
| RESEARCH ARTICLE

Influence Of Home Literacy Practices on The Foundational Literacy and Numeracy Skills of Preschool Learners

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| ABSTRACT

This study examined the influence of home literacy practices on the foundational literacy and numeracy skills of preschool learners. Employing a descriptive-correlational research design, the research investigated how key components of the home literacy environment including the availability of books, parent-child interactions, literacy habits, and parental beliefs were associated with children's proficiency in alphabet knowledge, phonological awareness, book and print knowledge, number recognition, identifying attributes, and thinking skills. The study utilized purposive sampling to select 100 parent-respondents and 2 preschool teachers, ensuring participants were representative of the target population. Data were collected through a validated home literacy environment questionnaire and the Literacy and Numeracy (LitNum) Assessment Tool. Statistical analyses included frequency counts, weighted means, and Pearson's Product-Moment Correlation Coefficient. The findings indicated that while many learners demonstrated advanced skills in both literacy and numeracy, the computed *r*-values signified negligible correlations and all *p*-values exceeded the 0.05 significance threshold, suggesting no statistically significant relationship between home literacy practices and foundational academic skills. In response to these findings, the study developed a comprehensive Action Plan aimed at sustaining parental engagement and enhancing targeted support for both learners and families. The research underscored the ongoing need for school-home collaboration and systematic support to promote academic readiness in early childhood education.

| KEYWORDS

Home Literacy Environment, Foundational Literacy and Numeracy, Parent-Child Interaction, Phonological Awareness

| ARTICLE INFORMATION

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Introduction

Foundational literacy and numeracy (FLN) skills are critical building blocks for children's lifelong learning and academic success. Early childhood researchers emphasize that literacy and numeracy learning begins long before formal schooling, shaped largely by children's home environments and the interactions they experience with caregivers (Neuman & Celano, 2020). Preschool children develop early alphabet knowledge, phonological awareness, and book concepts through rich language exposure and access to developmentally appropriate literacy materials (Lonigan & Shanahan, 2020). Likewise, numeracy foundations such as number recognition, counting, and sorting are cultivated through playful experiences in familiar contexts and daily routines (Zhao et al., 2022; Purpura et al., 2023). International literacy monitoring frameworks, including those by UNESCO and UNICEF, stress the importance of home environments that support emergent language, print awareness, and informal mathematics in early years, especially in low- and middle-income countries (UNESCO, 2022). In the Philippines, early childhood education policies under the

Early Childhood Care and Development (ECCD) Law and DepEd's Kindergarten Curriculum emphasize developmentally appropriate practices and partnership between home and school in supporting FLN development.

The home literacy environment (HLE) serves as a powerful influence on children's emergent reading and numeracy abilities, shaping interest, motivation, and early skill acquisition. Scholars highlight that children who are frequently read to, provided access to books, and engaged in language-rich activities show stronger gains in vocabulary, alphabet familiarity, and early reading comprehension (Sénéchal & LeFevre, 2022). Regular parent-child reading routines and exposure to print materials stimulate phonological awareness and letter-sound understanding (Hindman & Morrison, 2021; Noble et al., 2022). At the same time, early numeracy is fostered through home practices that emphasize counting, comparing objects, and discussing numbers during everyday interactions (Cannon et al., 2022). Parents' engagement, literacy habits, and beliefs about education significantly predict early academic performance (Suggate et al., 2023). In communities where resources are limited, supportive literacy practices such as storytelling, singing, and conversational turn-taking remain essential pathways for early skill development (Neumann et al., 2023). Understanding home literacy dynamics is therefore central to strengthening children's school readiness and FLN outcomes.

Despite these insights, socioeconomic factors, parental educational background, and access to learning materials shape disparities in home literacy settings, especially in developing contexts (Sultana & Habib, 2023). Studies in Southeast Asia and the Philippines have shown that many young learners face gaps in alphabet knowledge, phonological awareness, and number concepts due to limited literacy exposure at home (Reyes & Dela Cruz, 2021). Parents' work schedules, resource constraints, and lack of training in supporting home-based learning affect how children engage with books, counting tasks, and early writing (Cabell et al., 2022). In urban-poor communities such as those served by Barrio Luz Elementary School, contextual challenges such as limited learning materials, shared living spaces, and low family income may reduce opportunities for intentional literacy and numeracy engagement (UNICEF Philippines, 2023). These realities underscore the importance of examining families' literacy routines, beliefs, and interaction patterns to identify strengths and barriers in early learning environments.

However, research gaps remain regarding how different dimensions of home literacy practices physical learning spaces, parent literacy habits, child reading routines, parent-child interaction, and parental beliefs uniquely contribute to both emergent literacy and numeracy outcomes in Philippine preschool settings. While international studies have explored home learning environments extensively, fewer local studies have examined specific home practices linked to alphabet knowledge, phonological awareness, book handling skills, number recognition, and early thinking skills among Filipino preschoolers (Espino & Ong, 2023). Much of the existing literature in the Philippines focuses on reading challenges in later grades rather than building FLN foundations during early childhood. This gap is particularly relevant in urban public schools like Barrio Luz Elementary School, where learners may experience varied levels of literacy exposure and parental involvement due to economic, social, and environmental conditions. Thus, a systematic investigation of home literacy influences on foundational literacy and numeracy is necessary to guide early intervention and family-school collaboration strategies.

Given this context, the present study seeks to investigate the influence of home literacy practices on the foundational literacy and numeracy skills of preschool learners at Barrio Luz Elementary School. The study examines parents' perceptions of their home literacy environment, including physical resources, literacy habits, child literacy interactions, parent-child engagement, and parental beliefs, alongside assessments of children's alphabet knowledge, phonological awareness, book and print knowledge, number sense, attributes identification, and thinking skills. Findings aim to inform targeted early literacy programs, strengthen parent engagement initiatives, and support evidence-based planning for FLN interventions. This research intends to contribute to national early learning priorities by providing localized evidence that can guide teachers, school leaders, and policymakers in enhancing home-school partnerships and designing culturally relevant, sustainable FLN support systems for young learners.

Literature Review

The home literacy environment (HLE) plays a central role in shaping children's early language and literacy skills. Research consistently shows that exposure to books, shared reading, and meaningful caregiver-child interactions enhance vocabulary development, alphabet recognition, and phonological awareness (Sénéchal & LeFevre, 2022). Children whose parents regularly read to them demonstrate stronger emergent literacy and later reading achievement than those with limited reading exposure (Niklas et al., 2020; Noble et al., 2022). Parental literacy beliefs and modeling reading behaviors further contribute to positive literacy outcomes by fostering motivation and interest in print (Puccioni, 2021). Moreover, conversational interactions such as storytelling, dialogue, and singing promote narrative ability and listening comprehension, which are foundational to reading readiness (Neumann et al., 2023; Hindman & Morrison, 2021). Studies in multilingual settings also highlight that early literacy benefits from mother-tongue storytelling and culturally relevant books, especially in resource-constrained contexts (Neuman & Celano, 2020). Collectively, these findings underscore that HLE quality significantly influences preschoolers' emergent literacy development across diverse socioeconomic environments.

Home numeracy practices similarly exert a strong influence on children's foundational numeracy development. Parental engagement in informal math activities such as counting objects, comparing quantities, and identifying shapes predicts children's number knowledge, pattern recognition, and early problem-solving skills (Cannon et al., 2022). Daily routines like shopping, cooking, and play-based tasks provide natural opportunities for mathematical exploration and enhance children's conceptual understanding of numbers and spatial relations (Purpura et al., 2023). Studies report that parental math attitudes and confidence shape children's numeracy outcomes, as parents who believe math is important tend to engage more in numeracy-rich interactions (Martinez et al., 2022). However, limited access to learning materials and varying parental education levels can restrict early numeracy support, especially in low-income communities (UNICEF, 2023; Bernardo & Calleja, 2023). Research from Southeast Asia similarly shows disparities in early math readiness tied to home learning environments and resource availability (Sunga & Bautista, 2022). These findings emphasize the crucial role of supportive home numeracy environments in fostering children's foundational mathematical skills prior to formal schooling.

Methodology

This study employed a descriptive-correlational research design to determine the influence of home literacy practices on the foundational literacy and numeracy skills of preschool learners at Barrio Luz Elementary School, Cebu City. The descriptive component documented the home literacy environment and learners' academic performance, while the correlational aspect examined the association between home-based literacy practices and children's emergent literacy and numeracy skills. This design aligned with Calderon and Gonzales (2011), who note that descriptive-correlational research allows examination of existing conditions and relationships without manipulation of variables. The Input–Process–Output (IPO) model guided the study: input included home literacy indicators and learner performance; the process involved assessment and analysis; and the output provided insight into how home practices relate to early learning outcomes. A total of 102 respondents participated, composed of 100 parents/guardians of preschool learners and two kindergarten teachers selected through purposive sampling. Data were gathered using two instruments: (1) the DepEd Literacy and Numeracy (LitNum) Assessment Tool to measure learners' proficiency in alphabet knowledge, phonological awareness, book and print knowledge, number recognition, classification, and thinking skills; and (2) a Parent Home Literacy Environment Questionnaire, adapted from Buvanewari and Padakannaya (2017), to assess physical literacy resources, parent and child literacy habits, parent-child interactions, and literacy beliefs. For children's performance, the LitNum tool used the following categories: 85–100% (Advanced), 70–84% (Proficient), 50–69% (Developing), and below 50% (Beginning). The parent survey utilized a five-point Likert scale: 5-Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree, and 1-Strongly Disagree. Scores were tabulated, averaged, and interpreted to classify literacy environments and learner skill levels. Pearson's r was applied to test correlations between home literacy variables and children's literacy and numeracy outcomes. Ethical protocols were observed, including seeking school approval, explaining study purposes to parents, and ensuring confidentiality.

Results

Table 1. Status of Literacy Environment at their Home in terms of Physical Environment

S/N	Indicators	WM	SD	Verbal Description
1	My child has toys that teach colors, shapes sizes, etc.	4.58	0.75	Excellent
2	My child has three or more puzzles	3.93	1.04	Very Satisfactory
3	My child has toys or games requiring refined movements	4.05	1.00	Very Satisfactory
4	My child has at least 10 children's books	3.52	1.26	Very Satisfactory
5	My child has toys that help teach the names of animals, vehicles, fruits, etc.	4.44	0.94	Excellent
6	We have alphabet books/blocks/magnetic letters/flashcards/workbooks at home	4.25	1.01	Excellent
7	There is a designated place for books and toys at home	4.05	0.97	Very Satisfactory
8	The toys and books are accessible to the child	4.36	0.78	Excellent
	Aggregate Weighted Mean	4.15		Very Satisfactory
	Aggregate Standard Deviation		0.97	

Table 1 shows the status of the home literacy environment in terms of the physical environment. The overall aggregate weighted mean of 4.15 (SD = 0.97) indicates a Very Satisfactory level, suggesting that most preschool learners are provided with rich, engaging, and accessible learning materials at home. The highest-rated indicator was having toys that teach colors, shapes, and sizes (WM = 4.58, SD = 0.75), followed by accessibility of toys and books (WM = 4.36, SD = 0.78) and literacy-related materials such as alphabet books, blocks, flashcards, and workbooks (WM = 4.25, SD = 1.01), all with Excellent ratings. This shows that parents actively provide developmentally-appropriate materials that support early literacy and cognitive development. On the other hand, the indicator with the lowest mean was having at least 10 children's books at home (WM = 3.52, SD = 1.26), though still interpreted as Very Satisfactory, indicating that while books are present, some households might rely more on toys and other resources rather than printed reading materials. Overall, the results reflect a supportive literacy-rich physical environment that provides learners with various opportunities to explore, play, and engage in early learning activities at home an essential foundation for early literacy and numeracy development.

Table 2. Status of Literacy Environment at their Home in terms of Parent Literacy Habits

S/N	Indicators	WM	SD	Verbal Description
1	Our family buys and reads daily newspaper	3.54	1.17	Very Satisfactory
2	My child sees me writing/typing	4.38	0.75	Excellent
3	My child sees me reading non-work-related things, for pleasure	3.87	1.18	Very Satisfactory
4	My child sees me playing word games, crossword, etc.	3.99	1.15	Very Satisfactory
5	I enjoy talking about books related to various topics with friends and family members	4.02	0.95	Very Satisfactory
6	I go to bookstores/library along with my child	3.59	1.17	Very Satisfactory
7	I personally enjoy reading a habit	4.14	0.92	Very Satisfactory
8	My child sees me reading books/magazines/newspapers	4.14	0.87	Very Satisfactory
Aggregate Weighted Mean		3.96		Very Satisfactory
Aggregate Standard Deviation			1.02	

Table 2 illustrates the status of the home literacy environment in terms of parent literacy habits. The aggregate weighted mean of 3.96 (SD = 1.02) indicates a Very Satisfactory rating, suggesting that parents frequently model literacy-related behaviors that support children's early learning. The highest-rated indicator was children observing parents writing or typing (WM = 4.38, SD = 0.75), followed by parents' habitual reading and children seeing them read books or printed materials (WM = 4.14, SD = 0.87). These findings imply that most parents demonstrate literacy engagement through daily routines an important factor as research consistently highlights parental modeling as vital in shaping children's positive literacy attitudes and emergent reading skills. Conversely, the lowest-rated habits included reading newspapers (WM = 3.54, SD = 1.17) and visiting bookstores or libraries with children (WM = 3.59, SD = 1.17), which, although still rated Very Satisfactory, may reflect limited access to print media and community learning spaces. While digital media may be replacing traditional newspapers, occasional library and bookstore visits remain important as they expose children to diverse print resources and support early print motivation. Overall, results suggest that parents in the community are actively modeling literacy behaviors, thereby creating a supportive environment that fosters preschoolers' foundational literacy development.

Table 3 presents the status of the home literacy environment in terms of child literacy habits. The aggregate weighted mean of 4.13 (SD = 0.97) indicates a Very Satisfactory level, suggesting that children actively engage in literacy-related behaviors at home. The highest-rated indicators reflect strong early literacy motivation and school-readiness behaviors children frequently ask for help learning alphabet letters (WM = 4.42, SD = 0.79) and writing tasks (WM = 4.24, SD = 0.86), showing eagerness to develop

Table 3. Status of Literacy Environment at their Home in terms of Child Literacy Habits

S/N	Indicators	WM	SD	Verbal Description
1	My child asks for help learning the letters of the alphabet	4.42	0.79	Excellent
2	My child asks for help while writing	4.24	0.86	Excellent
3	My child asks for books to be read to him/her	4.00	1.01	Very Satisfactory
4	My child pretends to read from books or says stories to himself/herself	3.71	1.23	Very Satisfactory
5	My child shows interest in reading signboards when we go out	4.20	1.02	Very Satisfactory
6	My child shows interest in identifying the product by looking at an advertisement or the wrapper of the product	4.25	0.93	Excellent
Aggregate Weighted Mean		4.13		
Aggregate Standard Deviation			0.97	Very Satisfactory

foundational reading and writing skills. Children also show curiosity toward print in their surroundings (WM = 4.20, SD = 1.02) and interest in identifying products and advertisements (WM = 4.25, SD = 0.93), highlighting their growing environmental print awareness a key predictor of early reading development. Meanwhile, story-related play behaviors such as pretend reading (WM = 3.71, SD = 1.23) and requesting story-reading sessions (WM = 4.00, SD = 1.01) indicate emerging print motivation, imagination, and narrative awareness, which are associated with improved oral language and later independent reading (Whitehurst & Lonigan, 2021; Neuman & Moland, 2019). These findings suggest that most children are receiving meaningful literacy stimulation at home and are actively initiating literacy tasks behaviors strongly associated with higher emergent literacy achievement. Although pretend reading scored slightly lower, its presence still reflects healthy literacy-play development, emphasizing the need to continue promoting storytelling routines and book-rich interaction at home. Overall, the results show that children in the study community display strong literacy motivation and engagement, which are crucial foundations for successful reading acquisition.

Table 4 shows that parent-child literacy interaction is consistently strong, with an aggregate weighted mean of 4.36, interpreted as Excellent (SD = 0.98). Parents frequently engage in meaningful literacy practices such as storytelling, asking questions during reading, teaching rhymes, and pointing at letters and words which are proven predictors of early reading success.

Table 4. Status of Literacy Environment at their Home in terms of Parent-Child Interaction

S/N	Indicators	WM	SD	Verbal Description
1	I teach simple verbal manners (please, sorry, thank you, etc.	4.64	0.78	Excellent
2	I encourage my child to talk and take time to listen	4.63	0.73	Excellent
3	I teach nursery rhymes and songs to my child	4.55	0.80	Excellent
4	I name pictures in books and talk about the pictures	4.47	0.70	Excellent
5	I read stories to my child	4.21	0.82	Excellent
6	I point out to words in magazines/newspapers	4.01	1.06	Very Satisfactory
7	I help my child solve jigsaw puzzles	4.01	0.98	Very Satisfactory
8	I encourage my child to act out a story	4.39	0.96	Excellent
9	I encourage my child to read product labels, street signs, and signboards	4.44	0.74	Excellent

10	When we read, I try to sound excited so my child stays interested	4.19	1.11	Very Satisfactory
11	I ask my child a lot of questions when we read	4.34	0.80	Excellent
12	I try to make the story more real to my child by relating the story to his/her life	4.42	0.70	Excellent
13	When we read, we talk about the pictures as much as we read the story	4.45	0.74	Excellent
14	When we read, I encourage my child to tell the story	4.23	0.90	Excellent
15	When we read, I ask my child to point out to different letters/numbers printed in the book	4.49	0.74	Excellent
16	I play reading-related games with my child	4.34	0.75	Excellent
17	I tell stories to my child	4.41	0.81	Excellent
18	I point my child's finger to words when I read to him/her	4.31	1.02	Excellent
19	I speak to my child about what happened during the day	4.67	3.82	Excellent
20	My child and I make new rhymes by playing with words/sounds	4.12	1.10	Very Satisfactory
21	I change my voice to suit the characters when I read to my child	4.16	0.94	Very Satisfactory
22	I talk to my child about what he/she watches on TV	4.31	0.82	Excellent
23	I translate the stories into our home language when my child does not understand English words	4.39	0.77	Excellent
	Aggregate Weighted Mean	4.36		
	Aggregate Standard Deviation		0.98	Excellent

The highest rated behaviors include teaching verbal manners (WM = 4.64) and engaging in daily conversations (WM = 4.67), highlighting strong language exposure and social communication at home. Activities such as shared reading, dramatic storytelling, and discussing pictures/books also suggest rich dialogic reading, which supports vocabulary development, comprehension, and emergent literacy. These results indicate that families provide strong interactive literacy experiences that can significantly enhance children's foundational skills. Schools can capitalize on this strength by reinforcing home-school literacy partnerships, offering parent workshops on sustained reading routines, and integrating home activities into early learning programs. This supportive home literacy culture is likely to contribute to improved literacy and numeracy readiness among preschoolers.

Table 5. Status of Literacy Environment at their Home in terms of Parental Beliefs

S/N	Indicators	WM	SD	Verbal Description
1	Parents can teach alphabets to their child in addition to what is taught in school	4.47	0.89	Excellent
2	Parents can help their child to read and write words in addition to what is taught in school	4.58	0.78	Excellent
3	Most children do well at reading words in school because their parent teaches them to read words at home	4.47	0.73	Excellent
4	Parents have the responsibility to teach reading and writing skills to their child	4.50	0.88	Excellent
5	Most parents should supplement the literacy skills their child learns at school by teaching their child literacy skills at home	4.57	0.75	Excellent
6	Parents should select books based on their colorful illustrations high-interest content and natural language	4.35	0.86	Excellent

7	Parents should develop the child's confidence and interest in putting ideas on paper in whatever form they can (drawing writing etc.)	4.42	0.88	Excellent
8	Parents should help in developing child's ability to divide a word into parts or syllables to read new words	4.36	0.92	Excellent
9	I think that it is important to develop a broad interest in reading in my child	4.42	0.85	Excellent
10	I think that it is important to develop my child's ability to hear the separate sounds in spoken words such as "f" in "fish"	4.46	0.74	Excellent
Aggregate Weighted Mean		4.46		
Aggregate Standard Deviation			0.83	Excellent

Table 5 shows an excellent level of parental beliefs toward literacy development, with an aggregate weighted mean of 4.46 (SD = 0.83). Parents strongly believe that they play a significant role in teaching foundational literacy, supplementing school instruction, and fostering early reading and writing skills. High ratings across all indicators—particularly on helping children read and write beyond school lessons (WM = 4.58) and taking responsibility for developing literacy skills (WM = 4.50)—reflect a highly supportive literacy mindset. Parents also value age-appropriate books, phonological awareness, and motivating children to express ideas through drawing or writing, demonstrating awareness of developmentally appropriate literacy practices. These strong positive beliefs provide an excellent foundation for continuous home-school collaboration. Teachers can harness this high parental motivation by offering structured guidance, reading materials, and literacy-at-home programs. Strengthening parental capacity through workshops or take-home literacy kits can further enhance children's emergent literacy and numeracy outcomes, as belief-driven parental involvement often translates into more effective learning support at home.

Table 6. Level of Literacy Skills of the Learners in terms of Alphabet Knowledge

Level	f	%
Advanced	102	100.00
Intermediate	0	0.00
Beginner	0	0.00
Total	102	100.00

Table 6 reveals that all preschool learners (100%) demonstrated an Advanced level of alphabet knowledge, with no learners falling under Intermediate or Beginner categories. This indicates that the children have successfully developed strong foundational alphabet recognition skills, including identifying and naming both uppercase and lowercase letters. Such performance suggests that early literacy instruction both at home and in school has been highly effective in supporting letter recognition, a key prerequisite for phonemic awareness and early reading development. The exceptional mastery of alphabet knowledge provides a strong foundation for subsequent literacy skills, such as decoding and word recognition. Teachers can now shift focus toward more advanced literacy tasks, including blending sounds, phonics instruction, and early reading comprehension activities. Additionally, parents may be encouraged to sustain this progress by engaging children in activities such as shared reading, letter-sound games, and environmental print recognition to further reinforce and extend their literacy development.

Table 7 shows that 93.14% of preschool learners demonstrated Advanced phonological awareness, while 6.86% performed at the Intermediate level, and none were categorized as Beginners. This indicates that the majority of learners possess strong skills in recognizing and manipulating sounds in spoken language, including rhyming, identifying beginning sounds, and segmenting syllables core components of early reading development. The high level of phonological awareness suggests that both home literacy support and classroom instruction are effectively fostering sound awareness abilities, which are critical predictors of future reading success. However, the presence of a small proportion of learners at the Intermediate level highlights the need for continued differentiated instruction. Teachers should provide targeted reinforcement through phonemic games, sound blending activities, and multisensory phonics approaches to ensure these learners achieve full mastery. Maintaining strong collaboration with parents can also help sustain home-based phonological activities, further strengthening early literacy development.

Table 8. Level of Literacy Skills of the Learners in terms of Book and Print Knowledge

Level	f	%
Advanced	50	49.02
Intermediate	48	47.06
Beginner	4	3.92
Total	102	100.00

Table 8 reveals that 49.02% of learners demonstrated Advanced book and print knowledge, nearly matched by 47.06% at the Intermediate level, while 3.92% remained at the Beginner stage. This distribution indicates that about half of the preschool learners have already developed strong foundational print concepts such as identifying book parts, understanding text directionality, and recognizing print as a source of meaning. However, a substantial portion is still progressing in these skills, and a small number require significant support. The results highlight the importance of continued exposure to books and print-rich environments both at home and in school. The high proportion of learners at the Intermediate level suggests the need for

Table 7. Level of Literacy Skills of the Learners in terms of Phonological Awareness

Level	f	%
Advanced	95	93.14
Intermediate	7	6.86
Beginner	0	0.00
Total	102	100.00

sustained shared-reading practices, guided book exploration, and modeling of reading behaviors to strengthen familiarity with print conventions. Teachers and parents should prioritize daily read-alouds, print referencing (pointing to words, letters, and punctuation), and encouraging children to handle books independently.

Table 9. Level of Numeracy Skills of the Learners in terms of Numbers

Level	f	%
Advanced	102	100.00
Intermediate	0	0.00
Beginner	0	0.00
Total	102	100.00

Table 9 shows that 100% of the learners achieved an Advanced level in numeracy skills related to numbers, indicating that all preschoolers demonstrated strong competencies in basic number concepts. This suggests that learners can confidently perform tasks such as counting objects, recognizing and writing numerals, and understanding basic number relationships. The uniform mastery implies effective early numeracy instruction and strong reinforcement either at home, in school, or through both environments. With all learners performing at an advanced level, instructional strategies appear successful in developing

foundational number sense a critical predictor of future mathematics achievement. However, this finding also underscores the need to ensure that learning experiences continue to progress beyond basic number skills to prevent stagnation. Teachers may introduce more complex numeracy activities such as simple addition and subtraction word problems, number patterning, and hands-on math games to deepen conceptual understanding.

Table 10. Level of Numeracy Skills of the Learners in terms of Identifying Attributes

Level	f	%
Advanced	102	100.00
Intermediate	0	0.00
Beginner	0	0.00
Total	102	100.00

Table 10 reveals that all learners (100%) demonstrated an Advanced level in identifying attributes, indicating strong skills in recognizing and distinguishing shapes, colors, sizes, and other observable characteristics. This suggests that preschoolers at Barrio Luz Elementary School have developed a solid foundation in early classification and visual discrimination skills, essential for later mathematical reasoning and scientific thinking. Such mastery reflects both effective classroom practices—likely through hands-on activities, visual aids, and play-based learning—and supportive literacy-numeracy exposure at home. The uniformly high-performance points to successful instructional approaches in developing perceptual and cognitive readiness skills among learners. While this is a promising result, it also highlights the need to sustain and further challenge learners through tasks requiring higher-order thinking, such as pattern recognition, sorting by multiple attributes, and introductory measurement concepts.

Table 11. Level of Numeracy Skills of the Learners in terms of Thinking Skills

Level	f	%
Advanced	101	99.02
Intermediate	1	0.98
Beginner	0	0.00
Total	102	100.00

Table 11 shows that almost all learners (99.02%) demonstrated an Advanced level of thinking skills, with only one learner (0.98%) reaching the Intermediate level and none in the Beginner category. This indicates that preschool learners at Barrio Luz Elementary School possess strong early thinking and problem-solving abilities, including skills such as comparing, categorizing, predicting, and engaging in simple reasoning tasks. Such high performance suggests that both classroom instruction and home literacy environments successfully fostered cognitive development through interactive learning, exploration, and guided inquiry. The results imply that learners are well-prepared for more complex academic tasks in higher grade levels, particularly those requiring logical reasoning and decision-making. Teachers should continue providing stimulating learning opportunities such as inquiry-based activities, manipulatives, puzzles, and real-life problem-solving tasks to sustain and deepen these cognitive skills. Parents can reinforce thinking development at home by encouraging conversations, asking guiding questions, and offering games that require reasoning (e.g., matching, sequencing, and simple puzzles). While the mastery level is impressive, continuous enrichment is essential to maintain growth and prevent skill plateau, ensuring that learners transition smoothly into formal academic learning with strong cognitive foundations.

Table 12. Test of relationship between the Status of Literacy Environment at their Home and Literacy Skills of the Learners

Literacy Environment VS:	r-value	Strength of Correlation	p - value	Decision	Remarks
Alphabet Knowledge	-0.025	Negligible Negative	0.803	Do not reject Ho	Not Significant
Phonological Awareness	0.059	Negligible Positive	0.554	Do not reject Ho	Not Significant
Book and Print Knowledge	0.109	Negligible Positive	0.276	Do not reject Ho	Not Significant

*significant at $p < 0.05$ (two-tailed)

Table 12 presents the correlation between the home literacy environment and learners' literacy skills. The results show negligible correlations across all literacy domains: Alphabet Knowledge ($r = -0.025$), Phonological Awareness ($r = 0.059$), and Book and Print Knowledge ($r = 0.109$). All corresponding p-values ($p > 0.05$) indicate no statistically significant relationship, meaning the status of home literacy environment did not significantly predict learners' literacy performance in this study. Despite parents reporting highly supportive literacy practices at home, learners still performed similarly regardless of variations in home literacy inputs. This pattern suggests that other factors such as classroom instruction, structured early childhood programs, access to school-based literacy materials, and teacher-guided learning may have played a more influential role in shaping literacy skills. The non-significant results imply that while home literacy practices are important, they alone may not guarantee literacy mastery in early childhood. It highlights the critical role of school-based literacy instruction, teacher scaffolding, and formal learning environments in building foundational reading skills. For educators, this emphasizes strengthening classroom literacy programs, guided reading activities, phonological awareness routines, and book exposure. Although home literacy remains valuable for enrichment, collaboration between home and school should be reinforced. Parents may benefit from targeted literacy orientation programs to align home practices with school literacy standards. Ultimately, a balanced and coordinated home-school approach may yield stronger literacy gains than home efforts alone.

Table 13 shows the correlation between the home literacy environment and preschool learners' numeracy skills. Results reveal no significant relationship between the home literacy environment and the domains of Numbers ($r = -0.042$, $p = 0.673$) and Identifying Attributes ($r = 0.007$, $p = 0.941$). These negligible correlations indicate that the home literacy setting did not meaningfully influence children's basic number recognition, counting, or attributes identification skills. This aligns with research suggesting that foundational numeracy skills in early childhood are often shaped more strongly by structured classroom instruction and guided practice rather than informal home learning routines alone.

Table 13. Test of relationship between the Status of Literacy Environment at their Home and Numeracy Skills of the Learners

Literacy Environment VS:	r-value	Strength of Correlation	p - value	Decision	Remarks
Numbers	-0.042	Negligible Negative	0.673	Do not reject Ho	Not Significant
Identifying Attributes	0.007	Negligible Positive	0.941	Do not reject Ho	Not Significant
Thinking Skills	-0.200*	Negligible Negative	0.044	Reject Ho	Significant

*significant at $p < 0.05$ (two-tailed)

However, a significant but negligible negative correlation emerged for Thinking Skills ($r = -0.200$, $p = 0.044$), implying that as reported home literacy environment quality slightly increased, thinking skills scores tended to decrease. While the correlation is weak, it may indicate that some parents provide high literacy support but less focus on numeracy-related reasoning activities such as problem-solving, pattern recognition, and classification. This could also reflect that school-based learning activities contributed more substantially to numeracy reasoning gains than home routines. The findings emphasize the importance of school-led numeracy interventions, such as hands-on math tasks, play-based counting exercises, and structured reasoning activities. Although a supportive home literacy environment benefits language learning, numeracy development may require targeted math-focused interactions at home.

Discussion

Findings reveal that preschool learners from Barrio Luz Elementary School demonstrated high foundational literacy and numeracy skills, with most children performing at the Advanced level in alphabet knowledge, phonological awareness, numeracy, and attribute recognition. These results suggest a strong early learning foundation, which aligns with studies reporting that early exposure to literacy and numeracy activities significantly fosters emergent reading and counting abilities (Lonigan & Shanahan, 2020; Cabell et al., 2021). The consistently excellent home literacy practices reported that including parents' active reading habits, book-related interactions, and positive beliefs about early learning indicate a supportive home learning environment. These findings mirror global research concluding that parental reading engagement and shared book experiences strongly enhance children's early language development and motivation to learn (Niklas & Schneider, 2017; Rodríguez et al., 2021). Furthermore, the children's strong performance in numeracy aligns with evidence that structured learning environments and regular exposure to quantitative concepts support early number sense development (Jordan et al., 2022).

Despite the strong home literacy environment, the correlation results show no significant relationship between home literacy practices and most literacy and numeracy skills, except a weak negative correlation with thinking skills. This suggests that while parents foster literacy behaviors, school-based instruction and structured classroom routines may have played a more dominant role in children's academic outcomes. Literature similarly emphasizes that high-quality early childhood programs and teacher-guided activities are primary drivers of formal literacy and numeracy acquisition, especially in low-to-middle-income contexts where school exposure significantly compensates for variation in home learning conditions (Melhuish et al., 2020; Sonnenschein & Sun, 2023). The negligible association with thinking skills may indicate that home practices are more print- and language-focused, while advanced numeracy reasoning requires intentional teaching and problem-solving opportunities, often school-driven (Purpura et al., 2023). These results underscore the importance of strengthening home-school collaboration, guiding parents in numeracy-rich interactions, and sustaining quality early childhood programs to ensure holistic cognitive development.

Conclusion

Based on the findings, it was concluded that the home literacy environment of preschool learners was generally supportive and enriching. Parents provided their children with a very satisfactory to excellent physical and social setting for literacy, demonstrated strong literacy habits, and maintained highly positive beliefs about their role in fostering early learning. Children were exposed to a variety of print materials and literacy-related activities, and parents engaged in frequent, high-quality interactions that nurtured language development and a love for reading. The learners themselves demonstrated high levels of readiness and achievement in both literacy and numeracy. All children achieved advanced proficiency in alphabet knowledge and numerical skills, and the vast majority excelled in phonological awareness, book and print knowledge, identifying attributes, and thinking skills. These results reflected the effectiveness of both home and school efforts in preparing young learners for academic success. Despite these strengths, the study concluded that there was no significant relationship between the overall status of the home literacy environment and most aspects of the children's literacy and numeracy skills. The anticipated direct influence of home factors on academic performance was not consistently evident, except for a negligible negative relationship with thinking skills. This suggested that while supportive home environments were essential, they alone did not fully account for differences in learning outcomes. The development of foundational skills appeared to be shaped by a combination of factors, including quality of instruction at school, access to community resources, and broader educational experiences. Thus, the research highlighted that early learning was a complex and multifaceted process, best supported by collaboration between families, educators, and the wider community. Strengthening these partnerships and addressing areas where resources or experiences could be further enriched would help ensure that all preschool learners have the opportunity to thrive both academically and personally.

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