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| RESEARCH ARTICLE

The Role of Home Literacy Environment in Shaping Early Literacy and Numeracy Skills among Preschool Children

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ABSTRACT

This study examined the influence of the Home Literacy Environment (HLE) on the literacy and numeracy skills of preschoolers. A descriptive-correlational research design was employed to profile the learners' academic competencies and assess the characteristics of their home learning environments. Respondents included two preschool teachers and 100 parents or guardians, totaling 102 participants. Data were gathered using the Department of Education's Literacy and Numeracy (LitNum) Assessment Tool and a Parent Survey Questionnaire adapted from Buvaneswari and Padakannaya (2017), which measured five HLE dimensions: physical environment, parent literacy habits, child literacy habits, parent-child interactions, and parental beliefs. Descriptive statistics summarized learner performance and household literacy practices, while Pearson's Product-Moment Correlation tested associations between HLE factors and learner outcomes. Findings revealed that the home literacy environment was generally strong, with Excellent ratings in parental beliefs, parent-child interactions, and child literacy habits, and Very Satisfactory ratings in parent literacy habits and physical environment. Learners also demonstrated advanced literacy and numeracy skills across most domains. However, statistical analysis showed no significant correlation between the HLE and learners' literacy and numeracy performance. These results suggest that while supportive home environments exist, other factors such as classroom instruction, school programs, and individual abilities may play a greater role in shaping children's foundational learning outcomes.

KEYWORDS

Early Childhood Education, descriptive-correlational design, home literacy environment, parental beliefs, literacy, numeracy.

ARTICLE INFORMATION

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1. Introduction

In today's shifting educational landscape, the bedrock of a child's learning journey lies in the early development of literacy and numeracy. These skills are strongly influenced by the home environment, where early interactions, parental involvement, and access to print and digital materials play a vital role (Napoli & Purpura, 2018). The home literacy environment (HLE), which includes resources, family literacy practices, and parent-child interactions, is widely acknowledged as a key factor shaping children's readiness for school and long-term achievement (Bonifacci et al., 2021). This study aimed to evaluate the influence of the HLE on the literacy and numeracy skills of preschoolers at Mabolo Elementary School, DepEd Cebu City Division, for School Year 2024–2025, and to create an action plan based on its results. Globally, efforts to strengthen early education have been aligned with Sustainable Development Goal (SDG) 4, which seeks to ensure inclusive, equitable, and quality education while promoting lifelong learning opportunities (United Nations, 2015). Early Childhood Care and Education (ECCE) has been recognized as a critical stage that builds the foundation for literacy, numeracy, and holistic child development (Cheung et al., 2021).

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Despite international commitments, gaps in early learning persist, leaving millions of children without the necessary skills to succeed in school. UNESCO (2020) reported that over 250 million children globally are not acquiring basic reading and math competencies, reflecting challenges tied to poverty, conflict, and weak home support. Studies highlight that limited access to books, educational play, and interactive parent-child learning at home heightens disadvantage, especially in low-income contexts (Kumar & Behera, 2022). Addressing these inequalities requires deeper understanding of the HLE, as it directly influences readiness and long-term outcomes (Salminen et al., 2021). Strengthening home learning aligns with the missions of UNESCO and UNICEF to reduce inequity and ensure every child a fair start.

In the Philippines, the reading crisis continues to be a major concern. The 2018 Programme for International Student Assessment (PISA) showed that 80% of Filipino 15-year-olds fell below the minimum reading proficiency level (OECD, 2019). This crisis stems from early years, where learners often advance grades despite not mastering reading fluency or comprehension. The Department of Education acknowledged this "mass promotion" practice, which undermines authentic learning assessment (Mateo, 2020). Research further reveals that literacy challenges are common in early grades, especially in public schools where home resources are scarce and parental involvement is inconsistent (David et al., 2022). Importantly, literacy and numeracy are interconnected, with children exposed to rich HLEs excelling in both domains (Manolitsis et al., 2013). Meanwhile, digital platforms are emerging as promising tools for literacy and numeracy growth, offering engaging and interactive learning to complement traditional methods (Plowman & Stephen, 2005).

Given these pressing concerns, this study sought to assess the extent to which the home literacy environment shapes preschoolers' literacy and numeracy outcomes. Findings from this investigation will enable educators and policymakers to better understand the role of home-based factors and design actionable strategies, including technology-based interventions, to bridge learning gaps. The resulting action plan aims to guide both parents and teachers in supporting early literacy and numeracy, consistent with national reforms and global commitments to improve educational quality and equity (Anders et al., 2012).

2. Review of Related Literature

The home literacy environment (HLE) is a central factor in children's early literacy development, encompassing the availability of books and learning materials, parental reading practices, and interactive literacy activities at home. Research shows that access to diverse literacy resources, such as storybooks and educational tools, significantly predicts emergent skills like vocabulary, print awareness, and phonological processing (Haynes, 2010). Parents' own literacy behaviors, including modeling reading and showing positive attitudes toward books, further support children's motivation and engagement with print (Napoli et al., 2021). Shared activities like storybook reading expose children to new vocabulary, narrative structures, and print conventions, fostering deeper language and literacy skills (Manolitsis et al., 2013). Interactive methods such as dialogic reading, where children are encouraged to ask and answer questions during reading, have been found to substantially strengthen emergent literacy outcomes (Melhuish et al., 2008).

Beyond reading, studies also highlight strong links between the HLE and early numeracy skills. Parents' attitudes toward numeracy and their engagement in home-based math activities, such as counting during daily routines or playing number games, predict children's early mathematical understanding (Napoli & Purpura, 2018). These everyday practices foster knowledge of numbers, counting, and problem-solving strategies (Skwarchuk et al., 2014). Moreover, cross-cultural findings show that parental expectations and beliefs about literacy and numeracy significantly shape the quality and frequency of home learning activities, which in turn affect preschoolers' readiness for school (Susperreguy et al., 2022). Taken together, these findings emphasize that the home environment through resources, parental behaviors, and interactive practices—plays a crucial role in fostering the literacy and numeracy foundations essential for future academic success (Bonifacci et al., 2021)

3. Methodology

This study employed a descriptive-correlational research design to comprehensively examine how the home literacy environment (HLE) influences the literacy and numeracy skills of preschoolers enrolled at Bulacao Community School. The descriptive component aimed to profile both the learners' academic competencies and the characteristics of their home learning environments, while the correlational aspect analyzed relationships between these factors without manipulating variables. Two primary groups participated: 2 preschool teachers and 100 parents or guardians, totaling 102 respondents. Data were collected using the Literacy and Numeracy (LitNum) Assessment Tool developed by the Philippine Department of Education and a Survey Questionnaire for Parents, which incorporated an adapted instrument originally created by Buvaneswari and Padakannaya (2017) to capture five dimensions of the HLE (physical environment, parent literacy habits, child literacy habits, parent-child interactions, and parental beliefs). The LitNum Assessment measured key early literacy domains (alphabet knowledge, phonological awareness, book and print knowledge) and numeracy domains (number recognition, identifying attributes, and thinking skills). Children's raw scores were converted to percentage scores and classified into four performance levels: Beginning, Developing,

Proficient, and Advanced. The parent survey used a five-point Likert scale to quantify the frequency and consistency of home literacy practices. Descriptive statistics (frequency, percentage, weighted mean) summarized the profiles, while the Pearson Product-Moment Correlation Coefficient tested the strength and direction of associations between home literacy variables and learner outcomes. This methodology allowed for an integrated analysis of quantitative and qualitative data, providing evidence-based insights into the connection between home environments and children's foundational academic skills.

4. 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.	4.45	0.70	Excellent
2	My child has three or more puzzles	3.94	1.10	Very Satisfactory
3	My child has toys or games requiring refined movements.	4.02	1.05	Very Satisfactory
4	My child has at least 10 children's books	3.89	1.08	Very Satisfactory
5	My child has toys that help teach the names of animals, vehicles, fruits, etc.	4.37	0.76	Excellent
6	We have alphabet books/blocks/magnetic letters/flashcards/workbooks at home	4.26	0.91	Excellent
7	There is a designated place for books and toys at home	4.09	0.99	Very Satisfactory
8	The toys and books are accessible to the child	4.25	0.95	Excellent
	Aggregate Weighted Mean	4.16		Very
	Aggregate Standard Deviation		0.94	Satisfactory

The results in Table 1 show that the home literacy environment in terms of the physical environment is generally Very Satisfactory (AWM = 4.16, SD = 0.94). Indicators rated Excellent include the availability of toys teaching colors, shapes, and sizes, toys introducing names of objects, alphabet-related materials, and accessibility of toys and books. Meanwhile, having puzzles, toys requiring refined movements, and at least 10 children's books were rated Very Satisfactory. This suggests that while most homes provide sufficient educational resources that support literacy, there is still room to further improve access to books and puzzles to enrich children's early learning experiences.

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	3.70	1.15	Very Satisfactory
2	My child sees me writing/typing	4.32	0.77	Excellent
3	My child sees me reading non-work-related things, for pleasure	3.72	1.16	Very Satisfactory
4	My child sees me playing word games, crossword, etc.	4.11	0.96	Very Satisfactory
5	I enjoy talking about books related to various topics with friends and family members	3.88	1.13	Very Satisfactory
6	I go to bookstores/library along with my child	3.59	1.26	Very Satisfactory
7	I personally enjoy reading a habit	3.90	1.05	Very Satisfactory
8	My child sees me reading books/magazines/newspapers	4.06	0.94	Very Satisfactory
	Aggregate Weighted Mean	3.91		Very
	Aggregate Standard Deviation		1.05	Satisfactory

The data in Table 2 reveal that the status of the home literacy environment in terms of parent literacy habits is generally rated Very Satisfactory (AWM = 3.91, SD = 1.05). The highest-rated indicator was children observing their parents writing or typing (WM = 4.32, SD = 0.77), which was described as Excellent, showing that parents consistently model literacy-related behaviors. Other habits, such as playing word games, reading materials, and discussing books, were rated Very Satisfactory, indicating regular but not consistent engagement in literacy activities. The lowest-rated habit was going to bookstores or libraries with

children (WM = 3.59, SD = 1.26), suggesting limited exposure to such literacy-enriching experiences outside the home. Overall, the findings highlight that while parents demonstrate good literacy practices, strengthening habits like shared visits to libraries and more frequent modeling of recreational reading could further enhance children's literacy development.

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	4.48	0.67	Excellent
2	My child asks for help while writing	4.30	0.88	Excellent
3	My child asks for books to be read to him/her	4.33	0.85	Excellent
4	My child pretends to read from books or says stories to himself/herself	3.62	1.33	Very
5	My child shows interest in reading signboards when we go out	4.20	1.00	Satisfactory Very Satisfactory
6	My child shows interest in identifying the product by looking at an advertisement or the wrapper of the product	4.30	0.80	Excellent
	Aggregate Weighted Mean	4.21		Excellent
	Aggregate Standard Deviation		0.92	

The results in Table 3 show that the status of the home literacy environment in terms of child literacy habits is rated Excellent overall (AWM = 4.21, SD = 0.92). Indicators with the highest ratings include children asking for help in learning letters (WM = 4.48, SD = 0.67), requesting assistance in writing (WM = 4.30, SD = 0.88), asking for books to be read (WM = 4.33, SD = 0.85), and showing interest in advertisements or product wrappers (WM = 4.30, SD = 0.80), all described as Excellent. Meanwhile, pretending to read or telling stories independently (WM = 3.62, SD = 1.33) and noticing signboards outside (WM = 4.20, SD = 1.00) were rated Very Satisfactory. These findings suggest that children are highly engaged in literacy-related activities at home, actively seeking support and showing strong curiosity toward print materials, though independent reading-like behaviors could still be further encouraged.

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

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S/N	Indicators	WM	SD	Verbal Description
1	I teach simple verbal manners (please, sorry, thank you, etc.	4.72	0.52	Excellent
2	I encourage my child to talk and take time to listen	4.66	0.54	Excellent
3	I teach nursery rhymes and songs to my child	4.43	0.74	Excellent
4	I name pictures in books and talk about the pictures	4.40	0.84	Excellent
5	I read stories to my child	4.26	0.86	Excellent
6	I point out to words in magazines/newspapers	3.96	1.04	Very Satisfactory
7	I help my child solve jigsaw puzzles	4.05	1.03	Very Satisfactory
8	I encourage my child to act out a story	4.30	0.79	Excellent
9	I encourage my child to read product labels, street signs, and signboards	4.28	0.79	Excellent
10	When we read, I try to sound excited so my child stays interested	4.38	0.74	Excellent
11	I ask my child a lot of questions when we read	4.31	0.69	Excellent
12	I try to make the story more real to my child by relating the story to his/her life	4.40	0.65	Excellent
13	When we read, we talk about the pictures as much as we read the story	4.40	0.65	Excellent
14	When we read, I encourage my child to tell the story	4.34	0.68	Excellent
15	When we read, I ask my child to point out to different letters/numbers printed in the book	4.40	0.77	Excellent
16	I play reading-related games with my child	4.15	0.92	Very
				Satisfactory
17	I tell stories to my child	4.33	0.78	Excellent
18	I point my child's finger to words when I read to him/her	4.44	0.73	Excellent
19	I speak to my child about what happened during the day	4.10	0.92	Very
13		4.10	0.52	Satisfactory
20	My child and I make new rhymes by playing with	4.06	0.96	Very
	words/sounds			Satisfactory
21	I change my voice to suit the characters when I read to my child	4.16	0.95	Very
22	I talk to my child about what he/she watches on TV	4.35	0.67	Satisfactory Excellent
	I translate the stories into our home language when my		0.67	
23	child does not understand English words	4.38	0.78	Excellent
	Aggregate Weighted Mean	4.32		
	Aggregate Standard Deviation			Excellent
	Aggregate Standard Deviation		0.78	

The findings in Table 4 indicate that the status of the home literacy environment in terms of parent-child interaction is rated Excellent overall (AWM = 4.32, SD = 0.78). The highest-rated practices include teaching simple verbal manners (WM = 4.72, SD = 0.52) and encouraging children to talk while actively listening (WM = 4.66, SD = 0.54), reflecting strong communication and social interaction at home. Other consistently Excellent practices include reading stories, naming and discussing pictures, asking questions during reading, making stories relatable, and translating stories into the home language, all of which highlight rich, interactive, and supportive engagement between parents and children. Meanwhile, activities such as pointing out words in newspapers (WM = 3.96), helping solve puzzles (WM = 4.05), playing reading-related games (WM = 4.15), and making new rhymes (WM = 4.06) were rated Very Satisfactory, indicating areas that could still be enhanced to further strengthen literacy exposure. Overall, the results show that parents actively foster meaningful interactions that promote both literacy and language development, providing children with strong foundations for early learning.

4.

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	4.58	0.60	Excellent
2	Parents can help their child to read and write words in addition to what is taught in school	4.65	0.48	Excellent
3	Most children do well at reading words in school because their parent teaches them to read words at home	4.52	0.64	Excellent
4	Parents have the responsibility to teach reading and writing skills to their child	4.54	0.67	Excellent
5	Most parents should supplement the literacy skills their child learns at school by teaching their child literacy skills at home	4.60	0.55	Excellent
6	Parents should select books based on their colorful illustrations high-interest con- tent and natural language	4.32	0.75	Excellent
7	Parents should develop the child's confidence and interest in putting ideas on paper in whatever form they can (drawing writing etc.)	4.49	0.69	Excellent
8	Parents should help in developing child's ability to divide a word into parts or syllables to read new words	4.54	0.58	Excellent
9	I think that it is important to develop a broad interest in reading in my child	4.61	0.57	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"	4.54	0.60	Excellent
	Aggregate Weighted Mean	4.54		Excellent
	Aggregate Standard Deviation		0.61	Excellent

The results in Table 5 show that the status of the home literacy environment in terms of parental beliefs is rated Excellent overall (AWM = 4.54, SD = 0.61). All indicators were consistently rated Excellent, reflecting strong and positive parental convictions about their role in supporting literacy development. The highest-rated belief was that parents can help children learn to read and write words beyond school instruction (WM = 4.65, SD = 0.48), underscoring parents' recognition of their active role in extending learning at home. Similarly, parents strongly agreed that they have a responsibility to teach literacy skills (WM = 4.54) and that fostering broad interest in reading is important (WM = 4.61). Beliefs related to supplementing school instruction, selecting engaging books, and supporting children's phonological awareness were also rated highly, showing that parents value both motivation and skill development in literacy. Overall, the findings indicate that parents hold very positive and proactive attitudes toward their involvement in their child's literacy journey, which greatly contributes to a supportive home learning environment.

Components	WM	SD	Verbal Description
Physical Environment	4.16	0.94	Very Satisfactory
Parent Literacy Habits	3.91	1.05	Very Satisfactory
Child Literacy Habits	4.21	0.92	Excellent
Parent-child Interaction	4.32	0.78	Excellent
Parental Beliefs	4.54	0.61	Excellent
Grand Mean	4.23		
			Excellent
Grand Standard Deviation		0.86	

The results in Table 6 present the overall status of the home literacy environment across its components. The findings reveal a Grand Mean of 4.23 (SD = 0.86), which is interpreted as Excellent, indicating that the learners' homes generally provide strong support for literacy development. Among the components, the highest rating was on Parental Beliefs (WM = 4.54, SD = 0.61), reflecting parents' strong conviction about their role in enhancing literacy. This was followed by Parent-Child Interaction (WM = 4.32, SD = 0.78) and Child Literacy Habits (WM = 4.21, SD = 0.92), both also rated Excellent, highlighting that children are highly engaged and parents actively support learning through interactive activities. On the other hand, the Physical Environment (WM = 4.16, SD = 0.94) and Parent Literacy Habits (WM = 3.91, SD = 1.05) were rated Very Satisfactory, suggesting that while homes are fairly well-resourced and parents model literacy behaviors, these areas have relatively more room for improvement compared to the others. Overall, the results indicate that the home literacy environment of the respondents is highly conducive to literacy development, strengthened particularly by positive parental beliefs and active parent-child engagement.

Table 7. Level of Literacy Skills of the Learners in terms of Alphabet Knowledge

Level	f	%
Advanced	86	92.47
Intermediate	5	5.38
Beginner	2	2.15
Total	93	100.00

The results in Table 7 indicate the learners' literacy skills in terms of alphabet knowledge. A vast majority, 86 learners or 92.47%, reached the Advanced level, showing strong mastery in recognizing and identifying letters of the alphabet. Meanwhile, 5 learners or 5.38% were at the Intermediate level, and only 2 learners or 2.15% were at the Beginner level. These results demonstrate that most of the preschoolers possess well-developed alphabet knowledge, an essential foundation for reading and writing, with only a very small proportion requiring additional support to reach higher proficiency.

Table 8. Level of Literacy Skills of the Learners in terms of Phonological Awareness

f	%
79	84.95
13	13.98
1	1.08
93	100.00
	f 79 13 1

The results in Table 8 present the learners' literacy skills in terms of phonological awareness. The majority, 79 learners or 84.95%, performed at the Advanced level, reflecting strong skills in recognizing and manipulating sounds in spoken words. Meanwhile, 13 learners or 13.98% were at the Intermediate level, and only 1 learner or 1.08% was classified as a Beginner.

These findings indicate that most preschoolers have well-developed phonological awareness, which is crucial for early reading and spelling, although a small portion of learners may still need additional support to strengthen this foundational skill.

Table 9. Level of Literacy Skills of the Learners in terms of Book and Print Knowledge

Level	f	%
Advanced	79	84.95
Intermediate	13	13.98
Beginner	1	1.08
Total	93	100.00

The results in Table 9 show the learners' literacy skills in terms of book and print knowledge. A large majority, 79 learners or 84.95%, were at the Advanced level, indicating strong familiarity with books, print concepts, and how written language functions. Meanwhile, 13 learners or 13.98% were at the Intermediate level, and only 1 learner or 1.08% was at the Beginner level. These findings suggest that most preschoolers possess well-developed book and print awareness, which is essential for building reading readiness, though a small number still require support to achieve higher mastery.

Table 10. Level of Numeracy Skills of the Learners in terms of Numbers

Level	f	%
Advanced	93	100.00
Intermediate	0	0.00
Beginner	0	0.00
Total	93	100.00

The results in Table 10 reveal the learners' numeracy skills in terms of numbers. All respondents, 93 learners or 100%, performed at the Advanced level, with no learners falling under the Intermediate or Beginner categories. This indicates that every child has fully developed skills in number recognition and basic numerical concepts. The findings highlight that number knowledge is a particular strength among the preschoolers, showing excellent readiness for more advanced mathematical learning.

Table 11. Level of Numeracy Skills of the Learners in terms of Identifying Attributes

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Level	f	%		
Advanced	91	97.85		
Intermediate	2	2.15		
Beginner	0	0.00		
Total	93	100.00		

The results in Table 11 show the learners' numeracy skills in terms of identifying attributes. A vast majority, 91 learners or 97.85%, were at the Advanced level, while only 2 learners or 2.15% were at the Intermediate level, and none were classified as Beginners. This indicates that nearly all preschoolers have highly developed skills in recognizing and distinguishing attributes such as size, shape, and color, which are vital for classification and problem-solving. The minimal percentage at the intermediate level suggests that only a few learners need further reinforcement, while overall performance in this domain is very strong.

Table 12. Level of Numeracy Skills of the Learners in terms of Thinking Skills

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Level	f	%
Advanced	93	100.00
Intermediate	0	0.00
Beginner	0	0.00
Total	93	100.00

The results in Table 12 indicate the learners' numeracy skills in terms of thinking skills. All respondents, 93 learners or 100%, achieved the Advanced level, with no learners falling under the Intermediate or Beginner categories. This shows that every child demonstrated strong problem-solving, reasoning, and critical thinking abilities in relation to numeracy. The findings highlight that thinking skills are a particular strength among the preschoolers, reflecting excellent readiness for more complex mathematical tasks and higher-order cognitive development.

Table 13. 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	-0.031	Negligible Negative	0.771	Do not reject Ho	Not Significant
Phonological Awareness	0.018	Negligible Positive	0.864	Do not reject Ho	Not Significant
Book and Print Knowledge	0.003	Negligible Positive	0.978	Do not reject Ho	Not Significant

^{*}significant at p<0.05 (two-tailed)

The results in Table 13 show the test of relationship between the status of the literacy environment at home and the literacy skills of the learners. Findings reveal that the correlations across all literacy domains were negligible and not statistically significant. Specifically, the relationship with alphabet knowledge showed a negligible negative correlation (r = -0.031, p = 0.771), while phonological awareness (r = 0.018, p = 0.864) and book and print knowledge (r = 0.003, p = 0.978) both showed negligible positive correlations. Since all p-values were greater than 0.05, the null hypothesis was not rejected, indicating that the home literacy environment had no significant correlation with the learners' literacy skills. This suggests that other factors beyond the home environment may play a stronger role in shaping the literacy abilities of the preschoolers in this study.

Table 14. Test of relationship between the Status of Literacy Environment at their Home and Numeracy Skills of the Learners

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Literacy Environment VS:	r-value	Strength of Correlation	p - value	Decision	Remarks		
Numbers	-0.173	Negligible Negative	0.098	Do not reject Ho	Not Significant		
Identifying Attributes	0.025	Negligible Positive	0.815	Do not reject Ho	Not Significant		
Thinking Skills	-0.148	Negligible Negative	0.157	Do not reject Ho	Not Significant		

^{*}significant at p<0.05 (two-tailed)

The results in Table 14 present the test of relationship between the status of the home literacy environment and the learners' numeracy skills. The findings indicate negligible correlations across all domains, with none reaching statistical significance. For numbers, the correlation was negligible negative (r = -0.173, p = 0.098); for identifying attributes, a negligible positive relationship was found (r = 0.025, p = 0.815); and for thinking skills, the correlation was also negligible negative (r = -0.148, p = 0.157). Since all p-values exceeded 0.05, the null hypothesis was not rejected in each case, confirming that the home literacy environment had no significant relationship with the numeracy skills of the learners. This suggests that other factors, such as classroom instruction or individual cognitive development, may play a more decisive role in shaping children's numeracy performance.

5. Conclusion

The findings of the study show that the home literacy environment of the preschoolers is generally strong, with parents providing supportive beliefs, interactive practices, and resources that help children learn. Most learners demonstrated advanced skills in literacy, particularly in alphabet knowledge, phonological awareness, and book and print knowledge. Similarly, numeracy skills such as recognizing numbers, identifying attributes, and thinking skills were also highly developed, with many learners reaching the advanced level. However, the analysis revealed no significant relationship between the home literacy environment and the children's literacy and numeracy skills. This means that while the home environment is supportive, other factors such as classroom teaching, school programs, and individual abilities may play a stronger role in children's development.

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