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From Plates to Progress: Exploring the Perceptions of Parents and Teachers on Malnutrition and Academic Performance of Early Childhood Learners

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Abstract

This study investigates the perceptions of parents and teachers regarding the impact of malnutrition on the academic performance of young children. Employing a descriptive methodology and thematic analysis, the research reveals that parents from economic backgrounds commonly face challenges such as limited education due to poverty, leading to reduced involvement in their children's education and reliance on low-paying jobs. Consequently, they struggle to provide nutritious meals for their children. Teachers' perspectives highlight that poor nutrition contributes to low class participation, tardiness, hyperactive behavior, and even academic failure. The study underscores the significance of government assistance programs like the Pantawid Pamilyang Pilipino Program and School-Based Feeding Programs in sustaining early learners' nutrition and improving class participation. Parental support and collaborative efforts are essential to comprehensively address malnutrition and its impact on academic performance. This research contributes to the existing body of knowledge by shedding light on the perceptions of parents and teachers and providing insights for potential interventions and recommendations.

Keywords: Malnutrition, Academic Performance, Parents, Teachers

Introduction

Nelson Mandela once said that education is the most powerful weapon a person can use to change the world. Education shapes each person, the society and the world through fostering knowledge and skills, but how can the children be empowered enough in education when malnutrition becomes a significant obstacle in their path. In the early years of childhood, malnutrition is most crucial for growth and development because it can cause long-term effects. Malnutrition, focuses on a lack of adequate nutrients, and it is considered as a widespread health issue that children are facing right now. Nutritious diet is the primary cornerstone that powers this trip (Govender, 2021). A child's capacity to learn, grow, and realize their full potential can all be hampered by malnutrition at this crucial time. Malnutrition's effects on young learners have come to light as a growing concern since it possesses significant barriers to both their overall well-being and future chances. The research will explore the perceptions of Parents and teachers on malnutrition and academic performance in early childhood learners. It has been demonstrated in existing research that this condition, which is defined by an inadequate or unbalanced intake of key nutrients, has far-reaching effects that go beyond acute health problems, affecting a child's ability to learn, grow and thrive. (World Health Organization, n.d.) [27].

In the present time, malnutrition in young learners includes a variety of nutritional deficiencies, both undernutrition and overnutrition. The aforementioned health problem is especially common in areas with poor and medium incomes. According to the study of Siddiqui *et al*. (2020) [21] about the intertwined relationship between malnutrition and poverty, is that malnutrition produces conditions of poverty by reducing the economic potential of the population and likewise, poverty exacerbates malnutrition by heightening the risk or vulnerability to food insecurity, poor hygiene and sanitation, access to healthcare, environmental factors, improper feeding practices, or exposure to low-nutrient diet, such as factors the unhealthy eating habits,

healthy food accessibility, sedentary lifestyles, and lack of nutritional education which affects the child's metabolism, growth, and development. Children who are malnourished frequently do not achieve their full height potential, which can cause physical disabilities that can last a lifetime. Their immune systems are more susceptible to infections and illnesses, which causes them to miss school more frequently and limits their capacity to participate in the active learning experiences that are crucial for development. EL Mohamed (2019) [16], stated that a child with a malnutrition problem is at risk of developing cognitive problems like poor memory, concentration issues, and impaired problem-solving skills. These obstacles may make it difficult for them to concentrate, pick things up, and do well in school. Early childhood learners may find it difficult to function at their best in the classroom as a result of malnutrition. They may develop behavioral problems, anxiety, and sadness, which further impedes their ability to interact socially and form relationships with the people around them. This academic setback may also limit their future.

The study will primarily focus on understanding the views of parents and teachers on malnutrition and academic performance of early childhood learners. As malnutrition affects millions of people worldwide and has a variety of reasons, especially in young children. It endangers their holistic development, harming their physical and cognitive health as well as their academic achievement. Exploring the phenomenon through the perceptions of parents and teachers is important because they are the adults that mainly influences the lives of young learners. In the end, combating malnutrition in this at-risk age group assures a better well-being for the affected children who are the future of the world.

Objective of the Study

This research aims to investigate the perceptions of parents and teachers on malnutrition and the academic performance of early childhood learners using a descriptive method. This includes exploring learners' socio-demographic background and academic performance. The study aims to answer the following questions:

1. According to parents' perspective, what are the socio-demographic factors that influence/s the academic performance of their early learners?
2. According to teachers' perspective, how do these factors influence the academic performance of their early learners?
3. What are the teacher's recommended interventions that can help address malnutrition in the early learners?

An interview with the parents will be conducted to gather the socio-demographic factors that may directly affect the overall well-being of early childhood learners. The views of teachers will be gathered through an interview to assess the academic performance of the early childhood learners. The themes generated in this study will help shape the results of the study. Moreover, the study seeks to link the gap in providing possible interventions and strategies that can effectively address malnutrition in early childhood and improve the situation of learners.

Review of Related Literature

The following related literature cited in this chapter are several sources of information and ideas that helped enhance the knowledge of the researcher on how other things or phenomena are associated with the concern of this study. Thus, these will supplement and complement the findings of this study.

Prevalence of Malnutrition

Malnutrition is a global health issue that affects millions of people, particularly in developing countries like the Philippines. It is a condition characterized by an imbalance between the intake of nutrients and the body's nutritional needs, leading to a range of adverse health effects. Numerous studies have highlighted the alarming prevalence of malnutrition among Filipino early childhood learners. Factors such as poverty, inadequate access to nutritious food, and poor healthcare infrastructure contribute to the high rates of stunting, wasting, and underweight children. Malnutrition often starts during the critical first 1,000 days of life, from conception to a child's second birthday, and can have lifelong implications. According to the International Food Policy Research Institute's Global Nutrition Report (2016) [13], malnutrition produces a cascade of individual and societal issues and opportunities. Malnutrition and inadequate diets are the leading causes of the worldwide illness burden. We already know that the annual GDP losses caused by low weight, poor child growth, and micronutrient deficiencies in Asia and Africa are 11 percent more than the losses seen during the financial crisis. Malnutrition, in any form, poses serious risks to human health. Today's world suffers a double burden of malnutrition, including both undernutrition and obesity, particularly in poorer countries. Hunger and malnutrition lead to the early deaths of mothers, newborns, and young children, as well as impaired physical and mental development in children.

Malnutrition, as defined by the World Health Organization (WHO) June 2019, encompasses deficiencies, excesses, or imbalances in energy and nutrient intake. Malnutrition affects every country and poses a significant global health challenge. The WHO emphasizes the importance of universal access to effective nutrition interventions, healthy diets, and sustainable food systems to address malnutrition. According to a study by Dukhi (2020) [10], though malnutrition targets everyone, one of the most affected groups are the young children especially those with compromised immune systems. Malnutrition underscores different categories including wasting, stunting, underweight, vitamin deficiencies, overweight, obesity, and diet-related health problems. The study cited the United Nations Decade of Action on Nutrition 2016-2025 as it supported the addressing of malnutrition. As well as the Sustainable Development Goals No, 2 which targets to improve nutrition, achieve food security, and end world hunger, and Sustainable Development Goals No. 3 which promotes healthy well-being and living for everyone. Intervention suggestions to battle the burdens of malnutrition involve early diagnosis of childhood diseases and it must be available at the local community level to eradicate the pervasive malnutrition cycle. Health services especially in the rural local communities are less accessible hence the government and organizations that help with giving solutions should tap local units to address the adversities.

Malnutrition remains a pervasive problem in the Philippines, particularly among children and pregnant women. Numerous studies have documented the high rates of

stunting, wasting, and underweight among Filipino children, highlighting the persistence of this issue. Factors contributing to the prevalence of malnutrition include poverty, inadequate access to nutritious food, and poor healthcare infrastructure, especially in rural areas. Malnutrition remains a major public health concern in the Philippines, with 3.4 million stunted children and over 300,000 severely wasted children under the age of five. With the Philippines being very disaster-prone, this remains a severe kid health problem. Malnutrition becomes more likely in the aftermath of an emergency. According to a national nutrition assessment, 20% of Filipino children aged 0 to 5 are underweight, while 30% are stunted or excessively short for their age. According to a UNICEF survey, the Philippines ranks ninth in the world in terms of the number of stunted children. To address the country's high prevalence of Severe Acute Malnutrition (SAM), the Philippine Nutrition Cluster stressed the urgent need to support the national procedures and policies for the management of SAM in children under the age of five are being developed. This was accomplished through community-based management. The Department of Health (DOH) leads a working group on acute malnutrition. (UNICEF Philippines, 2015).

Health Consequences

Schmidt (2014) [22] stated that children who are malnourished may exhibit many symptoms, such as obesity or underweight, as well as delayed growth. It is one of the effects that can be observed in a malnourished child. Stunted growth among young children should not be neglected since it holds undesirable outcomes which can be brought to their later years. More than merely a matter of appearance, stunting is a marker for an array of developmental problems, explains Reynaldo Martorell, a professor of international nutrition at Emory University. “The more stunted the child,” Martorell says, “the more likely it is that the brain, kidneys, and other organ systems will be affected.”

Chandra and Ojah (2013) [5] said that the findings show that infections in malnourished children are more severe, persist longer, and recur more frequently. Energy, protein, iron, folic acid, vitamin A, pyridoxine, zinc, and energy have all been thoroughly studied in relation to dietary deficits. Reviews of the literature have highlighted cases of deadly giant cell pneumonia in measles, widespread prenatal herpes infections, and others that have all been observed in individuals with protein–energy malnutrition (PEM). Intestinal parasites are also more prevalent in undernourished people. Not only those child who are impoverished were not the ones who are affected with malnutrition but according to recent anthropometric, biochemical, and hematological examination results, hospitalized patients in wealthy communities were also found to be malnourished, indicating that this issue is not just present in Third World nations but may also occur in cultures with stable economies.

Cognitive and Developmental Effects

Palupi, *et al*., (2013) [18] states that undernutrition is a result of the ongoing global issue of hunger, which is particularly acute in some parts of developing nations. Early in infancy, inadequate nutrition may have a negative impact on brain development. Research conducted in Bogor, Indonesia, revealed that children suffering from severe acute malnutrition scored much lower on memory capacity tests than children of normal weight. In addition, kids with moderate acute malnutrition typically had worse memory skills than kids who weren't malnourished. On the other hand, children who are overnourished may potentially experience cognitive impairments. According to the study, children who are overweight considerably scored worse on memory tests than children who are average weight. Additionally, compared to children of normal weight, obese children also tended to have lower memory ability scores. In order to maximize a child's brain development, it is crucial to maintain a normal BMI, preventing undernutrition on one side and overnutrition on the other. By giving children a sufficient and balanced quantity of nutrients through food, this might be accomplished.

Educational Outcomes

Masood (2019) [14] said that the developing world is also experiencing malnutrition of children. The adverse effects of malnutrition on future health, education and employment outcomes of children are increasingly recognised in literature. The researchers are studying children for the first fifteen years of their lives, using this panel dataset to assess how stunting affects future educational attainment. Consideration should be given to the fact that both child nutrition and future educational outcomes are natural variables affected by household investment decisions.

Abebe, *et al*., (2017) [1] conducted a cross sectional study that was carried out in 630 randomly selected primary school students from Hawa Galan woreda. The results showed a strong correlation between underweightness, stunting and academic performance. Not only those who are malnourished is the main reason for low academic performance but it also stated that being female, attending above grade 4, having educated parents, coming from households with monthly income of more than 2000 ETB (~USD91) and having no parental support during homework were significantly associated with students’ academic performance. The correlation between the academic performance of primary school pupils and stunting and underweight has been established. In this study area, nutrition intervention should be considered. Parents are encouraged to participate in their children's education.

Muiru (2014) [17] stated that the crucial role nutrition plays for developmental, conductive and behavioral outcomes in life’s early stages is often not well understood and appreciated by schools and parents. Malnutrition is the condition of being weak or ill as a result of your failure to eat adequately, or that you do not have adequate food. This study focused on ten schools in which classes one and two pupils had graduated from each school. From each school, five teachers and five parents have been selected. In the study, it was observed that malnutrition had an effect on academic performance due to increases in infections, reduced mental competence and low attendance at school. The students can continue to go to school as long as improvements are made in the feeding programme. It is also necessary to provide for basic needs.

Socioeconomic Factors

Yeasmin and Islam (2017) conducted a study in four selected slums in Dhaka City, Bangladesh, the study was designed to assess the prevalence of undernutrition and to establish the relationship between the prevailing social and

environmental factors and the undernutrition of children aged 6 to 12 years. It was an empirical cross sectional study in which 100 slum children were examined. A total of 60% children were stunted and 84% were underweight. Being dropout from school, low educational level of parents, mud floor house, low meal frequency, poor hygiene practices (such as, using temporary latrine, not taking bath regularly, drinking unboiled water) were significantly associated with being underweight and stunted. Similarly, an increased number of family members and a room full of people raised the risk of stunting significantly. Children who belong to the family using wood as fuel and who had smoking behavior were also likely to be stunted.

Poverty where children from poor families are less likely to meet the basic prerequisites for learning and are often ill-prepared to attend school. Children who live in low-resourced communities are more likely to be malnourished, to have absent parents, and to be exposed to violence and stress. Their schools may receive less funding. These factors often lead to poor outcomes (Grantham-McGregor *et al*., 2007; Shonkoff and Garner, 2012). School attendance may be affected by the need to work to contribute to family finances and by difficulties with paying school fees and other costs.

According to the study of McKenzie (2019) [15], the effects of poverty early childhood learners are the main hindrance of successful learning in schools today. The number of marginalized children is increasing, hence, education and awareness among teachers on the effects of poverty on learner behavior and academic performance in the classroom is essential. Learners who grow up in difficult circumstances struggle emotionally, socially, and academically due to mental health challenges, stress, and cognitive delays. The study concluded that teachers must establish strong relationships with their learners. Providing a comfortable classroom environment that lessens their stressful experiences. Through various teaching and learning strategies teachers can make wonders in the lives of learners. Young learners' main support system are their parents but the knowledge of teachers with their learners' background and abilities will help in giving them meaningful school experiences.

Parental Knowledge and Practice

Glorioso *et. al*. (2020) stated that teaching school children and their moms about nutrition is a chance to encourage wholesome eating habits for the rest of their lives in order to enhance their wellbeing and nutrition. The goal of the study was to evaluate how well nutrition education modules might raise the level of food and nutrition literacy among mothers and their children. It relates to the idea that parental knowledge on healthy eating habits affects the nutritional health of early learners. Young children rely on the decisions of the significant adults in their lives. The family's socio-economic background influences the accessibility of healthy foods for their children.

Interventions

According to UNICEF Statistics (2016), 52 million children under the age of five are wasted in Asia, with 17 million severely wasted. School nutrition helps children's education and well-being. A hungry child will not develop, will not learn as well, and will face numerous health problems in the future. School meals can keep children in school and out of trouble. It is far more than just providing meals. They represent a financial investment in the world's poorest children. They constitute a bet on our shared future and global security. School meals can keep children in school and out of trouble. Strong relationships can boost the variables that encourage children to attend school. It serves as a launching pad for numerous positive outcomes for impoverished children and their families. School feeding programs include parents and communities in the promotion of public health, education, and the development of autonomy.

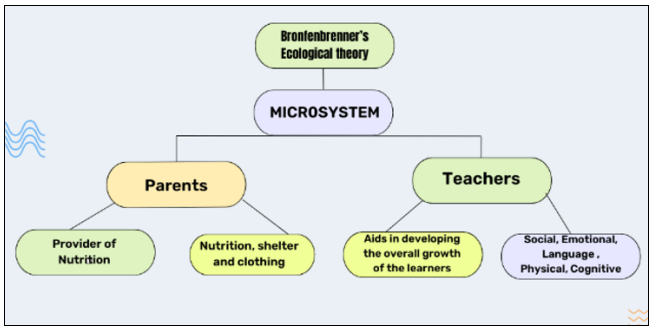
School-based feeding programs have become a critical component of educational and nutritional policies in the Philippines. School-based feeding programs in the Philippines primarily aim to address the dual challenges of malnutrition and poor educational outcomes. These programs seek to provide nutritious meals to schoolchildren, especially those in vulnerable communities, to improve their overall health and well-being and enhance their capacity to learn. Research has consistently shown that school-based feeding programs have a positive impact on the nutritional status of participating children. These programs often provide balanced and fortified meals, which help combat malnutrition, reduce the prevalence of stunting and wasting, and improve the overall health of students. According to Rivera (2017) [20], the implementation of the school-based feeding program in Tarlac province's schools division has been outstanding and the financial distribution is sufficient. Improvements in children's health, and nutrition values are significant.

According to the study of Dominguez (2018) [9], Low school survival rates are a direct outcome of severe malnutrition. This demonstrates that a kid's capacity to remain in school is significantly impacted by malnutrition, reinforcing the need for school-based initiatives designed to combat severe child wasting. As might be expected, malnutrition has a detrimental effect on cognitive growth and academic success. This emphasizes how important food is to a kid's academic life and how it may either help or hurt growth and development, depending on the child. Learners who are undernourished are more disturbed in class and lack focus. They are usually absent-minded and gain no learning. Therefore, school initiatives such as feeding programs and *gulayan sa paaralan* may give significant impact to their participation in their education.

Nutrition affects the academic achievement of a Filipino child. Students who are not in proper nutrition may be disturbed from the class and are less focused. Eating behavior affects a child's nutritional status which in the long run still affects their academic achievement. Academic achievement and healthy eating habits are found to be correlated. Hence, development of educational interventions focusing on students' awareness on healthy food intake will encourage them to have a better practice of healthy eating habits and a better academic performance. Aceron, *et. al*. (2019), found that malnutrition had a negative impact on children's academic performance and growth rates. Knowing more about what nutritional deficiencies can lead to, parents should help their children to be successful in the classroom. The support of the learners' immediate family members and their involvement in the education of their children are key aspects in the success of their development. The adults that regularly supervise their children can immediately alleviate or look for solutions when there are problems arising in

terms of physical and cognitive development. Grounded on the thought that *prevention is better than cure*, therefore, the faster developmental problems are detected the lesser is the damage caused in the development of learners.

Theoretical Framework



Bronfenbrener's ecological system theory helps to understand the interconnectedness between parents as providers of nutrition and teachers as facilitators of overall growth in various domains. It highlights the importance of considering multiple environmental systems and their interactions in promoting optimal child development, including physical, social, emotional, language, and cognitive aspects. According to Bronfenbrenner's ecological theory, the microsystem represents the immediate environment in which individuals interact. The microsystem encompasses the roles of parents and teachers. Parents, as part of the microsystem, are responsible for providing nutrition, basic needs, shelter, and clothing to their children. They play a crucial role in the overall well-being of learners, including their physical health and access to nutritious meals. Teachers, also part of the microsystem, contribute to the development and growth of learners by focusing on various aspects of their development, such as social, emotional, language, physical, and cognitive progress. Teachers' involvement and support are essential in ensuring optimal academic performance and overall growth. The framework highlights the importance of understanding the interactions between parents, teachers, and learners within their immediate environments. This framework helps to emphasize the influence of these key individuals in shaping the experiences and outcomes of early learners. Overall, the theoretical framework based on Bronfenbrenner's ecological theory provides a solid foundation for examining the perceptions of parents and teachers on malnutrition and academic performance. It underscores the significance of the microsystem, particularly the roles of parents and teachers, in promoting the well-being and development of early learners.

Methodology

The research design used in the study is a descriptive method. The main objective of this research design is to describe individuals, situations, issues, behaviors, or phenomena (Siedlecki, 2020). It is used to gain a comprehensive understanding of the perceptions of parents and teachers on malnutrition and academic performance of early childhood learners by exploring their views through an interview method. **(**Gebremichael *et al*, 2021**)** The researchers will gather data through an interview using both semi-structured and unstructured data collection with open ended questions to explore the research problem and generate in-depth insights. To make sense of the gathered data, thematic analysis will be conducted to generate themes and patterns from the results.

Research Participants

The researchers used purposive sampling design in choosing the respondents which ensures that the chosen respondents have a capability to answer the questions and has background knowledge of children that are labeled as malnourished. This study is composed of eight (8) participants in total. The respondents of this study are four (4) parents that have children enrolled in early childhood grade levels from preschool until grade three and four (4) teachers teaching in grade levels from preschool until grade three. The respondents are selected through the following criteria: a) the teacher has a teaching experience of at least five (5) years, b) parents have a child that is enrolled as preschool, kindergarten, grades 1, 2, or 3 learners. They are chosen due to their knowledge and experience about early childhood learners who are experiencing malnutrition.

Research Instruments

The research instruments chosen are used for conducting qualitative data that explores early childhood learners' body mass index, socio-demographic background, academic performance, and the possible interventions that will address early childhood malnutrition **(**Tomaszewski, 2020**)**. The participants data are gathered through a semi-structured interview using guide questions. The interview will be recorded via smartphone and transcribed by the researchers.

Data Analysis

The study utilized a thematic analysis method in analyzing qualitative data that involves reading through a set of data and looking for patterns in the meaning of the data to find themes. (Villegas, n.d.) [26] The researchers used an inductive analysis where the researchers read through the data and allowed codes to emerge/name.

Results and Discussion

Major Theme #1: Low Income Family

One of the major themes generated from the data collected based on the parents' perception are the hardships each respective family faces because of low economic status. As Parent 1, Significant Statement 1 (P1, SS1) narrated, *"Lisud gyud… para nako kuwang ako pangita para sa pag suporta sa ako pamilya labi na ako ra ang nag trabaho… Maka skwela man ang mga bata pero dili gyud gali hayahay nga kahimtang. Kakha-tuka sa ingon pa nila."* According to Hill *et. al*. (2013), family income instability negatively affects children's healthy development. Constant income provides security of being able to provide the needs of the family. Additionally, P2, SS2 stated, *"Dili gali permanente ang trabaho… Kung naay mangita ug panday, makakwarta… Kung wala mangita pa mi ug laing kapangwartahan."* Low income parents who work in low-quality jobs that entails low pay and no benefits result in unsupervised children and inadequate child support. This circumstance ripple to more negative effects that influences the well-being of children (Heinrich, 2014).

Subtheme #1: Lack of Parental Education Due to Poverty

Based on the given statement of the parents, it highlighted a situation where parents have not had the opportunity to receive formal education or have had limited access to educational opportunities due to financial constraints, specifically living in impoverished conditions. The life circumstances of these parents, especially when they were children themselves, and in their earlier generations, particularly these parents are mostly living in rural areas or provinces, and P1, SS3 mentioned, *"Ako og akoa bana kay elementary graduate ra tawn mi, tungod sad lisud mi nga pamilya gikan wala nami kapadayon og eskwela."* According to the study of Henry et.al, 2011 financial constraint is really one of the most barriers to parental involvement in education that impacts their overall child's nutrition. These parents living and experiencing impoverished conditions in their life struggle to prioritize education. The main focus of their living was to solely meet the basic needs such as food, shelter, and healthcare that often take precedence over investing in education. Their families prioritize immediate survival and addressing essential needs rather than focusing on long-term investments in education. According to the study of Harold *et al*., 2017 about how important parental education is for child nutrition. The knowledge and understanding of parents about child nutrition will impact the result of growth and development of their children.

Subtheme #2: Inaccessibility to Nutritious Meals

Due to the lack of parental education because of poverty, these parents have limited knowledge about the importance of a balanced diet, the nutritional requirements for different age groups, and the potential health risk associated with poor nutrition (George, 2016). P3, SS9 stated that, *"Maninguha mi nga makakaon sila buntag hantud hapon… pero kasagaran sa udto maninguha rana sila ug luto… kon dili mag luto ang katong bahaw pagka buntag kay maghapon man mi didto sa uma."* Children even at such a young age have the responsibility to fend for themselves. Lack of parental support and supervision negatively affects children's nutrition. Furthermore, P4, SS10 narrated, *"Ka-tulo sa usa ka adlaw… pero usahay naay maayo nga sud-an… usahay mag mantinil sad kong unsay naa."* Furthermore, in the same study of George, 2014 stated that their life situation restricts access to nutritious food options, and these parents with limited education may also face limited employment opportunities or unstable jobs, which can further impact their ability to afford healthy and nutritious food for their children. This can also result in reliance on inexpensive, processed, and nutrient-poor foods that may not provide the necessary nutrients for proper growth and development. This is one of the reasons why these parents are facing the challenge of acquiring necessary knowledge and skills related to proper nutrition for their children.

Subtheme #3: Government Support

All the participants that were interviewed stated that their children were recipients of Pantawid Pamilyang Pilipino Program (4ps) and School-based feeding program. As stated by P1, SS11 *"Miyembro ang akoa anak sa 4ps program ug apil sad siya sa makadawat ug feeding sa skwelahan. Makatabang sad ni sa allowance ug kaon pang adlaw-adlaw sa bata."* The program is implemented by the national government to help provide cash assistance to the family below poverty line and it aims to improve the health, nutrition, and the education of children in early childhood years (Official Gazzete, n.d.). Members receive a monthly monetary allowance that results in learners eagerly attending school because the program requires a number of class attendance from them. Meanwhile, the school-based feeding program (SBFP) aims to address undernutrition in school children (USDA, n.d.). Learners who belong to nutritional assessment undernourished receive a daily meal during lunch time. Both of these programs positively affect class participation because it motivates learners to attend school.

Major Theme #2: Low Academic Participation

Based on the given statements of the teachers, it highlighted that malnutrition affects the learners. Most of the teachers said that those learners who are labeled as malnourished are not actively participating in class discussions and activities. Based on the statement of Teacher 3, Significant Statement 18 (T3, SS18) said that, *"For learners that are wasted nutritional status. Mostly, they did not participate."* Another statement of T2, SS1 said that *"The learners need one on one discussion."* The statement shows that malnutrition has a partial contribution to a child's participation during class hours since are a lot of reasons why students do not participate during activities. Some may have a lack of sleep, lack of support there, parental assistance and other certain reasons. In contrast, as said by T1, SS20 *"Mo participate sila kanang naa ba roy kanang kuan panaglitan murag play ba ron sila or mag pasting, cutting, writing. Naa lay pila kabuok mga out 37 murag 3 ang kinahanglan i assist… sa parents."* The reason might derive from a student's engagement towards an activity.

Sub-theme # 4: Poor Class Attendance

The survey revealed that malnutrition affects the attendance of malnourished learners. Most of the teachers said that those students that are labeled as malnourished do not come to school regularly. Based on the statement from T3, SS15 *"they got sick"* which was one of the reasons for being absent which was caused by a low immune system. Undernutrition decreases immune defenses, making an individual more susceptible to infection. (Calder, 2013) [4] Another reason for being absent was also lack of monitoring of parents on children due to working in the farm. *"The reason for this is poverty and lack of follow up/attention due to their work. Most of their work are what we called a farmhand but not the owner of the farm, a laborer "mangombra" in visayan terms*," The teacher said. The said reason is not under the effects of malnutrition but it contributes to the causes of malnourishment since children are not taken care of by the parents. According to a study, the role of parents is really needed for the growth and development of the child. (Fazrin, *et. al*, 2022) [11] On the other hand, there was only one teacher who said, *"O, everyday sila mo ari sa school. Ang dili active nga malnourished kay kato ra bitawng underweight (pause) naa may stunted sya pero di sya underweight pareha ni kuan no ni Travis, stunted sya, mubo siya pero sakto sa iyang timbang."* The identified child with malnutrition comes to school regularly but is not active in class.

Sub-theme # 5: Interaction with Peers

The findings revealed that most teachers have observed that children with malnutrition are found to be hyperactive. According to T1, SS21, *"Usahay pud hyper pud siya (laughs), gawas na stunted siya kay grabe pud kaluhag…niya siya pud usahay kanang magda bitaw ug samok sa center."* This statement shows that the learners are still active even after being identified as malnourished. Children were also friendly with other classmates. A teacher said that *"Most of them, they socialize only with their seatmate."* Out of four teachers, only one of them had a student who wasn't active and friendly with other students. The teacher perceived that children that are identified as malnourished are *"shy and slow."* Since most of the teachers have students who are active and friendly, this only implies that malnutrition doesn't affect the child's social well-being.

Sub-theme # 6: Quarterly Exam Score

The findings showed partial results. Amongst four teachers, two of them said that the students that are labeled as malnourished were able to pass the exam. One of them said that the learner with malnutrition has failed the exam and T4, SS25 stated that *"50% sa 15 kabuok na malnourished."* The teacher said 50 percent out of 15 students identified with malnutrition were able to pass the exam. The data shows that malnutrition has partially contributed to a child's performance during exams.

Sub-theme # 7: Suggested Interventions

The most suggested interventions according to the participants was through feeding programs. According to T4, SS26 *"Kana sang feeding program pero di jud sya enough (everyday sya supposedly then di man jud sya mada kay daghan auxiliary sa school ang amoang paagi kay every monday and wednesday is pan, tuesday kay nutri buns and thursday kay saging and sa friday kay iron-fortified rice. Di jud sya enough kay wa ta kahibaw sa ilahang house kung makakaon ba silag tarong sa ilang balay. Dili sad enough na kana ra nga quantity, gamay ra juds tanan siya."* The said technique is also effective but it doesn't ensure that children will eat the foods that are given when they arrive at their house. Some students may give the food to others. Children were provided by the government and other stakeholders with foods able for the learners identified as malnourished to obtain a normal body mass index. T1, SS27 mentioned, *"Gi advice namo sila na ang pagkaon kana lang gyung mga healthy gani na mga pagkaon (pause) kanang (pause) likayan pud nang sigeg kaon mga junk foods unya karon kay ang DSWD kay naa man poy gi offer nga feeding bitaw namo (pause) so siguro makuan na jud na."* Parents should also be monitoring the child's food intake and making sure that everything that is served to the child is healthy and nutritious. A teacher also said that ten pesos a day contribution was also implemented to provide food for the malnourished children. T3, SS28 stated that *"Malnutrition can be addressed through proper and informative teaching on nutrition status. Conduct orientation for parents and learners."* Orientation for parents is also a great way to inform parents how important it is to ensure the food intake and its lifelong consequences if the child's health is not prioritized. The parental involvement especially for those parents who have young children who are detected with nutritional inadequacy are highly encouraged to participate in any activities that promotes children to achieve the normal body height and weight to eliminate the cases of malnutrition.

Conclusion

Based on the results of the data collected from parents' perspectives they have the commonality of coming from low economic backgrounds. This entails lack of parental education due to poverty which lessens their involvement in their children's education, lands them on low-paying jobs, and hinders them to provide nutritious meals for their children. Meanwhile, based on teachers' perspectives, poor nutrition results in low class participation which entails tardiness in coming to school, display hyperactive behavior that sometimes disrupts the class, and some of them failed on the last quarterly examination. In conclusion, from the parents and teachers perspective on malnutrition and academic performance of early learners, negative effects are inevitable. Moreover, government assistance through programs such as the Pantawid Pamilyang Pilipino Program and School-Based Feeding Programs will contribute in sustaining early learners' nutrition and the class participation. Parental support is also essential emphasizing the need for collaborative efforts to address malnutrition and low academic performance comprehensively.

Recommendation

The research findings concluded several recommendations that can be made to address the impact of malnutrition on the academic performance of young children. Firstly, it is crucial to increase awareness and education among parents about the importance of nutrition through workshops, seminars, and informational materials. Secondly, government assistance programs such as the Pantawid Pamilyang Pilipino Program and School-Based Feeding Programs should be strengthened to provide financial support, nutrition education, and nutritious meals. Thirdly, fostering collaboration between parents and teachers through regular communication and support groups can help address the issue effectively. Fourthly, providing resources and training for teachers to identify signs of malnutrition and offer appropriate support is essential. Lastly, community engagement through events and workshops can create a supportive environment for promoting healthy eating habits. Implementing these recommendations can contribute to improving early learners' nutrition and enhancing their academic performance. Future researchers are suggested to explore more studies about parental involvement in their children's education because even though there are plenty of existing studies, providing more local research that will show their perspectives will help deepen the understanding of the phenomenon.

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