

Article

Influence of the Home Learning Environment on The Literacy and Numeracy Skills of Preschool Learners

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Abstract: This study examined the influence of the home literacy environment on the literacy and numeracy skills of preschool learners at Tungkop Elementary School as the basis for an action plan. It specifically determined the status of the home literacy environment, the learners' literacy and numeracy skills, and the relationships among these variables. A descriptive–correlational research design was employed. The study was conducted at Tungkop Elementary School using convenience sampling, with 46 parent-respondents participating during the Department of Education summer break. Data were collected using the Home Literacy Environment Survey Questionnaire adopted from Buvaneswari and Padakannaya (2017) and the Literacy and Numeracy (LitNum) Assessment Tool prescribed under DepEd Order No. 029, s. 2022. Frequency, simple percentage, weighted mean, standard deviation, and Pearson Product–Moment Correlation Coefficient were used in analyzing the data. The findings revealed a highly supportive home literacy environment and advanced literacy and numeracy skills among preschool learners. No significant relationship was found between the home literacy environment and the learners' literacy and numeracy skills. It was concluded that although the learners demonstrated strong foundational competencies, other factors might also influence their academic development. The study recommended the implementation of the proposed action plan, "Building Strong Foundations for a Brighter Tomorrow," to sustain positive home literacy practices, strengthen home–school partnerships, and further enhance preschool learners' literacy and numeracy development.

Keywords: Home Literacy Environment, Preschool Learners, Literacy Skills, Numeracy Skills, Parent-Child Interaction, Parental Beliefs

Introduction

Early childhood education scholars emphasize that the home learning environment plays a crucial role in shaping children's foundational literacy and numeracy skills even before formal schooling begins. Studies have

consistently shown that early exposure to print materials, numeracy experiences, and supportive parental engagement significantly influences children's cognitive and language development (Niklas & Schneider, 2021; Susperreguy et al., 2022). The home environment serves as the child's first learning context where interactions with parents, books, and everyday learning experiences contribute to the development of essential skills necessary for later academic success (Sénéchal & Young, 2021). Consequently, researchers argue that literacy and numeracy competencies do not emerge solely from school instruction but are strongly influenced by experiences and interactions within the home environment during early childhood.

Globally, concerns regarding children's early literacy and numeracy competencies remain significant. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), approximately 70% of children in low- and middle-income countries cannot read and understand a simple text by age ten, indicating a global learning crisis that begins during early childhood (UNESCO, 2023). Similarly, international assessments emphasize that insufficient exposure to early literacy and numeracy experiences at home contributes to learning gaps that persist throughout schooling (OECD, 2022). Studies further indicate that children who grow up in stimulating home learning environments characterized by frequent reading activities, parent-child conversations, and numeracy-related interactions demonstrate stronger literacy and mathematical competencies compared to those with limited exposure (Melhuish et al., 2022). These global trends highlight the importance of strengthening home learning environments to ensure children develop the foundational skills needed for academic success.

In the Philippines, similar concerns have been observed regarding early literacy and numeracy development among young learners. National assessments and reports have revealed that many Filipino learners struggle with foundational reading and numeracy competencies during the early grades. The Philippine Statistics Authority (PSA) and the Department of Education (DepEd) reported that a significant proportion of learners in early grades demonstrate difficulties in basic literacy and numeracy skills, emphasizing the need for stronger early childhood learning support both at school and at home (DepEd, 2023). Furthermore, findings from the Programme for International Student Assessment (PISA) have highlighted persistent challenges in reading and mathematics performance among Filipino learners, which may partly stem from limited early exposure to literacy and numeracy experiences during preschool years (OECD, 2022). These concerns highlight the importance of strengthening home-based learning support to complement school instruction.

The importance of improving literacy and numeracy competencies also aligns with the United Nations Sustainable Development Goal (SDG) 4, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. SDG 4 specifically emphasizes the need to guarantee that all children acquire foundational literacy and numeracy skills during the early years of education (United Nations, 2023). Achieving this goal requires collaborative efforts between schools, families, and communities to create learning environments that nurture children's cognitive and language development. In this regard, strengthening the home literacy environment is considered a critical strategy in supporting early childhood education and improving learning outcomes.

Parents and families therefore play essential roles in supporting children's early learning development. Research indicates that parental involvement in literacy and numeracy activities such as reading books, storytelling, engaging in counting activities, and providing a print-rich environment significantly enhances children's academic readiness (Daucourt et al., 2021). When parents actively participate in their children's learning experiences at home, children tend to develop stronger language abilities, better number sense, and greater confidence in learning tasks (Berkowitz et al., 2022). These findings highlight the importance of parents as primary partners in education, particularly during the preschool years when children are developing foundational academic skills. However, in many educational settings, teachers observe that parents often rely heavily on schools to develop their children's literacy and numeracy abilities. In some cases, parents assume that the responsibility for teaching reading and numeracy skills rests primarily with teachers rather than recognizing the importance of continuous support at home. Teachers in several early childhood education contexts have noted that some parents provide limited learning opportunities at home due to time constraints, lack of resources, or limited awareness of effective strategies to support early literacy and numeracy development (Sénéchal & Young, 2021). As a result, children may enter school with varying levels of preparedness, which may influence their academic progress.

In Tungkop Elementary School, teachers have observed similar situations wherein some parents depend primarily on classroom instruction to support their children's literacy and numeracy development. While schools provide structured instruction and learning activities, the absence of consistent reinforcement at home may limit children's opportunities to practice and strengthen emerging skills. It has also been noted that many preschool learners tend to seek guidance primarily from teachers when encountering difficulties in recognizing letters, identifying sounds, or solving simple numerical tasks. Such observations suggest that strengthening collaboration

between parents and teachers is essential in supporting children's early academic development.

Given these concerns, examining the influence of the home learning environment on the literacy and numeracy skills of preschool learners becomes essential. Understanding how aspects of the home literacy environment such as the physical learning environment, parental literacy habits, child literacy habits, parent-child interactions, and parental beliefs affect children's learning outcomes can provide valuable insights for educators and policymakers. These insights may help identify strengths and gaps in home learning support and guide the development of strategies that encourage greater parental involvement in early childhood education. Therefore, this research will assess the influence of the home literacy environment on the literacy and numeracy skills of preschool learners at Tungkop Elementary School in the DepEd Cebu Province Division for the School Year 2025–2026. Specifically, the study will examine the status of the home literacy environment as perceived by parents, evaluate the learners' literacy and numeracy skills, determine the relationship between these variables, and use the findings as a basis for developing an action plan that aims to strengthen parental engagement and enhance early learning

Literature Review

The home literacy environment plays an important role in developing preschool children's emerging literacy skills because it provides opportunities for children to interact with books, print, letters, sounds, and adults who model literacy behaviors (Li et al. (2025). A literacy-supportive physical environment includes accessible books, writing materials, alphabet resources, and other print materials, while parents' reading habits, beliefs about literacy, and interactions with their children can influence how frequently these resources are used (Rahman, 2023). Recent evidence indicates that frequent and high-quality parent-child literacy interactions are associated with executive functioning and school-readiness outcomes, including early language and academic skills (Korucu et al., 2020). Longitudinal research also shows that both mother-child and father-child home literacy activities contribute to children's language and literacy development, emphasizing the importance of active parental participation rather than the simple presence of literacy materials at home (Liu & Chung, 2025). A recent scoping review further identified shared reading, storytelling, exposure to print, and parent-child literacy activities as recurring components of effective home literacy practices among preschool children (Ferreira et al., 2026). Moreover, children's participation and interest in traditional and digital literacy activities are influenced by the opportunities and interactions provided by adults in the home, reinforcing the relevance of examining children's literacy habits alongside parental practices and beliefs (Meoded Karabanov & Aram, 2026). These findings support assessing preschool learners' alphabet knowledge, phonological

awareness, and book and print knowledge in relation to the quality of their home literacy environment.

Home learning experiences are likewise relevant to preschool learners' numeracy development because mathematical knowledge can emerge through ordinary parent-child activities involving counting, comparing, sorting, recognizing shapes and patterns, and solving simple problems (Zhao & Gibson, 2023). Recent research demonstrates that the home-rearing environment may influence early mathematics achievement through children's self-regulation and mathematics-related dispositions, suggesting that cognitive and behavioral processes developed within the home can contribute to mathematical learning (Liu et al., 2026). Parents' mathematical beliefs are also important because they can shape the frequency and quality of home mathematics activities as well as children's use of mathematical language, which in turn is associated with early mathematics skills (Wang et al., 2026). Cross-cultural research on parent-child mathematics talk further shows that parents naturally discuss quantities and numerical ideas during both explicit numeracy tasks and everyday routines, while their beliefs can influence the nature of these interactions (Yang et al., 2025). In addition, large-scale evidence examining home mathematical activities suggests that the relationship between the frequency of such activities and children's mathematical outcomes depends on the type and quality of experiences offered rather than frequency alone (Hunt et al., 2026). Therefore, a home environment that provides meaningful opportunities to work with numbers, classify and compare attributes, recognize relationships, and engage in reasoning activities may support preschool learners' number knowledge, ability to identify attributes, and broader thinking skills.

Methodology

This study employed a descriptive-correlational research design to examine the influence of the home literacy environment on the literacy and numeracy skills of preschool learners. The descriptive component determined the status of the home literacy environment in terms of physical environment, parent literacy habits, child literacy habits, parent-child interaction, and parental beliefs, as well as the learners' levels of literacy and numeracy skills. The correlational component determined whether significant relationships existed between the home literacy environment and learners' literacy and numeracy performance. The study followed the Input-Process-Output (IPO) Model to organize the variables, research procedures, analysis, and proposed action plan.

The study was conducted at Tungkop Elementary School in Barangay Tungkop, Minglanilla, Cebu Province, and involved 46 parent-respondents whose children were enrolled in the Kinder-Faith class during School Year 2025–2026. Convenience sampling was employed because data gathering occurred during the summer vacation and participation depended on the availability of the preschool teacher, complete learner assessment records, and consenting parents.

Two instruments were utilized. The Home Literacy Environment Survey Questionnaire for Parents, adopted from Buvaneswari and Padakannaya (2017), consisted of 55 items covering five dimensions: physical environment, parent literacy habits, child literacy habits, parent-child interaction, and parental beliefs. Responses were rated using a five-point Likert scale. Learners' literacy and numeracy performance was obtained from their existing Literacy and Numeracy (LitNum) Assessment records. Literacy covered alphabet knowledge,

phonological awareness, and book and print knowledge, while numeracy covered numbers, identifying attributes, and thinking skills.

Before data collection, appropriate institutional and school permissions and informed parental consent were secured. Confidentiality, voluntary participation, anonymity, and compliance with the Data Privacy Act of 2012 were observed. Completed questionnaires and authorized assessment records were checked, coded, consolidated, and analyzed. Frequency, percentage, weighted mean, and standard deviation were used for descriptive analysis, while Pearson's product-moment correlation coefficient (Pearson's r) at the 0.05 level of significance was used to determine relationships between the home literacy environment and learners' literacy and numeracy skills.

Results

Table 1. Status of Literacy Environment of the Learners' Home in Terms of Physical Environment

Indicators	WM	SD	Verbal Description
My child has toys that teach colors, shapes, sizes, etc.	4.48	0.84	Outstanding
My child has three or more puzzles.	3.65	1.10	Very Good
My child has toys or games requiring refined movements.	3.93	1.20	Very Good
My child has at least 10 children's books.	3.22	1.11	Good
My child has toys that help teach the names of animals, vehicles, fruits, etc.	4.54	0.69	Outstanding
We have alphabet books/blocks/magnetic letters/flashcards/workbooks at home.	4.11	0.90	Very Good
There is a designated place for books and toys at home.	3.80	1.05	Very Good
The toys and books are accessible to the child.	4.13	0.93	Very Good
Aggregate Mean	3.98		Very Good
Aggregate Standard Deviation		0.98	

Table 1 shows that the physical literacy environment of the learners' homes was generally Very Good, reflected by an aggregate mean of 3.98 and an aggregate standard deviation of 0.98. The highest-rated indicator was the availability of toys that help teach the names of animals, vehicles, and fruits, with a mean of 4.54, followed by toys that teach colors, shapes, and sizes, with a mean of 4.48. In contrast, having at least ten children's books obtained the lowest mean of 3.22, interpreted as Good. These findings indicate that most homes provide educational toys and accessible learning materials that can support early cognitive and literacy development. However, the relatively lower availability of children's books suggests a need to strengthen print-rich resources within the home. Increasing access to age-appropriate books may provide learners with more opportunities for shared reading, independent exploration, vocabulary development, and familiarity

with print, thereby enriching the overall home literacy environment.

Table 2. Status of Literacy Environment of the Learners' Home in Terms of Parent Literacy Habits

S/N Indicators	WM	SD	Verbal Description
1 Our family buys and reads daily newspaper.	3.04	1.33	Good
2 My child sees me writing/typing.	4.04	1.11	Very Good
3 My child sees me reading non-work-related things, for pleasure.	3.74	1.20	Very Good
4 My child sees me playing word games, crossword, etc.	3.78	1.09	Very Good
5 I enjoy talking about books related to various topics with friends and family members.	3.52	1.13	Very Good
6 I go to bookstores/library along with my child.	3.00	1.17	Good
7 I personally enjoy reading a habit.	3.67	1.03	Very Good
8 My child sees me reading books/magazines/newspapers.	3.83	1.08	Very Good
Aggregate Mean	3.58		Very Good
Aggregate Standard Deviation		1.15	

Table 2 shows that the learners' home literacy environment in terms of parent literacy habits was generally Very Good, with an aggregate mean of 3.58 and an aggregate standard deviation of 1.15. The highest mean of 4.04 was recorded for children seeing their parents writing or typing, indicating that parents commonly model functional literacy behaviors at home. Meanwhile, going to bookstores or libraries with the child obtained the lowest mean of 3.00, followed by buying and reading a daily newspaper at 3.04. These results suggest that parents generally demonstrate positive literacy practices, particularly through visible reading and writing activities. However, less frequent visits to bookstores and libraries may limit children's exposure to a wider range of reading materials. Strengthening family reading routines, increasing access to books, and encouraging parents to engage in varied literacy activities may further enrich the home literacy environment and support children's emerging reading and language development.

Table 3 shows that the learners' home literacy environment in terms of child literacy habits was generally Very Good, with an aggregate mean of 4.11 and an aggregate standard deviation of 1.00. Asking for help in learning alphabet letters obtained the highest mean of 4.41, followed by interest in identifying products through advertisements or wrappers at 4.33. Meanwhile, pretending to read books or independently telling stories obtained the lowest mean of 3.37, described as Good.

Table 3. Status of Literacy Environment of the Learners' 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.	4.41	0.83	Outstanding
2	My child asks for help while writing.	4.17	1.08	Very Good
3	My child asks for books to be read to him/her.	4.22	0.94	Outstanding
4	My child pretends to read from books or says stories to himself/herself.	3.37	1.27	Good
5	My child shows interest in reading signboards when we go out.	4.17	0.93	Very Good
6	My child shows interest in identifying the product by looking at an advertisement or the wrapper of the product.	4.33	0.94	Outstanding
	Aggregate Mean	4.11		Very Good
	Aggregate Standard Deviation		1.00	

These findings indicate that learners demonstrate considerable interest and participation in literacy-related activities, particularly those involving alphabet learning, books, and environmental print. However, their comparatively lower engagement in pretend reading and independent storytelling suggests an area for further development. Parents may provide more opportunities for children to explore books independently, retell familiar stories, engage in imaginative reading, and create their own narratives. Such activities may strengthen children's confidence, oral language, creativity, and emerging literacy abilities.

Table 4 shows that the learners' home literacy environment in terms of parent-child interaction was rated Outstanding, with an aggregate mean of 4.29 and an aggregate standard deviation of 0.83. The highest mean of 4.63 was recorded for teaching simple verbal manners, followed by encouraging children to talk and listening to them at 4.59. Several literacy-related interactions, including teaching nursery rhymes, pointing to words, storytelling, discussing pictures, and asking children to identify letters and numbers, were also rated highly. The lowest mean of 3.41 was recorded for pointing out words in magazines or newspapers, although it remained Very Good. These findings indicate that parents frequently engage their children in meaningful verbal and literacy activities at home. The implication is that strong parent-child interaction can provide consistent opportunities for language development, print awareness, vocabulary growth, and early literacy learning, while environmental print activities may still be strengthened.

Table 4. Status of Literacy Environment of the Learners' 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.).	4.63	0.74	Outstanding
2	I encourage my child to talk and take time to listen.	4.59	0.72	Outstanding
3	I teach nursery rhymes and songs to my child.	4.54	0.89	Outstanding
4	I name pictures in books and talk about the pictures.	4.35	0.90	Outstanding
5	I read stories to my child.	4.09	0.89	Very Good
6	I point out words in magazines/newspapers.	3.41	1.11	Very Good
7	I help my child solve jigsaw puzzles.	4.02	1.02	Very Good
8	I encourage my child to act out a story.	4.13	0.93	Very Good
9	I encourage my child to read product labels, street signs, and signboards.	4.37	0.90	Outstanding
10	When we read, I try to sound excited so my child stays interested.	4.43	0.72	Outstanding
11	I ask my child a lot of questions when we read.	4.13	0.69	Very Good
12	I try to make the story more real to my child by relating the story to his/her life.	4.33	0.67	Outstanding
13	When we read, we talk about the pictures as much as we read the story.	4.37	0.68	Outstanding
14	When we read, I encourage my child to tell the story.	4.43	0.65	Outstanding
15	When we read, I ask my child to point out different letters/numbers printed in the book.	4.39	0.83	Outstanding
16	I play reading-related games with my child.	4.22	0.79	Outstanding
17	I tell stories to my child.	4.37	0.68	Outstanding
18	I point my child's finger to words when I read to him/her.	4.54	0.72	Outstanding
19	I speak to my child about what happened during the day.	4.46	0.66	Outstanding
20	My child and I make new rhymes by playing with words/sounds.	4.11	0.90	Very Good
21	I change my voice to suit the characters when I read to my child.	4.11	0.99	Very Good
22	I talk to my child about what he/she watches on TV.	4.39	0.91	Outstanding
23	I translate the stories into our home language when my child does not understand English words.	4.30	1.05	Outstanding
Aggregate Mean		4.29		Outstanding
Aggregate Standard Deviation			0.83	

Table 5. Status of Literacy Environment of the Learners' 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.	4.67	0.73	Outstanding
2	Parents can help their child to read and write words in addition to what is taught in school.	4.76	0.67	Outstanding
3	Most children do well at reading words in school because their parent teaches them to read words at home.	4.57	0.62	Outstanding
4	Parents have the responsibility to teach reading and writing skills to their child.	4.52	0.69	Outstanding
5	Most parents should supplement the literacy skills their child learns at school by teaching their child literacy skills at home.	4.54	0.78	Outstanding
6	Parents should select books based on their colorful illustrations, high-interest content, and natural language.	4.37	0.83	Outstanding
7	Parents should develop the child's confidence and interest in putting ideas on paper in whatever form they can (drawing, writing, etc.).	4.70	0.59	Outstanding
8	Parents should help in developing the child's ability to divide a word into parts or syllables to read new words.	4.67	0.67	Outstanding
9	I think that it is important to develop a broad interest in reading in my child.	4.70	0.59	Outstanding
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."	4.70	0.51	Outstanding
Aggregate Mean		4.62		Outstanding
Aggregate Standard Deviation			0.67	

Table 5 shows that the learners' home literacy environment in terms of parental beliefs was rated Outstanding, with an aggregate mean of 4.62 and an aggregate standard deviation of 0.67. The highest mean of 4.76 was obtained for parents helping their children read and write words beyond what is taught in school. Several indicators also received very high ratings, particularly those concerning developing reading interest, recognizing sounds in spoken words, and encouraging children to express ideas through drawing and writing. The lowest mean of 4.37 was recorded for selecting books based on colorful illustrations, interesting content, and natural language, although it remained Outstanding. These findings indicate that parents strongly recognize their responsibility in supporting literacy development at home. The implication is that positive parental beliefs may encourage consistent involvement in reading, writing, phonological activities, and other literacy experiences that complement classroom instruction and strengthen children's early literacy development.

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

Level	f	%
Advanced	41	89.13
Intermediate	5	10.87
Beginner	0	0.00
Total	46	100.00

Table 6 shows that the learners demonstrated a high level of literacy skills in terms of alphabet knowledge. Of the 46 learners, 41 or 89.13 percent were classified as Advanced, while 5 or 10.87 percent were Intermediate. No learner was classified as Beginner. This indicates that most learners have already developed strong recognition and understanding of letters. The findings imply that learners possess a solid foundation for beginning reading and may benefit from more advanced activities involving letter-sound relationships and word recognition.

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

Level	f	%
Advanced	40	86.96
Intermediate	6	13.04
Beginner	0	0.00
Total	46	100.00

Table 7 shows that the learners demonstrated a high level of literacy skills in terms of phonological awareness. Out of 46 learners, 40 or 86.96 percent were classified as Advanced, while 6 or 13.04 percent were Intermediate. No learner was classified as Beginner. This indicates that most learners can effectively recognize and manipulate sounds in spoken language. The result implies strong readiness for reading development, although intermediate learners may still benefit from activities involving rhyming, syllable segmentation, and sound identification.

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

Level	f	%
Advanced	37	80.43
Intermediate	9	19.57
Beginner	0	0.00
Total	46	100.00

Table 8 shows that the learners demonstrated a high level of literacy skills in terms of book and print knowledge. Out of 46 learners, 37 or 80.43 percent were classified as Advanced, while 9 or 19.57 percent were Intermediate. No learner was classified as Beginner. This indicates that most learners possess strong understanding of basic book handling, print direction, and the functions of written text. The findings imply that learners are generally well prepared for formal reading activities, although those at the intermediate level may

benefit from continued exposure to books, shared reading, and explicit print-awareness activities.

Table 9. Level of Numeracy Skills of the Learners in Terms of Identifying Attributes

Level	f	%
Advanced	46	100.00
Intermediate	0	0.00
Beginner	0	0.00
Total	46	100.00

Table 9 shows that all 46 learners, representing 100 percent, were classified as Advanced in numeracy skills in terms of identifying attributes. No learner was classified as Intermediate or Beginner. This indicates that the learners can effectively recognize, compare, and classify objects based on characteristics such as shape, size, color, or other observable features. The result implies a strong foundation in early mathematical thinking and suggests that learners are ready for more complex classification, patterning, comparison, and problem-solving activities.

Table 10. Level of Numeracy Skills of the Learners in Terms of Thinking Skills

Level	f	%
Advanced	44	95.65
Intermediate	2	4.35
Beginner	0	0.00
Total	46	100.00

Table 10 shows that the learners demonstrated a very high level of numeracy in terms of thinking skills. Of the 46 learners, 44 or 95.65 percent were classified as Advanced, while only 2 or 4.35 percent were Intermediate. No learner was classified as Beginner. This indicates that most learners can effectively apply reasoning, comparison, and problem-solving skills in numerical situations. The finding implies that the learners are well prepared for more complex mathematical tasks, while the few intermediate learners may benefit from additional guided activities that strengthen logical thinking, problem solving, and mathematical reasoning.

Table 11. Test of Relationship between the Home Literacy Environment and Literacy Skills of the Learners

Variables	r-value	Strength of Correlation	p-value	Decision	Remarks
Home Literacy Environment and Literacy Skills	0.174	Negligible Positive	0.247	Do not reject H_0	Not Significant

Significant at $p \leq 0.05$ (two-tailed).

Table 11 shows a negligible positive relationship between the home literacy environment and the literacy skills of the learners, as indicated by an r-value of 0.174. The p-value of 0.247 is greater than the 0.05 level of significance, therefore, the null hypothesis was not rejected. This means that the relationship between the variables was not statistically significant. The finding implies that variations in learners' literacy skills cannot be statistically associated with differences in their home literacy environment within this sample, and other factors may contribute to their literacy performance.

Table 12. Test of Relationship between the Home Literacy Environment and Numeracy Skills of the Learners

Variables	r-value	Strength of Correlation	p-value	Decision	Remarks
Home Literacy Environment and Numeracy Skills	0.151	Negligible Positive	0.316	Do not reject H_0	Not Significant

Significant at $p \leq 0.05$ (two-tailed).

Table 12 shows a negligible positive relationship between the home literacy environment and the numeracy skills of the learners, as indicated by an r-value of 0.151. The p-value of 0.316 is greater than the 0.05 level of significance; therefore, the null hypothesis was not rejected. This indicates that the relationship between the home literacy environment and numeracy skills was not statistically significant. The finding implies that differences in the learners' numeracy skills cannot be statistically associated with variations in their home literacy environment within the sample, suggesting that other factors may contribute to their numeracy performance.

Discussion

Overall, the findings indicate that the preschool learners experienced a generally supportive home literacy environment. The physical environment, parent literacy habits, and child literacy habits were rated very good, while parent-child interaction and parental beliefs were rated outstanding. Parents demonstrated strong beliefs about their responsibility for supporting literacy and frequently engaged their children in conversations, storytelling, reading, rhyming, and other literacy-related activities. However, some areas could still be strengthened, particularly the availability of children's books, visits to bookstores or libraries, and opportunities for independent or pretend reading. In terms of learning outcomes, most learners demonstrated advanced literacy skills in alphabet knowledge, phonological awareness, and book and print knowledge. Numeracy performance was similarly strong, with learners demonstrating advanced abilities in identifying attributes and thinking skills. These results suggest that the learners generally possess well-developed foundational competencies needed for more advanced literacy and mathematical learning.

Despite the favorable home literacy environment and the high literacy and numeracy performance of the learners, the correlational findings revealed no statistically significant relationships between these variables. The relationship between the home literacy environment and literacy skills was negligible positive, with an r-value of 0.174 and a p-value of 0.247, while its relationship with numeracy skills was also negligible positive, with an r-value of 0.151 and a p-value of 0.316. Thus, the null hypotheses were not rejected. These findings imply that, within the group studied, differences in the home literacy environment

did not correspond strongly enough with differences in literacy or numeracy performance to establish statistical significance. One possible consideration is the limited variability in learners' outcomes because most were already classified at the advanced level. Therefore, the findings should not be interpreted as showing that the home environment is unimportant; rather, other influences, including classroom instruction, individual development, prior learning experiences, and family characteristics, may also contribute to preschool learners' performance.

Conclusion

The study concluded that preschool learners generally experienced a supportive home literacy environment characterized by positive literacy practices, active parent–child interactions, and strong parental beliefs toward early learning. The learners likewise demonstrated advanced literacy and numeracy skills, indicating that they had acquired the foundational competencies expected at the preschool level. However, the results suggested that these competencies were influenced not only by the home literacy environment but also by other educational and developmental factors. These findings highlighted the importance of sustaining strong home–school partnerships while strengthening classroom instruction and parental involvement. Moreover, the study provided valuable evidence that could guide educators, school administrators, and the Department of Education in developing programs and policies that further enhance preschool learners' literacy and numeracy development.

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