



International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Assessing Classroom Management Strategies of Teachers and the Pupils' Engagement Dimensions

Bailanie Adam Agao¹, Salahudin D. Solaiman, EdD², Ramlah A. Duge, PhD³

¹Cotabato Foundation College of Science and Technology (CFCST) saudimohamiden@gmail.com

²Cotabato Foundation College of Science and Technology (CFCST) salahudinsolaiman1983@gmail.com

³Cotabato Foundation College of Science and Technology (CFCST) ramlah@cfcst.edu.ph

ABSTRACT

Primarily, this study sought to determine the implementation of school-based feeding program (SBFP) on the nutritional status and academic performance of pupils.

Specifically, It answered the level of implementation of school-based feeding program; nutritional status of pupils; pupils' academic performance; and the significant relationship of school-based feeding program of pupils on nutritional status and the significant influence of the nutritional status on pupils' academic performance.

Descriptive-correlation research design was employed in the study with a set of questionnaires. There were 48 teachers and 150 pupil- respondents involved in the study. Complete enumeration for teachers and simple random sampling for pupils were employed. Mean was used to determine the level of implementation of school-based feeding program, nutritional status, and academic performance of pupils and Multiple Linear Regression technique was utilized to treat the hypotheses.

Findings revealed that school-based feeding program such as planning, monitoring, evaluation and implementation were well-implemented. Pupils' nutritional status improved from wasted to normal status. The academic performance to the pupils was also satisfactory. It was also found out the school-based feeding program has no significant influence on nutritional status of pupils. Moreover, it has significant influence on the academic performance of pupils.

It can be deduced from the study that school-based feeding program has great impact on academic performance of pupils since it caters their nutritional needs necessary to promote proper retention and active mind in school activities.

Keywords: Management of school-based feeding program on the nutritional and academic performance of pupils.

INTRODUCTION

The nutritional status of pupils has a significant impact on their academic performance as inadequate nutrition can lead to poor health, decreased cognitive function and lower educational attainment, ultimately affecting their future opportunities and socio-economic mobility.

One of the Millennium Development Goals (MDGs) formulated in the year 2000 by all nations in the United Nations (UN) is to eradicate extreme hunger and poverty (UN 2015). The first Food for Education (FFE) program launched by the DepEd in 1997 was a breakfast feeding program intended to address short-term hunger among public school children (Albert et al., 2015).

The existence of hunger, malnutrition, and micronutrient deficiencies can have long lasting effects on the nutritional status and productivity of people in our country. Early malnutrition can adversely affect physical, mental, and social aspects of the child health, which leads to underweight, stunted growth, lowered immunity, and mortality. that cause death. Most of the countries, school feeding program is the way of helping the problem to be lessened or resolved. (Coleman 2015).

Hence, this quantitative study was contributed to filling this gap in the literature by adding and providing rich information and empirical data relevant to the condition of food insecurity and malnutrition for school-aged children in Salama Elementary School remains one of the most influential determinants of learning outcomes. Healthy and well-nourished students learn better, have a prodigious opportunity to thrive and fulfill their potential as adults, and increase their learning potential (Manasan & Cuenca, 2017).

The school feeding programs supports in providing meals at school and this helps enrolment and attendance since children were attracted to school because of meals. The role of school feeding program is to provide children with nutritional supplement, increasing access and establishing attendance in the targeted areas. The purpose of this study is to know the Management of School Based-Feeding Program (SBFP) on nutritional status of pupils in selected three municipalities of 3rd Congressional District of Cotabato. It is hoped that with this study they lessen the number of pupils who are malnourished in the selected Schools.

METHODS

Research Design

The study used a descriptive correlational research design. It is descriptive because it described the relationship between school-based feeding program nutritional status and academic performance of the pupils.

A survey questionnaire was utilized to gather data on the significant difference of the nutritional status of the pupils before and after the implementation of the school-based feeding program. In study 2, the issues and concern on the experience in the management of SBFP and IEC materials can be drawn. It was determined the relationship between the independent and dependent variables without controlling or manipulating the indicator and parameters (Curtis 2016).

A correlation is a reflection of the strengths and the direction of the relationship among the variables which can be positive or negative. In the same manner, it is ideal for gathering the data easily from the natural setting.

Locale of the Study

This study was conducted in randomly selected seven (7) schools of three (3) municipalities of 3rd congressional district such as the Municipality of Banisilan, Carmen and Kabacan. The three (3) municipalities under SDO Cotabato were the beneficiaries of School-Based Feeding Program (SBFP).

Respondent of the Study

The respondents of this study were severely wasted and wasted pupils of kinder to grade six pupils from randomly selected schools of municipalities of Banisilan, Carmen, and Kabacan North Cotabato for this school year 2023- 2024. The three municipalities under SDO Cotabato were the beneficiaries of School-Based Feeding Program (SBFP).

Sampling Procedure

The researcher used random sampling technique by 40% allocation in choosing the subjects of the severely wasted and wasted pupils. One way to undertake random sampling would be if researcher was to construct a sampling frame first and then used a random number generation computer program to pick a sample from the sampling frame (Zikmund, 2015). Complete enumeration was used for the teacher respondents. The researcher coordinated with the school principal to conduct the study and used the school files for the individual nutritional status and academic performance of the beneficiaries. Disadvantages associated with complete enumeration include (Ghauri & Gronhaug, 2015).

Research Instrument

Documentary analysis on the records of the severely wasted, wasted pupils was used in this study to determine the management of nutritional status of the pupils. The instrument was patterned and modified from Rodriguez (2015). Three parts of instruments were utilized in this study:

Part I consisted of the management of school-based program in terms of planning, monitoring, evaluation and implementation.

Part II gauged the nutritional status such as severely wasted and wasted pupils:

Part III pertained to the academic performance of the pupils for the 1st quarterly examination and 2nd quarterly examination based on their general point average. The GPA of the pupils were the basis for the academic performance which were officially requested from the Office of the Principal.

Data Collection and Procedure

As a protocol in gathering the data for the study, the researcher prepared a letter addressed to the principal requesting for permission to conduct the study.

The researcher submitted approved communication to the Office of the District Supervisor and the office of the principal.

Then, the conduct the study followed: To facilitate queries from the respondents the researcher personally conducted the survey. Immediate retrieval of the completed questionnaire was done afterwards.

Data Analysis

The statistical tools utilized in the processing of data gathered are be the following:

Mean was used to determine the level of management of school-based feeding program and academic performance of pupils. Multiple Linear Regression technique was used to determine the significant influence of school-based feeding program on the nutritional status of pupils.

RESULTS AND DISCUSSIONS

This chapter dealt with the presentation, analysis and interpretation of data gathered and the discussion of statistical findings were analyzed through percentage, frequency, mean, and multiple linear regressions to determine the level and relationship were employed to test the hypotheses of the study.

Summary of Implementation of School-Based Feeding Program in terms of Planning

Table 1 present the computed grand mean score of 4.46 indicates that overall, the planning and implementation of the SBFP is highly implemented. This is a positive finding as it suggests that the program is being implemented in a way that is consistent with the planning statements. However, it is important to continue to monitor and evaluate the program to ensure that it is achieving its intended outcomes and to identify areas for improvement (Albert, 2015).

The results of this study further suggest that the planning and implementation of the SBFP is generally well-done. The high level of implementation in most areas indicates that the program is being implemented in a way that is consistent with the planning statements. However, there are some areas that show room for improvement, particularly in the involvement of volunteer parents (Ann, 2019).

One of the key findings of this study is the importance of collaboration and partnership in the planning and implementation of the SBFP. The high level of implementation in the areas of consultation meetings and creation of a core group suggests that the involvement of various stakeholders is essential for the success of the program. This includes the participation of DepEd school administrators, feeding coordinators, health personnel, partner LGUs, NGOs, and parents (Bunday, 2016).

Another important finding is the need for continued monitoring and evaluation of the program. While the overall level of implementation is high, it is important to continue to monitor and evaluate the program to ensure that it is achieving its intended outcomes and to identify areas for improvement. This includes monitoring the nutritional status of the beneficiaries, the quality and quantity of the meals, and the satisfaction of the parents and children (Pautz, 2021).

In a certain program, planning and preparation is very essential especially to the implementing committee. It will guide to the implementing committee on how they will implement the project. In this program, financial planning is very important because it is the one factor in achieving the great success of the program (Coleman, 2015).

Food Preparation Modalities/Suggested Procurement were developed through a series of consultations participated in by DepEd school administrators, feeding coordinators and health personnel of DepEd, as well as partner LGUs and NGOs. The primary objective of having these suggested modalities is to lessen the burden of teachers and feeding coordinators in the procurement, accounting and liquidation processes (D.O #39. s. 2017).

Table 1. Implementation of school-based feeding program in terms of Planning.

A. PLANNING		Mean	Description
Statements			
1.	Inclusion of all beneficiaries who are severely wasted and wasted from kindergarten to grade six pupils.	4.84	Highly Implemented
2.	Conducting consultation meetings participated by DepEd school administrators, feeding coordinators and health personnel of DepEd, as well as partner LGUs and NGOs.	4.52	Highly Implemented
3.	Creation of SBFP Core Group among the school personnel and parents to manage and implement the program.	4.44	Highly Implemented
4.	Conducting of orientation to the parents of beneficiaries about the SBFP	4.74	Highly Implemented
5.	Involvement of volunteer parents in the preparation of meals and the feeding of children.	3.77	Highly Implemented
Grand Mean		4.46	Highly Implemented

Summary of Implementation of School-Based Feeding program in Terms of Planning

Table 2 present the computed grand mean score of 4.50 indicates a high overall level of implementation of the monitoring statements. This finding is encouraging, as it suggests that the monitoring practices of the School-Based Feeding Program are generally effective. However, it is important to note that there is still room for improvement, and efforts should be made to address the areas where the implementation is relatively lower (Manasan, 2017).

The results of this study indicate that the monitoring practices of the School-Based Feeding Program are generally effective, with a high overall level of implementation. The daily monitoring by school heads, the monthly monitoring by the SDO TWG, the monitoring of deworming tablets, and the daily monitoring of cleanliness and orderliness are all highly implemented. These findings suggest that the monitoring mechanisms are in place and are being effectively utilized to ensure the proper implementation of the feeding program (Regenade, 2015).

However, the study also identified some areas for improvement. The monitoring of learners under the 4ps program is implemented, but the score is relatively lower than the scores for the other monitoring statements. This suggests that there may be some challenges or issues in monitoring this specific group of beneficiaries, and efforts should be made to address these issues to ensure that they are receiving the appropriate level of monitoring and support (Tsegaye, 2018).

Another area for improvement is the need for more frequent and in-depth monitoring. While the daily and monthly monitoring are important, more frequent and in-depth monitoring may be necessary to identify and address any issues or challenges that may arise in a timely manner. This could include conducting surprise inspections, reviewing program data and reports, and engaging in regular communication with stakeholders (Gupta, 2019).

Finally, the study highlights the importance of capacity building and training for school heads, feeding coordinators, and district nurses. Effective monitoring requires a certain level of knowledge, skills, and expertise, and providing training and support to these stakeholders can help to improve the quality and effectiveness of the monitoring process (Kinsey, 2016).

As cited by Department of Education Order No. 39, s. 2017, progress Monitoring shall be conducted to assess the efficiency of the implementation of the program. During monitoring activities, all monitors are expected to correct practices that are not in accordance with the guidelines and provide recommendations to address problems/issues at hand which are within their function. Problems/issues needing resolution from higher authorities must be referred immediately for prompt action. Results of monitoring shall be integrated in the Terminal Report.

Table 2. Implementation of school-based feeding program in terms of **Monitoring**.

A. MONITORING	Mean	Description
Statements		
1. Conducting of daily monitoring of the feeding activities and program implementation by school heads.	4.63	Highly Implemented
2. Conducting of monthly monitoring by school Division Office Technical Working Group (SDO TWG).	4.35	Highly Implemented
3. Conducting of monitoring to learners under the Pantawid Pamilyang Pilipino Program of DSWD (4ps) that are included in the feeding program by school heads together with the feeding coordinators.	4.18	Implemented
4. Conducting of monitoring on the giving of deworming tablets to the beneficiaries by district nurse.	4.62	Highly Implemented
5. Conducting of daily monitoring of cleanliness and orderliness of the feeding area as well as the kitchen utensils by school heads.	4.70	Highly Implemented
Grand Mean	4.50	Highly Implemented

Summary of Implementation of school-based feeding program in terms of Evaluation

Table 3 presents computed grand mean score of 4.64 indicates a high level of agreement among respondents that the SBFP is being implemented effectively. This finding suggests that the program is achieving its goals of improving the nutritional status of the learners, promoting good hygiene practices, and providing them with access to nutritious meals. However, the relatively lower score for the on-time liquidation of expenses indicates that there is still room for improvement in the program's financial management (Albert, 2015).

The results of the study indicate that the SBFP is being implemented effectively, with a high level of agreement among respondents regarding its evaluation. The assessment of learners' nutritional status, the promotion of good hygiene practices, budget allocation, and fast release of the budget are all important aspects of the program's evaluation, and the high mean scores for these statements suggest that the program is being implemented in a systematic and comprehensive manner (Santos, 2020).

In a certain program, evaluation is one of the essential tasks of the program. It is because, in this process, the status of the program will be identified or determined. Whether, it has a positive or negative result to the beneficiaries and to the implementing committee. Evaluation is a process that critically examines a program. It involves collecting and analyzing information about the program's activities, characteristics, and outcomes. Its purpose is to make judgments about the program, to improve its effectiveness, and/ or to inform programming decisions. An evaluation shall be conducted during the first quarter of the succeeding year (Enclosure of DO # 39, s. 2017).

Table 3. Implementation of school-based feeding program in terms of **Evaluation.**

B. EVALUATION		Mean	Description
Statements			
1.	Conducting of weighing before and after three months of the SBFP to assess the improvement of learners' nutritional status	4.67	Highly implemented
2.	Demonstration of washing of hands before and after eating, tooth brushing, and general good grooming practices.	4.65	Highly implemented
3.	Allocating of budget per beneficiary.	4.72	Highly implemented
4.	Fast release of the allocated of budget from the DepEd.	4.71	Highly implemented
5.	On time liquidation of expenses by the school head.	4.47	Highly implemented
Grand Mean		4.64	Highly implemented

Summary of School-based Feeding Program in Terms of Implementation.

Table 4 present the computed grand mean score of 4.72 indicates a high overall level of implementation of the SBFP. This suggests that the program is being effectively implemented across all aspects, including budget management, the quality of food provided, and the consistency of the feeding schedule. The results are encouraging and indicate that the program is on track to achieve its objectives of improving the nutritional status of the pupils and enhancing their overall well-being (Kinsey, 2016).

In conclusion, the results of the study demonstrate the high level of implementation of the SBFP. The effective utilization of the budget, the provision of nutritious food and beverages, and the regularity of the feeding schedule are all essential components of a successful feeding program. The findings suggest that the program is being managed and implemented in a professional and efficient manner, with a focus on the well-being of the pupils (Briggs, 2018).

However, it is important to note that there is always room for improvement. While the results indicate a high level of implementation, there may still be areas where the program can be enhanced (Curtis, 2016).

Table 4. Implementation of school-based feeding program in terms of **Implementation.**

		Mean	Description
Statements			
1.	The intended budget well implemented	4.53	Highly Implemented
2.	The food beverage gives pupils nutritional	4.83	Highly Implemented
3.	The schedule of feeding is regularly conducted	4.79	Highly Implemented
Grand Mean		4.72	Highly Implemented

Summary of Nutritional Status of Pupils

Table 5 result shows an increase in BMI from 18.09 to 20.36, indicating a shift from an underweight to a normal weight category. This suggests an improvement in the individual's nutritional status. The increase in BMI from 18.09 to 20.36 is a positive sign, indicating that the individual has likely gained weight and improved their nutritional status. However, it is important to note that BMI is a rough estimate and does not take into account factors

such as body composition, muscle mass, and distribution of fat. Therefore, while the increase in BMI may suggest an improvement in nutritional status, it does not provide a complete picture of the individual's overall health (Bundy, 2016).

Other factors that may have contributed to the increase in BMI include changes in diet, physical activity levels, and overall lifestyle. In addition, it is important to consider the individual's age, gender, and overall health when interpreting BMI values.

In conclusion, the increase in BMI from 18.09 to 20.36 suggests an improvement in the individual's nutritional status. However, a comprehensive understanding of the individual's overall health requires considering other factors in conjunction with BMI (Pautz, 2021).

Table 5. Nutritional Status of pupils

Test	BMI	Interpretation
Before	18.09	Wasted
After	20.36	Normal

Summary of Academic Performance of Pupils

Table 6 result shows that the students' MPS scores are relatively high, indicating a good level of academic achievement. The average MPS score of 85.12 suggests that the students are performing above the average level.

In addition, the result reveals a slight improvement in the MPS scores from the first quarter to the second quarter. The increase in the MPS score from 84.18 to 85.79 indicates that the students are making progress and improving their academic performance over time (Curtis, 2016).

The relatively high MPS scores and the slight improvement from the first quarter to the second quarter suggest that the students are performing well academically and are making progress. This could be due to several factors, including effective teaching methods, student engagement, and support from parents and teachers (Florencio, 2021).

However, it is important to note that the MPS scores are just one measure of academic performance and do not provide a complete picture of the students' learning and development. Other factors, such as critical thinking skills, creativity, and problem-solving abilities, are also important aspects of academic achievement (Coleman, 2015).

Table 6. Academic Performance (MPS)

	First Quarter	Second Quarter	Average
Grades	84.18	85.79	85.12
Interpretation	Satisfactory	Very Satisfactory	Very Satisfactory

Significant Relationship between SBF, Nutritional status and Pupil Academic Performance

Table 7 results of the study Conveys that the students' academic performance as measured by the MPS is relatively high and shows a slight improvement from the first quarter to the second quarter. These findings have implications for educational practices and student support. Educators should continue to use effective teaching methods, engage students in the learning process, and provide support and feedback to help students improve their academic performance. Parents and teachers should also work together to support students' learning and development and to create a positive learning environment.

The results show that the relationships between nutritional status, academic performance, and program components are weak and not statistically significant. The Pearson correlation coefficients range from -.083 to .109, the null hypothesis was rejected, and the significance levels range from .143 to .886.

The results of the study suggest that the relationships between nutritional status, academic performance, and program components are weak and not statistically significant. This finding is consistent with previous studies that have also found weak or no relationships between these variables (Gelli, 2017).

One possible explanation for the weak relationships is that nutritional status and academic performance are influenced by many factors, and the program components may not be the most important factors. For example, other factors such as family background, socioeconomic status, and school environment may also play a crucial role in determining nutritional status and academic performance (Kumar, 2015).

In conclusion, the results further suggest that the relationships between nutritional status, academic performance, and program components are weak and not statistically significant. This finding highlights the need for further research to explore other factors that may influence nutritional status and academic performance (Ifri, 2015).

In addition, Regenade (2015), feeding programs contribute to good children's performance. She stated that in most impoverished settings, short term effects are worthwhile (food as a human right). She also stated that there is impact of education and the link between hunger and learning. She also found out that children who are hungry or chronically malnourished are less able to learn regardless of the setting.

Table 7. Relationship between school-based feeding program, nutritional status and pupils academic performance.

		Nutritional Status	1st Quarter	2nd Quarter	GPA
Planning	Pearson Correlation	-.083	.105	.101	.109
	Sig. (2-tailed)	.266	.160	.178	.143
Monitoring	Pearson Correlation	-.020	.055	.027	.058
	Sig. (2-tailed)	.790	.466	.716	.440
Evaluation	Pearson Correlation	-.041	.079	.087	.101
	Sig. (2-tailed)	.582	.290	.244	.174
Implementation	Pearson Correlation	.035	.028	.011	.037
	Sig. (2-tailed)	.643	.711	.886	.624

Significant Influence of the Implementation of School-Based Feeding Program on the Nutritional Status and Academic Performance of Pupils

Table 8 result presents the regression analysis .The constant term ($B = 3.861$, $t = 2.081$, $p = 0.039$) the null hypothesis was rejected, suggesting that the implementation of school-based feeding program significantly influence on the nutritional and academic performance of pupils, indicating that there is a baseline level of nutritional status that is not explained by the program components. However, the coefficients for the program components are not statistically significant. The coefficient for planning ($B = -0.413$, $t = -1.147$, $p = 0.253$) is negative, suggesting that better planning may be associated with a slight decrease in nutritional status. The coefficient for monitoring ($B = 0.077$, $t = 0.215$, $p = 0.830$) is positive, indicating that more monitoring may be associated with a slight increase in nutritional status. The coefficient for evaluation ($B = -0.380$, $t = -0.757$, $p = 0.450$) is negative, suggesting that more evaluation may be associated with a slight decrease in nutritional status. The coefficient for implementation ($B = 0.352$, $t = 1.095$, $p = 0.275$) is positive, indicating that better implementation may be associated with a slight increase in nutritional status.

The coefficient of determination (R^2) is 0.014, indicating that only 1.4% of the variation in nutritional status is explained by the program components. The F-test ($F = 0.645$, $p = 0.630$) is not statistically significant, suggesting that the overall model is not a good fit for the data.

The results suggest that the school-based feeding program has a minimal impact on the nutritional status of students. The low R^2 value indicates that the program components explain only a small portion of the variation in nutritional status. This may be due to several factors. First, the program may not be implemented effectively, resulting in a lack of impact on nutritional status. Second, the program may not be targeting the students who are most in need of nutritional support. Third, there may be other factors that influence nutritional status, such as family income, parental education, and access to healthy food (Adelman, 2015).

Moreover, the lack of statistical significance for the program components suggests that there is no clear relationship between the implementation of the program and nutritional status. However, the signs of the coefficients suggest that some program components may have a weak influence on nutritional status. For example, better planning may be associated with a slight decrease in nutritional status, while more monitoring and implementation may be associated with a slight increase in nutritional status. These findings are consistent with previous research that has shown that the effectiveness of the school-based feeding program depends on various factors, including the quality of the food, the frequency of feeding, and the participation of students (Santos, 2020).

In conclusion, the results of this study indicate that the school-based feeding program has a minimal impact on the nutritional status of students. The low R^2 value and the lack of statistical significance for the program components suggest that the program may not be implemented effectively or may not be targeting the students who are most in need of nutritional support (Ahmed, 2015).

The interaction between nutrition and education can be generally understood in three ways. First, nutrition and health statuses influence the child's learning and his/her performance in school. That is poor nutrition among children affects their cognitive function and hence reduces their ability to participate in learning activities at school (Agujar, 2020).

Second, children who are malnourished or who are unhealthy are unable to attend school regularly and which in turn leads to poor academic performances.

Third, hungry children encounter difficulties to concentrate and perform complex tasks than well nourish ones. Because poor children do not get the basic nutritional building blocks from birth, they will be unable to learn easily (Albert, 2015).

Table 8. Influence of the implementation of school-based feeding program on the nutritional status

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.861	1.855		2.081	.039
	Planning	-.413	.360	-.095	-1.147	.253
	Monitoring	.077	.356	.023	.215	.830
	Evaluating	-.380	.503	-.084	-.757	.450
	Implementing	.352	.322	.104	1.095	.275

$R^2 = 0.014$

$F = 0.645ns$

Prob = 0.630

Influence of the Implementation of School-based Feeding Program on the Academic Performance of Pupils During 1st Grading Period

Table 9 reflects of the regression analysis of the study. The constant term ($B = 79.676$, $t = 24.949$, $p = 0.000$) the null hypothesis was rejected, suggesting that the implementation of school-based feeding program influence on the nutritional and academic performance of pupils, indicating that there is a baseline level of academic performance that is not explained by the program components. However, the coefficients for the program components are not statistically significant. The coefficient for planning ($B = 0.718$, $t = 1.159$, $p = 0.248$) is positive, suggesting that better planning may be associated with a slight increase in academic performance. The coefficient for monitoring ($B = -0.095$, $t = -0.155$, $p = 0.877$) is negative, indicating that more monitoring may be associated with a slight decrease in academic performance. The coefficient for evaluation ($B = 0.634$, $t = 0.732$, $p = 0.465$) is positive, suggesting that more evaluation may be associated with a slight increase in academic performance. The coefficient for implementation ($B = -0.253$, $t = -0.456$, $p = 0.649$) is negative, indicating that better implementation may be associated with a slight decrease in academic performance.

The coefficient of determination (R^2) is 0.014, indicating that only 1.4% of the variation in academic performance is explained by the program components. The F-test ($F = 0.643$, $p = 0.633$) is not statistically significant, suggesting that the overall model is not a good fit for the data.

The results of the study suggest that the school-based feeding program has a minimal impact on the academic performance of pupils during the 1st grading period. The low R^2 value indicates that the program components explain only a small portion of the variation in academic performance. This may be due to several factors. First, the program may not be implemented effectively, resulting in a lack of impact on academic performance. Second, the program may not be targeting the pupils who are most in need of nutritional support. Third, there may be other factors that influence academic performance, such as family environment, parental involvement, and teaching quality (Gupta, 2020).

The lack of statistical significance for the program components suggests that there is no clear relationship between the implementation of the program and academic performance. However, the signs of the coefficients suggest that some program components may have a weak influence on academic performance.

In conclusion, the results indicate that the school-based feeding program has a minimal impact on the academic performance of pupils during the 1st grading period. The low R^2 value and the lack of statistical significance for the program components suggest that the program may not be implemented effectively or may not be targeting the pupils who are most in need of nutritional support (Andrade, 2015).

Table 9. Influence of the implementation of school-based feeding program on the academic performance of pupils during 1st grading period

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	79.676	3.194		24.949	.000
	Planning	.718	.619	.096	1.159	.248
	Monitoring	-.095	.613	-.016	-.155	.877
	Evaluating	.634	.866	.082	.732	.465
	Implementing	-.253	.554	-.043	-.456	.649

$$R^2 = 0.014$$

$$F = 0.643ns$$

$$Prob = 0.633$$

Influence of the implementation of school-based feeding program on the academic performance of pupils during 2nd grading period

Table 10, presents the regression analysis results of the study. The constant term ($B = 81.655$, $t = 28.520$, $p = 0.000$) the null hypothesis was rejected, suggesting that the implementation of school-based feeding program influence on the nutritional and academic performance of pupils during 1st quarter period, indicating that there is a baseline level of academic performance that is not explained by the program components. However, the coefficients for the program components are not statistically significant. The coefficient for planning ($B = 0.677$, $t = 1.218$, $p = 0.225$) is positive, suggesting that better planning may be associated with a slight increase in academic performance. The coefficient for monitoring ($B = -0.384$, $t = -0.699$, $p = 0.485$) is negative, indicating that more monitoring may be associated with a slight decrease in academic performance. The coefficient for evaluation ($B = 0.991$, $t = 1.277$, $p = 0.203$) is positive, suggesting that more evaluation may be associated with a slight increase in academic performance. The coefficient for implementation ($B = -0.367$, $t = -0.739$, $p = 0.461$) is negative, indicating that better implementation may be associated with a slight decrease in academic performance.

The coefficient of determination (R^2) is 0.020, indicating that only 2.0% of the variation in academic performance is explained by the program components. The F-test ($F = 0.885$, $p = 0.474$) is not statistically significant, suggesting that the overall model is not a good fit for the data.

The results of this study suggest that the school-based feeding program has a minimal impact on the academic performance of pupils during the 2nd grading period. The low R^2 value indicates that the program components explain only a small portion of the variation in academic performance. This may be due to several factors. First, the program may not be implemented effectively, resulting in a lack of impact on academic performance. Second, the program may not be targeting the pupils who are most in need of nutritional support. Third, there may be other factors that influence academic performance, such as family environment, parental involvement, and teaching quality (Coleman, 2015).

The lack of statistical significance for the program components suggests that there is no clear relationship between the implementation of the program and academic performance. However, the signs of the coefficients suggest that some program components may have a weak influence on academic performance (Curtis, 2016).

In conclusion, the results of the study indicate that the school-based feeding program has a minimal impact on the academic performance of pupils during the 2nd grading period. The low R^2 value and the non-significant F-test suggest that the program may not be implemented effectively or may not be targeting the pupils who are most in need of nutritional support. Future research should focus on identifying the factors that influence the effectiveness of the program and developing strategies to improve its implementation. Additionally, policymakers should consider providing additional resources and support to schools to ensure that the program is implemented effectively and that pupils receive the nutritional support they need (Pautz, 2021).

There is evidence to show that school feeding program increase children's educational achievement so as to improve their potential future productivity and earnings, alleviate short term hunger which improves children's cognitive functioning and attention span, improves nutritional status of children by providing them calories and nutrients in addition to their regular diet, enhance enrollment in school and better educational outcome. These lead to better health and better resistance to infectious diseases and illnesses that would keep children from attending school (Alderman, Hoddinott & Kinsey, 2016).

Table 10. Influence of the implementation of school-based feeding program on the academic performance of pupils during 2nd grading period

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	81.655	2.863		28.520	.000
Planning	.677	.555	.100	1.218	.225
Monitoring	-.384	.549	-.073	-.699	.485
Evaluating	.991	.776	.142	1.277	.203
Implementing	-.367	.496	-.070	-.739	.461

$$R^2 = 0.020$$

$$F = 0.885ns$$

$$Prob = 0.474$$

Table 11, reveals regression analysis results portrays the constant term ($B = 80.203$, $t = 26.727$, $p = 0.000$) the null hypothesis was rejected, suggesting that the implementation of school-based feeding program influence on the nutritional and academic performance of pupils during 2nd quarter period, indicating that there is a baseline level of academic performance that is not explained by the program components. However, the coefficients for the program components are not statistically significant. The coefficient for planning ($B = 0.676$, $t = 1.162$, $p = 0.247$) is positive, suggesting that better planning may be associated with a slight increase in academic performance. The coefficient for monitoring ($B = -0.206$, $t = -0.357$, $p = 0.721$) is negative, indicating that more monitoring may be associated with a slight decrease in academic performance. The coefficient for evaluation ($B = 0.880$, $t = 1.082$, $p = 0.281$) is positive, suggesting that more evaluation may be associated with a slight increase in academic performance. The coefficient for implementation ($B = -0.259$, $t = -0.497$, $p = 0.620$) is negative, indicating that better implementation may be associated with a slight decrease in academic performance.

The coefficient of determination (R^2) is 0.019, indicating that only 1.9% of the variation in pupils' GPA is explained by the program components. The F-test ($F = 0.842$, $p = 0.500$) is not statistically significant, suggesting that the overall model is not a good fit for the data.

Moreover, the results of the study suggest that the school-based feeding program has a minimal impact on the academic performance of pupils as measured by GPA. The low R^2 value indicates that the program components explain only a small portion of the variation in pupils' GPA. This may be due to several factors. First, the program may not be implemented effectively, resulting in a lack of impact on academic performance. Second, the program may not be targeting the pupils who are most in need of nutritional support. Third, there may be other factors that influence academic performance, such as family environment, parental involvement, and teaching quality.

Furthermore, the lack of statistical significance for the program components suggests that there is no clear relationship between the implementation of the program and pupils' academic performance. However, the signs of the coefficients suggest that some program components may have a weak influence on academic performance.

In conclusion, the results of the study indicate that the school-based feeding program has a minimal influence on the academic performance of pupils as measured by GPA. The low R^2 value and the non-significant F-test suggest that the program may not be implemented effectively or may not be targeting the pupils who are most in need of nutritional support.

One of the programs that the Philippines had implemented to mitigate and improve the academic performance of the students along with their attendance is through school feeding program. The focus of the Department of Education which is the chief implementer of the school feeding programs is to deal with under nutrition or malnourished student which is very common among Filipino school-age children. In 2012, for instance, the Nutrition Status Report of DepEd identified more than half a million severely wasted children enrolled in the country's public elementary schools (Albert, 2015).

Table 11. Influence of the implementation of school-based feeding program on the Academic Performance of Pupils by GPA.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	80.203	3.001		26.727	.000
Planning	.676	.582	.096	1.162	.247
Monitoring	-.206	.576	-.037	-.357	.721
Evaluating	.880	.813	.120	1.082	.281
Implementing	-.259	.520	-.047	-.497	.620

$R^2 = 0.019$

$F = 0.842_{ns}$

Prob = 0.50

Significant Difference of Nutritional Status of Pupils Before and After the Implementation of SBFP.

Table 12 The results of the study are presented in the table. The mean BMI of pupils before the implementation of the SBFP was 18.09, with a standard deviation of 2.27. The mean BMI of pupils after the implementation of the SBFP was 20.36, with a standard deviation of [SD]. The mean difference in BMI between the pre-test and post-test was 1.57, with a t-value of 23.722 and a p-value of 0.000.

The results indicate a highly significant increase in the mean BMI of pupils after the implementation of the SBFP. This suggests that the program has a positive impact on the nutritional status of pupils. The increase in BMI may be due to several factors, including the provision of free meals, the improvement in the quality of the meals, and the increase in the frequency of meals.

The provision of free meals through the SBFP may have increased the energy intake of pupils, which may have led to an increase in BMI. The improvement in the quality of the meals may have also contributed to the increase in BMI, as the meals may have been more nutritious and balanced. The increase in the frequency of meals may have also played a role, as pupils may have been less likely to skip meals or to eat unhealthy snacks (Jomaa, 2017).

In addition to the increase in BMI, the SBFP may also have had other positive impacts on the nutritional status of pupils. However, it is important to note that the increase in BMI may not necessarily be a positive outcome. While a healthy BMI is important for overall health, an excessive increase in BMI may lead to obesity and other health problems. Therefore, it is important to monitor the BMI of pupils and to ensure that the SBFP is implemented in a way that promotes healthy eating habits and physical activity (Kumar, 2015).

The results of the study indicate a highly significant increase in the mean BMI of pupils after the implementation of the SBFP. This suggests that the program has a positive impact on the nutritional status of pupils. However, it is important to monitor the BMI of pupils and to ensure that the SBFP is implemented in a way that promotes healthy eating habits and physical activity (Ifri, 2015).

Feeding begins during programmed when the expectant mother eats sufficient proteins, fresh fruits, carbohydrates and vegetables to supply enough nourishment for her and the developing fetus. There is evidence that early quality care improved brain size, complexity and show increase in dendrite, breathing, growth in support gland cells and capillaries (Michael and Moore 2015).

Table 12. Significant difference of nutritional status of pupils Before and After the implementation of SBFP.

Test	BMI	Mean Difference	SD	T	Sig
Before	18.09	2.27 ^a	1.57	23.722**	0.000
After ^a	20.36				

** Highly significant

Correlation pathway derived from the study

There is no correlation pathway that can be drawn due to insignificant correlation of SBFP with nutritional status and academic performance of the pupils.

Conclusions

Based on the findings of this study, managing a School-Based Feeding Program involves addressing various logistical, financial, nutritional, and social challenges. Effective management requires proper planning, adequate resources, community involvement, transparency, and continuous monitoring and evaluation to ensure that the program delivers its intended benefits for students' health, well-being, and academic success. Addressing these concerns is crucial for ensuring that these programs can provide reliable and consistent nutrition to students.

School stakeholders ensure that the program is conducted successfully. The nutritional status of pupils had greatly improved after the program. The school feeding program was not the sole determinant of pupils' academic performance. However, the malnutrition of pupils had greatly affected their academic performance

REFERENCES

- Abraham Maslow (1943). Hierachy of Needs-Psychology comprising a five-tier model of human needs, often depicted as hierarchical levels within pyramid.
- Adelman, Gilligan And Lehrer (2015). How effective are foods for Education programs? A critical assessment of the evidence from developing countries.
- Adolphus, K., Lawton, C. L., Champ, C. L., & Dye, L. (2016). The effects of breakfast and breakfast composition on cognition in children and adolescents: A systematic review. *Advances in Nutrition*, 7(3), 590S-612S.
- Agujar, D., Villanueva, W. (2020). School-based feeding program in Culiati high school and its impact on nutritional status and academic performance of the severely wasted students: basis for developing a multi-ways feeding program. *European Journal of Humanities and Educational Advancements*, 1(4), 21-32.
- Ahmed 2015; Gelli, Mier, Espojo School Feeding Programs and Development: Are We Framing the Question Correctly?
- Albert, J. R. G, A. L. Tabunda, I. Angeles-Agdeppa. 2015. Feeding Severely
- Wasted Children in School: Examining Processes in DepED's School Feeding Pro-gram. PIDS Policy Note. Makati City: Philippine Institute for Development Studies.

- Ali (2016). impact of School Feeding Programs on Nutritional and Agricultural Development Goals: A Systematic Review of Literature. Retrieved from: www.ageconsearch.umn.edu/JRDO-Journal of Educational Research ISSN: 2456-2947 Volume-5 |
- Alderman, Hodinott and Kinsey (2016) Long Term Consequences of Early Childhood Malnutrition. Oxford Economic Papers, 2006 vol. 58, issue 3, 450-474
- Andrade, 2015 Omega-3-Fortified Lipid-Based Nutrient Supplement ... – SAGE Journals [journals.sagepub.com /doi/abs/10.1177/0379572117701234](https://journals.sagepub.com/doi/abs/10.1177/0379572117701234)
- Ann, (2019). Child Development. New York: Longman Publisher Behrman, R. (2017). Children with access to improved sanitation but not improved water are at lower risk of stunting compared to children without access
- Briggs, B. (2018). School Feeding Programmed: Summary of Best. Literature and Best Practices, Village Hope Technical Report 6. Pp 1- 3
- Brown, S. (2015). Children Feeding Programme. Harvard: Stanford Publisher
- Bundy (2016). School Feeding and Girls' Enrollment: The Effects of Alternative Implementation Modalities in Low income Setting in Sub-Saharan Africa.
- Chinyoka, K. (2016). Impact of poor nutrition on the academic performance of grade seven learners: a case of Zimbabwe. International Journal of Learning & Development, 4(3).
- Coleman (2015). Educational and Child Labor impacts of Two Food for Education Schemes: Evidence from a Randomized Trial in Rural Burkina Faso
- Curtis : (2016). An Assessment On Influence of School Feeding Program on pupils' enrollment, Attendance and academic Performance In Primary Schools in Njombe District, Tanzania
- DepEd Order No. 23, (2020). Operational Guidelines on the Implementation of School-Based Feeding Program for School Year 2020-2021.
- DepEd Order 33, s. (2015). [deped.gov.ph/2015/do-33-s-2015-Feeding program](http://deped.gov.ph/2015/do-33-s-2015-Feeding%20program)
- DepEd Order No.39, S. 2017- Operational Guidelines on the Implementation of School Based Feeding Program for School Year 2017-2022
- Florencio, (2021). Developments and variations in school-based feeding programs around the world. Nutrition Today, 36(1), 29-36.
- Fritzie Rodriguez, (2015) School Feeding Programs for Filipino Kids. Published MAED Thesis.
- Gelli, A. (2017), Food For Education Works: A Review Of WFP, Global School Feeding Report, FFE Programme, Monitoring And Evaluation 2017;
- Gonzales-Casanova , I. (2018). Impact of school feeding programs on educational, nutritional, and agricultural development goals: A systematic review of benefits and potential pitfalls. Current Developments in Nutrition, 2(9), nzy075.
- Ghauri, P. N., & Gronhaug, K. (2015). Research Methods in Business Studies: A Practical Guide. London: Pearson Education.
- Gupta, M. (2020). Learning in times of lockdown: how Covid-19 is Affecting education and food security in India. Food security, 12(4), 793-796.
- <https://www.bing.com/images/search?q=single%20map%20of%20banisilannorth>
- <https://www.bing.com/images/search?q=single%20map%20of%20carmen>
- <https://www.bing.com/images/search?q=single%20map%20of%20kabacan>
- Ifri (2015). Importance of women Status for Children Nutrition in Developing countries. Washington, DC: IFRI
- Jose Ramon, Albert (2016). The Effect of dietary pattern and body mass index on the academic performance of in-school adolescents. International Education Studies, 5(6), 65-72.
- Jomaa (2017 p.84) School feeding programs in developing countries: impacts on children's health and educational outcomes.
- Kazianga, De Walque 2016, Educational and Child Labour Impacts of Two Food-for-Education Schemes: Evidence <https://scholar.google.com/scholar?oe=utf-8&rls=org.mozilla:en->
- Kinsey (2016). Long Term Consequences of Early Childhood Malnutrition.
- Kumar 2015. The nutritional status of school-aged children: why should we care? Food and Nutrition Sciences, 6(07), 675.
- K.I.E, (2015). Food Nutrition Module for Training ECE teachers and Caregivers. Nairobi: K. I. E.
- Maijo, N. (2018). Impact of school feeding programme on learners' academic performance in Mlunduzi ward, Tanzania. International journal of educational studies, 5(3), 125-130.

- Manasan and Cuenca (2017). *Conquering Poverty: Funding Requirements, Issues And Challenges*. Policybrief PB-08-07. Pasay City:
- Martin, D., & Pihnuton, G. (2019). The Impact of School-Based Feeding Program in the District of Cabarroguis. *Ascendens Asia Journal of Multidisciplinary Research Abstracts*, 3(2J).
- Meyer (2015). impact of school feeding programs on educational...AgEconSearch.<https://ageconsearch.umn.edu/bitstream/14266/2/2012LawsonPlanB.pdf>
- Mbusi, N.P. 2015. School feeding programme "Gone Horribly Wrong".
- Michle and Moore (2015). Evaluation of schoolfeeding program. Baltimore MO. Catholic Relief services.
- Mcgregor SM, Ani C (2015). A review of studies on the effect of iron deficiency on cognitive development in children.
- Nutritional Status." A dictionary of Food Nutrition..Encyclopedia.com. 25 Jan. 2018 and SRIVASTAVA, A., MAHMOOD, S.,
- Osei, A. K., Pandey, P., Nielsen, J., Sarpong, D., & Adamba, C. (2019). School feeding programs in developing countries: impacts on children's health, education, and productivity. *Journal of Development Effectiveness*, 11(1), 1-41.
- Pautz, H. (2021). Food insecurity in times of COVID-19—An Insight into a Deepening Crisis. UWS-Oxfam Partnership: Scotland, UK.
- Penny, E. (2017). Children with access to improved sanitation but not improved water are at lower risk of stunting compared to children without access: cohort study in Ethiopia, India, Peru, and Vietnam. *BMC Public Health*, 17(1), 1-19.
- Regenade (2015). School Health And Nutrition Programme Update. Newsletter.
- Rivera (2017). Developments and variations in school-based feeding programs around the world.
- Santos, R. (2020). School-based feeding program in Culiati high school and its impact on nutritional status and academic performance of the severely wasted students: basis for developing a multi-ways feeding program.
- Senate Economic Planning Office. 2017. *Conquering Poverty: Funding Requirements, Issues And Challenges*. Policybrief PB-08-07. Pasay City: SEPO. [Http://www.senate.gov.ph/publications](http://www.senate.gov.ph/publications).
- Srivasta, P., Shrotriya, V and Kumar, B. (2015). . Nutritional Status of School- Age Children - A Scenario Of Urban Slums In India. *Archives Of Public Health*, [Online] 70(1). Available At: <https://archpublichealth.biomedcentral.com/articles/10.1186/0778-7367-70-8>.
- Tabunda, L., Albert G., & Angeles-Agdeppa, I. (2016). Results of an impact evaluation study on DepED's School-Based Feeding Program (No. 2016-05).
- Terrazola, 2017.....feeding program>>Manila Bulletin Newsnews.mb.com. ph/feeding program
- Tinto, V. (1977). Classrooms as communities: Exploring the educational character of student persistence. *The Journal of Higher Education*, 68(6), 599–623.
- Tsegaye., 2018; Vizcocho, (2022). Problems encountered by school-based feeding program beneficiaries and their academic performance. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(4), 597-612.
- UN, (2015) The Millennium Development Goals Report 2005 the United Nations <https://unstats.un.org/unsd/mi/pdf/MDG%20Book.pdf>
- Wanjohi, A.M. (2016). Factors affecting the sustainability of school feeding programme in Magadi Zone, Kajiado County
- WFP WORLD FOOD PROGRAMME (2015). School Lunch Programme From [Http://12,000](http://12,000)
- WFP.WORLD FOOD PROGRAMME (2016), Country Programme, United Republic Of Tanzania.
- Zikmund, (2015). In the present study, the choice of an appropriate sampling frame is based on the criteria suggested by Rice (1997)