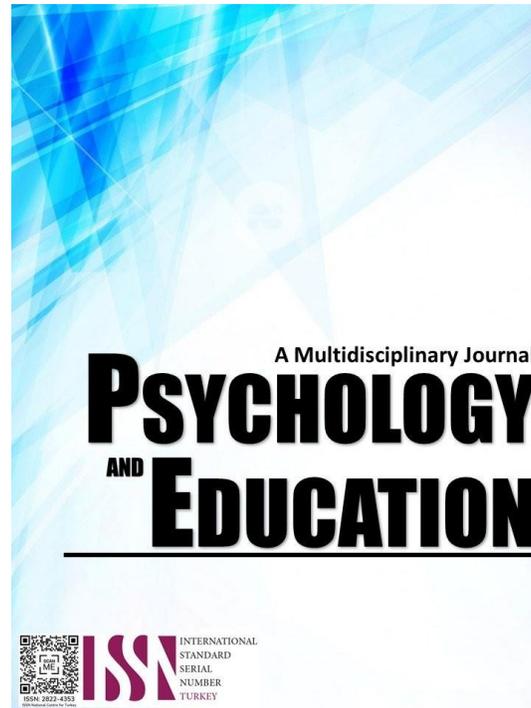


LEARNERS' NUTRITIONAL PRACTICES AND STATUS AND THEIR ACADEMIC PERFORMANCE IN ARLING PANLIPUNAN



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 37

Issue 7

Pages: 746-755

Document ID: 2025PEMJ3604

DOI: 10.70838/pemj.370708

Manuscript Accepted: 03-25-2025

Learners' Nutritional Practices and Status and their Academic Performance in Araling Panlipunan

Maria Fatima J. Marimon,* Noel A. Tannery
For affiliations and correspondence, see the last page.

Abstract

This study aimed to investigate the learners' nutritional status in relation to their academic performance at Malaybalay City National High School (MCNHS) San Jose, Bangcud National High School-Bangcud, and Malaybalay City National Science High School (MCNSHS)-Aglayan, Division of Malaybalay City, SY 20192020. It was conducted using the descriptive-correlational research design. The respondents were the teachers of the said school who were having an advisory. The instrument used to gather data was a survey-questionnaire which was patterned from Naelga and Doncillo, 2017. Descriptive statistical tools were used to process the gathered data such as frequency count and percentage, weighted mean and standard deviation, and Pearson r. This study found out that: majority of the learners were having wasted nutritional status; but they have Very Satisfactory academic performance in Araling Panlipunan. There was a very highly effective level of learners' nutritional practices in terms of Physical Development, Academic Performance, and Social Development. There was no significant relationship between the nutritional status of the learners and their academic performance in Araling Panlipunan. Only Physical Development showed a significant relationship to the academic achievement of the learners. This study offers the following recommendations: The SBFP or School Based Feeding Program needs to be sustained by the government. The students may focus and continue their efforts in their studies to sustain or even improve further their very satisfactory academic performance in Araling Panlipunan. The nutritional practices of the learners in terms of Physical Development, Academic Performance, and Social Development may be given priority to sustain their very highly effective turnouts. The teachers may exert efforts for the learners to fully maximize their full potentials in Araling Panlipunan and other subjects.

Keywords: *learners' nutritional practices, status, academic performance, Araling Panlipunan*

Introduction

Hunger, malnutrition, and a lack of certain micronutrients have been the main topics of studies on health nutrition. Diet education has traditionally focused on specific nutrients or dietary groups. The main cause of illness among children in underdeveloped nations is malnutrition. Even in Malaybalay City National High School, baseline nutritional status shows that 47 were wasted and 18 were severely wasted, while on the end line data this January of 2020, 56 were wasted and 9 students had been recorded as severely wasted.

According to the Global Nutrition Report, all nations save China had reached a point where they were either over or undernourished, having passed a "malnutrition red line." According to a recent survey conducted by the Food and Nutrition Research Institute, around a third of school children in the Country are underfed (FNRI). According to research by the nonprofit Save the Children, up to 1.5 million kids in the Philippines go an entire day without even one meal, with one in four of them doing so on occasion.

In addition, according to the Department of Education, "severe malnourishment" affects up to 1.8 million children in the nation. Malnutrition is a very common problem among the weak and the poor. The amount of Filipino families living in extreme poverty is reflected in these findings (Beredo, 2018).

After several years of work, the School Feeding Program, which was based on previous school records, improved the micronutrient status of the students, with the majority of students in Grades 7 through 10 having wasted or severely wasted BMI increasing to normal. However, it is still important to identify the reasons of malnutrition in order to lessen its effects, offer potential solutions, and evaluate how it affects the students' academic performance.

According to Jun Arajo of the Department of Education's Health and Nutrition Center, undernutrition is to blame for the dropout in both primary and secondary schools. The incidence rates in the nation will be significantly impacted if the trend persists in the upcoming years, and the economy would suffer. To address the issue of undernutrition among students in public schools and enhance learning outcomes, drop-out rates, and education retention rates, the Philippine company raised a feeding program in response.

K-12 Araling Panlipunan Curriculum will mold people with quantitative, introspection, answerable, resourceful, feasible, civilized, and rightist skills with a national and global perspective and appreciation of the historical past, in order to achieve the goal of Education for All 2015 and the Philippine K-12 Basic Education Curriculum Framework, that is to have the expertise necessary for the 21st century in order to cultivate a "essentially literate and established Filipino" (Maxci, 2017).

In order to foster civic competency, social studies as a discipline integrates the scientific knowledge and humanities. Social studies deliver organized, systematic study within the curriculum that draws from a variety of academic fields, including archaeology, antiquities, economy, location, background, legislation, principles, cultural studies, philosophy, faith, and sociolinguistics, as well as pertinent material from the human sciences, mathematical skills, and biology and chemistry (NCSS cited in Zarillo 2013).

Likewise, according to the K–12 Araling Panlipunan Curriculum, the goal of classroom instruction of Araling Panlipunan is to help students gain a comprehension of the fundamental ideas and issues in history, geography, politics, economics, and allied subjects so that they will be able to discern, generate, intelligent, and engage in others.

Understanding is emphasized in the program rather than memorizing of terms and ideas. The student is needed to provide their own description and analysis of each topic studied as well as how it translates in various contexts, particularly how it applies to the importance that topic has for them personally and for civilization as a whole (Maxci, 2017).

According to numerous studies, well-nourished students thrive or do an amazing job in both reading and math than underfed kids when it comes towards the learning experience. Thus, a student's academic performance may be impacted by their nutritional status. In considering the preceding context, this study was carried out to assess the nutritional practices and status of students attending Malaybalay City National High School (MCNHS)-San Jose, Bangcud National High School-Bangcud, and Malaybalay City National Science High School (MCNSHS)-Aglayan, Division of Malaybalay City, who were taking the Araling Panlipunan subject during the 2019–2020 school year, as well as their academic performance.

Research Questions

With regard to the academic achievements of students at Malaybalay City National High School, Bangcud National High School, and Malaybalay City National Science High School, Division of Malaybalay City, SY 2019-2020, this study sought to examine the effectiveness of nutritional practices and nutritional status. This research specifically aimed to respond to the following questions:

1. What is the nutritional status of the learners in Malaybalay City National High School (MCNHS) San Jose, Bangcud National High School (BNHS) Bangcud, and Malaybalay City National Science High School (MCNSHS) Aglayan, Division of Malaybalay City, SY 2019-2020?
2. What is the academic standing of the students in the aforementioned schools?
3. What is the efficacy level of learners' nutritional practices in terms of physical development, academic performance, and social development?
4. Is there a strong connection between the nutritional practices of the learners and their academic performance in Araling Panlipunan?
5. Does the nutritional state of students and their academic achievement in Araling Panlipunan have a significant relationship?

Methodology

Research Design

The descriptive-correlational research methodology was used to carry out this investigation. It focused on how well nutritional habits and status correlated with students' academic performance at Malaybalay City National High School (MCNHS)-San Jose, Bangcud National High School-Bangcud, and Malaybalay City National Science High School (MCNSHS)-Aglayan in the division of Malaybalay City for the 2019–2020 school year. In this investigation, the descriptive research approach worked well. Descriptive research, according to Ariola (2006), aims to answer problems by examining the relationship between variables. The technique is most effective when investigating and interpreting data from a study that is focused with the relational circumstances that exist, the behaviors that are common, the beliefs and processes that are active, the impacts that are currently observed, or the changes that are emerging.

Respondents

Teachers participated in the survey as responders. who have advisory class at Malaybalay City National High School (MCNHS)-San Jose, Bangcud National High School-Bangcud, and Malaybalay City National Science High School (MCNSHS)-Aglayan, Division of Malaybalay City. There were 33 teachers in MCNHS, 18 of them have advisory classes; there were 56 teachers in MCNSHS, 40 of them are having advisory classes, and Bangcud National High School with 90 teachers. Each teacher chose one particular student who served as their subject of the survey. The sampling technique employed for this investigation was sample chosen. A non-probability sample known as a purposive sample was chosen based on the study's goal as well as population characteristics. Other names for purposeful sampling include judgemental, selective, or subjective sampling. Only the instructors of advising classes in the aforementioned schools participated in this survey as respondents.

Instrument

The survey-questionnaire used in this study has three sections, with Part I focusing on the nutritional status of students at three schools: Malaybalay City National High School, Bangcud National High School, Malaybalay City National Science High School, Division of Malaybalay SY 2019–2020.

In Part II, we discussed how the students' dietary habits affected their academic performance.

The academic performance of the students in the Araling Panlipunan subject in the mentioned schools for SY 2019–2020 was covered in Part III.

Since Naelga and Doncillo had already pilot-tested the instrument, it was no longer used (2017). Only a minor adjustment was made to match this investigation.

Procedure

The necessary process were used to gather information on the effectiveness of dietary habits and status in relation to students' academic performance at Malaybalay City National High School (MCNHS)-San Jose, Bangcud National High School-Bangcud, and Malaybalay City National Science High School (MCNSHS)-Aglayan, Division of Malaybalay City, for the school year 2019–2020:

First, the researcher requested authorization in writing from the dean of the graduate school to proceed with the research. Then, the endorsement and authorization letters were distributed to the DepEd staff members, specifically the superintendent of the schools division, the public schools district supervisor, and the school head. Third, the researcher delivered the surveys to the intended responders directly. Finally, the researcher obtained the surveys.

Data Analysis

The collected data were processed using the following descriptive statistical tools:

- Frequency count and percentage were utilized to assess the students' nutritional status.
- Frequency count and percentage were used to assess the students' academic performance.
- Pearson r was used to establish the connection between the students' dietary habits and their scholastic success in Araling Panlipunan.
- Pearson r was used to determine whether there was a meaningful connection between the students' nutritional state and their academic achievement in Araling Panlipunan.

Results and Discussion

This presents the results as well as analyzes and interprets them in the context of educational research. The order in which the issues were raised in Chapter 1 is followed by the debate.

Table 1 below displays the nutritional status of students attending Bangcud National High School, Malaybalay City National Science High School, and Malaybalay City National High School in SY 2019–2020.

Table 1. *Nutritional Status of the Learners*

<i>Nutritional Status</i>	<i>Frequency</i>	<i>Percent</i>
Normal	2	1.98
Wasted	97	96.04
Severely wasted	2	1.98
Total	101	100

As seen, among the 101 respondents (or 100%), majority of the learners as subject of the study with frequency of 97 (96.04%) were Wasted. There was an equal number of Normal and Severely wasted learners with 2 (or 1.98%). This implies that most of the learners who participated in this study were wasted and need a feeding program.

Moralista (2016) conducted a study on the Nutritional Status of Elementary Pupils at the District of Lambunao East, Philippines found out that the findings revealed that as a whole, the result showed that the extent of the nutritional status of respondents was “Moderate” and when categorized as to Normal “High”, Wasted “Moderate” and Severely Wasted “Low” and that there is no significant difference that existed in the extent in nutritional status of pupils’ as to normal; wasted ($p=.461$) and severely wasted.

It recommends that Pupils are moderately concern of their nutritional status and Regardless of their age and nutritional brackets, most of the respondents have high nutritional status. It is recommended that the nutritional supplement program in the schools should be continued without any stop.

The next section talks about how well students did academically in the Araling Panlipunan.

Table 2 presents the learners’ academic performance in the Araling Panlipunan subject.

Table 2. *Learners’ Academic Performance in the Araling Panlipunan*

<i>Academic Performance</i>	<i>Frequency</i>	<i>Percent</i>	<i>Qualitative Description</i>
90 and above	22	21.8	Outstanding
85 – 89	60	59.4	Very Satisfactory
80 – 84	18	17.8	Satisfactory
75 - 79	1	1.0	Fairly Satisfactory
Total	101	100.0	

Based on D.O.#8,s.2015

As shown, majority of the learners as the subjects of the study with 22 (or 21.8%) learners who garnered 90% and above or Outstanding academic performance. It is followed by 60 (or 59.4%) have 85%–89% or Very Satisfactory academic performance in the said subject. Third in rank are learners with 18 (or 17.8%) who got 80%–84% or Satisfactory. Only 1 student (or 1% of the class) received academic performance ratings of 75%–79% or "Fairly Satisfactory." This indicates that the majority of the students are doing well in their academic work. For students to truly perform at their best in school, they need to eat a healthy, balanced diet. As a result, healthy eating is promoted at home and even in school.

This observation is related to Lawson's (2012) assertion that school feeding programs have become common in poor nations as a social security system and a means of reaching the Millennium Development Goals.

These programs are frequently targeted towards populations that are food insecure and reside in areas with high concentrations of families from low socioeconomic status, or towards schools that face poor attendance and enrolment of students.

Ghosh (2013) conducted a study on academic performance and nutritional status – a case study on college students in North Tripura. According to the study, the development of any nation or community depends largely on the quality of education of such a nation. Understanding the nature of the causal relationship between health and education is important to determine the exact relation between them. The mechanism by which health and nutrition influence educational achievement is not well established, but poor health and malnutrition in early childhood may affect cognitive abilities, necessary for learning process and consequently educational achievement.

This analysis finds, among other things, that indigenous individuals had lower BMI values than their nontribal equivalents. This may be because tribal students have less access to convenience meals and, as a result, may consume fewer of these sorts of foods, which seem to be high in sugary foods. Also, the academic achievements of tribal students are a little lower than their nontribal counterparts which again comes out in the regression and negative correlation of BMI with academic achievement.

The next part shows how well students' eating habits have affected their healthy activity, academic performance, and social progress.

The effectiveness of learners' nutritional practices in terms of Physical Development is presented in Table 3 below.

Table 3. Effectiveness of Learners' Nutritional Practices in terms of Physical Development

	<i>Indicator</i>	<i>Mean</i>	<i>SD</i>	<i>QD</i>
1.	Nutrition is important at every age. The students need proper nutrients stay healthy and strong, and grow up healthy and strong too.	4.78	0.46	VHE
2.	Good -nutrition will also affect physical growth and maturation, thus affecting growth rate, body weight and ultimately height.	4.76	0.49	VHE
3.	Good nutrition is an important part of leading a healthy lifestyle. Combined with physical activity, student's diet can make them to reach and maintain a healthy weight, reduce risk of chronic diseases (like heart disease and cancer), and promote their overall health.	4.65	0.50	VHE
4.	Nutrition for children can also help establish a foundation for healthy eating habits and nutritional knowledge that the students can apply throughout life.	4.64	0.54	VHE
5.	At school, enough-nutrition causes children to have more energy and more interest for learning.	4.56	0.67	VHE
MEAN		4.68	0.38	VHE

Note: n = 101

Scale	Range	Qualitative Description
5	4.20 – 5.00	Very Highly Effective (VHE)
4	3.40 – 4.19	Highly Effective (HE)
3	2.60 – 3.39	Moderately Effective (ME)
2	1.80 – 2.59	Less Effective (LE)
1	1.00 – 1.79	Not Effective (NE)

As shown, among the five items, the statement which got the highest mean was Nutrition is important at every age. The students need proper nutrients stay healthy and strong, and grow up healthy and strong too with Mean=4.78 and SD=0.46 described as Very Highly Effective (VHE). This means that the students are well aware on the benefit they can get from the good nutrition as they grow. The Das report lends credence to something like this (2020). She believes that eating is essential for a student's physical and mental growth. However, a lot of the food items that are popular with adolescents are really impeding their ability to learn. Such foods are packed with sodium, sugar, caffeine, and other substances that dehydrate, agitate, and sicken children. This affects not just their performance and grades but is also overall behavior and emotions (Das, 2020).

Analysis of the information extracted from these studies shows that school feeding programs conclusively impact the micronutrient level of targeted children, but have modest and mixed effects on health outcomes as evaluated by anthropometric measurements. While the impact of these interventions on cognitive skills and abilities of students is still uncertain, there is strong evidence that school feeding programs positively affect school enrollment and attendance rates, especially for girls. The review points to several gaps in the literature, including the lack of a systematic analysis of linkages between FFE, sustainability, and agricultural development. There is also a lack of evidence on the cost-effectiveness of school feeding programs in delivering desirable outcomes. These are identified as topics for further research.



At education, proper nutritional results in youngsters having more vitality and desire to learn. an item with the lowest mean (Mean=4.56 and SD=0.67) was classified as Very Highly Effective (VHE). This indicates that the pupils have a genuine understanding of the advantages of a good diet and how it affects a person's energy and concentration. This finding is reinforced by the report of Das (2020). According to her, studies show that diets heavy in saturated fats really impair memory and learning. These are commonly accessible and reasonably priced in schools. Foods like French fries, burgers, nuggets, and other such items reduce learners' mental capacity. As a result, they struggle after lunch to concentrate in class and on their studies.

The adequacy of the students' dietary habits in terms of their physical improvement received an overall mean of 4.68 with SD=0.38, which is qualitatively characterized as Very Highly Effective (VHE). As a result of their dietary habits, the responders can be said to have actually watched the physical growth of the students.

The research by Horca, Lucero, and colleagues (2016) is closely linked to this conclusion of the study, which confirms that after the 120 days of the School-Based Feeding Program's implementation, this report showed that the SBFP has an impact on the academic performance of all severely wasted students at Southville Elementary School for the academic year 2015–2016.

It suggests that the government provide sufficient resources so that the School Based Feeding Program can be conducted consistently each school year. Students' nutritional status and academic performance should be improved using the school-based campaign as a trampoline. After the feeding program, it is important to maintain the nutritional status of the students who benefited. Parents should be urged to prepare the wholesome dinner at home. In order to maintain the project's ongoing operation, linkages between the Gulayan sa Paaralan Project (GPP) and the School Based Feeding Program (SBFP) must be strictly maintained.

The effectiveness of learners' nutritional practices in terms of Academic Performance is shown in Table 4 below.

Table 4. *Effectiveness of Learners' Nutritional Practices in terms of Academic Performance*

Indicator		Mean	SD	QD
1.	Good nutrition positively influences cognitive development and academic performance	4.74	0.50	VHE
2.	Access to nutrition, particularly breakfast, can enhance a student's psychosocial well-being, reduce aggression and school suspensions, and decrease discipline problems.	4.70	0.54	VHE
3.	Healthy nutrition radically improves children's cognitive function and measurable academic achievement.	4.63	0.52	VHE
4.	There is positive association between diet and academic achievement whereby students who consume regular meals, including specifically a breakfast meal, as well as students who reported higher consumption of fruit, were found to have higher academic achievement	4.41	0.60	VHE
5.	Diets high in trans and saturated fats can negatively impact learning and memory, nutritional deficiencies early in life can affect the cognitive development of school-aged children, and access to nutrition improves students' cognition, concentration, and energy levels.	4.32	0.66	VHE
MEAN		4.56	0.44	VHE

Note: n = 101

Scale	Range	Qualitative Description
5	4.20 – 5.00	Very Highly Effective (VHE)
4	3.40 – 4.19	Highly Effective (HE)
3	2.60 – 3.39	Moderately Effective (ME)
2	1.80 – 2.59	Less Effective (LE)
1	1.00 – 1.79	Not Effective (NE)

As shown, among the five items, the statement which got the highest item was Good nutrition positively influences cognitive development and academic performance with Mean=4.74 and SD=0.50 qualitatively described as Very Highly Effective (VHE). This means that the students are conscious that good nutrition positively influences their brain functions. Dr. Reyes (2013) conducted a study on the impact of School-Based Feeding Program on the physical growth, academic performance, and social development of students in Holy Spirit Elementary School, Quezon City. The study found out that the whole respondents are agreeable as to the benefits their children are receiving from the said program.

Who are not fed before going to school, can have an adverse effect on learning. Children who are hungry have more difficulty concentrating and performing complex tasks, even if otherwise well nourished. Research and program experience shows that improving nutrition and health can lead to better performance, fewer repeated grades and reduced drop out.

The statement which got the lowest mean was Diets high in trans and saturated fats can negatively impact learning and memory, nutritional deficiencies early in life can affect the cognitive development of school-aged children, and access to nutrition improves students' cognition, concentration, and energy levels with Mean=4.32 and SD=0.66 qualitatively described as Very Highly Effective (VHE). The negative impacts of bad diet on the body's systems and activities have therefore been taught to the students.

According to Das (2020), sugars and glucose have a greater impact on diets with a higher fat content. We all understand that sugar, which is derived from carbs and necessary for energy, lowers the bodies natural energy levels when it is in excess. After eating processed foods, the body produces more insulin to help it metabolize the freshly ingested foods. Additionally, it causes our bodies' glucose levels to rise, which is unhealthy. A high-glycemic and greasy diet that is regularly consumed can harm the kidneys, eyes, and blood vessels as well as induce irritation, fatigue, and loss of concentration.



The effectiveness of learners’ nutritional practices in terms of Academic Performance got an Overall Mean of 4.56 and SD=0.44 being qualitatively described as Very Highly Effective (VHE). This means that the respondents have really noted the nutritional practices of the learners which were effective to their academic performance. Poor nutrition and health among school children contributes to the inefficiency of the educational system. Children with diminished cognitive abilities and sensory impairments naturally perform less well and are more likely to repeat grades and to drop out of school than children who are not impaired; they also enroll in school at a later age, if at all, and finish fewer years of schooling. The irregular school attendance of malnourished and unhealthy children is one of the key factors in poor performance. Even temporary hunger, common in children.

The effectiveness of learners’ nutritional practices in terms of Social Development is displayed in Table 5 below.

Table 5. *Effectiveness of Learners’ Nutritional Practices in terms of Social Development*

Indicator		Mean	SD	QD
1.	Proper nutrition during childhood can positively affect a child's social behaviors and development.	4.69	0.46	VHE
2.	Good nutrition will enhance active social play and exploratory behaviour in the class.	4.61	0.51	VHE
3.	Childhood social behavior, even adult social behavior, has a lot of implications for physical and mental health and well-being.	4.60	0.53	VHE
4.	Good nutrition will enhance cognitive function and promote good social behavior, which is essential to brain development and intelligence.	4.54	0.52	VHE
5.	Good nutrition will enhance social interactions, friendliness, and extent of verbalization.	4.50	0.54	VHE
MEAN		4.59	0.38	VHE

Note: n = 101

Scale	Range	Qualitative Description
5	4.20 – 5.00	Very Highly Effective (VHE)
4	3.40 – 4.19	Highly Effective (HE)
3	2.60 – 3.39	Moderately Effective (ME)
2	1.80 – 2.59	Less Effective (LE)
1	1.00 – 1.79	Not Effective (NE)

Proper nutrition during childhood can influence a child's social behaviors and development, as seen in Table 6, with a mean of 4.69 and a standard deviation of 0.46, both of which are qualitatively characterized as Very Highly Effective (VHE). This demonstrates that the pupils are conscious of the notion that a healthy diet should begin at a young age.

According to Das (2020), parents may make sure that their children continue to have a nutritious diet and have normal brain function when they are not in school. They can do this by packing their children's meals in smaller portions for them to eat every three to four hours. We experience emotions of exhaustion and tension merely thirty minutes after a nourishing snack or supper. Giving kids tiny packs of wholesome food that they can eat in between short amounts of time will increase their energy and sharpen their focus.

The formative years of a person's life are also a crucial period for their growth and development, as well as for the development of both their physical and mental capacities. The best diet for a child to follow in order to promote and support this growth and development is consequently of great scientific interest. The amount, nature, time, and nutritional content of each meal are included in this.

Eating healthy will improve social connections, friendliness, and extent of verbalization was the claim with the lowest mean, with a qualitative rating of Very Highly Effective (Mean=4.50 and SD=0.54) (VHE). This shows that the students were aware of the positive effects healthy eating can have on their interpersonal relationships. Therefore, it is crucial to take action to ensure that kids continue to practice good eating habits. Parents can plan and prepare wholesome, delicious, and nourishing meals that are nourishing and the kids enjoy eating at home. Teachers should take the effort to inform kids about the negative impacts of poor eating habits and how consuming wholesome foods can improve one's health while they are still in school.

By looking at systems, policy, school food, health education, and creative school activities, they can take action to create a better learning environment. Also available in the canteens are unprocessed and natural food items including vegetables, fruits, salads, eggs, and lean proteins. We consume less glucose when we eat natural foods, so kids can depart cafeterias experiencing more energized, less tired, and focused on the lessons ahead (Das, 2020).

With a grand mean of 4.59 and a standard deviation of 0.38, the nutritional practices of students in terms of social development are rated as Very Highly Effective (VHE). This indicates that the respondents had firsthand experience with how the students' dietary habits contributed to their social growth. A child's learning and academic performance are significantly impacted by their nutritional and physical health status. Children who aren't getting specific nutrients in their diet, especially iron and iodine, or who experience hunger, whey deficiencies, parasite illnesses, or other illnesses do not have the same capacity for learning as children who are fit and well-fed.

The significant relationship between the nutritional status of the learners and their academic performance in Araling Panlipunan is discussed in the following section.

Table 6 presents the relationship between the nutritional status of the learners and their academic performance in Araling Panlipunan

Table 6. *Relationship between the Nutritional Status of the Learners and Their Academic*

Performance in Araling Panlipunan (n = 101)

	<i>r-value</i>	<i>p</i>	<i>Interpretation</i>
Test of significant relationship between the nutritional status of the learners and their academic performance in Araling Panlipunan	0.058	0.563	Not Significant

According to the data, there is absolutely no correlation between the students' academic achievement in Araling Panlipunan and their nutritional status ($r = 0.058$, $p = 0.563$). This indicates that the students' academic achievement at Araling Panlipunan is unrelated to the kind of nutritional status they have. But parents should always be reminded that natural food products should be included in a child's daily diet rather than manufactured meals for better academic and extracurricular achievements. A healthy body, behavior, and mental capacity will result from this.

This conclusion was supported by Adriatico et al. They conducted a study at Banilad Elementary School in Cebu City to determine the relationship between kids' nutritional state and academic performance. Using the World Health Organization Weight Status Categories by BMI by Age Percentiles, the measurements of height, weight, and age were taken, and the body mass index was calculated. The second grading period grades were used as the basis of their academic performance. A correlation between the nutritional status and academic performance of the students was determined during Pearson correlation. The grade point average used to gauge academic success among the students and nutritional status are not significantly correlated, according to the Pearson correlation coefficient. The findings revealed that as a whole, the result showed that the extent of the nutritional status of respondents was "Moderate" and when categorized as to Normal "High", Wasted "Moderate" and Severely Wasted "Low" and that there is no significant difference that existed in the extent in nutritional status of pupils' as to normal; wasted ($p = .461$) and severely wasted.

The findings are also supported by Beredo (2018), who conducted a study on nutritional status and its impact on academic performance of selected Grade 8 Students with the aim of identifying the nutritional status, causes of undernutrition, and its influence on the performance of Grade 8 Students with wasted and severely wasted BMI. The researcher used the descriptive – correlational research method which described the relationship between variables. Four (4) variables were used in this study such as poverty, health condition, eating habits, and illiteracy.

The results showed that sometimes health condition and illiteracy are the contributing factors for malnutrition as evidenced by the average mean of 3.06 and 3.58 respectively. While most often, poverty and eating habits contributed to the causes of malnutrition. A negligible negative correlation existed between weight and academic performance based on the computed r value which was less than the tabular value of 0.349 at 5% level of significance. The obtained chi-square value between nutritional status and academic performance was found to be insignificant since the obtained chi-square value was less than the tabular value of 9.488 at 5% level of significance.

The researcher suggests that the School-Based Feeding Program be enhanced in order to continue. Further, it is also recommended to encourage the active involvement of parents, communities and local government in the implementation of intensified school nutrition program.

The notion that children's cognitive growth entails the maturation of higher mental skills like attention, memory, learning, and perception is refuted by this research. It has been demonstrated that improved academic performance throughout these years is connected with optimal brain growth (Nyaradi et al. 2013b). Conversely, if nutrition influences cognitive development in a good way, then dietary inadequacies could potentially harm cognitive growth (Benton 2010).

Making appropriate dietary choices is crucial to a student's academic success because, as research has shown, nutrition is necessary for the development of the brain and cognition. The finding above is distinct from this research. Children's cognitive performance is negatively impacted by malnutrition on a global scale, with undernutrition having the worst impacts (Averett and Stifel, 2007; Alaimo et al., 2001; Kaestner and Grossman, 2009 and Taras, 2005). During a crucial growth period that is frequently disregarded, school lunches offer a crucial nutritional intervention. They gain two benefits by serving lunch at school during the academic day.

The Department of Education (DepEd), which emphasizes the value of healthy eating for raising students' academic performance, disagrees with the same finding. Given that it leads to higher enrollment, greater punctuality, better performance, fewer repeat students, and lower dropout rates, it is regarded as a wise expenditure in education. Hence, DepEd proposed in the 2014 Budget a School-Based Feeding Program (SBFP) that will cater to a targeted 562,262 severely wasted (SW) school children in Kinder to Grade 6 nation wide. The proposal was approved but the budget was lodged with the Department of Social Welfare and Development (DSWD) as President Benigno Aquino Directed the DSWD to implement a national feeding program that will cover the daycare center pupils and the school children.

Therefore, it is agreed upon that there is no substantial correlation between the students' nutritional status and their academic achievement in Araling Panlipunan.

The next section discusses the important connection between students' dietary habits and their academic success at Araling Panlipunan.

Table 7 presents the relationship between the nutritional practices of the learners and their academic performance in Araling Panlipunan

Table 8. *Relationship between the Nutritional Practices of the Learners and Their Academic Performance in Araling Panlipunan (n = 101)*

	<i>r-value</i>	<i>p</i>	<i>Interpretation</i>
Physical Development	-.210*	.035	Significant
Academic Performance	-.146	.145	Not Significant
Social Development	-.127	.204	Not Significant

*. Correlation is significant at the 0.05 level (2-tailed).
 **. Correlation is significant at the 0.01 level (2-tailed).

The data on the relationship between the nutritional practices of the learners and their academic performance in Araling Panlipunan reveals that only Physical Development with ($r = -.210^*$, $p = .035$) showed a significant difference. This means that nutritional practices of the learners concerning Physical Development affects significantly to their academic performance in the said subject. A nutritious diet has a positive synergistic effect on both physical and mental capacities, and nutrition plays a significant part in a child's growth and development. Children's physical growth, cognitive development, and psychosocial skills are all negatively impacted by malnutrition, and both short- and long-term consequences can have a variety of negative outcomes. The best people to talk to parents about their children's nutrition are healthcare professionals, and this is something that should be promoted.

The other variables, including Academic Performance ($r = -.146$, $p = .145$) and Social Development ($r = -.127$, $p = .204$), had no bearing on the results. This indicates that nutritional practices have no impact on students' academic achievement or social development in the Araling Panlipunan subject.

Given that one variable revealed a significant correlation between the students' dietary habits and their academic performance in Araling Panlipunan, the null hypothesis, according to which there is no correlation between the students' dietary habits and their academic performance in Araling Panlipunan—is hereby rejected.

Conclusions

This research led to several key conclusions. It was found that the student-participants were experiencing wasted nutritional status primarily due to malnutrition, a result of financial inadequacy within their families. Many learners were undernourished, with some even skipping meals, especially breakfast, due to the lack of available food. Despite these nutritional challenges, the majority of the learners performed very satisfactorily in Araling Panlipunan, demonstrating diligence and commitment to their studies. The study emphasized the importance of proper nutrition in promoting health, strength, cognitive development, academic performance, and social behavior. However, no significant correlation was found between the students' dietary habits and their academic achievement in Araling Panlipunan. Instead, physical development was identified as the only factor that significantly affected academic performance in the subject.

Based on these findings, several recommendations were proposed. The government should continue supporting the School-Based Feeding Program (SBFP) to assist students with severely wasted nutritional status. Learners are encouraged to maintain or further improve their academic performance by focusing on their studies and prioritizing healthy nutritional practices that support physical, academic, and social development. Teachers can play an essential role by guiding parents in enhancing the physical development of learners through integrated lessons and positive modeling. Even though nutritional status did not correlate with academic achievement in Araling Panlipunan, educators are still encouraged to help all students reach their full potential across all learning areas.

References

- Adriatico, K.K. et., al. The correlation between nutritional status and academic performance of students in Banilad Elementary School, Cebu City. Gullas College of Medicine University of the Visayas. Retrieved: <http://www.herdin.ph/index.php?view=research&cid=62827>
- Atkinson C. Making sense of Piaget. London: Routledge & Kegan Paul; 1983. Chapters 1-2, 6.
- Auld GW, Romaniello C, Heimendinger J, Hambidge C, Hambidge M. Outcomes from a school-based nutrition education program using resource teachers and cross-disciplinary models. *J Nutr Educ*. 1998; 30(5):268-80.
- Beredo (2018). Nutritional Status and Its Impact on Academic Performance
- Breakwell ME. The association between parenting practices of parents of preschool children and the preschool children's nutrition knowledge [dissertation]. Toronto, Canada; 1991.
- Contento I. Children's thinking about food and eating-A piagetian-based study. *J Nutr Educ*. 1981; 13(Suppl.1):S86-S90.
- De Guzman, J. Food Intake and Academic Performance. Retrieved:

https://www.academia.edu/3441191/food_intake_and_academic_performance?auto=download

Dietz W. H. Overweight in childhood and adolescence. *N Engl J Med.* 2004; 350(9):855-7.

Evans RI. Jean Piaget: man and his ideas. *Birinci Bask*, Ankara: Doruk Yayıncılık; 1999. p.32, 125, 141, 149, 177-8.

Flavell JH, Miller PH, Miller SA. *Cognitive development.* New Jersey: Pearson Prentice Hall; 2002. Chapters 1, 5.

Food Guide Pyramid. [cited 2008 Mar 10]. Available from:
<http://www.diabetesdiabeticdiet.com/food_pyramid.htm>.

Ghosh, S. (2013). Academic Performance and Nutritional Status – A Case Study on College Students in North Tripura. *IOSR Journal of Research & Method in Education (IOSRJME)*. 1. 57-68. 10.9790/7388-0145768. Retrieved: https://www.researchgate.net/publication/272813257_Academic_Performance_and_Nutritional_Status_A_Case_Study_on_College_Students_in_North_Tripura/citation/download

Glenny AM, Meara SO, Melville A, Sheldon TA, Wilson C. The treatment and prevention of obesity: a systematic review of the literature. *Int J Obes Relat Metab Disord.* 1997; 21(9):715-3.

Gorelick M, Clark A. Effects of nutrition program on knowledge of preschoolchildren. *J Nutr Educ.* 1985; 17(3):88-92.

Grade 8 Students. Villapagasa National High School, Villapagasa, Bansud, Division of Oriental Mindoro, Philippine Retrieved: <https://iopscience.iop.org/article/10.1088/1742-6596/1254/1/012013/pdf>

Hardy LR. Psychometric testing of a developmental food frequency questionnaire for elementary school children In North Carolina [dissertation]. University of North Carolina; 2002.

Holzheimer L, Mohay H, Masters IB. Educating young children about asthma: comparing the effectiveness of a developmentally appropriate asthma education video tape and picture book. *Child: Care, Health Dev.* 1998; 24(1):85-99.

Lee TR, Schvaneveldt JD, Sorenson AW. Nutritional understanding of preschoolchildren taught in the home or a child development laboratory. *Home Econ Res J.* 1984; 13(1):52-60. Singleton JC, Achterberg CL, Shannon BM. Role of food and nutrition in the health perceptions of young children. *J Am Diet Assoc.* 1992; 92(1):67-70.

Maxci, J. C. (2017). correlating the academic performance and competency in araling panlipunan of junior high school students in the Third Congressional District of Quezon: basis for an enhancement program. Course Specialists of the Institute of Open and Distance Education Polytechnic University of the Philippines, Lopez Quezon Center. Retrieved: https://www.academia.edu/33322887/CORRELATING_THE_ACADEMIC_PERFORMANCE_ANDCOMPETENCY_IN_ARALING_PANLIPUNAN_OF_JUNIOR_HIGHSCHOOL_STUDENTS_IN_THE_THIRD_CONGRESSIONAL_DISTRICT_OF_QUEZON_BASIS_FOR_AN_ENHANCEMENT_PROGRAM

Moestue H, Huttly S, R. Sarella L, and Galab, S. 'The bigger the better': mothers' social networks and child nutrition in andhra pradesh. *Public Health Nutr.* 2007; 10(11):1274-82.

Moralista, R.(2016). Nutritional Status of Elementary Pupils at the District of Lambunao East, Philippines. *Journal of Social Sciences & Humanities Research*, 2(1).1-5

Naelga S. C. and Doncillo, H.L. Nutritional Status: Its Relationship To The Academic Performance In English And Mathematics Of Grade 2 Pupils In Bulua Central School. Master of Arts in Home Economics (MAHE) & Master in Technician Teacher Education (MTTE), Department of TLE & Technician Teacher Education, CPSEM, Mindanao University of Science and Technology. Retrieved: http://tojdac.org/tojdac/VOLUME6NOVSPCL_files/tojdac_v060NVSE158.pdf

Pasnak R, Cooke WD, Hendricks C. Enhancing academic performance by strengthening class-inclusion reasoning. *J Psychol.* 2006; 140(6):603-13.

Piaget J, Inhelder B. *The psychology of the child.* 2nd ed. New York: Basic Books; 1969. Chapters 2-3.

Piaget J. *Structuralism.* London: Routledge & Kegan Paul; 1971. Chapters 4-6.

Piaget J. *The origins of intelligence in children.* New York: International Universities Press; 1952. p.1-7, 35, 42, 157, 345, 381.

Piaget J. *The Principles of genetic epistemology.* London: Routledge & Kegan Paul; 1972. Chapters 1-2.

Piaget J. *The psychology of intelligence.* New Jersey: Littlefield, Adams & Co; 1960. Part 1-3.

Rickard KA, Gallahue DL, Gruen GE, Tridle M, Bewley N, Steele K. The play approach to learning in the context of families and schools: an alternative paradigm for nutrition and fitness education in the 21st century. American Dietetic Association. *J Am Diet Assoc.* 1995; 95(10):1121.



- Smith L. (1997). A brief biography of Jean Piaget. [cited 2009 Mar 22]. Available from: <<http://www.piaget.org/aboutPiaget.html>>.
- Smith L. Callery P. Children's accounts of their preoperative information needs. *J Clin Nurs*. 2005; 14(2):230-8.
- Wisconsin Nutrition Education Program. Developmentally appropriate nutrition education for youth ages 6-11. 2001 [cited 2007 Oct 12]. Available from: <<http://www.uwex.edu/ces/wnep/files/03resyth.pdf>>.
- Yeşilyaprak B. Educational psychology, development, education and teaching. Ankara: PegemA Yayıncılık; 2007. p.83, 86, 87, 94, 96.

Affiliations and Corresponding Information

Maria Fatima J. Marimon, RN

Malaybalay City National High School
Department of Education – Philippines

Noel A. Tannery, MAEd

Valencia Colleges (Bukidnon), Inc. – Philippines