagogical Approach (Phonological awareness)	Australia	Preschool reading skills	Quantitative
15	Fitria et al. (2019)	Pedagogical Approach (Flash Card)	Malaysia	children's Early reading ability	Quantitative
16	Ahmad & Khoo (2019)	Interactive media strategies	Malaysia	Preschool students reading skills.	Quantitative
17	Ariati et al. (2018)	Pedagogical Approach (Jolly Phonics)	Indonesian	Children's reading skills.	Qualitative

Continued

18	Yusuf & Enesi (2017)	Pedagogical Approach (Phonics)	Nigeria	Pupils' reading skills and attitude	Quantitative
19	Zulhendri & Warmansyah (2020)	Pedagogical Approach (Multisensory)	Indonesia	Developing early reading skills	Quantitative
20	Ihmeideh (2017)	E-book Apporach	Jordanian	Enhance preschool reading skills	Quantitative
21	Van-Gorp et al. (2014)	Pedagogical Approach (Repeated Reading)	Netherlands	improve reading speed and reading accuracy	<i>Quantitative</i>
22	Giles & Tunks (2015)	Pedagogical Approach (Differentiated Instruction)	USA	Facilitating preschool literacy acquisition.	<i>Quantitative</i>

Source: Research database. Own elaboration.

1. Descriptive Analysis of Methodology

The descriptive characteristics of the study under review show that, 13% of the articles utilized a qualitative methodology, 83% of the articles embraced quantitative methods and 4% used a mixed methodology which combines both qualitative and quantitative methodology. This is graphically illustrated in Figure 2.

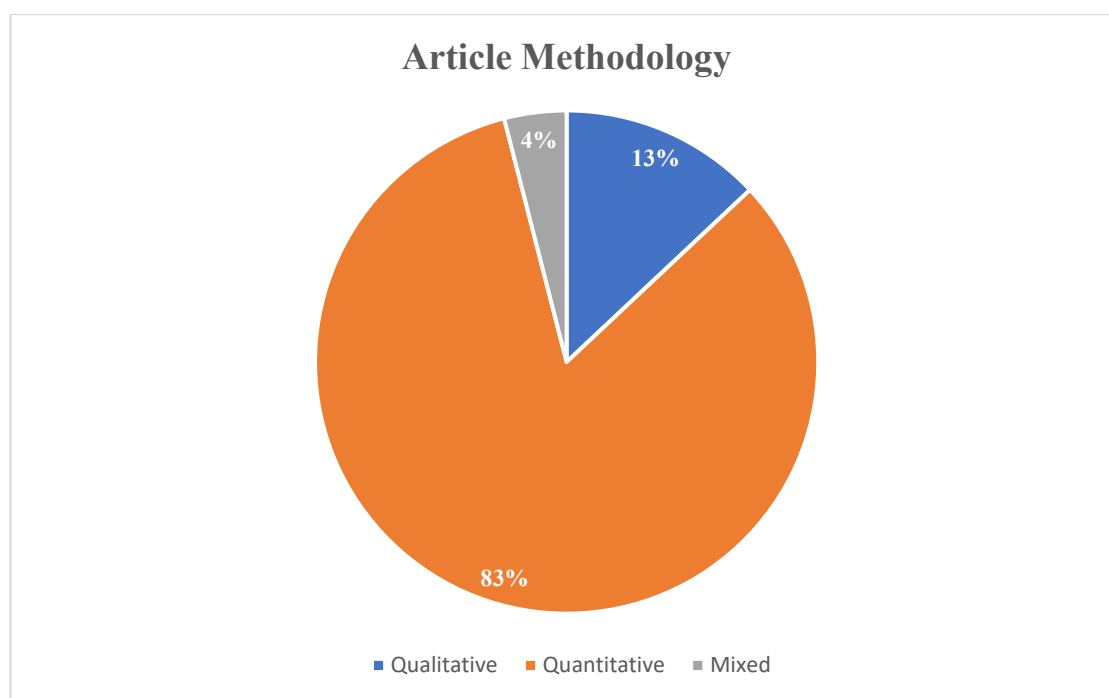


Figure 2 Article Methodology

2. Publication by Year

Figure 3 graphically illustrates the distribution of articles by year and the number of each article.

3. Research Country Affiliation

This shows how the research articles on the subject are distributed geographically. USA emerges as the most active contributor among the articles tested, accounting for 23% of publications. Malaysia comes second with 18%, Indonesia and Spain follow with 14% and 9% respectively, while the following

countries all contributed 4% each, Ghana, United Kingdom, Israel, France, Hong Kong, Australia, Nigeria, Jordan, and Netherland. This stat shows that our subject under review is of great interest amongst researchers in the USA, Malaysia, Indonesia and Spain as they all have contributed a handful percentage on this subject matter. This graphical illustration is shown in Figure 4.

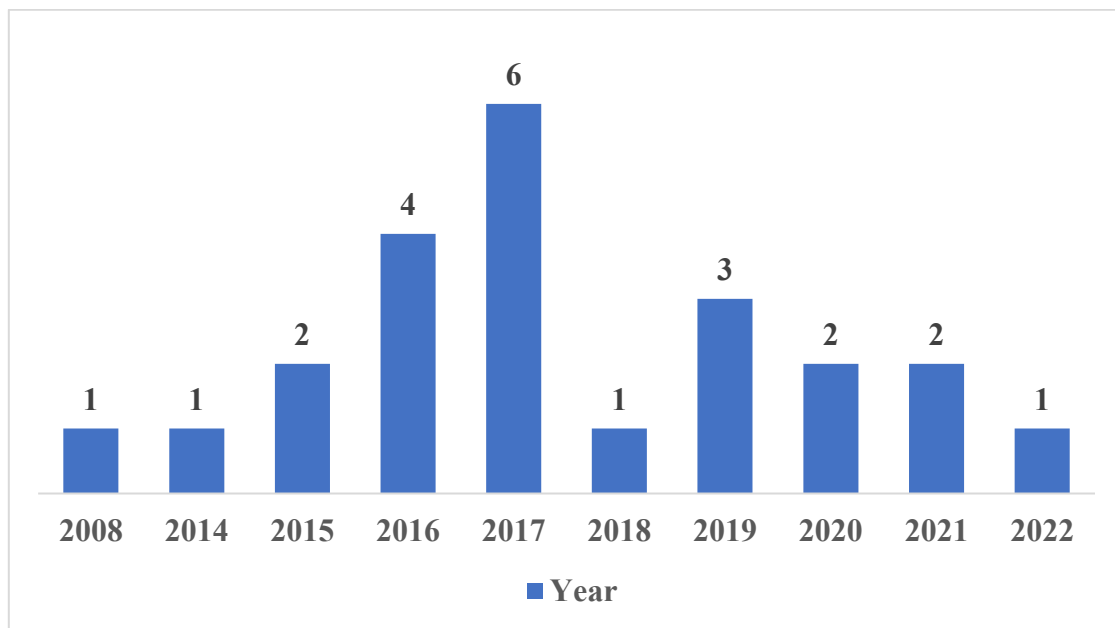


Figure 3 Publication by year

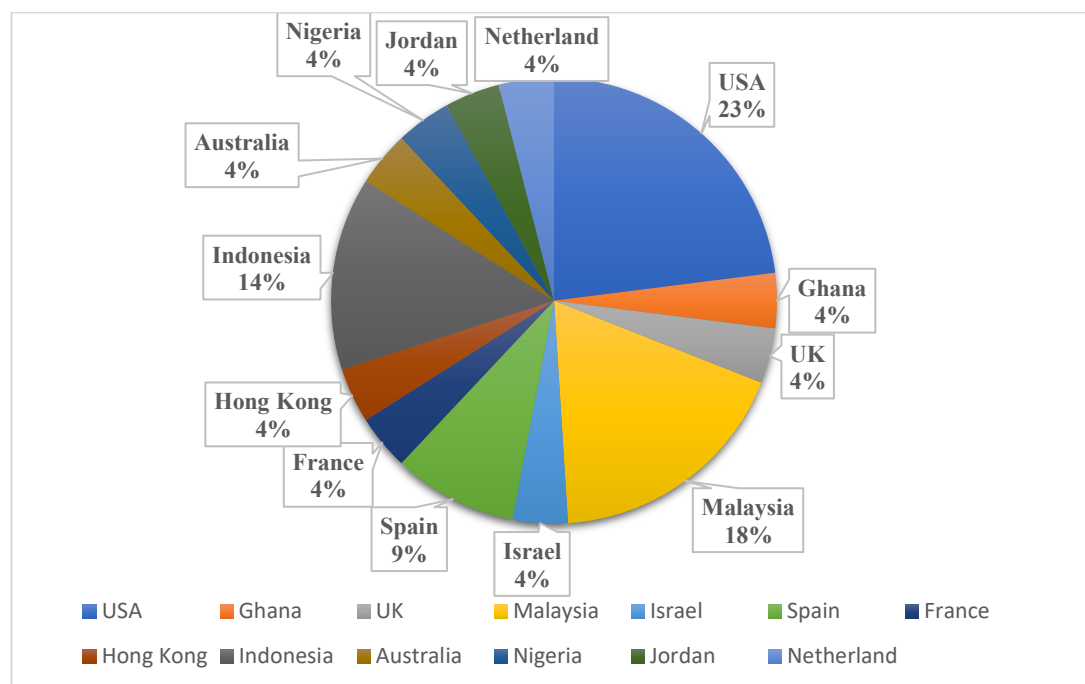


Figure 4 Research Country Affiliation

4. Authors Country Affiliation

The majority of the researchers in USA contributed to the study under review, while Malaysia, Indonesia, and Australia followed, this shows that this topic is of great interest to researchers in the

aforementioned countries. Figure 5 shows how authors contributed to the study by their countries of affiliation.

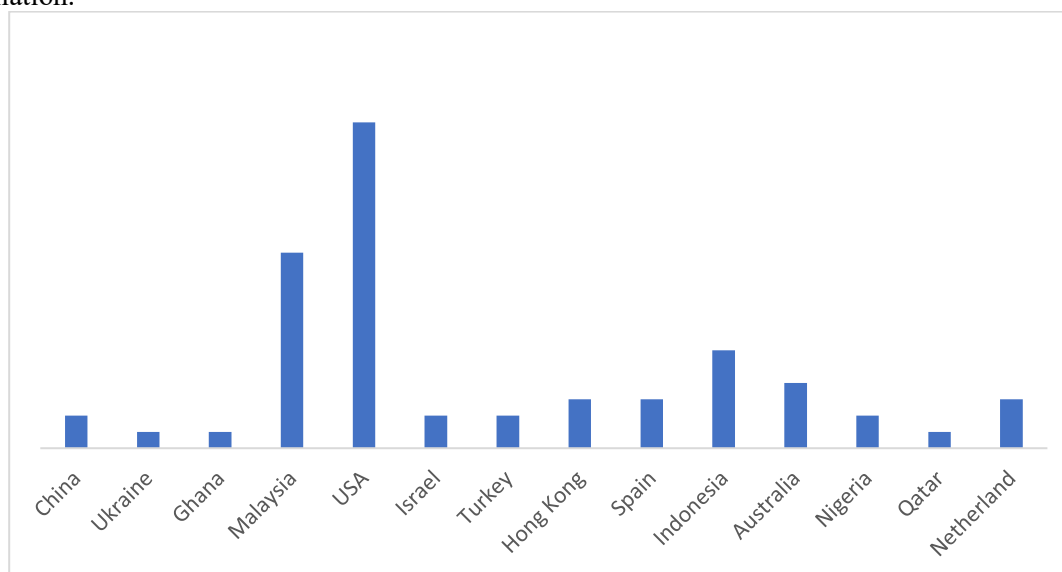


Figure 5 Authors' Country Affiliation

5. Contribution by Continent

In the continent where English is used and learned by non-native speakers as an additional or instructional language as early as preschool or prekindergarten age, the studies chosen for this study were all conducted there. Asia emerges as the primary contributor in terms of percentage share, leading with 39%, Europe and North America an English-speaking continent follow with 26% and 22% respectively, Africa contributed 9% and Australia has 4%. This is seen in Figure 6.

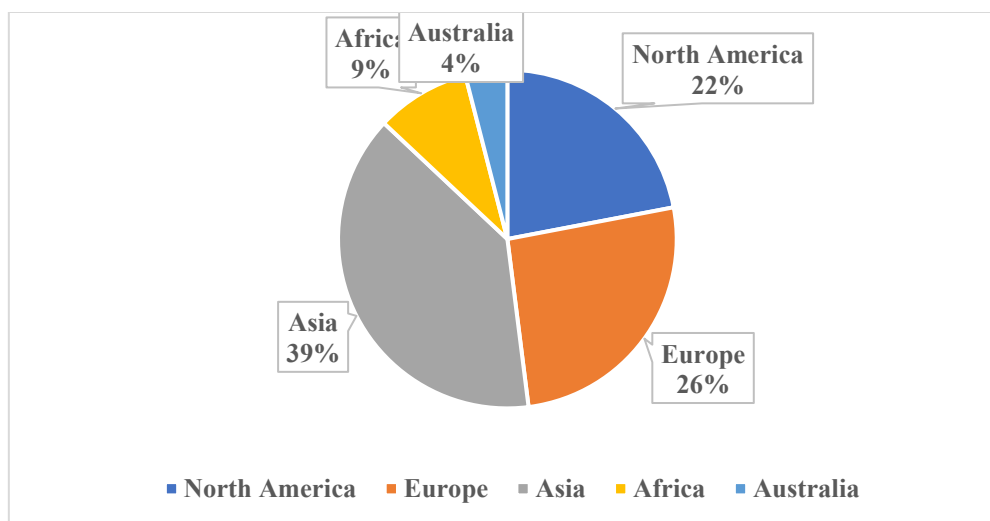


Figure 6 Contribution by Continent

DISCUSSION OF RESULT

This study aims to review the preschool pedagogy for promoting reading skills with the objective of examining the reading strategies used in teaching reading skills in preschool and to identify the effectiveness of these strategies based on the three basic elements of teaching strategy which are

decoding, fluency, and comprehension.

1. What is the reading strategies used in teaching reading skills in preschool?

Reading strategies are specific techniques and approaches that individuals use to comprehend, interpret, and make sense of written text. Reading Strategies used in teaching reading skills in preschool are as follows.

a. Montessori Approach

This approach emphasizes respect for a child's normal psychological, physical, and social growth as well as independence and freedom within reasonable bounds. This method includes several techniques like the music method, movement method, and play-based learning.

The Music Method, as outlined by Kraus (2012), involves the practice of reading while singing. This approach enhances reading proficiency by directing the brain's attention to sound, which is crucial for the development of phonemic awareness. Phonemes, the distinct units of sound that form words, are essential for language acquisition. Through this method, children develop the ability to distinguish these phonemes more effectively. Kraus (2012) emphasizes that as children learn to read and simultaneously sing or play specific musical notes, the brain's capacity to differentiate sounds is sharpened. This dual engagement in reading and music fosters a deeper connection between auditory skills and reading ability.

Another innovative approach is the Movement Method, which integrates physical activity into literacy education. The International Literacy Association (2013) notes that incorporating movement into reading instruction enhances preschoolers' engagement and retention of information. By involving their bodies in the learning process, children can better connect with the material, making abstract concepts more concrete. This method aligns with research suggesting that kinesthetic learning, or learning through movement, supports brain development and reinforces memory. The Movement Method encourages children to connect letters, sounds, and words to actions, thereby fostering both physical coordination and early reading skills.

Lastly, Play-based Learning, as described by St. George (2017), emphasizes the role of play in educational development. This method utilizes play as a foundational tool for learning, allowing children to explore, experiment, and embrace challenges in a creative and low-pressure environment. Play-based learning fosters problem-solving skills and cognitive flexibility, which are critical for reading comprehension. By engaging in imaginative and exploratory play, children not only enhance their literacy skills but also develop socially and emotionally. St. George (2017) suggests that this approach encourages children to view learning as a dynamic and enjoyable process, which can lead to long-term educational benefits.

Heang et al. (2021) utilized the Montessori approach in their study to investigate the benefit of play to learning in preschool, the study shows that play benefited children in terms of their cognitive development, and activities such as singing songs or reciting rhymes enhance children's social and emotional development; from their findings, it implies that play-based learning outcomes result in greater advantages for kids and instructors in developing excellent reading skills. Augustine (2015) endorsed this strategy for educating young children in reading. Augustine claims that compared to non-musical and non-movement activities, music and movement have an effect on preschoolers' reading abilities.

b. Pedagogical Approach

This pertains to the techniques and strategies employed by educators in the process of teaching and learning. It encompasses the way teachers engage in teaching and learning, utilizing a particular curriculum with defined objectives. These approaches can be tailored with the student's needs in focus to enhance participation and, ultimately, achieve desired student outcomes as posited by (Yusuf et al., 2022; Adewale & Potokri, 2023). This approach encompasses the Dialogic method, Games method, and flash-cards method.

The Dialogic Method emphasizes the importance of continuous dialogue between educators and students, moving beyond the traditional one-way transmission of knowledge. As described by Adewale and Potokri (2023), this method encourages open communication, where teachers actively engage with students' evolving thoughts, drawing out their everyday perspectives and "common sense" viewpoints. Through these ongoing dialogues, educators are better equipped to address misconceptions and guide students toward deeper understanding. The dialogic approach transforms the classroom into a collaborative learning environment, fostering critical thinking and allowing students to feel heard and involved in the learning process. This method is particularly valuable in its ability to adapt to the needs of each student, providing personalized guidance and support.

The Games Method, according to Atlas (2023), introduces digital, interactive learning tools that leverage elements such as Shape, Sound, Light, and Motion to make complex concepts more accessible. This method integrates educational activities that not only engage students but also teach them about scientific principles like resonance, vibration, frequency, and angles. By utilizing gamified learning, students are motivated to explore creative applications of what they are studying, making abstract concepts more tangible and exciting. The Games Method also enhances problem-solving skills and encourages experimentation, making it an effective tool for developing both cognitive and technical abilities.

Lastly, the Flash-cards Method is a time-tested approach that remains effective for early reading instruction. Atlas (2023) notes that this technique is particularly useful for teaching sight words, phonics, and vocabulary to preschoolers. Flashcards provide a simple yet efficient way to reinforce word recognition and language development, making them an ideal tool for building foundational reading skills. Moreover, flashcards can be seamlessly incorporated into playful activities, increasing student engagement and retention. This method appeals to young learners by turning the learning process into a fun and interactive experience, making it easier for children to absorb new information.

The usage of games and pre-reading activities is vehemently debated in the study of Osei et al. (2016). The results are incredibly telling as the analysis reveals that games and pre-reading activities in language teaching give children fantastic opportunities to improve their reading skills. According to the study, language acquisition and the development of pre-reading skills enhance when games and pre-reading activities are used in preschool centers to teach language and literacy. When Osei et al. compared the treatment class, which participated in games and pre-reading activities, with the control group, which did not, it was clear that using games and pre-reading activities to teach language contents promoted higher achievement, accuracy of factual information recognition, and the usefulness of information in daily life. These findings corroborate the findings of Nur and Ahmed (2017), according to Nur and Ahmad (2017), employing interaction to teach reading skills is more creative and gives preschoolers greater confidence in learning them.

According to Kelly et al (2019) study, which assesses the efficacy of a classroom-based phonological awareness program for 4-5-year-olds, phonological awareness can considerably increase reading skills. It was mentioned in their research that employing flash cards as a way of teaching preschool reading will solve the problem of reading handicap encountered by the children in their reading activities, Fitria et al. (2019) support this approach with their findings, as it was stated in their research that using flash cards as a method of teaching preschool reading will solve the problem of reading disability experienced by the children in their reading activities. Early childhood learning activities are now more pleasurable thanks to the child's attention being drawn by the variety of flash cards used in the process. Because the flash card method utilized is created in accordance with the topic and the needs of children, it is thought to be extremely valuable and proven to increase the early reading ability of children. The study of Ariati et al. (2018) uses jolly phonics to evaluate the effective strategy for enhancing children's English literacy, their findings indicate that implementing jolly phonics enhanced children's overall reading skills. To improve reading skills, Zuhendri & Warmansyah (2020) employ a multisensory method, which is categorized as a pedagogical approach. This method involves several senses (such as visual, aural, and kinesthetic/tactile) at once. Zuhendri & Warmansyah found that utilizing multisensory learning while reading can enhance the reading proficiency of children who possess high spatial-visual intelligence. Children with high spatial-visual intelligence exhibit the capacity to adeptly handle, arrange, and generate content related to artistic pursuits, exploration, games, and imaginative activities, predominantly in the realm of visual imagery and spatial concepts.

c. E-book Approach

E-book is not a typical reading strategy approach, however, it's a valuable resource and tool used in teaching reading skills in preschool. Although Korat and Segal-Drori (2016) stressed that the children should be guided by an adult, their findings show that this approach is effective in assisting reading skills. Reading an e-book with adult support, as opposed to print book reading with adult support, is a more efficient context for children's emergent literacy progress. In their thorough analysis of the effects of e-book reading on young children's developing literacy skills, López-Escribano et al. (2021) state that children can listen to storybooks on computers and tablets as well as when an adult reads to them from a printed version. Their findings show that e-book stories enhance reading skills. Their findings also demonstrate that, contrary to what Korat and Segal-Drori (2016) claimed, the presence of an adult does not benefit children's reading abilities. Ihmeideh (2014) examined how reading electronic books in comparison to reading print books in schools, and the results suggest that the electronic book group outperforms the print book group. They came to the conclusion that electronic books have the ability to increase children's literacy.

d. Child-Centered Approach

The child is positioned at the center of the learning process with this method. It is a learner-centric approach that recognizes and respects the unique needs, interests, abilities, and experiences of each child, according to Baştuğ and Demirtaş (2016), this has similarities with the Fernald method in terms of dictation activities.

e. Computer-Assisted Instruction

This is an educational approach that utilizes computer technology and software to support and enhance the development of preschool reading skills (Kim & Wagner, 2021), this method involves the use of interactive computer programs and digital resources designed to engage young learners in reading activities. CAI programs often incorporate multimedia elements such as audio, video, graphics, and interactive exercises to provide a dynamic and engaging learning experience.

2. How effective are these strategies based on the three basic elements of teaching strategy: Decoding, Fluency, and Comprehension?

It's crucial to know the effectiveness of the above-mentioned strategy, here, we aim to know the effect on the following.

a. Decoding

One of the most important steps in learning to read is decoding, which entails segmenting and combining the sounds in words. To correctly recognize written words and decode their meaning, it takes both knowledge of letter-sound correlations and the capacity to use that knowledge. According to Augustine (2015), music and movement which is classified as the Montessori approach aid children in learning more effectively, help their phonological awareness, and decoding vocabulary, and this helps the children reach their goal. Kelly et al. (2019), in their study, using the pedagogical approach, their finding show that the pedagogical approach is a suitable means to decode alphabet knowledge as well as improve non-word spelling and reading. The results of Ariati et al. (2018)'s research, in which jolly phonics was used, corroborate this approach. In their study, they were able to help preschool children decode words and learn letter sounds, letter formation, blending for reading, and challenging word identification.

b. Fluency

One of the fundamental components of reading strategy is fluency, which is the capacity to read a text accurately, swiftly, and expressively. Fluent reading increases the capacity to read lengthy or challenging texts. The connection between word recognition and comprehension is made possible by

reading fluency. Fluency is developed through numerous opportunities for practice where the activity can be completed successfully, as stated by the study of Abbott et al. (2017), reading strategies improve children's fluency and sound identification. Baştuğ & Demirtaş (2016) posit that the Child-centered approach eliminates the student reading and fluency problem, from their sample tested, the accuracy reading level was 72.6%, which shows a great improvement in the children's fluency accuracy. According to study by Blom-Hoffman et al. (2017), dialogic reading is a pedagogical strategy that helps toddlers and preschoolers develop their spoken language and emergent literacy skills. Chow et al. (2008) also evaluate the effectiveness of the dialogic method with a 12-week study, their findings support Blom-Hoffman et al. (2017), as the children improve significantly both in reading fluency and comprehension. Although Nur and Ahmad (2017) made use of the interactive method, their findings show that the pedagogical approach is effective in improving the student's reading skills, as a result of this, they encourage teachers to find an interactive way to teach their pupils and to adopt this approach. According to the findings of Fitria et al. (2019), the utilization of flashcards has been shown to enhance early reading proficiency in children which is also a pedagogical approach, these findings clearly show that the approaches mentioned all improve the reading fluency of children in their preschool.

c. Comprehension

The ultimate purpose of reading is comprehension, or drawing meaning from what you have read. Comprehending is an interactive and purposeful process. Readers must evaluate, assimilate, and personalize text rather than simply reading it passively. When a picture book is read to a child before they can read, the process of understanding text begins. They hear the words, look at the pictures in the book, and possibly begin to connect the words on the page with the thoughts they are hearing. That is why some teachers use visual materials like flashcards, e-books, and play method strategies in teaching reading skills for preschool. Research indicates that students who engage in visualization while reading demonstrate improved recall abilities compared to those who do not (Ghazanfari, 2009). Korat & Segal-Drori (2016) findings indicate that an E-book approach aids the development of phonological awareness and word-reading skills in young children, which is seen as the foundation for children's comprehension. Heang et al. (2021) findings show that the Play-based method which is classified as the Montessori approach offers children the chance to cultivate a profound understanding of their surroundings by engaging in inquiry, exploration, interaction, and problem-solving activities. This foundation of experiential learning equips them with valuable skills and strategies that are instrumental in comprehension of the world and various forms of communication. The use of flashcards, a pedagogical approach can enhance children's early reading abilities, and this improvement in early reading skills can lay a foundation for stronger reading comprehension (Fitria et al., 2019). Also, Ihmeideh (2014) findings suggest that e-books hold promise in fostering pupils' emergent reading ability, particularly in the areas of print awareness as well as vocabulary development, which are foundational for enhancing reading comprehension abilities.

CONCLUSIONS

The main goal of this research was to evaluate the utilization of reading strategies in the instruction of preschool reading skills, with a particular focus on evaluating their effectiveness based on the three fundamental elements of teaching strategies: Decoding, Fluency, and Comprehension. Through the application of the systematic PRISMA approach in our literature search, our research findings highlight the vital role of reading strategies in establishing a strong foundation for preschool children. Approaches such as Montessori, Pedagogical, E-book, and Child-centered have been acknowledged as important factors in improving kids' reading abilities. These approaches were found to positively impact decoding, fluency, and comprehension abilities among preschool learners. Every empirical study has its inherent limitations, and this research is no exception. While the findings of this pioneering systematic literature review (SLR) using the PRISMA framework are noteworthy, it's important to recognize that this study represents a preliminary exploration of the reading strategies employed in teaching preschool reading skills and their respective roles, also, a significant observation is that many of these strategies lack full

incorporation of the three fundamental elements expected in reading strategies. Therefore, the qualitative conclusions drawn in this study are based on a restricted dataset, comprising only 23 academic articles. Given the exploratory nature of this investigation, it is imperative that future research endeavors involve more comprehensive empirical studies, utilizing primary data and encompassing a larger and more diverse sample of participants.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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