

## Impact Study on Literacy and Reading Program Among pupils of SHL Restoration Village

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**ABSTRACT :** *This research study mainly determined the impact of the numeracy and literacy program in San Jose Sico, Batangas City specifically at the BATA Center where Mass Communication students aided in teaching the students. The study sought to describe the profile of the respondents as to their gender and age; which resulted that there is no significant difference as to their gender and age. This also seeks to identify the impact of literacy and reading program as to the three domains of learning : Cognitive, affective and Psychomotor. Access to high quality, detailed guidance on literacy and numeracy improvement lifted literacy and numeracy performance offer a detailed and evidence based approach to the fundamentals of literacy and numeracy teaching and learning, across curriculum, assessment (including formative assessment) and pedagogy. Learning domains have always played an important role in evaluating the student's knowledge and skills. The learning domains can be incorporated, while designing the course outcomes of all the courses in a program; however, the assessment of learning domains practiced in many higher education programs resulted in vague assessment methods and as a result there are still lacking some other aspects as to how they are able to deliver and strategize the methods in teaching the younger ones. The program also presupposes the use of proposed program under the literacy and numeracy program.*

**Keywords:** *Communication students, education fundamental, learning domains, numeracy, literacy.*

### INTRODUCTION

Learning to read and write is fundamental to children's success in school and to their optimal life trajectory, regardless of their background, socio-economic status, or opportunities. Over the last several years, the global education discourse has shifted its emphasis from improving educational access to a stronger focus on improving learning outcomes. Unfortunately, many current reading initiatives focus exclusively on supporting reading skills in the early primary grades, without acknowledging the importance of foundational emergent literacy skills children develop in the early years that set them on a positive reading trajectory in school.

Emergent literacy encompasses the knowledge, skills, and attitudes that a child develops in relation to reading and writing throughout the early childhood period, starting at birth and before the onset of conventional reading and writing instruction (usually at school entry). Emergent literacy includes such aspects as oral language (both speaking and listening), understanding that print can carry meaning, as well as basic alphabet knowledge, and early phonological awareness [1].

School provides a structured education and promotes a child's mental and psychological growth. Aside from learning academics, a child will also learn other important life skills such as teamwork, good

manners, unity, sharing, and responsibility. Children are like sponges that will absorb almost everything that is taught to them. By allowing them to learn in a school setting while they are young, they can be molded into good, responsible, and hardworking individuals. The role of school in child development begins as early as pre-school and continues through childhood.

Education is very essential in the growth of human being it entails an individual to learn basic reading and writing as well as arithmetic in order to enable oneself for self-sufficiency in the future. Froebel's impact of education today admonishes the idea that formal curriculum, methodology, and teacher training practices are necessary to support children's learning [2]. Children's early numeracy skills are defined as a "child's fluidity and flexibility with numbers, the sense of what numbers mean, and an ability to perform mental mathematics and to look at the world and make comparisons" [3].

Some consider parents to be a child's first teacher while teachers are their second parents. When kids begin their preschool or kindergarten education, children are in a way handed over to trained teachers, and are ideally nourished and bestowed with support, and good teaching by these professionals. From the moment a baby is born, learning begins. Early education in the form of a preschool program can provide a consistent and solid foundation for education and

formation. Early education in school is the key to creating the right environment for a child's educational success. Children will learn habits and patterns that they will retain in later years and if teachers and parents can establish positive learning skills and social interaction skills early on, children will have the right tools to help them achieve success in the future. School will provide a structured setting where children can learn about rules and regulations, as well as where they can learn how to behave positively in group settings. They will also begin to pick up the academic knowledge they need for the future. Classrooms will be typically divided into different learning areas, each equipped with materials that are developmentally appropriate for the age of the child. In preschool, for example, kids can begin performing tasks such as counting and reciting the alphabet in preschool, which are building blocks of more complex tasks such as arithmetic and reading.

Literacy is defined by Watson and Johnson-Turner [4] as students' ability to interpret and create texts with appropriateness, accuracy, confidence, fluency, and efficacy for learning in and out of school, and for participating in the workplace and community. Students learn to adapt language to meet the demands of more general or more specialized purposes, audiences, and contexts. They learn about the different ways in which knowledge and opinion are represented and developed in texts, and about how more or less abstraction and complexity can be shown through language and through multimodal representations. This means that print and digital contexts are included, and that listening, viewing, reading, speaking, writing, and creating are all developed systematically and concurrently [5].

Numeracy is the knowledge, skills, behaviors, and dispositions that students need to use mathematics in a wide range of situations. It involves recognizing and understanding the role of mathematics in the world and having the dispositions and capacities to use mathematical knowledge and skills purposefully. Number, measurement and geometry, statistics and probability are common aspects of most people's mathematical experience in everyday personal, study and work situations. Equally important are the essential roles that algebra, functions and relations, logic, mathematical structure and working mathematically play in people's understanding of the natural and human worlds, and the interaction between them. Students are exposed to increasingly sophisticated and refined mathematical understanding, fluency, reasoning, modelling and problem-solving. These capabilities

enable students to respond to familiar and unfamiliar situations by employing mathematics to make informed decisions and solve problems efficiently. There is now also good evidence that other areas of development – such as resilience and perseverance – support achievement in numeracy as well.

#### **OBJECTIVES OF THE STUDY**

This research is very particular with the Impact of the Study on Literacy and Reading Program among the Pupils of BATA Center – SHL Restoration Village situated at San Jose Sico, Batangas City. The study aims to resolve the following: To describe the profile of the respondents as to age and gender; To identify the impact of literacy and reading program as to the Knowledge; Skills and Behaviour / Attitude; To test the difference between the profile variables and the literacy variables. Lastly, To propose programs that will enhance the Literacy and numeracy program in SHL Restoration Village .

#### **METHODOLOGY**

##### **Research Design**

The researcher used the descriptive method in the Impact Study on Literacy and Numeracy program among the pupils of BATA Center SHL Restoration Village ; Batangas City. According to Vaismoradi et al [6], the descriptive method is used in the assessment and finds answers to questions through the analysis of variables' relationship. It is very important and preliminary to the study to utilize various school documents and records to serve as basis for evaluating programs as basis for development and improvement.

##### **Participants**

The respondents of the study are 43 students per household of BATA Center SHL Restoration Village Batangas City. The university strives to maintain a positive relationship with its society and is deeply concerned about the needs of those who are less fortunate. The Sotero H. Laurel Restoration Village, located in Barangay Sico, Batangas City, is one of the adopted villages, where an institutional project in collaboration with the Couples for Christ Family Life Foundation aims to provide homes for the homeless [7].

Table 1 shows the Percentage distribution of Respondents' profile as to sex and age. Whereas, most of the students that had entered the BATA center where male with a frequency distribution of 25 and at 58.10 % of the total respondents household as compared to the 41.90 % female students which constitutes 18 female.

As to the age of the respondents, 4-5 years of age are the main target of the literacy program which has a total percentage of 34.90, followed by the 3 years old children with a frequency distribution of 8 and a percentage of 18.60 and lastly those who are at 6 years of age with a percentage of 11.60 and a total of 5 where among the beneficiaries of the literacy program of the institution

**Table 1**  
**Percentage Distribution of the Respondents' Profile**

Variable	Frequency	Percentage (%)
<b>Sex</b>		
Male	25	58.10
Female	18	41.90
<b>Age</b>		
3 years old	8	18.60
4 years old	15	34.90
5 years old	15	34.90
6 years old	5	11.60

Gender differences plays an important role in the learning behaviour of an individual. Hence in the SHL Restoration Village, in Sico Batangas it is evident that their populace had been dominated by man (children and adult). Developing early literacy skills makes it easier for children to learn to read. Children who enter school with these skills have an advantage that carries with them throughout their school years.

**Data Gathering Procedure**

A questionnaire will be distributed to pupils who had been students at the BATA SHL Restoration Village day Care Center . The questionnaire will be divided into 2 parts, the first part ; the profile of the respondents as to : Gender and Age . The second part will include the questionnaire on the impact of the program as to three variables- 1. Knowledge 2. Skills 3. Attitude/ behaviour .

**Data Analysis**

The researcher made use of frequency and percentage to analyze the profile of the respondents, while weighted mean and rank was used to analyze the impact on the numeracy and literacy program as to the knowledge, skills, and attitude and behavior. Analysis of variance was used to test the difference between the profile variables and the literacy variables.

**Ethical Considerations**

Confidentiality of the research data with respect to anonymity of the participants in this study is ensured

in keeping the identities of the pre service teachers , the cooperating teachers and the schools unidentified. For purposes of presentation of the data for statistical analysis , codes or numbers are assigned in the tabulation of data gathered from the questionnaire.

**RESULTS AND DISCUSSION**

Table 2.1 shows the impact of effectiveness of the program as to the Knowledge acquired by the students in the Numeracy and Literacy Program of Mass Communication students. Children who do not learn to read, write and communicate effectively at primary level are more likely to leave school early, be unemployed or in low-skilled jobs, have poorer emotional and physical health and are more likely to end up in poverty and in our prisons. As a component of basic education and a foundation for lifelong learning, literacy is the key to enhancing human capabilities and achieving many other rights. In short, literacy and numeracy carry wide-ranging benefits not only for individuals but also for families, communities, and society.

**Table 2.1**  
**Impact on the Numeracy & Literacy Program as to Knowledge**

Indicators	WM	VI	Rank
1. I learned how to pronounce selected words correctly.	4.30	GE	6
2. I learned the correct spelling of selected words.	4.35	GE	4.5
3. I understand the meanings of some selected words	4.35	GE	4.5
4. I learned how to write numbers.	4.44	GE	2
5. I gained how to distinguish numbers.	4.60	VGE	1
6. I learned how to add simple equations.	4.42	GE	3
<b>Composite Mean</b>	<b>4.41</b>	<b>Great Extent</b>	

*Legend: 4.50 – 5.00 = Very Great Extent (VGE); 3.50 – 4.49 = Great Extent (GE); 2.50 – 3.49 = Moderate Extent (ME); 1.50 – 2.49 = Little Extent (LE) ; 1.00 – 1.49 = Very Little Extent (VLE)*

In the study conducted it is very evident that the students gained how to distinguish numbers (4.60) which has been topmost and ranked 1st interpreted as very great extent which means that the students easily can distinguish and had prime literacy on number cognition. Learning how to write numbers (4.44) was ranked second and verbal interpretation of great extent; third is learning how to add simple equations (4.42) with a verbal interpretation of great extent. Next in rank is learning how to spell words and understand it's meaning sharing the rank 4.5. It can be used to think that Literacy as the skill of reading and writing when children were 'ready' to learn. Today most people understand that literacy 'emerges' gradually in the early years with the

development of literacy in young babies who hear sounds, have them identified by sensitive caring adults, babbling and repeating sounds and rhymes and later sharing books, stories, TV or other communication technologies. Learning how to pronounce selected words correctly got the lowest rank at 6 with a great extent verbal interpretation. Children are natural lovers of learning. Watch their faces fill with wonder as they watch an egg hatch or learn how birds build their nests. Early learning environments nurture that inborn love for learning because the curious nature of the child is free. At preschool, education is done through playtime.

Piaget's theory is adaptation of instruction to the learner's developmental level. The content of instruction needs to be consistent with the developmental level of the learner. The teacher's role is to facilitate learning by providing a variety of experiences. Teacher should obviously provide opportunities for learners to explore and experience, by doing so is encouraging learner's new understandings. Piaget emphasizes the Opportunities that allow learners of different cognitive levels to work together and encourage less mature students to advance to create understanding [8]. Hence, cognitive skills are not fixed but can be influenced through investment in preschool training, education in school, and significantly, parental efforts. The most effective period for cognitive skill investment by parents is early in the life of their children [9].

**Table 2.2**  
**Impact on the Numeracy & Literacy Program as to Skills**

Indicators	WM	VI	Rank
1. I can now write letters correctly.	4.56	VGE	1.5
2. I learned how to recite numbers and alphabet	4.56	VGE	1.5
3. I can now write the correct spelling of some simple words.	4.51	VGE	4
4. I can now count no. 1-10.	4.53	VGE	3
5. I learned how to write numbers in numerals.	4.47	GE	5
6. I learned how to write numbers in word form .	4.16	GE	6
<b>Composite Mean</b>	<b>4.47</b>	<b>Great Extent</b>	

Legend: 4.50 – 5.00 = Very Great Extent (VGE); 3.50 – 4.49 = Great Extent (GE); 2.50 – 3.49 = Moderate Extent (ME); 1.50 – 2.49 = Little Extent (LE) ; 1.00 – 1.49 = Very Little Extent (VLE)

Table 2.2 shows the effectiveness of the program as to the skills of the students in the Restoration Village. It is clearly identified that both learning how to write and how to recite numbers and alphabet had been the nest skills they have imparted in the children of Sico (4.56) taking a rank of both 1.5. Counting numbers

(4.53) ranked number 3 while writing the correct simple spelling of words (4.51) ranked 4<sup>th</sup>. The lowest in rank is learning how to write numbers in word form (4.16) . The total composite mean averaged at 4.47 with the verbal interpretation of Great Extent .

This shows that children had the best time in learning these skills since this are basics. Reading to preschoolers has been found to be related to language growth, emergent literacy and reading achievement [10]. In addition, reading to children also stimulates them to read books themselves and further develop their cognitive skills. The study on reading to children at 4 years of age and the subsequent development of very early reading skills is relevant since early remedial or stimulating activities may be important for later reading skills/proficiency. On the other hand, Janes and Strong [11] point out that number sense is using common sense based on the way numbers and tools work. It helps prekindergarten children to detect errors and to choose logical approaches and strategies to solve mathematics problems. Because developing number sense and counting is one of the most fundamental skills for prekindergarten children, curriculum developers and researchers are interested in supporting its conceptual development [12].

**Table 2.3**  
**Impact on the Numeracy and Literacy Program as to Attitude and Behavior**

Indicators	WM	VI	Rank
1. I became attentive when listening to the teacher.	4.35	GE	4
2. I feel more empowered to learn about numbers and words.	4.30	GE	5.5
3. I become more disciplined pupil.	4.44	GE	3
4. I felt learning words and numbers are important.	4.30	GE	5.5
5. I develop the spirit of sharing with others.	4.51	VGE	2
6. I became more sociable by interacting with others.	4.60	VGE	1
<b>Composite Mean</b>	<b>4.42</b>	<b>Great Extent</b>	

Legend: 4.50 – 5.00 = Very Great Extent (VGE); 3.50 – 4.49 = Great Extent (GE); 2.50 – 3.49 = Moderate Extent (ME); 1.50 – 2.49 = Little Extent (LE) ; 1.00 – 1.49 = Very Little Extent (VLE)

Table 2.3 shows the impact on the effectiveness of the programs as to Attitude and behavior ; the tables shows that students become sociable by interacting with other children in the class/ group which topped the rank with a weighted mean of 4.60 followed by developing the spirit of sharing with others with a verbal interpretation of with great extent and a weighted average of 4.51 .

A child's environment can have a large impact on their development and their behavior. When a young

child is displaying problem behaviors, it is important to intervene early by making positive changes to their environment. Socially acceptable learned behaviors that enable an individual to interact effectively with others and to avoid or escape negative social interactions with others [13]. They are called prosocial behaviors ; children are enhanced with skills that they are able to mingle with the nature and be able to nurture them as human being . The environment plays an important part in the honing of their social skills, behaviors and interacting capacities. Caprara, et al. [14] found that prosocial skills (cooperating, helping, sharing, and consoling) in 3rd grade was a better predictor of 8th grade academic achievement than 3rd grade academic achievement. Malecki and Elliott [15] reported similar findings for social skills and problem behaviors for an elementary sample, with social skills significantly predicting end-of-year achievement test performance on a high stakes test.

**Table 2.4**  
**Summary on the Impact of Literacy & Numeracy program**

Indicators	WM	VI	Rank
Knowledge	4.41	GE	3
Skills	4.47	GE	1
Attitude and Behavior	4.42	GE	2
<b>Composite Mean</b>	<b>4.43</b>	<b>Great Extent</b>	

Legend: 4.50 – 5.00 = Very Great Extent (VGE); 3.50 – 4.49 = Great Extent (GE); 2.50 – 3.49 = Moderate Extent (ME); 1.50 – 2.49 = Little Extent (LE); 1.00 – 1.49 = Very Little Extent (VLE)

The summary table shows the impact of the literacy and Numeracy program as based on various variables whereas, skills (4.47) ranked the highest with a verbal interpretation of great extent; followed by attitude and behavior (4.42) and knowledge (4.41). The composite means of 4.43 interpreted as great extent signifies that the program had remarked a great impact. Which means that the three main domains of learning and all teachers should know about them and use them to construct lessons. These domains are cognitive, affective and psychomotor. Each domain on this page has a taxonomy associated with it.

Lifting literacy and numeracy outcomes in every school, in every classroom, for every student, is a responsibility we all share. To succeed, literacy and numeracy outcomes must be central to what we do, across all levels of the system, every day. Access to high quality, detailed guidance on literacy and numeracy improvement lifted literacy and numeracy performance offer a detailed and evidence-based approach to the fundamentals of literacy and numeracy teaching and learning, across curriculum,

assessment (including formative assessment) and pedagogy. Learning domains have always played an important role in evaluating the student’s knowledge and skills. The learning domains can be incorporated, while designing the course outcomes of all the courses in a program; however, the assessment of learning domains practiced in many higher education programs resulted in vague assessment methods and as a result there are still lacking some other aspects as to how they are able to deliver and strategize the methods in teaching the younger ones.

The cognitive domain contains learning skills predominantly related to thinking processes. Learning processes in the cognitive domain include a hierarchy of skills involving processing information, constructing understanding, applying knowledge, solving problems, and conducting research [16]. There are six levels of cognitive complexity: knowledge, comprehension, application, analysis, synthesis, evaluation. Bloom’s taxonomy focused on describing levels of attainments rather than process skills, and did not substantially address the manner in which the learner proceeds from one level to the next. The cognitive domain includes skill clusters that organize a complete, concise, and complementary listing of the learning skills most critical for each process [17].

Most people think of learning as an intellectual or mental function. However, learning is not a just a cognitive (mental) function [18]. The affective domain involves our feelings, emotions and attitudes. The affective domain involves our feelings, emotions, and attitudes. This domain includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes.

**Table 3**  
**Difference of Responses on the Impact on the Effectiveness of the Program When Grouped According to Profile Variables**

	Sex		I	Age		
	t-value	p-value		F-value	p-value	
Knowledge	0.259	0.130	NS	1.033	0.389	NS
Skills	0.260	0.079	NS	1.132	0.348	NS
Attitude and Behavior	-	0.165	NS	1.253	0.304	NS

Legend: Significant at p-value < 0.05

Table 3 presents the comparison of responses on the impact of the program when grouped according to profile. The result shows that there was no significant difference observed since the obtained p-values were all greater than 0.05 alpha level. This means that the responses do not vary significantly. This is similar with the study of Borbon and Ylagan [19] proving that the impact of the project is not affected on whether the project is effective. Hence, profile variable is not a factor to Impact on the Effectiveness of the Program as seen in the results.

**Table 4**

**Proposed Program for the Improvement of Literacy and Numeracy Program**

Strategic Focus	Summary of Functions / ( Proposed Program )
Leaders will have access to high quality data sets and professional development to assess school and student achievement – so you can understand and diagnose your school’s performance, as the basis for formulating approaches to strengthening practice of the literacy and the reading program .	The teachers and the respective students of the BATA Center must work hand in hand in achieving this goal. To have proper education and learn the basics of reading and arithmetic. The BATA Center to house a teacher in charge that will have the resiliency to teach basic preschool education.
School leaders have clear, detailed guidance on actions that improve literacy and numeracy achievement (where needed) within the improvement cycle	Evaluate the performance of the students every after cycle of Literacy and Numeracy programs as to determine the needs of the children the next school year. Implementation of Program Based on Needs Assessment
Teachers have access to high quality, evidence-based guides and professional learning to inform practice across: <ul style="list-style-type: none"> <li>• Curriculum</li> <li>• Pedagogy</li> <li>• Assessment (including formative assessment)</li> </ul>	Includes the use of various strategies in teaching . Methods to improve teaching : <ol style="list-style-type: none"> <li>1. Integrated Technology</li> <li>2. Cooperative Learning Structures</li> <li>3. Differentiated Instruction</li> <li>4. Goal Setting</li> <li>5. Cross Curriculum Teaching</li> <li>6. Assessment for Learning</li> </ol>
Teachers and schools are provided with support for all children and young people to succeed in literacy and numeracy.	Activities to enhance Students Learning : LITERACY <ol style="list-style-type: none"> <li>1. Apple Alphabet Activity</li> <li>2. Symmetry Drawing</li> <li>3. Learn your Letters BINGO Game</li> <li>4. Spell My name Activity</li> <li>5. Alphabet Teeth Cleaning</li> </ol> NUMERACY <ol style="list-style-type: none"> <li>1. Make a Number Line Activity</li> <li>2. Giant Shape Match</li> <li>3. Smack the Number Counting Game</li> <li>4. Number Match</li> <li>5. Finger Print Counting</li> </ol>
Teachers are supported to work as researchers of their own practice, and in a collaborative way.	Teambuilding activity with the students . Forming groups to facilitate learning. Incorporation of PLAY and LEARN for FUN Activity
Schools and teachers will be provided with support and encouragement to learn from each other.	Performance Task for students. Activities included: <ol style="list-style-type: none"> <li>1. Matching Color</li> <li>2. Letter Matching</li> <li>3. Dirt Playdough (Sensory Writing)</li> <li>4. Build a Bug</li> <li>5. Shape Sort</li> <li>6. Phone Telephone Number</li> <li>7. Educational Easter Egg Activity</li> <li>8. Number Sense</li> <li>9. Duplo Lego</li> <li>10. Roll and Cross</li> </ol>
There is differentiated support for all schools to lift their performance.	A range of supports will be provided to teachers (student teachers) and school leaders who will conduct the project and give the campaign of information dissemination. Culminating Activity for YEAR ENDER GRADUATION

### Conclusion and Recommendation

Results revealed that there is great extent of impact of the literacy and Numeracy program as to the skills, attitude and behavior, and knowledge. It was also found out that there is no significant differences on the responses to the impact on the effectiveness of the program when grouped according to profile.

The study will help the teacher uplift the level of reading and numeracy activities to students.

Hence, it is recommended for the school administration – teachers who handles programs as literacy and numeracy that they may be able to evaluate and assess the activities given to students based on the age level and the capabilities thereunto. Lastly, for the future researchers that they can create another program of activities that will enhance the three domains of the students in the preschool level .

### References

- [1] Altun, D., Tantekin Erden, F., & Hartman, D. K. (2021). Preliterate young children's reading attitudes: Connections to the home literacy environment and maternal factors. *Early Childhood Education Journal*, 1-12.
- [2] Castner, D. J., Schneider, J. L., & Henderson, J. G. (2020). Curriculum Wisdom and Educational Leadership. In *Oxford Research Encyclopedia of Education*.
- [3] Slusser, E. (2019). Counting and basic numerical skills. In *International handbook of mathematical learning difficulties*(pp. 521-542). Springer, Cham.
- [4] Watson, A., & Johnson-Turner, S. (2019). Finding the right words: Literacy in the history classroom. *agora*, 54(2), 33-39.
- [5] Sindoni, M. G., Moschini, I., Adami, E., & Karatza, S. (2021). 16 The Common Framework of Reference for Intercultural Digital Literacies (CFRiDiL): Learning as Meaning-Making and Assessment as Recognition in English as an Additional Language Contexts. *Multimodality in English language learning*.
- [6] Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & health sciences*, 15(3), 398-405.
- [7] Magnaye, R. P., & Ylagan, A. P. (2021). Effectiveness and Impact of Community Extension Program of One Philippine Higher Education Institution as Basis for Sustainability. *Asia Pacific Journal of Academic Research in Business Administration*, 7(1).
- [8] Domingo, J. G. (2021). Cognitive skills achievement in mathematics of the elementary pre-service teachers using Piaget's seven logical operations. *Turkish*

- Journal of Computer and Mathematics Education (TURCOMAT)*, 12(4), 435-440.
- [9] Coneus, K., Laucht, M., & Reuß, K. (2012). The role of parental investments for cognitive and noncognitive skill formation—Evidence for the first 11 years of life. *Economics & Human Biology*, 10(2), 189-209.
  - [10] Majorano, M., Ferrari, R., Bertelli, B., Persici, V., & Bastianello, T. (2021). Talk—An Intervention Programme for Enhancing Early Literacy Skills in Preschool Children: A Pilot Study. *Child Care in Practice*, 1-17.
  - [11] Janes, R. C., & Strong, E. L. (2014). *Numbers and Stories: Using Children's Literature to Teach Young Children Number Sense*. Corwin Press.
  - [12] McGuire, P., Kinzie, M. B., & Berch, D. B. (2012). Developing number sense in pre-k with five-frames. *Early Childhood Education Journal*, 40(4), 213-222.
  - [13] Gresham, F. M., & Elliott, S. N. (1993). Social skills intervention guide: Systematic approaches to social skills training. *Special Services in the Schools*, 8(1), 137-158.
  - [14] Caprara, G. V., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P. G. (2000). Prosocial foundations of children's academic achievement. *Psychological science*, 11(4), 302-306.
  - [15] Malecki, C. K., & Elliot, S. N. (2002). Children's social behaviors as predictors of academic achievement: A longitudinal analysis. *School psychology quarterly*, 17(1), 1.
  - [16] Strawhacker, A., & Bers, M. U. (2019). What they learn when they learn coding: investigating cognitive domains and computer programming knowledge in young children. *Educational Technology Research and Development*, 67(3), 541-575.
  - [17] Singh, R. K. V., & Shaari, A. H. (2019). The analysis of Higher-Order Thinking skills in English reading comprehension tests in Malaysia. *Geografia*, 15(1).
  - [18] Boogert, N. J., Madden, J. R., Morand-Ferron, J., & Thornton, A. (2018). Measuring and understanding individual differences in cognition. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 373(1756), 20170280.
  - [19] Borbon, N. M. D., & Ylagan, A. D. (2021). Impact assessment on the tourism community extension project to the beneficiary of SHL restoration village. *International Journal of Research Studies in Management*, 9(1), 11-17.

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