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Operational Practices of School Program: An Evaluation to the Implementation of School-Based Feeding Program

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ABSTRACT

This study aims to evaluate the School-Based Feeding Program (SBFP) and its impact on schools at Raposo Elementary School, Candelaria district, division of Zambales. The Input-Process-Output framework, questionnaire, informal interview, and observation were used as means of gathering data. The principal, entire teachers, feeding recipients from grade 3 to grade 6, and their parents were chosen to be respondents, thus, a purposive sampling technique was used. Using the descriptive-survey design, data gathered from a total of 54 respondents revealed that SBFP has an excellent impact on key indicators of school performance. It is also found out that this program alleviates short-term hunger and improves the nutritional status of learners. But it could be inferred that the positive attitude of parents towards the schooling of their child is the least attributed effect of SBFP. Thus, there is a need to strengthen parental involvement in organizing and implementing the SBFP and to revamp the policy framework detailing the management of the program. Therefore, as an output of this study, the proposed comprehensive school improvement plan of SBFP was designed to increase its beneficial effect and healthier operational practices.

INTRODUCTION

The burdens of hunger, malnutrition and ill-health of school-age children are major constraints in achieving the Education for All and the Millennium Development Goals (MDGs) on education (Bundy, 2012). Poor nutrition and health among schoolchildren contributes to the inefficiency of the educational system (Pollitt, 2009). Children with diminished cognitive abilities naturally perform less well and are more likely to repeat grades and to drop out of school; they also enroll in school at a later age, if at all, and finish fewer years of schooling (Jukes, Drake, and Bundy 2007). The irregular school attendance of malnourished and unhealthy children is one of the key factors in poor performance. Even short-term hunger, common in children who are not fed before going to school, can have an adverse effect on learning (Pollitt, Cueto, and Jacoby 1998). Children who are hungry have more difficulty in concentrating and performing complex tasks (Grantham-McGregor, Chang, and Walker 1998). In 2006, monitoring data from the World Food Program (WFP) school feeding programs showed that in newly-assisted schools 63% of pupils on average do not have any food before going to school (WFP, 2007).

The global food, fuel, and financial crises have given new prominence to school feeding as a potential safety net and as a social support measure that helps keep children in school. The School Feeding program provides an explicit or implicit transfer to households and can increase school attendance, cognition, and educational achievement, particularly if supported by complementary actions such as deworming and food fortification. In many cases, these programs may be used to specifically benefit the

poorest and most vulnerable children. Well-designed school feeding programs can provide nutritional benefits and should complement and not compete with nutrition programs for younger children, which remain a clear priority for targeting malnutrition overall. Such programs will help countries achieve the Education for All Goals.

In pursuant to Deped Order No. 39, s.2017 known as operational guidelines on the implementation of school-based feeding program for school years 2017-2022 and Deped Order No. 018 s.2019 known as Supplemental Guidelines on the Implementation of School-Based Feeding Program for Fiscal Year 2019, the Department of Education, through the Bureau of Learners Support Services- School Health Division (BLSS-SHD) shall implement the School-Based Feeding Program (SBFP) to address malnutrition among public school children. SBFP covers all Severely Wasted (SW) and Wasted (W) kindergarten to grade 6 pupils. The program primarily aims to improve nutritional status of the beneficiaries by at least 70% at the end of 120 feeding days. Secondly, it aims to increase classroom attendance and school performance of target beneficiaries by 85% to 100% and encourage learners to go to school every day.

Feeding program is guided by the theory of Maslow's Hierarchy of Needs (Maslow, 1943) that is widely referred to in educational circles. In this theory, Abraham Maslow suggested that before individuals meet their full potential, they need to satisfy a series of needs. It's important to note that Maslow based his theory more on philosophy than on scientific evidence. However, Maslow's Hierarchy of Needs can provide teachers a reminder and framework that our students are less likely to perform at their full

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potential if their basic needs are unmet. From the bottom of the hierarchy upwards, the needs are: physiological, safety, love and belonging, esteem, and self-actualization. Are any students entering the classroom without their Physiological needs met? Are these students getting all of their basic physical needs? These basic needs include food, water, sleep, oxygen, and warmth. If all students have met these needs, they can successfully proceed to the next stage.

To support students' physiological needs, teachers should ensure that all students have access to water in their rooms. Water bottles are a simple solution and research shows the many benefits of hydrated students. Also, have nutritious foods available. Foods with slow-burning complex carbohydrates (such as granola bars) can help students sustain energy levels throughout the morning or afternoon. The significance of learners' physiological needs leads to the decision of the Department of Education (DepEd) to implement the School-Based Feeding Program.

School Feeding Programs (SFPs) are considered to be a sound investment in education. There is evidence that SFPs increase school enrollment (Ahmed, 2004; Gelli, Meir, and Espejo, 2007), cognition (Whaley et al., 2003; kristjansson et al., 2007; Jukes et. Al., 2008) and educational achievement (Tan, Lane, and Lassibille 1999; Ahmed, 2004; Adelman et. Al., 2008), particularly if supported by complementary actions (Simeon, Grantham-McGregor, and Wong, 1995; Van Stuijvenberg et. Al., 1999; Jukes et. Al., 2002).

The study attempted to evaluate the School- Based Feeding Program (SBFP) at Taposo Elementary School, Candelaria district, division of Zambales during the school year 2019-2020. Specifically, this study is intended to investigate the impacts of SBFP among students, parents, teachers, and the overall impact of the program in school, what are the perspectives of school principal and school feeding coordinator in terms of difficulties encountered, satisfaction, and needed improvements, and eventually, this will lead to the proposed plan to improve School-Based Feeding Program.

The study is anchored on the assumption that the respondents are truthful and objective in expressing the impact of SBFP in different perspectives that will be used as the basis for the proposed comprehensive school improvement plan in SBFP. Moreover, the respondents' responses to the questionnaire are reliable bases in measuring the impact of the said program.

The research is limited to analyzing the impacts of SBFP on improving students' performance in school, students' healthy lifestyle, positive attitude of parents towards the schooling of their child, improving key indicators of school performance and the overall operation of SBFP among grade 3 to grade 6 feeding recipients. And these school age children are those from 8-12 year of age.

Although the impacts of SBFP are studied in various ways, such as the impacts on nutrition, cognitive development, learning achievement, agricultural production, and so on,

yet these aspects are beyond the scope of this research and hence are not covered here. In terms of geography, the study has been conducted in Taposo Elementary School one of the schools in Candelaria district, division of Zambales.

The delimitation of this study is that it was conducted on small sample and hence this limits the ability of the findings to be generalized. Likewise, the study gathered data only from grade 3 to grade 6 feeding beneficiaries and their parents and thus it is difficult to represent the results of the study to lower grade levels.

METHODOLOGY

In facilitating the gathering of data, methods were planned depending on the purpose and scope for which the study was undertaken. Descriptive type of research was utilized in the study. Descriptive- survey research method was utilized to gather pertinent data from the respondents through a validated and reliable instrument with the sole purpose of identifying the impact of SBFP to school. After respondents answer the questions, researchers describe the responses given. In order for the survey to be both reliable and valid, it is important that the questions are constructed properly. Questions should be written in a clear and easy to understand sentences (Cumming et. Al., 1989). Answers to the survey were confirmed and enriched through informal interviews.

All grade 3 to grade 6 feeding beneficiaries and their parents, the entire teaching personnel and the school principal in Taposo Elementary School, Candelaria district, division of Zambales during the school year 2019- 2020 were taken as respondents in this study. Thus, purposive sampling technique was utilized.

This study involves the participation student-respondents (43%), parent-respondents (43%), teacher-respondents (11%), and School head and School Feeding coordinator-respondents (3%). In total, there are 54 respondents who were actively participated along the process of this study. The survey- questionnaire was utilized as main instrument used in gathering data in this study. It is subdivided into six parts of investigation and the respondents were asked to rate the statements under the following variables using rating scale.

Part I and II are intended for student-respondents that dealt with impact on improving students' performance in school and improving students' healthy lifestyle. Part III is designed for parent- respondents that determine their positive attitude towards the schooling of their child. Part IV is for teacher- respondents to identify the impact on improving key indicators of school performance. Part V is for the entire respondents to reveal the assessment of the overall operation of SBFP. And the last part is to be answered by the school principal and feeding coordinator, describing their insights on the difficulties encountered satisfaction with the program and plans for improvements.

The first draft of the questionnaire was shown to his professor in Advanced Test, Measurement and Program

evaluation subject. Suggestions for improvement of the instrument were properly considered. The improved draft was submitted to a dry-run test to Bani Elementary School, district of Masinloc, and the nearby district of Candelaria. This school is not included in the study. The purpose of the pilot testing of the questionnaire was to improve some items included in the instrument. Based on the result of the dry run, the questionnaire was clearly understood and accepted. The improved instrument was submitted to the professor for correction, comments, and suggestions. Upon approval, the final form was reproduced and administered to all respondents.

The researcher sought permission from the school principal of Taposo Elementary School to authorize the distribution of the questionnaire to the respondents. With the approval of the proper authority, copies of questionnaire were distributed and retrieved to the target respondents. All data gathered by the instrument were tallied, tabulated, analyzed and interpreted accordingly using Likert Scale, Percentage, and Weighted Mean.

To complete the study with appropriate research guidelines, research ethics is very important. In considering ethical aspect of research, enough time is given to the respondents of the study so that they can depict their true view on research questions. Primary and secondary data are used in this study. Consent from the respondents was taken and appropriate permission is ensured for usage of their given data. Confidentiality of the responses is maintained strictly to ensure privacy of their data. The disclosure of respondent identity is based on their permission where they are not willing so it is not exhibited. Beyond that fact, usage of any secondary data from any source is acknowledged with appropriate reference. Hence, the ethical aspect of research will be followed very strictly in this research.

RESULTS AND DISCUSSION

This part presents, analyzes and interprets the different data gathered from the respondents with the use of questionnaire.

Impact of SBFP

There are five identified impacts of SBFP to school, namely students' performance in school; students' healthy lifestyle; positive attitude of parents towards schooling of their child; key indicators of school performance; and the overall operation of the program.

Improving Students' Performance in School

The results in Table 1 exposed that the school feeding program had shown a fair impact on learner's performance having an average weighted mean of 2.33. The analysis indicates that the school feeding program had slightly increased examination performance, but in particular, it helped to get learners into school.

There are several direct effects that involve the immediate impact of nutrition on the daily performance of a student. Mental and behavioral problems can be traced back to unhealthy nutrition and poor eating habits. Scientists have also established a link between student behavior and

nutrition. Access to proper nutrition can help students maintain psychosocial well-being and reduce aggression. This can have a positive effect on students by avoiding discipline and school suspension.

Table 1. Impact on Improving Students' Performance in School

Statements	Wm	Dr
1. Motivates students to go to/ stay in school	2.70	E
2.Improves learning and cognition	2.26	F
3. Improves grades	2.30	F
4.Improves participation in class discussion	1.57	F
5.Develops positive attitude towards learning	2.52	E
6.Improves concentration in school	2.61	E
Average Weighted Mean	2.33	F

Impact on Improving Students' Healthy Lifestyle

It is very evident in Table 2 that SBFP has fairly promoted healthy lifestyle to students, but it is close to excellent having an average weighted mean of 2.49. SBFP targets normal growth and development of feeding recipients and reduce the risk of diet-related diseases by early shaping of adequate dietary and lifestyle behaviors.

Table 2. Improving Students' Healthy Lifestyle

Statements	Wm	Dr
1. Develops healthy life habits (diet)	2.39	F
2. Relieve short-term hunger	2.83	E
3. Increases pupils' energy intake	2.96	E
4. Reduces frequency of illness	2.57	E
5. Improves body mass index (BMI)	1.70	F
Average Weighted Mean	2.49	F

Feeding program has an important target and has the potential to improve the dietary habits and lifestyle of students while reducing incidences of obesity-related non-communicable diseases throughout the whole lifespan.

Positive Attitude of Parents towards the Schooling of their Child

Table 3 shows that the positive attitude of parents towards the schooling of their child is fairly influenced by SBFP with an average weighted mean of 2.07. Upon looking at the weighted mean of each statement, no one reached an excellent judgment by the parent- respondents.

Table 3. Positive Attitude of Parents towards the Schooling of their Child

Statements	Wm	Dr
1. Motivates parents/guardians to send/keep child to school	2.13	F
2.. Changes parents' attitude regarding schooling	2.17	F
3. Burden off of parents' and guardians' shoulders	2.39	F
4. Increases involvement and participation in school programs	1.57	F
5. Increases awareness in holistic/total development of child	2.09	F
Average Weighted Mean	2.07	F

The study recommends that the practice of school-based feeding program is difficult interventions; it can be with advantages if the policy makers and implementers can benefit from a careful examination of the program by involving local communities than depending on the allocated budget so as to ensure sustainability of the program.

Improving Key Indicators of School Performance

It is noticeable in Table 4 that SBFP has an excellent impact on the improvement of key indicators of school performance, such as attendance, drop-out, enrollment, promotion and completion that has an average weighted mean of 2.53. This impact is indeed observed by teachers.

Table 4. Improving Key Indicators of School Performance

Statements	Wm	Dr
1. Reduces absenteeism	2.50	E
2. Reduces drop-out	2.50	E
3. Increases enrollment	2.67	E
4. Increases promotion and completion	2.83	E
5. Improves MPS in all learning areas	2.17	F
Average Weighted Mean	2.53	E

There is also evidence to suggest that diets with high amounts of Trans fat and saturated fats can have a negative impact on cognition. This will harm the ability of students to learn at a pace necessary for school success.

Overall Operation of SBFP

Based on the experience of the entire respondents, the desirable practices of the overall operation of SBFP are sometimes observed with an average weighted mean of 2.22 as shown in table 5.

Table 5. Improving Key Indicators of School Performance

Statements	Wm	Dr
1. Possesses a complete cooking equipment and storage at school	2.31	S
2. Performs immediate distribution of foods on time and regularly	2.54	A
3. Provides enough amount/servings of foods	2.57	A
4. Provides a variety of nutritious/ healthy foods	2.93	A
5. Improves MPS in all learning areas	1.91	S
6. Engages networking with parents and external stakeholders	1.46	N
7. Fund is properly allocated	2.31	S
8. Transparency of budget, planning, and allocation processes are well-communicated	2.17	S
9. Distributes hygiene kit to feeding program recipients.	1.98	S
10. Allocates iron folic supplements to all feeding program beneficiaries (tablet or syrup)	2.06	S
Average Weighted Mean	2.22	S

Feeding equipment in school is inadequate to sustain the desired operational practices of the program. MPS in all learning areas has a minor increase. SBFP never encouraged parents and stakeholders to come and participate in school programs. This area should be one of the focuses for improvement. Transparency of budget allocation, distribution of hygiene kit and iron supplement is sometimes observed in this school. There should be a proper communication between the school and its stakeholders or other concerned person. In contrary, immediate distribution of nutritious foods with enough amount of serving is always observed during the implementation of SBFP.

Perspective of Administrators

The school principal and school feeding coordinator provided their perspectives on SBFP to the researcher based on what they have experienced and observed.

Difficulties encountered during the implementation of SBFP

There were problems encountered in the implementation of SBFP, such as the inability of helper or parents to attend regularly in the preparation of food, additional work in bringing commodities, marketing, and the beneficiaries who dislike vegetables.

Satisfaction

The school was satisfied with the outcome of SBFP to the extent that it reduces hunger to pupils belong to a marginalized family. In addition to that, their nutritional status was improved. The program promoted good health, as well as to reduce inequities by encouraging families to send their children to school given the incentive provided by the school feeding program.

Improvements Needed

Upon the implementation of the program, it was observed that there is a need to re-examine program cost per beneficiary. There should also have a strong policy obliging the parents to have a regular schedule of coming to school and help in the preparation and distribution of foods.

CONCLUSION

It is found that improving students' performance in school, improving students' healthy lifestyle, positive attitude of parents towards the schooling of their child and the overall operation of SBFP in school are all, on average, or fairly observed, being positive attitude of parents towards the schooling of their child was the least observed among other impacts. But it could be inferred that improving key indicators of school performance is attributed to the excellent effect of the SBFP. It is concluded that the school agreed on the positive effect of the program in alleviating short-term hunger in school and uplifting the nutritional status of beneficiaries. On the other side, the findings showed that, whilst the program has increased key indicators of school performance, the major impediment to the implementation of SBFP is the parental involvement. It is observed that the existing program presents less incentive to attract parents to

engage networking and involvement in school program. One possible reason for this is that parents in this locale actively contribute towards their households' livelihood by generating income or taking care of household chores. Thus there is unwillingness on the part of parents to come to school because of some obligations in the family. Nevertheless, such generalization could be inconclusive given limited data set and smaller sample size. Moreover, the study shows that the challenges facing the implementation of SBFP are diverse. The deficiencies of policy formulation and implementation emerged as the major source of challenges facing the implementation of the community. Of great importance also is the role played by the school and its stakeholders that the program is well- managed.

Recommendations

Because School-Based Feeding Program by itself cannot enhance students' performance; it is also of paramount importance to increase the teaching quality through hiring adequate and qualified teachers as well as improving school infrastructures and ensuring sufficient learning materials. It is important to strengthen the community participation in organizing and implementing SBFP. This is because community assisted schools offer certain advantages such as increasing the contact, and hence communication between parents and teachers, officials and others; giving parents the opportunity to become more aware of what goes on at schools; and serving to raise the value of education/the school for parents and the whole community. The need to revamp the policy framework detailing the management of SBFP. Additional budget allocation is also needed in this program, but if this cannot be augmented by the government, the school shall extend networking to its stakeholders for supplementary resources. The study shows that school meals are provided during lunch break of the school, and thus children who travel long distances to reach school remain hungry during the first half of the school day. Program managers and policy makers should, therefore, consider the possibility of delivering meals early in the day before lesson begins. Such adjustment also makes children concentrate during the entire school period. Likewise, the prospect of implementing take home foods in addition to school meals should also be assessed to reach some member of households and increase the benefit of school participation. Therefore, this study proposes to design and initiate a comprehensive school improvement plan to increase the beneficial impact of school-based feeding program.

REFERENCES

Ahmed, A. U. (2004). Impact of feeding children in school: Evidence from Bangladesh. *International Food Policy Research Institute*.

Alderman, H., & Bundy, D. (2012). School feeding programs and development: Are we framing the question correctly? *World Bank Research Observer*. <https://doi.org/10.1093/wbro/lkr005>

Cumming, A., Bereiter, C., & Scardamalia, M. (1989). The Psychology of Written Composition. *The Modern Language Journal*. <https://doi.org/10.2307/327270>

Gelli, A., Meir, U., & Espejo, F. (2007). Does provision of food in school increase girls' enrollment? Evidence from schools in sub-Saharan Africa. *Food and Nutrition Bulletin*. <https://doi.org/10.1177/156482650702800203>

Grantham-McGregor, S. M., Chang, S., & Walker, S. P. (1998). Evaluation of school feeding programs: Some Jamaican examples. *American Journal of Clinical Nutrition*. <https://doi.org/10.1093/ajcn/67.4.785S>

Jukes, M. C. H., Drake, L. J., & Bundy, D. A. P. (2007). School health, nutrition and education for all: Levelling the playing field. In *School Health, Nutrition and Education for all: Levelling the Playing Field*. <https://doi.org/10.2471/blt.08.059519>

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*. <https://doi.org/10.1037/h0054346>

Micronutrient fortification: WFP experiences and ways forward. (2006). *Food and Nutrition Bulletin*. <https://doi.org/10.1177/156482650602700110>

Pantuliano, S. (2007). From food aid to livelihoods support: Rethinking the role of WFP in eastern Sudan. *Disasters*. <https://doi.org/10.1111/j.1467-7717.2007.00350.x>

Pollitt, E. (2009). Iron Deficiency and Educational Deficiency. *Nutrition Reviews*. <https://doi.org/10.1111/j.1753-4887.1997.tb06464.x>

Pollitt, E., Cueto, S., & Jacoby, E. R. (1998). Fasting and cognition in well- and undernourished schoolchildren: A review of three experimental studies. *American Journal of Clinical Nutrition*. <https://doi.org/10.1093/ajcn/67.4.779S>

Simeon, D. T., Grantham-McGregor, S. M., & Wong, M. S. (1995). Trichuris trichiura infection and cognition in children: Results of a randomized clinical trial. *Parasitology*. <https://doi.org/10.1017/S0031182000064799>

Tan, J. P., Lane, J., & Lassibille, G. (1999). Student outcomes in Philippine Elementary Schools: An evaluation of four experiments. *World Bank Economic Review*. <https://doi.org/10.1093/wber/13.3.493>