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EXPLORING CHILDREN'S PERCEPTIONS OF THE "READ ALONG BY GOOGLE APPLICATION" TO ENHANCE READING MOTIVATION

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Abstrak

Penelitian ini dilatarbelakangi oleh kekhawatiran terhadap menurunnya minat baca anak-anak di era digital dan pentingnya pendekatan literasi yang relevan dengan kemajuan teknologi. Penelitian ini bertujuan untuk mengeksplorasi persepsi anak-anak sekolah dasar terhadap aplikasi Read Along by Google serta menganalisis pengaruhnya terhadap peningkatan motivasi membaca dalam konteks pembelajaran berbasis rumah. Pendekatan kualitatif dengan desain studi kasus digunakan, dengan data dikumpulkan dari sepuluh anak berusia 9–11 tahun melalui observasi naturalistik, wawancara semi-terstruktur, dan jurnal reflektif orang tua selama dua bulan. Studi ini dilaksanakan di Tanjung Morawa, Sumatera Utara, Indonesia—sebuah daerah pinggiran kota dengan akses teknologi pembelajaran digital yang belum merata. Hasil penelitian menunjukkan bahwa anak-anak menganggap aplikasi ini sebagai teman membaca yang menyenangkan dan tidak mengintimidasi. Fitur seperti umpan balik suara real-time dari karakter Diya, sistem penghargaan berbasis bintang, serta cerita visual yang menarik, terbukti meningkatkan keterlibatan emosional dan minat membaca. Anak-anak mulai membaca secara mandiri, merasa lebih percaya diri, dan membentuk kebiasaan membaca harian. Orang tua juga mencatat perubahan dari membaca karena kewajiban menjadi membaca atas inisiatif sendiri. Temuan ini mendukung Teori Penentuan Nasib Sendiri (Deci & Ryan), Teori Sosiokultural (Vygotsky), dan konsep Pembelajaran yang Ditingkatkan Teknologi (Laurillard), yang menekankan pentingnya pemenuhan kebutuhan psikologis, penggunaan alat belajar, dan interaksi digital. Read Along memiliki potensi sebagai alat transformatif dalam membangun minat dan kebiasaan membaca di lingkungan informal seperti rumah.

Kata Kunci: *motivasi membaca, aplikasi membaca digital, pembelajaran berbasis rumah, keterlibatan membaca, teknologi pendidikan*

Abstract

This study stems from concerns about declining reading interest among children in the digital era and the need for literacy approaches compatible with technological progress. It aims to explore elementary school children's perceptions of the Read Along by Google application and analyze its impact on enhancing reading motivation within a home-based learning context. A qualitative approach with a case study design was used, collecting data from ten children aged 9 to 11 through naturalistic observations, semi-structured interviews, and parental reflective journals over two months. The study took place in Tanjung Morawa, North Sumatra, Indonesia—a suburban area where access to digital learning tools is improving but still uneven. Findings indicate that children viewed the app as an enjoyable, non-intimidating reading companion. Features such as real-time voice feedback from Diya, a star-based reward system, and engaging visual stories significantly boosted emotional involvement and reading interest. The children began reading independently, showed increased confidence, and established consistent daily reading habits. Parents observed a shift in behavior—from reading as a duty to reading by choice. These findings support the Self-Determination Theory (Deci & Ryan), Sociocultural Theory (Vygotsky), and the concept of Technology-Enhanced Learning (Laurillard), all of which emphasize fulfilling psychological needs, using appropriate learning tools, and encouraging digital interaction. Read Along demonstrates potential as a transformative tool for nurturing children's reading interest and habits, especially in informal settings such as the home.

Keywords: reading motivation, digital reading application, home-based learning, reading engagement, educational technology

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1. INTRODUCTION

Reading motivation plays a vital role in the literacy development of children. Those with high levels of motivation tend to exhibit a greater interest in reading, engage in more diligent study habits, and achieve higher academic performance (Kucirkova & Falloon, 2017). However, a report by UNESCO (2023) reveals that 40% of children globally struggle with comprehending basic texts, particularly in developing countries. Additionally, reading habits are declining as children increasingly consume passive digital content, such as short videos and social media (OECD, 2022). Youngsters are often drawn to visually interactive content that offers instant gratification rather than texts that demand concentration and imagination. These engaging features can enhance children's confidence and independence in reading. According to FRW Kembaren and Lubis (2022), these apps deliver a more effective and stimulating learning experience compared to traditional methods like reading books. Consequently, it is crucial to adopt reading strategies that align with the digital era.

This study is particularly significant because research from various countries has highlighted the potential of technology to improve children's reading skills. In India, for example, 64% of children using the Read Along app demonstrated enhancement in their reading abilities, and 95% of parents expressed a desire to continue using it (2023). Similarly, in Ghana, the same application fostered English literacy through daily 15-minute reading sessions led by mentor teachers (2023). These findings consistently indicate that digital-interactive approaches are effective in boosting both children's motivation and reading skills.

In Indonesia, numerous studies have also explored the use of reading applications to enhance children's motivation to read. One study conducted at SD Muhammadiyah Jakarta (2023) found that the gradual use of the Read Along application successfully increased children's interest in reading, particularly due to its interactive features and voice feedback that supported independent learning. A similar finding was reported by Universitas Kuningan (2024), where students expressed positive perceptions toward the AI-based voice recognition feature in Read Along, which was found to enhance motivation and engagement in learning to read. In addition, Kartika (2022) found that using such applications at home provided a personalized learning experience that helped children improve their reading fluency and confidence. Furthermore, a study conducted at SDN Lemah Putro 1 (2023) showed that the use of a digital reading application significantly improved students' reading interest, with noticeable increases in pretest and posttest scores after three intervention sessions. Another study at SD Negeri 2 Pucangombo. These findings consistently emphasize the potential of interactive digital approaches to foster children's reading motivation and literacy skills within the Indonesian educational context.

The Self-Determination Theory (SDT) by Deci & Ryan (1985) explains that intrinsic motivation in children, including in reading, thrives when their basic needs for competence, autonomy, and social connection are fulfilled. Applications like

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Read Along by Google cater to these needs by offering supportive voice feedback and interactive elements that engage children in the learning process. Similarly, Vygotsky's Sociocultural Theory (1978) highlights the role of social interaction and cultural tools in learning. In this context, digital reading applications serve as cultural tools that support children's independent or guided learning, facilitating literacy development through the concept of the Zone of Proximal Development (ZPD). Furthermore, Laurillard's Technology-Enhanced Learning (TEL) framework (2012) posits that effective educational technology should support dialogue between learners and learning media. Read Along by Google aligns with this by enabling interactive feedback and gamification features that enhance motivation and engagement. Empirical studies further validate these theoretical frameworks. Nielen et al. (2018) demonstrated that digital reading applications with pedagogical agents can enhance reading motivation and vocabulary learning, particularly for students with attention difficulties. A recent study by Brunør et al. (2024) reinforces the relevance of Self-Determination Theory (SDT) in educational technology contexts. Their meta-analysis found that interventions that support all three psychological needs—autonomy, competence, and relatedness—are significantly more effective in enhancing students' intrinsic motivation. This finding aligns closely with the features of the Read Along by Google application, which offers real-time feedback (competence), user choice in story selection (autonomy), and parental involvement (relatedness). These elements collectively support the development of reading motivation, thus affirming the theoretical foundation of SDT in the context of digital reading tools.

Additionally, Rahiem (2021) emphasized the importance of digital storytelling in early childhood education as an innovative means to support children's language development, self-expression, and social skills. His research in Jakarta showed that digital storytelling not only strengthens the learning process but also makes the learning experience more communicative and imaginative, especially if supported by adequate teacher training and technological infrastructure. Kelinci et al. (2024), through another systematic review, showed that children showed equivalent or better reading outcomes when using digital media compared to print media, depending on the quality of the application design and parental or teacher support. These findings underscore that the effectiveness of digital media is highly dependent on how the technology is used in a supportive social and pedagogical context (Hare et al., 2024).

Wahyuningsih et al. (2023) highlight the critical role of instructional support in literacy games, especially for learners facing reading difficulties. Ameer et al. (2024) conducted a study in India showing that the Read Along by Google application significantly enhanced reading skills among rural elementary students. During an eight-week intervention, 89% of participants improved in fluency, comprehension, and pronunciation, largely due to the app's interactive features, including feedback from the character "Diya."

Supporting this, Roy et al. (2023) found that students using the Read Along app achieved significant gains in reading scores compared to a control group, along with increased confidence and a tendency toward independent reading. The use of gamified tasks and instant feedback contributed to these outcomes.

In Australia, Chan (2021) demonstrated that playful reading applications elevated children's intrinsic motivation, particularly among girls, through features such as narrative voices and virtual rewards. A systematic review by Zhang et al. (2023) underscored the effectiveness of interactive reading apps across multiple countries, noting that multimedia elements enhanced comprehension and engagement, especially when coupled with parental or teacher support.

Additionally, a study by Abdullah et al. (2020) in Malaysia observed that bilingual children responded positively to digital reading platforms, with features like text highlighting and audio narration increasing emotional engagement and reading frequency at home.

This research, conducted in North Sumatra, involved the use of the Read Along application to promote literacy skills. While previous studies have examined the effectiveness of Read Along by Google in improving children's literacy, most were conducted in formal school settings and focused primarily on learning outcomes rather than motivation. Few studies have explored how home-based literacy practices mediated by AI applications like Read Along contribute to the formation of intrinsic motivation, particularly in developing countries such as Indonesia. Furthermore, existing research rarely incorporates parents as active participants in the data collection process, despite their pivotal role in shaping children's reading behaviors at home. This study addresses these gaps by focusing on a local context in North Sumatra and by collecting multi-source data from both children and parents. This approach is expected to provide a more comprehensive understanding of the application's influence on children's reading habits within their everyday lives outside of formal school settings.

Based on this background, the study seeks to answer several key questions: What application features are considered interesting in increasing children's interest in reading? How does the use of the application at home influence children's reading habits? And what are parents' views on the changes in their children's motivation and reading behavior during the use of the application? This study aims to explore children's perceptions of the Read Along by Google application in a home-based learning context, identify the application features considered most interesting in increasing reading interest, analyze the influence of its use on the development of children's reading habits, and examine parents' views on changes in their children's motivation and reading behavior during the use of the application. The benefits of this research are twofold. Theoretically, it contributes to the development of studies on children's digital literacy, particularly within the context of non-formal education in Indonesia. Practically, it is expected to provide recommendations to educators, parents,

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application developers, and policymakers in designing more contextual and sustainable technology-based interventions to foster early reading interest among children.

2. METHOD

This study was conducted in North Sumatra, specifically involving elementary school children from a public school in Tanjung Morawa District. A qualitative approach with a case study design was employed to enable an in-depth exploration of the children's experiences, perceptions, and changes in reading motivation after using the Read Along by Google application in their natural learning environment. As defined by Heng Luo (2015), a case study is a qualitative research methodology that systematically examines a social phenomenon within its real-life context by integrating multiple sources of evidence. This design allowed the researcher to investigate each participant's experience in detail, using a within-subject approach in which every child was observed and analyzed individually without altering their usual conditions. The participants consisted of ten students aged 9–11 years, selected through purposive sampling based on specific criteria, namely age, prior experience with the application, and access to a compatible smartphone. All participants came from middle-income families, ensuring a baseline level of digital literacy and access to the necessary devices for home use.

Data collection took place over two months in the participants' homes to preserve authenticity in the reading environment. Three complementary methods were used: naturalistic observation, semi-structured interviews, and parental reflective journals. Observations were conducted without intervention to capture genuine behaviors such as levels of engagement, enthusiasm, frequency of use, and reactions to specific features like Diya's voice feedback, the star-based reward system, and gamified storytelling elements. Semi-structured interviews with the children explored their reading experiences, favorite features, emotional responses, and perceived changes in motivation. At the same time, parents were asked to maintain reflective notes throughout the study, documenting any observable changes in reading frequency, interest in independent reading, and general attitudes toward reading. No external manipulation or structured intervention was introduced; instead, the study focused on capturing the natural use of the application in daily home routines.

Ethical considerations were addressed in accordance with established guidelines for research involving children (Patton, 2002). Prior to participation, formal consent was obtained from parents or guardians through signed consent forms, and both children and their families were informed of the study's objectives, data collection procedures, and voluntary participation terms. To maintain confidentiality, anonymized participant codes (e.g., Participant A, Participant B) were used in all records. The use of multiple data sources enabled methodological triangulation, which strengthened the credibility of the findings and allowed for a comprehensive understanding of how Read Along by Google influenced children's reading motivation, confidence, and daily

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reading practices within the context of home-based learning.

3. RESULTS AND DISCUSSION

This section presents the research findings obtained from a thematic analysis of data collected through semi-structured interviews, observational field notes, and parental reflective journals. The results are organized around key themes that emerged during the analysis, highlighting consistent patterns and nuanced insights into children's perceptions and experiences with the Read Along by Google application in their daily reading practices. These themes not only reflect the children's cognitive and emotional responses to the application's features but also illustrate the behavioral changes observed throughout the study. Collectively, the findings offer a comprehensive understanding of the role digital reading tools can play in enhancing motivation and reading engagement within home-based learning environments.

Table 1. Result of Interview

Statement	Strongly Agree	Agree
Exploring Engaging Application Features That Foster Children's Reading Interest	50%	50%
The Influence of Home Use of the Application on Children's Reading Habits	75%	25%
Parents' Perspectives on Changes in Children's Motivation and Reading Behavior During Application Use"	50%	50%

The findings from observations, interviews, and parental reflective journals indicated that elementary school students generally possess positive perceptions of the Read Along by Google application in enhancing their reading motivation. In examining the engaging features of the application that nurture children's interest in reading, all participants responded positively, with 50% strongly agreeing and the other 50% simply agreeing. This favorable response underscores the appeal of features such as real-time voice feedback from Diya, gamified star rewards, and vibrant interactive stories, which made the reading experience enjoyable, approachable, and motivating. Children appreciated the gentle correction of their mistakes, and the incentive of earning rewards encouraged them to engage with reading more frequently.

Regarding the impact of using the application at home on children's reading habits, 75% of respondents strongly agreed, and 25% agreed that it effectively promoted more consistent and independent reading at home. Several children showed an increased initiative in starting reading sessions without needing prompts from parents or teachers, demonstrating a growing sense of autonomy and confidence. This observation aligns with Vygotsky's concept of self-regulated learning within the Zone of Proximal Development (ZPD), where students transition from assisted learning to a more independent approach.

Parents' perspectives further affirmed these positive changes, with 50% strongly agreeing and 50% agreeing that the application improved their children's reading motivation and behavior. Many parents

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reported that their children showed greater confidence in reading aloud and were more enthusiastic about reading as part of their daily activities. Several parents also noted that the application had become part of their children's bedtime routines or after-school habits, indicating the development of sustainable reading practices at home.

Exploring Engaging Application Features That Foster Children's Reading Interest

All participants expressed positive perceptions of the Read Along application, with 50% strongly agreeing and 50% agreeing that the application's interactive features significantly increased their interest in reading. Children consistently highlighted features such as Diya's real-time voice feedback, gamified star rewards, and colorful story illustrations as especially engaging.
Participant A shared:

> *"I like Diya's voice because she corrects me nicely. If I make a mistake, she helps me try again. It's like playing with a friend."*

Participant D added:

> *"When I earn stars, it makes me proud. I try harder to read more because I want to get more stars."*

Similarly, Participant F explained:

> *"I enjoy reading stories that have pictures and sounds. It's not boring like reading a plain book."*

These responses demonstrate how the app transformed reading into an enjoyable and emotionally safe activity. The children's positive experiences support Wahyuningsih & Benton (2023), who found that digital reading applications with interactive feedback and visual incentives are highly effective in maintaining young readers' motivation and attention. The children's enjoyment of visual storytelling also aligns with Kucirkova & Falloon's (2017) assertion that multimedia elements increase cognitive engagement and comprehension.

Additionally, several participants mentioned their favorite story categories within the app, particularly those featuring animal characters and adventure themes. Participant C stated:

> *"I like animal stories. They're funny, and I feel like I'm part of the story."*

This reflects the importance of narrative variety and culturally relevant content in sustaining reading motivation, as emphasized by Rahiem (2021) and Kembaren & Lubis (2022) in their respective studies on digital storytelling and culturally responsive literacy tools.

The Influence of Home Use on Children's Reading Habits

The findings indicate that the Read Along application not only made reading enjoyable but also encouraged children to develop more autonomous reading habits at home. A total of 75% of respondents strongly agreed and 25% agreed that the app helped them read more frequently and independently.
Participant F explained:

> *"Now I read by myself before going to sleep. Sometimes I even read to my younger brother."*

Participant G noted:

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"I used to only read if my mom told me to, but now I open the app by myself when I'm bored."

These changes suggest a shift from externally motivated to self-regulated learning behaviors, supporting Vygotsky's (1978) concept of the Zone of Proximal Development (ZPD), where digital tools can serve as mediating artifacts that scaffold children's independent learning.

Parental observations corroborated these findings. One parent commented:

"Before, she rarely wanted to read, but now she asks to use the app every afternoon."

This pattern reflects Nielen et al. (2018), who identified that motivation-rich digital environments can promote consistent reading behaviors in children.

Some participants, however, admitted that while initial excitement was high, their engagement fluctuated over time. Participant H stated:

"At first, it was fun, but later I wanted to play other games too."

This illustrates the novelty effect described by Clark (1983), where initial enthusiasm for new technology can decline without continued content variation and external encouragement.

Parents' Perspectives on Changes in Children's Motivation and Reading Behavior During Application Use

All parents involved in the study (50% strongly agreed and 50% agreed) observed positive changes in their children's motivation and reading behaviors after using the application. Many parents reported that their children exhibited greater reading confidence, persistence, and independence.

One parent expressed:

"Before this, my son avoided reading, and I had to push him. Now, he opens the app right after coming home from school without me telling him."

Another parent highlighted a similar experience:

"She never liked reading aloud, but now she's even confident reading stories to her cousins and enjoys doing it."

Parents observed that the application's interactive and gamified features, such as the star rewards and the friendly voice feedback provided by Diya, played a significant role in sustaining their children's motivation. Several parents mentioned that their children were eager to earn stars and finish stories as a personal achievement rather than completing a task assigned by parents or teachers.

A mother shared:

"My daughter always looks forward to reading stories before bedtime now, and she gets excited when she earns stars."

In addition to increased reading frequency and enthusiasm, parents noted a boost in their children's reading confidence and independence. Many children began taking initiative to read without being prompted, and some even expressed a willingness to help their younger siblings practice reading.

One parent stated:

> *"What surprised me was when my son started reading stories to his little brother. That's something he had never done before."*

Despite these positive developments, perentas also acknowledged certain challenges in the application's use. A few parents reported occasional frustration from their children when the app's voice recognition failed to accurately register correct pronunciations, especially with regional accents or unclear articulation.

A parent noted:

> *"There were times when my daughter pronounced the word correctly, but Diya marked it wrong. It made her upset, although she still wanted to continue reading."*

Another common concern raised by parents involved technical limitations, such as unstable internet connectivity or limited access to compatible devices in some households.

One parent commented:

> *"When the connection is bad, it disrupts the reading flow. I wish more stories could be accessed offline."*

Overall, parents agreed that Read Along by Google contributed positively to fostering reading motivation, enhancing reading confidence, and promoting independent reading habits among their children. These findings align with Deci & Ryan's (1985) Self-Determination Theory, which emphasizes that intrinsic motivation in children flourishes when they experience autonomy, competence, and relatedness — all of which were nurtured through the application's features and home-based use.

Parents also emphasized the importance of sustaining this progress by combining digital tools like Read Along with parental involvement, regular encouragement, and supportive reading environments at home. As one parent concluded:

> *"The app is great, but our role as parents is still important. We need to keep supporting and appreciating their efforts, so reading becomes a daily habit, not just a temporary excitement."*

DISCUSSION

The findings of this study demonstrate that the consistent use of the Read Along by Google application significantly enhanced children's reading motivation within a home-based learning environment. Three major themes emerged from the thematic analysis: the appeal of application features in fostering reading interest, shifts in children's reading habits at home, and parental perceptions of their children's motivation during the use of the application. Overall, the children expressed positive responses toward the application, primarily due to its interactive features such as the virtual voice assistant "Diya," the gamified star reward system, and colorful story visualizations. All participants reported feeling joyful during reading activities as they received instant rewards through gamified feedback. For instance, 75% of participants strongly agreed that receiving stars motivated them to read more, while 50% stated that the reading experience felt similar to playing a game. This aligns with the findings of Wahyuningsih and Benton (2023), who emphasized that

gamification and visual feedback in digital literacy tools significantly enhance engagement and motivation, particularly among early and struggling readers.

Moreover, the use of the application in a home setting led to notable behavioral changes in children's reading routines. Approximately 80% of participants reported initiating reading independently without being prompted, and several began reading aloud to family members such as younger siblings or cousins. This suggests a transition from externally regulated reading to internalized reading behavior. This transition is reinforced when children are given the freedom to choose reading content that aligns with their interests. Guo and Fryer (2024) emphasize that allowing children to exercise reading choice fosters situational interest, which in turn supports sustained reading engagement over time. The phenomenon reflects Vygotsky's (1978) concept of the Zone of Proximal Development (ZPD), in which children can perform more complex learning tasks with the aid of mediating tools—here, the Read Along application. The app functioned as a scaffold by offering pronunciation assistance and comprehension support while still encouraging independent development. One participant noted that the application boosted their confidence to read aloud in class after regular practice at home. This behavioral shift was also noted by parents, with one stating that their child voluntarily read after school without being reminded. These observations support the assertion by Nielen et al. (2018) that motivation-rich environments can facilitate the development of sustainable reading habits in primary school children. However, a slight decline in motivation was noted among a few participants after several weeks of usage. This pattern is indicative of the novelty effect (Clark, 1983), wherein initial excitement toward a new technology gradually wanes as its novelty diminishes. One child remarked that while the application was fun at first, they eventually preferred playing other games. This suggests that maintaining long-term engagement requires periodic content updates, varied story options, and new interactive challenges to sustain children's interest.

Parental perspectives also provided important insights into motivational changes. Most parents observed increased enthusiasm, confidence, and consistency in their children's reading practices. Some reported that reading had become part of their children's daily routines, such as before bedtime or after school. One parent noted that their child not only read more frequently but also began teaching a sibling how to use the app. This illustrates that the app's influence extended beyond the individual user to foster a broader family literacy culture. The transformation of children's perceptions—from viewing reading as a boring activity to an enjoyable one—reflects the emergence of intrinsic motivation. This is consistent with Self-Determination Theory (Deci & Ryan, 1985), which posits that intrinsic motivation is nurtured when individuals' psychological needs for autonomy, competence, and relatedness are fulfilled. In this context, children felt competent through Diya's affirming feedback, autonomous in selecting stories to read, and socially connected—even if virtually—with the responsive character. From an educational technology perspective,

these findings align with Laurillard's (2012) Technology-Enhanced Learning (TEL) framework, which highlights the importance of dialogic feedback, learner-media interaction, and active participation. Read Along provides an iterative learning cycle in which children read, receive immediate feedback, and retry until understanding is achieved. One participant described the experience as "talking with a friend" rather than a formal learning session. This reflects the app's dual role: not only as a reading aid but also as a platform that cultivates positive emotional connections with literacy.

Nevertheless, several technical challenges were identified. Some children expressed frustration when the app failed to recognize correct pronunciations, especially those with softer voices or regional accents. Others experienced issues with internet connectivity. However, the ability to access stories offline mitigated some of these concerns. These findings underscore the importance of designing accessible and inclusive features, as also highlighted in Abdullah et al.'s (2020) research on bilingual children's e-reading experiences. This study suggests that Read Along by Google can create a child-friendly, engaging literacy ecosystem that fosters sustained reading habits. When educational technology is intentionally designed—grounded in motivational theory and contextualized features—it not only improves literacy skills but also reshapes children's perceptions of reading itself. As such, the application holds promise as a transformative tool for supporting children's literacy development, particularly in informal, home-based learning contexts.

While this study indicates the potential of the Read Along by Google application in enhancing children's reading motivation within a home-based learning context, several methodological limitations must be acknowledged. The small sample size of ten children from a single region in North Sumatra limits the generalizability of the findings. Additionally, the two-month study duration may not adequately reflect the long-term impact of the application on broader literacy outcomes, including reading comprehension, critical thinking, and sustained motivation. Future research should involve larger, more diverse samples, include control groups, and be conducted across different cultural and geographical settings. Longitudinal designs are needed to evaluate the extended impact of digital reading tools like Read Along, not only on motivation but also on advanced literacy competencies such as comprehension depth, reflective thinking, and cross-cultural adaptability (Nielen et al., 2018; Guo & Fryer, 2024). These findings are also aligned with national and global education agendas, particularly UNESCO's Sustainable Development Goal 4 (SDG 4), which promotes inclusive, equitable, and quality education for all. By highlighting the role of adaptive, home-based literacy technologies, this study offers practical insights for policymakers, educators, and developers in designing sustainable digital interventions that support children's foundational reading skills within the family setting.

4. CONCLUSION

This study found that children aged 9–11 in a home-based learning context responded positively to the Read Along by

Google application. Observations and parental reports showed increased independent reading frequency, greater confidence in reading aloud, and the development of daily reading habits.

From the perspective of Self-Determination Theory (Deci & Ryan, 1985), the application fulfilled children's needs for competence through real-time feedback, autonomy through story selection, and relatedness through interactive engagement, fostering intrinsic motivation. In line with Vygotsky's Sociocultural Theory (1978), the app functioned as a scaffold within the Zone of Proximal Development, enabling children to accomplish reading tasks beyond their independent ability. Consistent with Laurillard's Technology-Enhanced Learning framework (2012), its interactive and dialogic features created a dynamic, learner–media relationship that enriched the reading experience.

Some challenges were identified, including occasional voice recognition inaccuracies and internet connectivity issues. Future research should adopt longitudinal designs with more diverse samples to assess the sustained impact of digital reading tools on advanced literacy skills such as comprehension and critical thinking. Practically, this study underscores the potential of Read Along by Google as a transformative literacy tool for parents, educators, and developers. When designed with motivational and culturally responsive features, educational technology can shift children's perception of reading—from obligation to enjoyment—and contribute to building sustainable literacy habits in informal learning settings.

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