



Community Literacy Ecosystem to Enhance Elementary Students' Reading Comprehension

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ABSTRACT

This study investigates the contribution of a community-based literacy ecosystem to improving reading comprehension among elementary school students. The research was motivated by the continuous decline in national literacy performance over the past two years, the limited involvement of families in guiding children's reading activities, and the tendency of school literacy programs to focus only on routine activities without integrating community participation or local potential. These conditions highlight a research gap regarding how community engagement and parental support may strengthen literacy development in schools. A quantitative approach with a causal-comparative research design was employed. The participants were ($n = \dots$) students from Grade III and Grade V at SD Negeri Jejeg 01, Bumijawa District, Tegal Regency. The instruments included a reading comprehension test and a parental literacy support questionnaire related to reading practices at home and in community settings. Data were analyzed using independent comparison tests and a moderation regression model. The findings reveal that participation in community literacy activities has a positive and significant effect on students' reading comprehension ($p < .05$; $R^2 = \dots$). Furthermore, parental support significantly strengthens the relationship between community-based literacy involvement and students' reading performance. The results emphasize that sustainable literacy development requires shared responsibility among schools, families, and community networks. Strengthening this ecosystem can foster meaningful reading habits and support long-term literacy growth among young learners.

Keywords: *reading literacy; community ecosystem; parental involvement; reading comprehension.*

ABSTRAK

Penelitian ini bertujuan menganalisis peran ekosistem literasi berbasis komunitas dalam meningkatkan kemampuan memahami bacaan siswa sekolah dasar. Latar belakang penelitian didasari oleh rendahnya capaian literasi membaca nasional dalam dua tahun terakhir, lemahnya dukungan keluarga terhadap aktivitas membaca anak, serta program literasi sekolah yang masih bersifat rutin dan belum melibatkan peran komunitas secara sistematis. Kondisi tersebut menunjukkan adanya kesenjangan antara kebijakan literasi sekolah dan pemanfaatan potensi lingkungan sebagai pendukung pembelajaran literasi. Penelitian menggunakan pendekatan kuantitatif dengan desain komparatif kausal. Sampel penelitian berjumlah ($n = \dots$) terdiri atas siswa kelas III dan V di SD Negeri Jejeg 01 Kecamatan Bumijawa, Kabupaten Tegal. Instrumen penelitian

meliputi tes pemahaman bacaan serta kuesioner dukungan orang tua pada kegiatan literasi di rumah dan lingkungan komunitas. Data dianalisis melalui uji beda dan regresi moderasi. Hasil analisis menunjukkan bahwa kegiatan literasi berbasis komunitas memiliki pengaruh positif dan signifikan terhadap tingkat pemahaman bacaan siswa ($p < .05$; $R^2 = \dots$). Selain itu, dukungan orang tua memoderasi hubungan tersebut dan meningkatkan kekuatan pengaruh kegiatan komunitas terhadap kemampuan membaca anak. Temuan ini menegaskan pentingnya kolaborasi antara sekolah, keluarga, dan komunitas dalam membangun budaya literasi yang berkelanjutan dan bermakna bagi peserta didik sekolah dasar.

Kata Kunci: literasi membaca; ekosistem komunitas; dukungan orang tua; pemahaman bacaan.

INTRODUCTION

Reading comprehension is widely recognized as a core competency that supports students' academic achievement and social development. At the elementary level, reading literacy functions not only as a language skill but also as a gateway for mastering knowledge across subjects. Despite its importance, recent national education reports show that Indonesian students' reading proficiency has remained low and has even shown a declining trajectory in the past two years. This situation signals an urgent need to develop literacy learning frameworks that are more collaborative, contextual, and sustained across multiple environments.

To date, literacy strengthening programs in Indonesia have largely been concentrated within formal school settings. Family involvement and community engagement – two crucial components of children's literacy environments – have not been optimized, resulting in reading practices that are procedural and disconnected from students' sociocultural realities. Community-based literacy models offer strong potential, as they create authentic reading experiences that involve children, parents, and local actors, contributing to intrinsic motivation and meaningful text engagement.

A number of researchers have introduced various classroom-based strategies aimed at enhancing reading comprehension. For instance, (Nuryani et al., 2025) reported that the Cooperative Integrated Reading Composition model improves comprehension through structured peer collaboration. Likewise, (Harahap et al., 2023) found that multiliteracy approaches using varied media expanded students' interpretive ability. (Yesika et al., 2020) demonstrated the effectiveness of the SQ3R method in improving focus and memory during reading tasks, while (Khair & Sariasih, 2025) showed that STAD-based cooperative learning encourages social interaction that contributes to comprehension gains.

Although these studies provide valuable progress, they mainly emphasize classroom intervention and do not address the broader literacy ecosystem beyond school walls. Only limited studies – such as those by (Ningrum et al., 2025) have shown that culturally responsive teaching and digital engagement can strengthen students' interaction with texts. However, quantitative evidence examining how community-driven literacy programs influence comprehension, especially in rural contexts, remains scarce. Additionally, the moderating role of parental involvement in amplifying or reducing the benefits of community participation has been largely overlooked. Prior research has also tended to examine reading interest rather than reading comprehension as a key indicator of functional literacy. These gaps indicate the need for models that integrate school, community, and family into a coherent literacy ecosystem.

Studies by (Fitriyati et al., 2023) and (Agustin et al., 2022) suggest that integrating environmental context, learning technologies, and authentic tasks can create more meaningful literacy experiences. In this regard, a literacy ecosystem can be conceptualized as an interconnected support network involving teachers, families, communities, and the surrounding environment to sustain a reading culture (Alya et al., 2024). This aligns with Vygotsky's sociocultural theory, which posits that cognitive development emerges through social interaction and mediated learning.

Therefore, the present study extends previous research by shifting the focus from classroom strategies toward a broader community-based literacy framework. It also introduces parental support as a moderating variable, offering a deeper understanding of the mechanisms influencing reading comprehension. The novelty of this study lies in integrating a community literacy ecosystem with sociocultural perspectives and the Merdeka Curriculum's principles, which emphasize collaboration, contextual learning, and student agency (Anggraeni et al., 2019).

Based on this rationale, the study aims to (1) examine the effect of community literacy participation on elementary students' reading comprehension, and (2) analyze whether parental support moderates that relationship. The findings are expected to provide theoretical insights and practical recommendations for schools and local education stakeholders in designing sustainable, community-driven literacy interventions.

METHODS

Type and Design

This study adopted a quantitative approach using a **causal-comparative design**, as it is suitable for examining the influence of students' participation in community-based literacy activities on their reading comprehension without manipulating variables (Andini et al., 2023) and (Siti, 2021). This design allows natural group differences to be analyzed, providing a basis for identifying potential causal patterns within authentic learning environments.

The research was carried out at **SD Negeri Jejeg 01**, located in Bumijawa District, Tegal Regency, and involved students from Grades III and V. These grade levels were intentionally selected because they represent a developmental phase in which children transition from basic reading skills toward more advanced comprehension. A **total sampling technique** was applied, meaning all eligible students were included as participants (Putu, 2024) dan (Judijanto et al., 2024). The focus of the study was to analyze how community literacy engagement and parental support contribute to students' reading comprehension performance.

Data and Data Sources

The data consisted of both primary and secondary sources. Primary data were collected through: A reading comprehension test, measuring students' ability to identify main ideas, extract essential information, and make logical inferences. A parental support questionnaire, assessing the extent of family involvement in reading routines at home and participation in community-based literacy programs. Secondary data included documented evidence of community literacy initiatives, school reports, and archival records illustrating collaborative efforts among schools, families, and local communities. All instruments underwent content validation and item-level validity testing (r -calculated) and demonstrated acceptable reliability with Cronbach's Alpha coefficients $\geq .70$.

Data collection technique

Data were gathered using three main techniques: **Reading Comprehension Test** Used to evaluate factual, interpretive, and inferential understanding of written texts. **Parental Support Questionnaire** Designed to measure the frequency and quality of parental involvement. Example item: "I regularly allocate scheduled reading time with my child each week." **Document Analysis** Used to obtain supporting evidence such as activity logs, attendance records, and photographs of community-led literacy activities. The data collection phase was conducted over **three consecutive weeks** following consistent and standardized procedures for all participants (Syahroni Irfan, 2022). **Assumption Testing**, before further analysis, statistical assumptions were tested, including: **Normality Multicollinearity** (VIF < 10) Heteroscedasticity. All tests indicated that the data met the required assumptions and were suitable for further inferential analysis.

Data analysis

Both descriptive and inferential statistical procedures were applied in this study. Descriptive statistics were used to summarize respondent characteristics and identify patterns related to parental support, students' participation in community literacy activities, and reading comprehension scores. Meanwhile, inferential analysis was carried out using an independent t-test to compare reading comprehension scores across groups with different levels of literacy participation. Furthermore, Moderated Regression Analysis (MRA) was employed to test whether parental support strengthened the relationship between participation in community-based literacy programs and reading comprehension performance, as suggested in previous methodological frameworks (Afif et al., 2023) dan (Karimuddin et al., 2022). Prior to inferential testing, the dataset was screened, cleaned, and transformed to ensure the fulfillment of key statistical assumptions such as linearity and normality. All computations were performed using standardized statistical software. Results were interpreted with consideration of the social and cultural conditions of the elementary school context, providing a nuanced understanding of how a community literacy ecosystem contributes to reading development.

RESULTS AND DISCUSSION

Descriptive Findings

Table 1. Distribution of Parental Support for Children's Literacy Activities

Level of Support	Frequency	Percentage (%)	Category
Very High	12	30	Excellent
High	18	45	Good
Moderate	7	17.5	Fair
Low	3	7.5	Poor

Table 1. Parental Support Distribution for Children's Literacy Activities. The table indicates that nearly half of the parents (45%) demonstrated a high level of involvement in children's literacy practices, while 30% showed very strong engagement. In contrast, only 7.5% provided minimal support. These findings suggest that parental participation is generally favorable and may serve as a potential catalyst for literacy growth.

This result aligns with the findings of (Putu, 2024), who reported that family engagement significantly enhances children's motivation to read and their comprehension performance. Emotional and social reinforcement from parents serves as a major catalyst for the growth of sustainable reading habits.

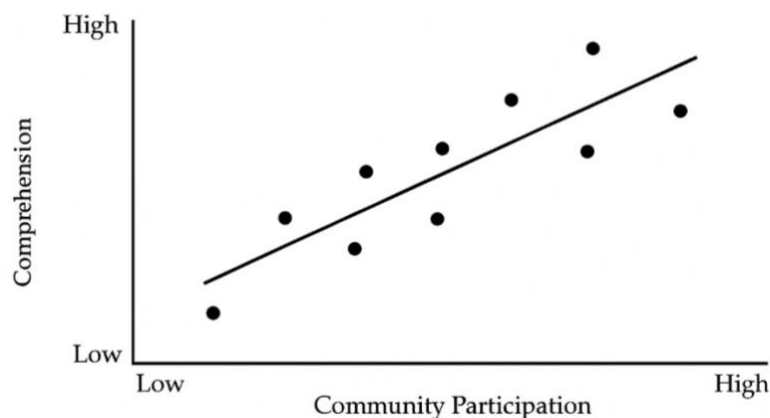


Figure 1. Relationship Between Community Participation and Reading Comprehension

Inferential analyses indicated that reading-comprehension scores differed significantly across levels of community literacy participation ($p < .05$). Furthermore, the moderation test revealed that parental support strengthened the positive association between students' involvement in community-based literacy activities and their reading-comprehension outcomes. The reported R^2 and ΔR^2 values show that including the moderating variable improved the model's ability to account for variance in comprehension performance. Interpretation overall, the findings reinforce the argument that reading comprehension development is not solely a school-driven process but emerges from a collaborative ecosystem involving families and community networks. These results support previous recommendations advocating for literacy programs that extend beyond classroom boundaries and integrate broader sociocultural learning environments. These results reinforce the findings of (Afandi et al., 2025) and (Zulaichah et al., 2025), who highlighted that family support functions as a reinforcing factor in cultivating children's literacy culture.

Discussion

The findings of this study address the main research question, confirming that participation in community-based literacy activities has a positive effect on elementary students' reading comprehension, and that parental support significantly strengthens this relationship.

Community literacy programs provide children with more contextual and meaningful learning experiences. Through activities such as *reading corners*, *book sharing*, and *story circles*, students learn to interpret textual meaning through social interactions and real-life contexts. This finding aligns with Vygotsky's social constructivist theory, which posits that cognitive development occurs through social interaction and support from the learning environment.

These results are consistent with (Nuryani et al., 2025) and (Maulani & Pendidikan, 2025), who found that *Culturally Responsive Teaching* enhances reading comprehension by connecting learning to local social and cultural contexts. In this study, community interaction helped students relate text content to their lived experiences, making comprehension deeper and more meaningful. Furthermore, (Judijanto et al., 2024) and (Andaresta & Rachmadiarti, 2021)

emphasized that literacy success in elementary education is largely determined by supportive social ecosystems. Collaboration among schools, families, and communities forms a *community literacy network* that promotes reading interest and functional literacy skills. The current study supports these conclusions, showing that community-based literacy initiatives not only enhance comprehension but also broaden students' social awareness and engagement.

Parental support plays a significant moderating role in the relationship between literacy participation and reading comprehension. Children who receive emotional encouragement, guided reading assistance, and access to books at home tend to be more confident and active in literacy activities (Li et al., 2025) and (Prita Ridha Insani & Muryanti, 2021). This finding underscores that the family serves as a vital bridge between school-based learning and home-based literacy practices.

The results also confirm that a collaborative community-based literacy ecosystem is an effective model for strengthening reading literacy skills. This aligns with the perspectives of (Nurhasanah et al., 2023) and (Wijaya et al., 2022), who stressed the importance of cross-role collaboration among teachers, parents, and communities in cultivating a sustainable literacy culture. From a practical standpoint, this study implies that elementary schools should expand partnerships with families and community organizations through inclusive, context-based literacy programs. Initiatives such as *family literacy programs*, *village reading movements*, and *neighborhood libraries* can reinforce the local literacy ecosystem. From a theoretical perspective, this research enriches the understanding of the community-based literacy ecosystem by integrating parental support as a moderating variable. The findings provide a foundation for future literacy theories emphasizing the synergy between home, school, and community as a unified and sustainable educational ecosystem. In conclusion, community-based literacy programs supported by strong family involvement effectively enhance elementary students' reading comprehension. The synergy among schools, families, and communities is essential for building a vibrant, meaningful, and sustainable literacy culture at the foundational level of education.

CONCLUSION (

This study reveals that students' engagement in community-based literacy initiatives exerts a meaningful and positive influence on their reading comprehension at the elementary school level. Children who participate consistently in community literacy programs tend to achieve higher comprehension scores than those with limited involvement. Parental support further strengthens this relationship, emphasizing the essential role of families in enhancing the broader literacy environment surrounding the child.

These findings highlight the importance of cultivating strong collaboration among schools, families, and community stakeholders to build a sustainable and context-sensitive literacy ecosystem. Nevertheless, this study has several limitations, particularly the restricted geographic scope and the limited range of variables included in the analysis. Future research should consider expanding the sample across multiple regions, employing longitudinal designs, or incorporating additional factors such as reading motivation and the quality of parent-child interaction.

Practically, the results provide a foundation for schools and policymakers to design more structured literacy programs, empower parents to take a more active role in home-based

reading activities, and encourage local communities to create child-friendly literacy spaces and initiatives that better support students' literacy development.

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