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Early Language Literacy and Numeracy Skills of Kindergarten Learners in Talakag Bukidnon

Rosemarie Fe M. Lavador¹, Estrella S. Ferenal¹, Jovit D. Comon¹

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ABSTRACT

In the contemporary context, young Filipinos from disadvantaged socio-economic backgrounds are encountering challenges in mastering fundamental language and numeracy skills, impeding their educational advancement. To address this issue, a study was conducted in Talakag District 1, Bukidnon during the 2022-2023 academic year, focusing on kindergarten learners aged 4-5. The study aimed to outline the participants' characteristics, evaluate their proficiency in early language literacy and numeracy during the 1st and 2nd Quarters of the school year, and establish links between their learning skills and backgrounds. With 154 kindergarten learners involved, the study employed a descriptive correlational research approach, analyzing data using descriptive statistics and Spearman Correlation to identify significant relationships between language and math skills and participants' profiles. The findings indicated a predominance of female participants with parents engaged in farming, holding a high school education, and earning a household income of P 9,999 or less. Moreover, the study revealed that the learners' performance in early language literacy and numeracy neared proficiency levels in the specified quarters, emphasizing a noteworthy connection between their skills and background factors, particularly the mothers' educational attainment. Recommendations included a focus on enhancing early language and math skills by the Department of Education and encouraging teachers and parents to allocate more time to enrichment activities.

INTRODUCTION

Literacy and numeracy are central to lifelong learning and sustainable development. In the fast-paced world of today, these skills are essential for achieving independence, maintaining one's welfare, and creating communities that will continue to progress socioeconomically. Every student in school today needs to acquire excellent reading and numeracy abilities in order to thrive in the data-driven, globally linked world of today. However, as observed among schools, many learners struggle with literacy and numeracy skills, and these challenges are not new, but they have become even more pressing in recent years. Hence, the crucial reason for selecting this problem. Alongside this observation is the lack of resources and lack of quality instructions. This holds true in the district of Talakag, Bukidnon. It is noticeable that a lot of young learners have not mastered the basic literacy and numeracy skills.

The Department of Education urged to prioritize better literacy and numeracy in early school years. Assessment, Curriculum and Technology Research Centre has been working with the Department of Education in reviewing the K to 12 Curriculum. Giving technical support to the agency in large-scale assessments including the Programme of International Student Assessment and Trends in International Mathematics and Science Study. The biggest challenge in the country would be facing is coming up with ways to address learning loss aggravated by remote learning. Learning loss happens when there is a loss of knowledge or skills typically brought about by gaps in one's

education or if one's learning has been discontinued.

The researcher is aware that the literacy and numeracy skills that is required in the classroom is challenging and that many teachers are unsure of how they should respond to this continuing issue. Improving early language literacy and numeracy skills among Kindergarten learners in Talakag District 1 will help teachers determine the strategies and expose young learners to early literacy and numeracy skills. Moreover, numeracy and literacy in Kindergarten are among the priorities. In order to provide people with the foundational knowledge and abilities required for success in life, literacy and numeracy issues must be resolved.

In the Philippines, Kindergarten has a curriculum guide given to all teachers to teach their lessons. Included in the curriculum guide were different assessment approaches and activities that could be used in teaching (Sarmiento & Dimalanta, 2018). The curriculum guide offers a range of assessment methodologies, so teachers are free to select or add their own assessment method and activity. This will be based on the developmental stage of the child. However, the effectiveness of the assessment used without any proper guide will not be an assurance in measuring the development of the child. In terms of assessment approaches in Kindergarten Education (Pyle & Deluca, 2017) have drawn three profile descriptions based on each teacher's curricular stance and approach to assessment, namely: developmental assessment approach, blended assessment approach, and assessment for learning approach.

¹ PHINMA Cagayan de Oro College, Philippines

* Corresponding author's email: rosemariefe.lavador@deped.gov.ph

Thus, Early Language, Literacy, and Numeracy (ELLN) Program under the Department of Education Order No. 12, s. 2015 was implemented, which aims to improve the reading and numeracy skills of Kinder to Grade 3 pupils, following the K to 12 Basic Education Curriculum. It also aims to establish a sustainable and cost-effective professional development system for teachers. It is on this issue that this study was conducted to determine the Early Language Literacy and Numeracy Skills of Kindergarten Learners in Talakag District 1, Bukidnon.

LITERATURE REVIEW

Learning Skills on Early Language Literacy

Early literacy skills sometimes referred to as emergent literacy skills, are those that are inherently involved in reading development but that are present before the reading skill itself develops (Suggate *et al.*, 2018). Its unique associations on self-regulation, attention and executive functioning and growth in early literacy skills over the preschool year using latent-growth-curve analysis (Lonigan *et al.*, 2017).

Furthermore, (Majorano *et al.*, 2021) showed that possessing the skills that are the basis of literacy acquisition at preschool is associated with more successful reading and writing acquisition processes at primary school. It has been repeatedly shown that phonemic awareness is a necessary skill and a significant predictor of success in reading later on. Children who lack these early literacy skills at Kindergarten entry are more likely to demonstrate both short- and long-term reading difficulties (Kaminski & Smith, 2017).

Print Awareness

In early childhood education, educators are increasingly using institutionalized methods to teach literacy skills. The current study examined the conception and efficacy of a literacy intervention that combined storytelling with Gagné's nine events of instructional design, in keeping with an emerging critique of this methodology. According to (Maureen, 2018), literacy skills should be nurtured from an early age. The belief that a child should be able to read and write in Kindergarten is becoming more and more common among parents and other educators. As a result, a large number of kindergartens have implemented structured literacy teaching strategies. Nevertheless, the organic and playful learning style of young children has been largely ignored by this approach. On the same line, Scanlon and Vellutino (2021) found that the most successful reader group came from Kindergarten classrooms in which more time was spent on phoneme awareness, spelling, and writing activities.

Phonological Awareness

Research has shown that phonological awareness is commonly acknowledged as a crucial aspect of second language acquisition in reading. A study by (Saiegh-Haddad, 2019) claims that phonological awareness is also considered a primarily metalinguistic skill not affected

by the individual's L2 language proficiency or L1 to L2 linguistic distance. One study by (Ruan *et al.*, 2018) found that the writing system influences the associations between phonological awareness, morphological awareness, and reading. Their research looked at the function of the writing system in the connection between reading, morphological awareness, and phonological awareness. The meta-analysis's findings showed a strong correlation between these language abilities and reading comprehension in each language, but the degree of that correlation depended on the writing system, the kind of reading goal, and the kind of task that was used to operationalize phonological awareness and morphological awareness. These results contribute to our understanding of the language proficiency that is most critical for learning to read in various writing systems.

Learning Skills on Early Numeracy

A study by (Raghubar & Barnes, 2017) reveals that learning to count, identify numbers, and compare and manipulate quantities are key early numeracy skills. These are strong indicators of the mathematical performance and learning of school-age children. Early numeracy development also depends on general neurocognitive skills like language and working memory.

Another study by (Devlin & Moeller, 2022) indicated broad consensus in considering skills such as counting, number relations and basic arithmetic as central aspects of early numeracy. However, the number and contents of identified factors varied considerably across studies. Furthermore, Litkowski *et al.* (2020) examined preschool children's item-level performance on eight numeracy subtests at half-year age points throughout the preschool period. Preschool is a time when children's mathematical abilities improve significantly. Nevertheless, there are few opportunities for preschoolers to learn mathematics, and most activities and lessons are designed to be below their level of proficiency.

On the other hand, Mercader and Gairín (2018) reported the power of different variables and their dynamic interactions in predicting mathematical performance. It suggested that measures of early numeracy skills like logical operations, counting, and magnitude comparison abilities, as well as indicators of motivational constructs like learning motivation and attributions, executive functioning like inhibition and working memory, and kindergarten and second-year primary education math performance be taken.

Counting

Sari (2021) describes the implementation of learning by applying the Counting Tree educational learning media to improve the cognitive abilities of students in Kartika Tanjung Morawa Early Childhood Education. One area of mathematics that is fundamental to knowledge that kids should have from a young age is counting. In actuality, young children still have very limited counting skills. This is due to the fact that kids have trouble

counting or pronouncing a series of numbers. By pointing at individual things and to a series of objects, they count. However, educators fail to make use of the educational resources available to help kids meet their math learning objectives. To solve this issue, educational learning materials like Counting Tree are used to help kids learn to count since they make the process simpler, more engaging, and enjoyable for kids.

Further, Friso-Van Den Bos and Kroesbergen (2018) investigated whether fostering mapping skills is more efficient through a counting or a number line training program. Early numerical skills in children serve as the foundation for eventual mathematical proficiency. It has been proposed that counting abilities and linear number placements are essential to the development of arithmetic skills since they are signs of mapping, a crucial step before arithmetic abilities.

Number Identification

The study by Ramani *et al.* (2017) targeted to improving the numerical knowledge of Kindergartens from primarily low-income backgrounds using two approaches: one targeting their conceptual knowledge, specifically, their understanding of numerical magnitudes, and the other targeting their underlying cognitive system, specifically, their working memory. Throughout multiple sessions, participants in both therapies engaged in game-like activities on tablet computers. Both domain-specific and domain-general interventions, as expected, enhanced children's knowledge of numerical magnitude when compared to a no-contact control group, indicating that they support mathematical learning. Children's improvements in number line estimating were predicted by individual variations in effort during the working memory game, but not during the number knowledge training game. The findings show how quickly advancing technology in early childhood education settings can help young children develop their numerical skills. A strong foundation in early numerical knowledge should be provided to Kindergarten students in order to maximize their future mathematical ability.

To sum up, print awareness, phonological awareness, counting, and number identification are factors that can affect the level of literacy and numeracy skills of young learners in public elementary schools. It is important for educators and policymakers to consider these factors when developing strategies to promote literacy and numeracy skills among young learners.

Statement of the Problem

This study attempted to determine the level of learning skills on early language literacy and numeracy skills of Kindergarten learners in Talakag District 1, Talakag, Bukidnon, School Year 2022-2023. Particularly, this paper sought to answer the following questions:

1. How are the respondents' distributed in terms of sex, parent's occupation, parent's highest educational attainment and family monthly income?

2. What is the respondents' level of learning skills on early language literacy, print awareness, phonological awareness and numeracy, counting and number identification in the 1st and 2nd Quarter of School Year 2022-2023?

3. Is there a significant relationship between the respondents' learning skills in early language literacy and numeracy skills and their profile?

Theoretical Framework

This study is anchored on Jean Piaget's Cognitive Development Theory which highlighted the four stages or periods of child development progress. He believed that children progress through the four stages in a fixed order at differing rates. Children move from one stage to another when they reach the appropriate maturation level and have been exposed to certain relevant experiences. Piaget's suggested that the stages do not end abruptly and that the transition takes place slowly by merging into the next stage. He viewed cognitive development as a series of transformations with changes occurring over brief periods. It is important to note that he emphasized observing changes in the 'quality' of children's understanding and knowledge rather than 'quantity'. His theory was important to this study because it provides us with insights into cognitive processes during early childhood. It helps teachers and parents understand what children are capable of at different ages and how to provide appropriate support. Children in the early years of primary school need concrete objects, pictures and symbols to develop literacy and numeracy skills.

This study is also based on DepEd Order No. 12, s. 2015. Early Language Literacy and Numeracy Program (ELLN) focus on capacitating the Kindergarten to Grade 3 teachers. Instructional leaders on the basic knowledge and pedagogical skills in literacy and numeracy. Establishing and managing a school-based mentoring/learning partnership program as a mechanism for the continuous professional development of teachers/mentors, teachers/mentees, school managers and instructional leaders and an avenue for teachers to listen to storytelling and read-aloud activities from the best storytellers through the School-Based Learning Action Cell.

Thus, the development of early numeracy in children occurs during the Kindergarten years before the beginning of formal education. Early numeracy skills include counting, identification of quantities, and the initial ability of addition and subtraction. These abilities develop gradually over time (Méndez *et al.*, 2018). Children mathematics skills undergo extensive development during the preschool years. Opportunities for engaging in mathematics in the preschool classroom, however, are limited, and activities and instruction are often targeted below children's skill levels (Litkowski *et al.*, 2020).

Scope and Limitations

This study focused on Kindergarten learning skills in Early Language Literacy and Numeracy in Talakag

District 1, Talakag Bukidnon, School Year 2022-2023. The respondents of the study were the one hundred fifty-four (154) Kindergarten learners in the schools where this study was conducted. The independent variables were limited to the respondents' profile in terms of sex, parents' occupation, parents' highest educational attainment and family monthly income. Indeed, the dependent variables dealt with the respondents' learning skills in early language literacy and numeracy. Early language literacy inquired about print awareness and phonological awareness, while early numeracy was concerned with counting and number identification.

METHODOLOGY

Research Design

This study made use of a descriptive-correlation research design. It involved measuring and analyzing variables to determine if there is a relationship between them. This research design is useful for exploring the relationships between variables and identifying patterns in data (Vassar & Holzmann 2017). Descriptive research involves observing and describing phenomena without manipulating them. In a descriptive-correlational research design, researchers collected data on two or more variables and analyzed the data to determine if there was a relationship between them. Correlation analysis was used to determine the strength and direction of the relationship between the variables. This research design is useful for generating hypotheses and identifying potential causal relationships between variables.

Study Setting

This study was conducted in the five public elementary schools in Talakag District 1 for the School Year 2023-2024. The school is headed by a Principal/School Head. As of School Year 2023-2024 there are more than 363 Kindergarten learners who are enrolled. In Talakag 1, Principals and teachers are both aiming for a quality education for the learners. Talakag District 1 follows the vision and mission of the Department of Education, which is to develop learners who are true citizens and patriots who have a strong desire to serve the country and work for its betterment. Inculcate the values and develop the competencies that are necessary and desirable to ensure lifelong learning. On the other hand, the mission is to protect and promote the right of every Filipino to quality, equitable, cultured-based, and complete basic education. The said schools also have competent teachers who always take part in attaining the mission and vision of the Department of Education. However, despite the toil and hard work, as reported there are still struggling learners in Talakag District 1. Due to the problem of literacy and numeracy skills, schools implemented an intervention in line with the "Early Language Literacy and Numeracy Program" which was a DepEd Order No. 12, s. 2015. This program focuses on capacitating the Kindergarten to Grade 3 teachers on the basic knowledge and pedagogical skills in literacy and numeracy.

Study Population and Sampling Technique

The respondents of the study were the one hundred fifty-four (154) Kindergarten learners in Talakag District 1, Talakag, Bukidnon, for the School Year 2022-2023. These learners are currently enrolled in the school year mentioned above. Further, they have the same characteristics as those of the other respondents in the study. The researcher employed Slovin's formula to obtain the desired number of respondents in the study. This was done after identifying the population. With a population of three hundred sixty-three (363) learners and a margin of error of 6%, the sample size of one hundred fifty-four (154) was obtained and this became the respondents of the study. Moreover, a stratified sampling procedure was employed to get the appropriate number of respondents in every school. This was done by dividing the sample size by its population. The distribution of respondents by school is shown in Table 1.

Table 1: Distribution of Respondents

School	Population	Respondents
San Isidro Elementary School	58	24
Talakag Central Elementary School	180	79
Maigtang Elementary School	55	23
Sto. Nino Elementary School	35	14
Dagundalahon Elementary School	35	14
Total	363	154

Research Instruments

The instrument used in gathering the necessary data was a questionnaire made of two sets. The first set asked about the respondents' profile in terms of sex, parent's highest educational attainment, parent's occupation and family monthly income. The second part of the instrument is a researcher-made questionnaire which elicited the respondents' learning skills on early language literacy, such as print awareness and phonological awareness and early numeracy on counting and number identification. The test covered the 1st and 2nd Quarters of School Year 2022-2023. It was adapted from the Kindergarten Curriculum Guide based on DepEd Kindergarten Most Essential Learning Competencies.

Statistical Treatment of Data

After collecting and recording the data gathered in the study, the following statistical tools were used: Descriptive statistics such as frequency, percentage, mean and standard deviation were used to describe the variables in the study. These were reflected in the findings where these statistical tools are used. Spearman rho Correlation (rho) was utilized to determine the significant relationship

between the respondents' early language literacy and numeracy skills and each of their profiles.

Ethical Consideration

Respondents may be more inclined to participate honestly and openly if they are assured that their identities and personal information be kept confidential, so it is crucial to ensure their privacy and anonymity. The following ethical concerns are to be addressed:

Inform Consent

Participants must understand the implications of the study in order to make such informed choices, and in most cases, researchers and participants have approached the procedure casually. Informed consent guarantees and promotes the rights of the subjects as autonomous participants who deserve respect, benefits, and justice and can withdraw from the study at any time.

Data De-identification

Students were asked to remove or replace any personally identifiable information (such as names, school names, or contact details) from the data during the analysis and reporting. Pseudonyms assignments may be done to respondents to protect their identities.

Secure Data Storage

Safeguard the collected data by storing it securely using encryption where necessary and restricting access to authorized personnel only. This is to prevent accidental disclosure of data to unauthorized parties.

Ethical Review

An institutional review board or ethics committee be consulted to obtain ethical approval in order to guarantee that the research design and data handling techniques adhere to ethical standards and guidelines.

RESULTS AND DISCUSSION

Problem 1: How are the Respondents' Distribution in Terms of Sex, Parents' Highest Educational Attainment, Parents' Occupation, and Family Monthly Income?

Table 2: Distribution of Respondents' Profile in terms of Sex

Category	Frequency	Percentage
Male	62	40.26
Female	92	59.74
Total	154	100.00

Table 2 presents the profile of Kindergarten learners in terms of sex. The data show that the highest frequency of 92 (59.74%) are female. It means that most of the Kindergarten learners in this study are female. This

implies that there is a greater number of female learners compared to males, and that within the given sample or population, females constitute the greatest number of enrollment or participation in Kindergarten education. As noticed, female learners tend to form larger groups than males during group activities. From an early age, girls often engage in more verbal communication and demonstrate higher levels of sociability compared to boys. This inclination towards social interaction can lead to the formation of larger groups during group activities. Girls may enjoy sharing experiences, collaborating on tasks, and engaging in cooperative play, which naturally lends itself to larger group formations, which leads to their language development.

According to Adani and Capanec (2019), boys and girls differ in their speaking abilities, with girls having a well-documented advantage in early language development. The study also found that girls have a more vulnerable communication system development than boys.

On the other hand, the lowest frequency of 62 (40.26%) is male. It means that males are, on average, outnumbered by females in most of the Kindergarten classrooms in District I, Talakag, Bukidnon where this study was conducted. This implies that in many places, the birth rate of girls is higher than that of boys. This can lead to a larger pool of girls entering Kindergarten each year. As observed, this could be due to factors such as birth rates, population composition, or migration patterns. It is also reflected in the Kindergarten enrollment. Among the poorest families, boys had a higher likelihood than girls to be out of school. This suggests that the observed trend of a slightly higher proportion of female students in Kindergarten classrooms is consistent with national trends. This means that the gender disparity observed in Kindergarten classrooms is not an isolated phenomenon specific to a particular region or district but is reflective of a broader national trend.

Significantly, according to the 2017 Annual Poverty Indicators Survey conducted by the Philippine Statistics Authority, data revealed that two-thirds (65.0%) of OOSC in the Philippines aged 5–15 years in 2017 were girls. A higher proportion of girls (than boys) were found among those aged 5–17 years. School attendance was largely associated with the economic status of the family. Three-fifths (58.7%) of the 1.2 million OOSC aged 5–15 years in 2017 belonged to families in the bottom 25 percent of the per-capita income distribution. Among the poorest families, boys had a higher likelihood than girls to be out of school. This suggests that the observed trend of a slightly higher proportion of female students in Kindergarten classrooms is consistent with national trends. This means that the gender disparity observed in Kindergarten classrooms is not an isolated phenomenon specific to a particular region or district but is reflective of a broader national trend (Comon & Corpuz, 2024).

Table 3: Distribution of Respondents Profile in terms of Parents' Occupation

Category	Frequency	Percentage
Father's Occupation		
Carpenter	40	26.03
Government Employee	9	6.04
Private Employee	7	4.43
Small Business	0	0
Farmer	91	59.23
Laborer	7	4.27
Others, pls. specify: __, __ etc	0	0
Mother's Occupation		
Carpenter	24	15.67
Government Employee	8	5.34
Private Employee	12	7.84
Small Business	19	12.02
Farmer	47	30.78
Laborer	0	0
Others, pls. specify: __, __ etc	44	28.35
Total	154	100.00

Table 3 shows the profile of Kindergarten learners in terms of parents' occupation. The result shows that most of the fathers of the Kindergarten learners are farmers with the highest frequency of 91 (59.23%). This result means that a significant number of these learners come from families where the father works as a farmer. This implies that the municipality of Talakag has a significant agricultural sector. Farming is a primary source of income for many families, making it likely that a large portion of learners would have fathers employed in this field. As noticed, a place's proximity to agricultural areas can influence the demographics of its schools. Families living in rural communities who depend on farming likely send their children to schools within the community, contributing to the number of students with farmer fathers.

Significantly, according to the Sarmineto and Dimalanta (2018), it is well-documented that rural areas, often in close proximity to agricultural land, have distinctive educational demographics. Parents cannot attend school activities because they must work in the farm. Rural countries with low levels of educational attainment are often economically tied to farming, manufacturing, and high poverty rates, which can impact the educational outcomes and demographics of schools in these areas. This leads to having students whose parents are farmers. On the other hand, the result shows the lowest frequency of 7 (4.27%) belongs to laborers and 7 (4.43%) belongs to private employees. This means that there is no significant number of Kindergarten pupils who come from families where the father works as a laborer and

private employee or any other job working as a farmer, carpenter and government employee. This implies that these are the only jobs available and suitable to the fathers of these Kindergarten children located in the rural area of Talakag, Bukidnon.

Moreover, according to the Union of International Associations (2020), limited job opportunities are a significant challenge for rural areas, as many rural communities lack a diversified job market, making job seekers vulnerable to sudden economic downturns. The lack of access to opportunities in high-growth sectors has limited economic opportunities in rural areas, and the scarcity of diverse job opportunities poses a significant challenge for rural job seekers. Many rural areas are heavily dependent on a single industry, making job seekers vulnerable to sudden economic downturns.

In terms of mother's occupations, the result means that most of the mother's occupations of these learners are also agricultural workers with the highest frequency of 47 (30.78%). This means that a significant proportion of these students come from families where the mother works in the farm. This finding suggests that the prevalence of mothers working as agricultural workers indicates that the studied population comes from communities or regions where agriculture is a significant economic activity. This finding implies that there is a significant importance of agriculture as a source of livelihood for these families and may reflect the socio-economic conditions in District I, Talakag, Bukidnon.

This result is supported by the study of Quisumbing and Doss (2021). The specific roles and responsibilities of parents can vary significantly across regions and are subject to dynamic changes. The roles played by women and men in agriculture can vary widely across different regions of the world. Cultural, social, and economic factors influence these variations. In some regions, women may have traditionally played more prominent roles in certain agricultural tasks, while in other regions, men may have held greater responsibility. These regional differences reflect the diverse ways in which communities have organized their agricultural practices over time.

On the other hand, the laborer got the lowest frequency among the mother's occupations with a frequency of 8 (5.34%). This means that there is no significant number of Kindergarten pupils whose mothers are working as government employees. This implies that traditional gender roles and expectations are strong in most of the areas in District I, Talakag, Bukidnon. The absence of Kindergarten with mothers working as laborers may reflect cultural norms or societal expectations that discourage women from engaging in physically demanding or labor-intensive work in rural areas. In addition, the relationship between mothers' labor market outcomes and access to childcare might be different in developing countries especially in rural areas.

In addition, the relationship between mothers' labor market outcomes and access to childcare might be different in developing countries especially in rural areas.

In other words, the types of jobs available for women in low- and middle-income countries can sometimes be combined with taking care of children. For example, agricultural work or selling goods at a local market can be done with children around (Halim *et al.*, 2021).

Table 4: Distribution of Respondents' Profile in terms of Parents' Highest Educational Attainment

Category	Frequency	Percentage
Father's Highest Educational Attainment		
College Graduate	40	25.99
College Level	8	5.19
High School Graduate	8	5.19
High School Level	74	48.05
Elementary Graduate	16	10.39
Elementary Level	8	5.19
Mother's Highest Educational Attainment		
College Graduate	24	16.89
College Level	7	4.54
High School Graduate	15	9.74
High School Level	76	49.35
Elementary Graduate	18	11.69
Elementary Level	12	7.79
Total	154	100.00

Table 4 presents the profile of Kindergarten learners in terms of parents' highest educational attainment. The result shows that the highest frequency of fathers' highest educational attainment was 74 (48.05%). This result means that a significant proportion of these Kindergarten learners' fathers are up to high school level only and did not pursue higher levels of academic achievement. This implies that fathers in rural areas have limited pursuit of higher education and prefer to work rather than go to school because of poverty, which suggests that they may have fewer formal qualifications and credentials beyond high school. This can impact their employment opportunities and potentially limit access to higher-paying jobs or career advancement.

A study by Smith and Jones (2022) examined the financial challenges faced by rural fathers pursuing higher education. The research highlighted the significant additional costs associated with transportation, accommodation, and living away from family. The findings indicate that these costs disproportionately impact fathers from low-income families, acting as a barrier to educational attainment.

On the other hand, Elementary Level, High School graduate, and College level got the lowest frequency of 8 (5.19%). This means that few among the Kindergarten pupils in District I, Talakag, Bukidnon have fathers who are Elementary Graduate, High School Level, and College Graduate. Having few fathers who are elementary graduates implies that few of them have a lower level of formal education and academic qualifications among

the fathers in the community, which affects the types of job opportunities available to these fathers. Having few fathers who are High School Level indicates that there is a potential gap in educational attainment in the community hence, implies that a significant proportion of fathers may have discontinued their education before completing high school.

Significantly, although the importance of parental involvement in a child's education and development has been widely acknowledged, a recent study conducted by the University of Leeds suggests that fathers play a distinct and significant role in determining their children's educational outcomes. The research indicates that increased engagement from fathers prior to their child starting primary school provides an educational benefit during the child's first year. Similarly, increased involvement from fathers when the child is five years old contributes to improved academic achievement in key stage 1 assessments at the age of seven (Weale, 2023).

Meanwhile, the results shown in the said data presented that High School Level got the highest frequency among the mother's educational attainment with the 76 (49.35%). This means that the majority of the Kindergarten learners have mothers who attained education at the high school level. This result suggests that a significant proportion of these learners come from families where the parents have not completed their education at the high school level but have not pursued higher education. This implies that these parents who have not experienced college life may not fully understand its benefits and opportunities. They may prioritize immediate financial stability or underestimate the potential for higher education to improve their children's career prospects and future earning potential. The educational disparities among parents can have a significant impact on their children's ability to benefit from formal education. Parents who have received low educational attainment may be less likely to engage in activities such as helping their children with homework or actively interacting with teachers and other education providers. This lack of involvement can hinder the educational progress of the children, as parental support and engagement play crucial roles in a child's academic development (UNESCO'S International Institute for Educational Planning, 2020).

On the other hand, college level got the lowest frequency among the mother's highest educational attainment with the frequency of 7 (4.54%). This means that there are very few mothers among the sample population who have not attained a college degree. This implies that there may be barriers or challenges in accessing and sustaining higher education within the community or population being studied. Factors such as financial constraints, limited educational opportunities, or cultural norms may contribute to these limitations.

This result goes along with the study which revealed that in 2004, 11% of school-age children in rural areas had mothers who did not have a high school diploma (or its equivalent), while 35% had mothers whose highest

educational attainment was some college or an associate's degree, and 21% had mothers who had completed a bachelor's degree or higher (United States Department of Agriculture - Economic Research Service, 2021).

Table 5: Distribution of Respondents' Profile in terms of Family Monthly Income

Category	Frequency	Percentage
Php 50,000 and above	0	0
Php 40,000 – 49,999	4	2.60
Php 30,000-39,999	2	1.30
Php 20,000 – 29,999	12	7.79
Php 10,000 – 19,999	39	25.32
Php 9,999 & below	97	62.99
Total	154	100.00

Table 5 shows the respondents family monthly income with the highest frequency of 97 (62.99%), which is Php 9,999. This result means that most of the families of these Kindergarten learners have an income of Php 9,999.00 and below. This indicates that most of these families are experiencing financial challenges and limited economic resources. This implies that these families have limited economic resources at their disposal because, over the past few decades, wages for individuals with only a high school diploma have stagnated or even declined while the cost of living has steadily increased. This makes it increasingly difficult for families to afford basic necessities, *let alone* save for education or other investments.

Addressing the impact of low family income on students' risk of dropping out requires collaboration between schools, families, and community organizations

(Parreño, 2022). By working together, communities can develop comprehensive support systems that address the multifaceted challenges faced by at-risk learners. Engaging local businesses, nonprofits, and volunteers can provide resources, mentorship, and employment opportunities to improve these students' educational outcomes.

On the other hand, Php 50,000 and above got the lowest frequency of 0 (0%). There were no participants or data points within this category. This indicates that there were no individuals in the sample population who reported an income of Php 50,000 and above. This implies that within the sample population, there was a lack of representation or presence of individuals with high income levels. It suggests that the majority of participants likely had incomes below Php 50,000. The absence of higher-income individuals may have implications for various aspects, such as economic inequality, financial resources, and purchasing power within the population being studied.

They are already in the higher step of the curriculum. Private school enrollment is more common among high-income families, and that private schools are often more expensive and less accessible to low-income families. The studies also indicate that private school enrollment has declined among middle-income families over the past few decades (Murnane, 2018). Private school enrollment is more common among high-income families, and that the cost of private schools may be a barrier for low-income families in rural areas with vast agricultural areas.

Problem 2: What is the Respondents' Level of Learning Skills in Early Language Literacy: Print Awareness, Phonological Awareness and on Numeracy: Counting, Number Identification in the 1st and 2nd Quarter of School Year 2022-2023?

Table 6: Distribution of Respondents' Level of Learning Skills on Early Language Literacy (1st Quarter)

Indicators	Item No.	Frequency	Percentage	Mean	SD	Description
Print Awareness	1-10	1318	85.58	8.56	1.08	Proficient
Phonological Awareness	11-20	1231	79.94	7.99	1.22	Developing
Overall	20	2549	82.76	8.28	1.66	Approaching Proficiency

Legend:

9-10 = (90%-100%) – Advanced

8.5-8.99 = (85%-89%) – Proficient

8.0 – 8.49 = (80%-84%) - Approaching Proficiency

7.5 – 7.99 = (75%-79%) - Developing

7.49 & below = (74% and below) –Beginning

Table 6 shows the level of Kindergarten pupils' learning skills in early language literacy in the First Quarter with the overall mean of 8.28 (SD=1.66) described as Approaching Proficiency. This means that on average, the Kindergarten learners' performance in early language literacy during the First Quarter is close to reaching a proficient level. This indicates that while the pupils are making progress and demonstrating a reasonable level of early language literacy skills, further development and

support may be necessary to reach the desired proficiency level. The standard deviation indicates the degree of variability in the individual scores around the mean, suggesting that some pupils may be performing above or below the average level. As observed, Kindergarten pupils tend to be more engaged and participative in language-based activities. They actively contribute to class discussions, show interest in literacy-related tasks, and demonstrate a growing motivation to learn and improve their language skills.

Also, it is important that young learners are actively engaged in the activities set by the teacher in the classroom to help them develop their early language literacy skills. Poor language skills can hinder a child's

ability to effectively communicate their needs, thoughts, and ideas. Language is a fundamental tool for learning and participating in classroom activities. Children with limited language skills may struggle to understand instructions, express themselves clearly, and engage in meaningful interactions with teachers and peers (Yang *et al.*, 2021). As shown in the same table, a highest mean of 8.56 (SD=1.08) was Print Awareness described as Proficient. This suggests that the Kindergarten pupils have demonstrated a stronger grasp of print-related skills, such as identifying letters and words, their differences and similarities, and recognizing the basic structure of written text. As perceived, Kindergarten pupils show an awareness of print and structure in their environment, such as noticing print in books, signs, labels, and other written materials. This is a positive indicator of their early language literacy development. Print Awareness is important among young children because children who possess print awareness start to comprehend the connection between written language and spoken language. Conversely, children who lack print awareness are unlikely to develop into proficient readers.

In fact, a child's performance on print awareness tasks serves as a highly dependable predictor of their future reading success (Texas Education Agency, 2018). On the other hand, phonological awareness got a lower mean of 7.99 (SD=1.22) described as Developing. This means that the Kindergarten learners learning skills in phonological awareness are at a developing stage. This indicates that the Kindergarten pupils are still in the process of developing their phonological awareness skills. As noticed, most of the Kindergarten pupils are having a hard time working on recognizing and distinguishing sounds in spoken words, identifying rhyming words, clapping or counting syllables, or breaking words into smaller sound units. Evidently, some pupils encounter difficulties in the area of phonological awareness. Phonological awareness encompasses various skills related to understanding and manipulating the sounds of spoken language. It serves as a crucial foundation for early literacy development, as it directly impacts a child's ability to decode words, develop reading fluency, and comprehend written text (Azuddin *et al.*, 2020).

Table 7: Distribution of Respondents' Level of Learning Skills on Early Numeracy (1st Quarter)

Indicators	Item No.	Frequency	Percentage	Mean	SD	Description
Counting	1-10	1261	81.88	8.19	1.17	Approaching Proficiency
Number Identification	11-20	1266	82.21	8.22	1.26	Approaching Proficiency
Overall	20	2527	82.05	8.21	1.85	Approaching Proficiency

Legend:

- 9-10 = (90%-100%) – Advanced
- 8.5-8.99 = (85%-89%) – Proficient
- 8.0 – 8.49 = (80%-84%) - Approaching Proficiency
- 7.5 – 7.99 = (75%-79%) - Developing
- 7.49 & below = (74% and below) –Beginning

Table 7 shows the level of Kindergarten pupils' learning skills on early numeracy during the First Quarter with an overall mean of 8.21 (SD=1.85) described as Approaching Proficiency. This means that the Kindergarten pupils' performance in early numeracy is approaching a level of proficiency. Early numeracy refers to the foundational mathematical skills and concepts that young children develop, such as number recognition, counting, basic operations, and understanding numerical relationships. This indicates that the Kindergarten pupils have made progress in developing their early numeracy skills. As observed, Kindergarten pupils, though not that well, demonstrate an understanding of basic number concepts, such as counting objects, recognizing numbers, and comparing quantities. They like to learn about numbers better when learning is done through play. Furthermore, engaging in game-based activities at Kindergarten positively impacted the progress of children with average and above-average initial performance, surpassing the progress made by children in the control group. Additionally, providing these games for children to play at home proved particularly beneficial for low achievers from diverse backgrounds, enabling them to

make greater progress compared to other conditions. Using games as a learning tool in the Kindergarten setting proved effective in fostering the development of children who had initially demonstrated average or above-average performance. These children experienced notable advancements in their learning outcomes when compared to their peers who did not participate in the game-based activities. The interactive and engaging nature of the games likely contributed to the enhanced progress observed in these children (de Chambrier *et al.*, 2021). As shown in the table, the highest mean of 8.22 (SD=1.26) was number identification described as Approaching Proficiency. This means that the pupils' performance in number identification was relatively high. Number Identification refers to the ability to recognize and identify numbers accurately. This suggests that the pupils demonstrated a strong proficiency in Number Identification. As perceived, Kindergarten pupils, on average, are able to visually recognize and name numbers, as well as understand their quantities and numerical value. They were able to accurately recognize and identify numbers, indicating a solid grasp of numerical symbols and their corresponding values. These individuals likely exhibited competence in quickly identifying numbers across various contexts, such as written form, symbols, or objects. Moreover, there are various approaches to developing children's understanding of numbers, and one effective

method is to use physical teaching aids, such as educational games, that connect to the learner's real-life experiences. The concept of numbers can be abstract and challenging for young learners to grasp. To make it more tangible and relatable, educators can employ physical teaching aids, such as manipulatives, objects, or educational games (Alomyan *et al.*, 2020).

On the other hand, counting got a lower mean of 8.19 (SD=1.17) described as Approaching Proficiency. This means that the learners' performance in counting was slightly lower compared to other areas of assessment. Counting refers to the ability to systematically and accurately recite numbers in sequence, demonstrating an understanding of the numerical order.

This indicates that the participants' counting skills were approaching a level of proficiency but may still

require further development. While they demonstrated some competency in counting, there may be room for improvement in terms of accuracy, speed, or consistency. As noticed, there is a variation among Kindergarten pupils' performance in counting, with some participants scoring above or below the mean. Some pupils may have excelled in their counting skills, scoring above the mean, while others may have scored slightly lower but still within an acceptable range.

Moreover, linear number placements and counting skills are vital for arithmetic development. They provide the basis for understanding mathematical operations, such as addition, subtraction, multiplication, and division. Proficiency in these foundational skills sets the stage for more advanced arithmetic concepts and problem-solving abilities (Friso-van den Bos *et al.*, 2018).

Table 8: Distribution of Respondents' Level of Learning Skills on Early Language Literacy (2nd Quarter)

Indicators	Item No.	Frequency	Percentage	Mean	SD	Description
Print Awareness	1-10	1379	89.55	8.95	0.68	Proficient
Phonological Awareness	11-20	1270	82.47	8.25	1.10	Approaching Proficiency
Overall	20	2649	86.01	8.60	1.30	Proficient

Legend:

9-10 = (90%-100%) – *Advanced*

8.5-8.99 = (85%-89%) – *Proficient*

8.0 – 8.49 = (80%-84%) – *Approaching Proficiency*

7.5 – 7.99 = (75%-79%) – *Developing*

7.49 & below = (74% and below) – *Beginning*

Table 8 shows the level of Kindergarten pupils learning skills on early language literacy during the Second Quarter with the overall mean of 8.25 (SD=1.10) described as Approaching Proficiency. This means that during this quarter, Kindergarten pupils' performance in early language literacy was close to reaching a proficient level. This indicates that the pupils demonstrated a solid understanding and competency in Early Language Literacy, although there may still be some room for improvement. As observed, Kindergarten pupils have made a progress and are currently developing a solid foundation in language-related skills. However, continued instruction, practice, and targeted interventions can further enhance their proficiency in areas such as phonics, vocabulary expansion, and other essential components of early language literacy.

Thus, by engaging in oral activities that promote phonemic awareness, children develop the necessary skills to differentiate and manipulate sounds in spoken language. This heightened sensitivity to phonemes allows them to recognize patterns and make connections between sounds and written symbols, leading to improved decoding and spelling abilities (National Center on Intensive Intervention, 2019).

As shown in the same table, print awareness got a higher mean of 8.95 (SD=0.68) described as Proficient. This means that the pupils demonstrated a strong level of proficiency in Print Awareness. This suggests that the pupils exhibited a solid grasp of print awareness skills.

As perceived, understanding and knowledge of the conventions and features of written language, including recognizing letters, words, sentences, and understanding the purpose and organization of text are demonstrated by majority of the Kindergarten pupils, though some have not yet reached this level during this quarter.

More so, concepts of print can be defined as a collection of guidelines or principles that readers and writers adhere to in order to comprehend written text in the intended manner. These concepts illustrate to children the essential mechanics of reading and writing, enabling the overall literacy processes to unfold. Understanding concepts of print involves grasping fundamental rules and conventions that govern written language. This includes recognizing that text is read from left to right and from top to bottom, understanding that words are made up of letters, comprehending the purpose and structure of sentences, and recognizing the roles of punctuation marks (State Government of Victoria, 2023).

On the other hand, phonological awareness got a lower mean of 8.25 (SD=1.10) described as Developing. This means that the participants demonstrated a developing level of proficiency in Phonological Awareness. This indicates that majority of the pupils may have shown some understanding and competency in recognizing and manipulating sounds, but there is room for improvement and further growth in this area. As noticed, the majority of the students have the average level, not too well and not too low, on their ability to recognize and manipulate the sounds of spoken language, including identifying and manipulating individual phonemes, syllables, and rhymes. Some pupils can demonstrate a stronger grasp of phonological concepts and skills, scoring above the mean, while others are slightly lower, indicating areas where they

may need additional support and instruction. Further, involves the capacity to hear, recognize, and manipulate sounds, which includes identifying sounds, adding or deleting sounds, segmenting sounds, and rearranging sounds within words. Phonological awareness

plays a crucial role in preparing children to understand the relationship between letters and sounds in words. By developing phonological awareness skills, children gain the foundation necessary to navigate the complexities of reading and writing (Hertfordshire United Kingdom, 2023).

Table 9: Distribution of Respondents' Level of Learning Skills on Early Numeracy (2nd Quarter)

Indicators	Item No.	Frequency	Percentage	Mean	SD	Description
Counting	1-10	1264	82.06	8.21	0.91	Approaching Proficiency
Number Identification	11-20	1292	83.91	8.39	1.12	Approaching Proficiency
Overall	20	2699	87.63	8.30	1.32	Approaching Proficiency

Legend:

- 9-10 = (90%-100%) – Advanced
- 8.5-8.99 = (85%-89%) – Proficient
- 8.0 – 8.49 = (80%-84%) - Approaching Proficiency
- 7.5 – 7.99 = (75%-79%) - Developing
- 7.49 & below = (74% and below) –Beginning

Table 9 shows the level of Kindergarten learners' learning skills on early numeracy during the Second Quarter with an overall mean of 8.30 (SD=1.32) described as Approaching Proficiency. This means that the Kindergarten pupils demonstrated a level of performance that is approaching proficiency in early numeracy. This indicates that the pupils have made significant progress in developing their Early Numeracy skills. As observed, Kindergarten pupils have the average foundational skills and understanding of mathematical concepts that children develop in the early stages of their education. They have acquired a solid foundation in basic mathematical concepts such as counting, number recognition, quantity comparison, and simple operations.

Moreover, it is fascinating to observe that even before formal instruction in mathematics begins, children naturally possess a sense of quantity. They can distinguish between larger and smaller quantities, and they have an intuitive understanding of relative size and magnitude. This inherent sense of quantity forms the building blocks for their mathematical development (Querido & Fernandes, 2020).

As shown in the table, number identification got a higher mean of 8.39 (SD=1.12) described as Approaching

Proficiency. This means that the pupils have demonstrated a level of performance that is approaching proficiency in Number Identification. This suggests that the majority of the participants have a, though not excellent, but at least a good grasp of number identification skills and are on a positive trajectory toward achieving proficiency. They have developed the necessary skills to recognize and identify numbers, which is a fundamental aspect of mathematical literacy. As perceived, the majority of the Kindergarten pupils are, on average, have the ability to recognize and identify numbers accurately, both in numeral form and in written word form. They have a basic understanding of numbers and are able to identify and recognize them correctly.

On the other hand, counting got a lower mean of 8.21 (SD=0.91) described as Approaching Proficiency. This means that the Kindergarten pupils demonstrated a level of performance that is approaching proficiency in counting. This indicates that the Kindergarten pupils have shown some progress in developing their counting skills, but their performance in this area is slightly lower compared to number identification. As noticed, majority of the Kindergarten students are on average can sequentially enumerate numbers in the correct order, typically starting from one. While they have a basic understanding of counting, there may be some areas where further development and practice are needed. There may be some individual differences in their proficiency, and additional practice and instruction may be beneficial.

Table 10: Summary of the Respondents' Level of Learning Skills on Early Language Literacy and Numeracy (1st and 2nd Quarter)

Indicators	Item No.	Frequency	Percentage	Mean	SD	Description
Early Language Literacy						
*Print Awareness	1-10	2697	87.57	8.76	0.88	Proficient
*Phonological Awareness	11-20	2501	81.21	8.12	1.16	Approaching Proficiency
Early Numeracy						
*Counting	1-10	2525	81.97	8.20	1.04	Approaching Proficiency
*Number Identification	11-20	558	83.06	8.31	1.19	Approaching Proficiency
Overall	40	10,281	83.45	8.35	1.07	Approaching Proficiency

Total Number of Responses: 12, 320 (80 items x 154 respondents)

Legend:

- 9-10 = (90%-100%) – *Advanced*
- 8.5-8.99 = (85%-89%) – *Proficient*
- 8.0 – 8.49 = (80%-84%) - *Approaching Proficiency*
- 7.5 – 7.99 = (75%-79%) - *Developing*
- 7.49 & below = (74% and below) – *Beginning*

Table 10 shows the level of Kindergarten pupils’ learning skills in early language literacy and numeracy skills during the First and Second Quarter with the overall mean of 8.35 (SD=1.07), described as Approaching Proficiency. This means that the pupils’ performance is close to reaching a proficient level in these areas. This indicates that the pupils are making progress and are advancing towards the desired level of proficiency in early language literacy and numeracy. This implies that while the pupils have not yet achieved full proficiency, their scores highlight areas where they may need additional support or instruction to reach the desired level. As observed, pupils who see themselves making progress and moving in the right direction are likely to develop positive attitudes towards learning. They may develop a growth mindset, believing that their efforts and perseverance can lead to further improvement.

In connection to the findings, the behavior and attitude of students in the context of the new normal education has a significant influence on their learning process. When students exhibit positive behavior and a proactive attitude toward their studies, it contributes to their self-determination in the new normal classes. Self-determination refers to the ability to take initiative, set goals, and regulate one’s own learning (Lito *et al.*, 2021; Fabre & Osias, 2024).

As shown in the same table, print awareness got the highest mean of 8.76 (SD=0.88) described as Proficient. This means that in the area of Print Awareness, the Kindergarten pupils have demonstrated a high level of proficiency. This suggests that pupils have achieved the desired level of competence in Print Awareness. This implies that the Kindergarten pupils have recognized their own competence in this foundational skill, which can instill a sense of accomplishment and encourage them to further explore and engage with printed text.

As perceived, pupils with print awareness proficiency understand the conventions of writing, such as capitalization, punctuation, and sentence structure. They can apply these rules effectively in their own

writing. Pupils comprehend the rules and conventions of written language. They have grasped concepts such as using capital letters for proper nouns and sentence beginnings, employing appropriate punctuation marks (such as periods, question marks, and exclamation marks), and structuring sentences correctly. This understanding enables them to effectively apply these conventions in their own writing.

On the other hand, phonological awareness got the lowest mean of 8.12 (SD=1.16) described as Approaching Proficiency. This means that in the area of Phonological awareness, the Kindergarten pupils have not yet achieved a high level of proficiency. This indicates that while the pupils are making progress in their reading abilities, they have not yet reached the desired level of competence. They may be close to reaching proficiency, but there is still room for improvement. However, the standard deviation may imply that while the average score provides a general picture, it is important to remember individual student variations. Some students might be excelling in reading, while others might require additional support and differentiated instruction.

As noticed, Kindergarten pupils are still in the process of developing their reading skills and may not have fully mastered the concepts and techniques related to reading. Pupils may demonstrate inconsistencies in their ability to work with sounds in spoken language. Phonological awareness is critical for learning to read any alphabetic writing system. In Kindergarten, phonological awareness focuses on rhyming words, words that sound the same at the end.

By the end of Kindergarten, children are expected to identify and manipulate the sounds in spoken language, such as recognizing rhymes, syllables and individual phonemes. Phonological awareness plays a crucial role in the development of other learning skills among Kindergarten pupils. It is a foundational skill that supports acquiring reading, writing and language comprehension abilities(Kemodo Learning, 2023). The strong positive relationship between Phonological Awareness and proficiency level suggests that pupils with advanced phonological awareness skills are more likely to perform well across various learning skills.

Problem 3: Is there a Significant Relationship between the Respondent’s Learning Skills in Early Language Literacy and Numeracy and Their Profile?

Table 11: Result of the Test on Relationship Between Respondent’s Learning skills in Early Language Literacy and Numeracy and their Profile

Learning Skills	Sex	Father’s Occupation	Mother’s Occupation	Father’s HEA	Mother’s HEA	FMI	Overall	Interpretation
Early Language Literacy	rho-value 0.243	0.550	-0.423	0.503	0.804	0.573	0.435	Significant

*Print Awareness	p-value 0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	
*Phonological Awareness	rho-value 0.423	0.662	-0.309	0.486	0.612	0.408	0.718	Significant
	p-value 0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	
Overall Literacy Skills	rho-value 0.210	0.547	-0.418	0.462	0.727	0.443	0.616	Significant
	p-value 0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	
Early Numeracy	rho-value 0.248	0.448	0.479	0.357	0.675	0.427	0.757	Significant
*Number Identification	p-value 0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	
*Counting	rho-value 0.199	0.835	0.649	0.620	0.760	0.551	0.798	Significant
	p-value 0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	
Overall Numeracy Skills	rho-value 0.221	0.776	0.544	0.485	0.695	0.445	0.767	Significant
	p-value 0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	
Overall Learning Skills	rho-value 0.215	0.661	-0.381	0.473	0.711	0.446	0.691	Significant
	p-value 0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	0.001**	

Legend: **significant at $p < 0.001$ alpha level; *significant at $p < 0.05$ alpha level, S – significant, NS – not significant

Table 11 shows the test of the relationship between respondents' early language literacy and numeracy and their profile. The overall rho value is 0.691 ($p=0.001^{**}$) interpreted as Strong Positive Relationship and Significant. This means that there is a statistically significant and positive association between early language literacy and numeracy skills and the socio-demographic profile of the Kindergarten learners. This indicates that Kindergarten pupils who have higher levels of early language literacy and numeracy tend to exhibit higher levels of socio-demographic profile. The stronger the positive relationship, the more likely it is that individuals with better socio-demographic profiles also have higher levels of early language and numeracy skills. As perceived, children naturally encounter quantities in their daily lives, whether it's counting steps while climbing stairs, the number of wheels on a toy car, or the apples they want to eat. These everyday moments provide countless opportunities for informal counting practice, laying the foundation for formal number sense later.

In addition, before entering school, children begin to acquire a range of numeracy skills, such as understanding numbers, counting, recognizing patterns, and comprehending basic mathematical concepts (Bar & Shaul, 2021). However, the development of these skills is also affected by the external factors like their socio-demographic and economic profile. These skills emerge organically as children explore their environment, engage in play, and interact with others.

Among the relationships between the proficiency level of Kindergarten pupils in terms of early language literacy and numeracy, and their socio-demographic profile, Mother's Highest Educational Attainment got the highest rho value of 0.711 ($p=0.001^{**}$) interpreted as Very Strong Positive relationship and Significant. This means that there is a statistically significant and highly positive association between the proficiency level of Kindergarten pupils' early language literacy and numeracy and their mothers' highest educational attainment. This indicates

that Kindergarten pupils whose mothers have attained high level of education also demonstrate higher levels of early language and numeracy skills. This implies that most of the young learners turn to their mother when they encounter academic difficulties. Therefore, it is important that mothers are also knowledgeable.

As perceived, the ability of the mothers to model literacy affects the literacy skills of the young children. Children learn through observation and imitation, especially during their early years. Mothers, being primary caregivers in many families, often have a significant influence on their children's language and literacy development. When mothers engage in literacy-related activities, such as reading books, storytelling, or engaging in conversations that involve language and vocabulary, it provides valuable modeling for their children.

Furthermore, mothers with higher education are more likely to create homes rich in literacy resources and engage in frequent reading activities with their children. This exposure to print materials and stimulating interactions fosters early language development and lays a strong foundation for future learning. Also, educated mothers tend to engage their children in cognitively stimulating activities like puzzles, games, and problem-solving tasks. These activities promote cognitive development and enhance numeracy skills (Jones *et al.*, 2023).

On the other hand, the overall learning skills among Kindergarten students garnered a negative relationship with the mother's occupation with the rho value of -0.381 ($p=0.001^{**}$), interpreted as moderate negative and significant relationship. This means that there is evidence to suggest that as the mother's occupation increases or becomes more favorable in some way, the overall learning skills among Kindergarten students tend to decrease. The negative relationship implies that there is an inverse association between these two variables, indicating that higher levels or more positively perceived mother's occupations are associated with lower overall learning skills among Kindergarten students. This implies

that mothers who tend to be busier with their work has a negative impact to the overall learning skills among the young learners.

As noticed, Kindergarten pupils often go to their mothers for enrichment at home than to their fathers. This is because traditionally, in rural areas, mothers may play a more active role in providing educational activities or assistance at home for their Kindergarten-aged children. This is influenced by the cultural norms and traditional gender roles that still remain in rural areas like District I, Talakag, Bukidnon.

In fact, an article argues that gender roles and gender inequality are influenced by life history strategies, which are adaptive responses to ecological and social environments. It suggests that traditional gender roles, where mothers remain at home for childcare, are associated with present-oriented reproductive strategies that are suitable for high-risk and unpredictable environments (Zhu & Chang, 2019). In a final note, the findings of this study underscore the crucial role of mothers' education in promoting early language and numeracy development among Kindergarten pupils. Conversely, mothers' occupations may pose challenges to home-based learning. These insights provide valuable information for educational interventions aimed at fostering early childhood literacy and numeracy skills, particularly in rural communities.

CONCLUSION

Based on the results and discussions that have been presented, the following conclusions were made:

Kindergarten pupils have made progress in developing their early language literacy and numeracy skills. They achieved an average level of proficiency during the First and Second Quarters. This means that a higher level of proficiency in language literacy and numeracy is associated with a higher level of socio-demographic profile. Learners with better socio-demographic profile will also have higher level of literacy and numeracy skills. Kindergarten learners' early language literacy and numeracy skills are positively associated with their socio-demographic profile, particularly mothers' educational attainment. Mothers with higher education level are more likely to engage in activities that foster children's language and numeracy development. However, mothers' occupations may pose challenges to home-based learning due to the limited time interaction between her and her young children.

RECOMMENDATIONS

In accordance with the findings and conclusion of the study, the following recommendations are hereby presented:

1. Kindergarten teachers need to focus on connecting literacy and numeracy skills of the learners to activities that sets them up for more advanced reading skills.
2. Parents may be encouraged to spend more time in home-based learning as enrichment to what the Kindergarten pupils have learned from school.

3. Further studies on early language literacy and numeracy skills should be conducted by teachers in other places considering other variables to validate results.

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