

THE SCHOOL FEEDING PROGRAMME STRATEGIES AND LEARNER PARTICIPATION IN PUBLIC PRIMARY SCHOOLS IN MAKUENI COUNTY, KENYA

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ARTICLE INFO	<u>ABSTRACT</u>		
Article history:	Objective: This paper sought to determine how school feeding programme strategies influence learner participation in public primary schools in Makueni County, Kenya.		
Received: April, 16 th 2024			
Accepted: June, 14 th 2024	Theoretical Framework: The study was anchored on; Social Learning Theory, Abraham Maslow's Theory of Human Motivation and theory of Change.		
Keywords: School Feeding Programme	Method: Descriptive and correlation research design were employed. The target population was 875 respondents. Data was analyzed using descriptive, and inferential statistics.		
Strategies; Participation of Pupils; Public Primary Schools; Stakeholder Involvement.	Results and Discussion: The findings were; there is no significant relationship between giving nutritious meals and learner participation was rejected from learners' view but was not rejected as per the Headteachers, Teachers and Chairpersons board of governors' view, there is no significant relationship among dietary teaching and learner participation was rejected from learners' view but was not rejected as per the		
PREREGISTERED OPEN DATA OPEN MATERIALS	Headteachers, Teachers and Chairpersons board of governors', there is no significant relationship between regular food supply during school days and learner participation was rejected from learners' view but was not rejected as per the Headteachers, Teachers and Chairpersons board of governors' view, there is no significant relationship between small-scale farmers' engagement and learner participation was not rejected from learners' view but was rejected as per the Headteachers, Teachers and Chairpersons board of governors' views.		
	Research Implications: The study found that learner participation within the study's territory was significantly correlated with the approaches used. The study recommends that Government Ministries of Education, Health and relevant Authorities, Head Teachers, Teachers, Chairpersons -BOM need to provide nutrition meals and dedicate adequate resources to sustain learner participation in Public Primary Schools in Makueni County, Kenya.		

Doi: https://doi.org/10.26668/businessreview/2024.v9i7.4832

AS ESTRATÉGIAS DO PROGRAMA DE ALIMENTAÇÃO ESCOLAR E A PARTICIPAÇÃO DOS ALUNOS EM ESCOLAS PÚBLICAS DE ENSINO FUNDAMENTAL NO CONDADO DE MAKUENI, QUÊNIA

RESUMO

Objetivo: Este artigo procurou determinar como as estratégias do programa de alimentação escolar influenciam a participação dos alunos em escolas públicas de ensino fundamental no condado de Makueni, no Quênia.

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ISSN: 2525-3654

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Estrutura Teórica: O estudo foi ancorado na Teoria da Aprendizagem Social, na Teoria da Motivação Humana de Abraham Maslow e na Teoria da Mudança.

Método: Foi empregado um projeto de pesquisa descritiva e de correlação. A população-alvo foi de 875 entrevistados. Os dados foram analisados por meio de estatísticas descritivas e inferenciais.

Resultados e Discussão: Os resultados foram os seguintes: não há relação significativa entre o fornecimento de refeições nutritivas e a participação dos alunos, o que foi rejeitado pela opinião dos alunos, mas não foi rejeitado pela opinião dos diretores, professores e presidentes do conselho de governadores; não há relação significativa entre o fornecimento regular de alimentos durante os dias letivos e a participação dos alunos, o que foi rejeitado na opinião dos alunos, mas não foi rejeitado na opinião dos diretores, professores e presidentes do conselho de governadores; não há relação significativa entre o envolvimento de pequenos agricultores e a participação dos alunos, o que não foi rejeitado na opinião dos alunos, mas foi rejeitado na opinião dos diretores, professores e presidentes do conselho de governadores.

Implicações para a Pesquisa: O estudo constatou que a participação dos alunos no território do estudo foi significativamente correlacionada com as abordagens utilizadas. O estudo recomenda que os Ministérios da Educação e da Saúde do governo e as autoridades relevantes, os diretores de escola, os professores e os presidentes do conselho de administração precisem fornecer refeições nutritivas e dedicar recursos adequados para manter a participação dos alunos nas escolas públicas de ensino fundamental do condado de Makueni, no Quênia.

Palavras-chave: Estratégias do Programa de Alimentação Escolar, Participação dos Alunos, Escolas Primárias Públicas, Envolvimento das Partes Interessadas.

LAS ESTRATEGIAS DEL PROGRAMA DE ALIMENTACIÓN ESCOLAR Y LA PARTICIPACIÓN DE LOS ALUMNOS EN LAS ESCUELAS PRIMARIAS PÚBLICAS DEL CONDADO DE MAKUENI, KENIA

RESUMEN

Objetivo: Este trabajo pretendía determinar cómo influyen las estrategias del programa de alimentación escolar en la participación de los alumnos en las escuelas primarias públicas del condado de Makueni, Kenia.

Marco teórico: El estudio se basó en la teoría del aprendizaje social, la teoría de la motivación humana de Abraham Maslow y la teoría del cambio.

Método: Se empleó un diseño de investigación descriptivo y correlacional. La población objetivo fue de 875 encuestados. Los datos se analizaron mediante estadística descriptiva e inferencial.

Resultados y Discusión: Las conclusiones fueron las siguientes: no existe una relación significativa entre el suministro de comidas nutritivas y la participación de los alunos; no existe una relación significativa entre la enseñanza dietética y la participación de los alumnos, no existe una relación significativa entre el suministro regular de alimentos durante los días lectivos y la participación de los alumnos; esta opinión fue rechazada por los alumnos, pero no por los directores, profesores y presidentes de las juntas de gobernadores; no existe una relación significativa entre el compromiso de los pequeños agricultores y la participación de los alumnos; esta opinión fue rechazada por los directores, profesores y presidentes de las juntas de gobernadores.

Implicaciones de la Investigación: El estudio reveló que la participación de los alumnos en el territorio estudiado guardaba una correlación significativa con los enfoques utilizados. El estudio recomienda que los Ministerios de Educación, Salud y las autoridades pertinentes, así como los directores, maestros y presidentes de las juntas directivas, proporcionen comidas nutritivas y dediquen recursos adecuados para mantener la participación de los alumnos en las escuelas primarias públicas del condado de Makueni, Kenia.

Palabras clave: Estrategias del Programa de Alimentación Escolar, Participación de los Alumnos, Escuelas Primarias Públicas, Participación de las Partes Interesadas.

1 INTRODUCTION

Learners who participate in class build their interpersonal skills, and ability to learn. Acquiring knowledge is greatly enhanced by the effective implementation of school feeding programme strategies. It is an essential tool that encourages learning in regions where there is a shortage of food (World Food Programme, 2021). Hungry students are less receptive and preoccupied in class (Adekunle & Ogbogu, 2016). According to Akanbi and Aina (2013), teenagers' physiques' metabolism and cognitive growth are contingent upon a nutritious diet. Consequently, the objectives of the school feeding programme are focused on boosting academic performance, increasing transition, reducing absenteeism, and enhancing school registration (Lawson, 2012; Gentilini, 2016).

The Kenyan government, in collaboration with the World Food Programme (WFP), decided on an evolution policy from the WFP to the Government-led Home Grown School Meals Programme in an attempt to enhance national ownership of the school feeding programme (GoK, 2007; WFP, 2013). The entity behind the school feeding programme strategies observed both trends, which have contributed to the approaches' adoption given that some schools have seen an increase in enrollment while others have seen a decline in performance (WFP, 2016; Wamaru, 2012; Erukudi & Edabu, 2020). However, pupils are not given nutritious meals when they encounter food shortages. The objective of this study was therefore to investigate how school feeding programme strategies and M&E Practices influence learner participation in public primary schools in Makueni County, Kenya.

2 THEORETICAL FRAMEWORK

The study was anchored on; Social Learning Theory, Abraham Maslow's Theory of Human Motivation and theory of Change. Social Learning Theory was founded by Bandura (1977) who is known for his learning as a result of reinforcement, conditioning, and punishment. In this study, social learning theory was used to support the independent variable - school feeding programme strategies, where so much concentration is needed in learning activities. Social learning theory expounds on learning process and social behavior which proposes that new behaviors can be developed by perceiving and emulating others. In this study, school feeding strategies influencelearner participation in school. The theory assumes that human cognition development is linked to interpersonal aspects like cognition, emotional, genetic aspects, conduct, and ecological activities. Hence in the context of; provision of nutrition meals, nutrition education, regular provision of meals during school days and smallholder farmer engagement models the learner behavior in school.

Abraham Maslow's Theory of Human Motivation was coined in 1943, by Abraham Maslow and has been included in this review. Although individuals aspire to fufill their

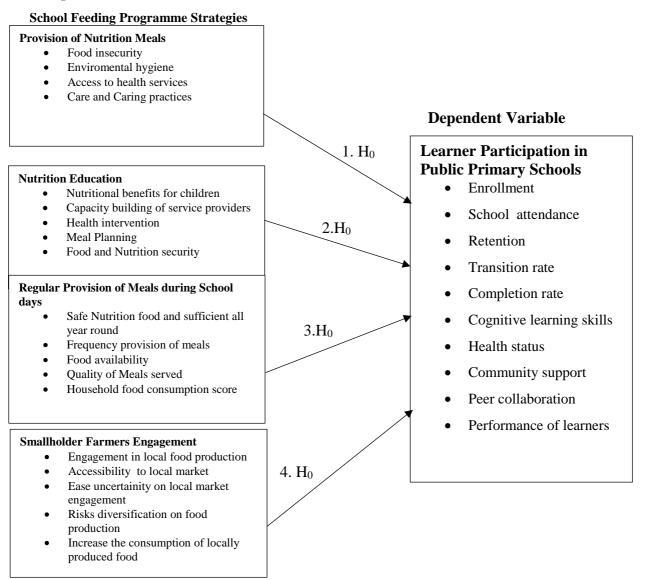
basic needs, the theory is explained in the shape of a pyramid on how often persons strive to meet their higher needs. This theory is consindered for this research because it analyzes physiological needs of learners which involve food and has an effect on different bids in this case. Therefore, as Maslow points out, supplying food helps to satisfy hunger, which is a physiological demand that must be met before other wants can be accomplished. Thus in this study Maslow's theory has been used to support the independent variable of the study. Lewin (1958), coined the term "theory of change" to describe how provisions and improvements might be made to achieve a desired result. Its goal is to solve some of the challenges faced by evaluators on attempting to assess effects on complicated social development programme. Poorly expressed assumptions, lack of transparency on how change procedures occurred, and insufficient attestation are just a few examples.

Theory of change is again focused on poverty reduction through school feeding programme strategies. More knowledge will be gained through nutrition education. Giving learners food in school days will enhance their cognitive skills, improve health status and ensure school attendace without failure enhancing their participation in school. More parents will enroll their children to school because there is provision of food. In addition, enganging smallholder farmers in school feeding programme is a life changing event because they will supply food to schools and this again will impact on the economic status through creation of employment. Increased income will change the living standards of the people thus improving health status. The aggregate effect of improvements in learners' food security in the short run, school enrollment and learner participation in the medium run, amounts to an investment in human capital that is expected to break the intergenerational transmission of poverty. This is because healthy and knowledgeable children are easily trained to become providers of competitive labour in market. Therefore, theory of change in revealed at this stage as learners evolve and adapt the new changes for prosperity. The theory supports the dependent variable of the study.

Figure 1

Conceptual Framework School Feeding Programme Strategies, and Learner Participation in Public Primary Schools

Independent Variable



3 LITERATURE REVIEW

The school meal programme implemented approaches aimed at ensuring project success through the inclusion of stakeholders and recipients, in addition to addressing implementationrelated issues further. The ensuing sub-themes delve deeper into specifics;

3.1 LEARNER PARTICIPATION IN PUBLIC PRIMARY SCHOOLS

The engagement of pupils in learning is inherently regarded as a crucial element of a country's strategic development goals. The involvement of learners in class is influenced by a variety of factors. Having competent teachers, offering enough food, encouraging good health, fostering a friendly environment, and other aspects are all factors that encourage students to actively participate in class (Kapur, 2018). Pupils who miss school frequently fall behind and do poorly in class assignments.

3.2 STRATEGIES FOR SCHOOL FEEDING PROGRAMME

The strategies for the school meal programme were implemented to ensure that everything was monitored and that the program ran following the World Bank and the Kenyan government's expectations. The strategies are designed to enhance learner participation through enhanced transition and completion rates, peer collaboration, school attendance, retention, and enrollment rates. The school feeding programme has influenced the execution of several school programme, particularly the curriculum execution exercise, as evidenced by students' participation in extracurricular activities, attendance in class, academic performance, and school administration procedures (Khatete et al., 2013). As a result, improving the programme through the application of these strategies guarantees the welfare of the benefits realized, particularly the projected rise in student participation. The distribution of nutrient-dense food, instruction in nutrition, providing nourishing meals throughout the school day, and enlisting the help of small-scale producers are the primary elements of school meal programme strategies. The subsequent sub-themes go into further detail about these.

3.3 GIVING NUTRITIONAL MEALS

Nutrition not only aids in human development but also the prevention and treatment of disease. Maintaining good health requires eating a well-balanced diet. (Bier et al., 2013). According to Ohlhorst et al. (2013), healthy learners comprehend the concepts they are being taught in school and demonstrate high self-esteem, resulting in the growth of the economy, society, and individual citizens.

3.4 DIETARY TEACHING

Acquiring awareness and understanding of nutrition enables teenagers and their families to ensure that a well-balanced diet promotes healthier growth, (UNICEF, 2019). Many countries working toward the Millennium Development Goals (MDGs) consider nutrition education a top priority. Furthermore, teaching about nutrition promotes healthy eating practices while increasing students' awareness of their nutritional status. Inevitably, most children in semi-arid regions fail to take advantage of this free service due to factors such as impoverishment, gender disparity, scarcity of food, and security concerns.

3.5 FOOD SUPPLY DURING SCHOOL DAYS

Pupils who receive enough meals experience less hunger. Students must eat enough meals throughout the day to participate fully. (Graham et al., 2016; Lawson, 2012). Anderson, Gallagher, and Ritchie (2018) found that school meal quality and academic performance are positively correlated with students' healthy diets.

3.6 THE INVOLVEMENT OF SMALL-SCALE PRODUCERS IN THE SCHOOL FEEDING PROGRAMME

By taking part in the school feeding program, smallholder farmers can access consistent markets, increasing their income and household food security (Mensah, 2019). For the targeted children, a steady supply of nutritious food is also guaranteed (WFP, 2016). Purchasing food directly from small-scale producers can be expensive, but it also empowers farmers and social groups and creates long-term incentives that support local development (WFP, 2016).

3.7 THEORETICAL FRAMEWORK

The term "theoretical framework" defines a set of notions, theories, and presumptions that act as a prism through which to view a specific phenomenon. It offers a framework for arranging and comprehending the connections between different elements and variables that influence the phenomenon under study. A strong theoretical framework can direct the design of empirical studies to test hypotheses, help researchers identify knowledge gaps, and generate hypotheses. The theory of change and social learning provided the foundation for the study.

3.8 SOCIAL LEARNING THEORY

The theory was developed in 1977 by Bandura, a psychologist best known for his research on how people learn through reinforcement, adaptation, and retaliation. He points out that most human behaviors are learned through imitation, observation, and modeling. Bandura goes on to say that learning is necessary for observable behaviors to occur. He talked in detail about motivation, retention, attention, and reproduction—the four phases that are necessary in this scenario. A learner must pay attention, as they get disengaged if distracted which lowers the quality of the learning process. Social learning theory is considered to be a fundamental component of the cognitive dominant behaviorist theories due to its similarity to behaviorist theories and its emphasis on the cognitive components of learning.

The strategies of the school feeding program were supported by the social learning theory because learning activities demand a high degree of focus. Observing and imitating others can help someone learn a new behavior, as per the theory of social learning, which provides an in-depth account of social interactions and the learning process. According to this study, school feeding policies affect pupil participation in class. This theory holds that the evolution of human cognition has been influenced by social factors including cognition, emotion, genetics, behavior, and ecological activities.

Consequently, the setting of supplying wholesome food, educating people about nutrition, serving food during school hours, and interacting with small-scale producers serves as a model for how learners should behave in the classroom. In addition, Edinyang et al., (2015) pointed out that the investigation of social studies emphasizes how people interact with their environment and seeks to impart knowledge, morals, and documentation techniques to them. Pupils gain confidence in their ability to accomplish an array of responsibilities in the classroom and can nurture self-efficacy that is founded on social learning theory (Kurt, 2019).

4 METHODOLOGY

The pragmatic paradigm, which uses noncommittal philosophical structures, was applied in this study. Pragmatics encourages the use of mixed methods research instead of relying solely on one kind of qualitative or quantitative data collection and analysis (Creswell, 2018). Descriptive surveys and correlational research methods were used in the study. Their popularity stems from the fact that these two designs can be used with both descriptive and inferential methods. The population being studied was identified through the use of a descriptive survey (Shield et al., 2013).

According to Hartling et al., (2012), a descriptive survey design is employed in describing features of the population being observed as well as the frequency of occurrence of the phenomenon as it occurs naturally, to naturally uncover the inconsistencies. From the target population of 875 individuals, a sample size of 275 respondents was determined using the Yamane formula from 1967. The data was gathered using a questionnaire and interview guide. Headteachers and county representatives well-versed in the school feeding programme were chosen for a purposeful sampling. After being verified for accuracy, the quantitative and qualitative data were collected, coded, and then subjected to a thematic analysis. The quantitative data were analyzed using descriptive and inferential statistics, and the significant findings were presented in tables using frequency range, algebraic means, and standard deviation. In addition, the F-test was applied to test hypotheses and Pearson product-moment correlation was utilized to obtain inferential analysis.

The cumulative effects of school feeding programme strategies and learner participation in public primary schools were evident in the qualitative and quantitative data. The data was analyzed in version 25 of the Statistical Package for Social Sciences (SPSS). The results of the normality test on the data showed that they were assumed to have a normal distribution.

The degree of correlation between the independent predictor variables and the dependent variable was expressed using Pearson's Product Moment correlation coefficient (r). The study employed a two-tailed test design with a 95% confidence level and a significance level of 0.05. This allowed for the possibility of both positive and negative influences. The hypothesis's linear correlation was analyzed using the simple regression method, and the results were interpreted using the Pearson Product Moment Correlation. Descriptive statistics and upfront graphic analysis form the basis of quantitative data analyses. To ascertain the relationship between the independent and dependent variables, a correlation analysis was performed.

5 RESULTS AND DISCUSSIONS

The study's objective was to find out how learner participation in public primary schools in Makueni County was influenced by school feeding program strategies. The results of the SFP strategies and learner involvement in class are shown in Table 1.

Table 1

School Feeding Programme Strategies and Learner Participation Pupils in Public Primary Schools

School Feeding Programme Strategies	n	Mean	Standard deviation
Giving Nutritional meals	58	2.34	0.832
Dietary Teaching	58	1.74	0.733
Food supply during school days	58	2.25	0.846
Engagement of Small-Scale Farmers	58	2.46	0.484
Composite mean standard deviation	& 58	2.20	0.724

Table 1 presents the descriptive statistics of the joint strategies for SFP and learner participation in public primary schools.

The composite mean for giving nutritious meals of 2.56 higher compared to the general composite mean which was 2.20; suggesting school feeding programme strategies moderately influence Learner participation. The composite standard deviation of giving nutritious meals of 0.832 was higher compared to the 0.724 composite standard deviation demonstrating agreement on view amongst respondents. These findings agree with those of Perez-Rodrigo & Aranceta, (2003) who suggested that the provision of nutritious meals alone might not influence Learner participation in public primary schools. Complementarity with other feeding programme strategies might be necessary.

The composite mean for dietary teaching of 1.74 was slightly less than the 2.20 overall composite mean; suggesting combined school feeding programme strategies had a very low influence on learner participation in public primary schools. The composite standard deviation of the provision of nutritious meals of 0.733 was higher compared to the 0.724 composite standard deviation demonstrating agreement in opinion among participants. The research outcome is in agreement with Perez-Rodrigo & Aranceta, (2003) who found out the importance of conservational and behavioural aspects in effective learner participation and nutrition interventions marks the need to involve parents and the community. Suggesting that nutrition education alone might not influence learner participation. Complementarity with other feeding programme strategies might be necessary.

The composite mean for regular supply of food during school days of 2.25 was greater than the general composite mean of 2.20; suggesting the combined school feeding programme strategies had a low influence on learner participation in community schools. The composite standard deviation of the provision of nutritious meals of 0.846 higher compared to the general composite standard deviation of 0.724 indicating a disagreement in opinion amongst the respondents. The outcomes agree with those of Perez-Rodrigo & Aranceta (2003) who found that the importance of environmental and behavioural aspects in effective learner participation and nutrition interventions highlights the importance of including parents and the community. Suggesting that regular provision of meals during school days alone might not influence learner participation. Complementarity with other feeding programme strategies might be necessary.

The composite mean for small-scale farmer engagement of 2.46 which was greater than the 2.20 composite mean; suggesting combined school feeding programme strategies had a low influence on learner participation in public primary schools. The composite standard deviation of the provision of nutritious meals of 0.484 was lower compared to 0.724 general compound standard deviation indicating an agreement in opinion among respondents. The study outcomes are in line with Perez-Rodrigo & Aranceta (2003). Suggesting that smallholder farmers' engagement alone might not influence learner participation. Complementarity with other feeding programme strategies might be necessary.

5.1 CORRELATION ANALYSIS FOR STRATEGIES IN SCHOOL FEEDING PROGRAMME AND LEARNER INVOLVEMENT IN PUBLIC PRIMARY SCHOOLS

To establish the extent of the correlation between combined SFP Strategies and learner participation in public primary schools, Pearson correlation coefficient was applied to the tallies of every measurement. The entire tallies of the measurements were then analyzed. A summary of each single tally obtained on every statement by the participants was computed at a confidence level of 95 percent. Table: 2 exhibits the outcome.

Table 2

Correlation Analysis for Strategies in School Feeding Programme and Learner Participation in Public Primary Schools

Strategies for School Feeding Programme	Learner Involvement	
Giving Nutritional Meals	Pearson Correlation	-0.363*
	Sig. (2-tailed)	0.005
	n	58
Dietary Teaching	Pearson Correlation	-0.109*
	Sig. (2-tailed)	0.417
	n	58
Regular supply of food during school days	Pearson Correlation	-0.274*
	Sig. (2-tailed)	0.037
Small-scale farmers engagement	n	58
	Pearson Correlation	0.178*
	Sig. (2-tailed)	0.182
	n	58
Overall Strategies for School Feeding	Pearson Correlation	-0.278*
Programme Strategies	Sig. (2-tailed)	0.034
	N	58

*significant at 0.05 level (2-tailed)

To investigate the association between strategies for SFP and learner participation in public primary schools, several characteristics of combined school feeding programme strategies (provision of nutrition meals, nutrition education, regular provision of meals during school days, and smallholder farmers' engagement) were investigated according to the ensuing hypothesis; H0: There is no significant relationship between combined school feeding programme strategies and learner participation in public primary schools. The corresponding logical model for the hypothesis was recognized as: Learner Participation = f (school feeding programme strategies). From the overall results, the correlation coefficient for combined SFP strategies and learner participation in public primary schools was determined as; r = -0.278where the p-value was 0.034 < 0.05, signifying a remarkable correlation amongst combined school feeding programme strategies and learner participation; preceding rejection of the null hypothesis (H0: There is no significant association between SFP strategies and learner participation), and acceptance of the alternative hypothesis (H0: There is a significant relationship between SFP strategies on learner participation). This study outcome concludes there is a remarkable correlation between combined school feeding programme strategies and learner participation.

5.2 REGRESSION ANALYSIS FOR STRATEGIES IN SCHOOL FEEDING PROGRAMME AND LEARNER PARTICIPATION IN PUBLIC PRIMARY SCHOOLS

To determine how the strategies in SFP influence learner participation in public primary schools, multiple linear regression was used. It was necessary to solicit respondents' opinion on the influence of SFP strategies and learner participation in public primary schools. The purpose of employing a multiple regression model was to discover which of the school feeding programme strategies best-predicted learner participation in public primary schools. This is expounded in the ensuing sub-themes:

5.3 MODEL SUMMARY FOR STRATEGIES IN SCHOOL FEEDING PROGRAMME AND LEARNER PARTICIPATION IN PUBLIC PRIMARY SCHOOLS

The Model summary aimed to investigate how the combined school feeding programme strategies being forecaster insignificantly or significantly foretold learner participation in public primary schools. Table 3 demonstrates the results for the model summary of regression.

Table 3

Model Summary for Regression Analysis of School Feeding Programme Strategies and Learner Participation in Public Primary Schools

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	0.457ª	0.209	0.149	0.427	
a Predictors: (Constant) School Feeding Programme Strategies					

a. Predictors: (Constant), School Feeding Programme Strategies

Table 3 represents the model summary for regression and relationships between SFP strategies and learner participation in public primary schools. According to the model summary, there was an affirmative multiple association (R=0.457) concerning combined school feeding program strategies and learner participation in public primary schools. In addition, a 20.9% variance in learner participation was described by the School Feeding Programme Strategies. These outcomes agree with Chabite et al., (2018) who found that the reduction of undernourishment and improvement of child survival through enhancement of the nutritional status and optimal feeding strategies are necessary.

6 CONCLUSION

Examining the effects of combined school feeding program strategies on learner participation was the fifth goal of the study. From the perspective of learners, both Pearson correlation and simple linear regression coefficients indicated a significant relationship between learner participation and the combined school feeding programme strategies. The p-value below the fixed tolerance of significance implied a significant influence of combined school feeding programme strategies and learner participation in public primary schools. However, from the perspective of Headteachers, Teachers, and Chairpersons -BoM, the Pearson correlation as well as coefficient results for simple linear regression indicated an insignificant influence on school feeding programme strategies and learner participation in public primary schools. P-values above the set tolerance of significance implied an insignificant influence of smallholder farmers' engagement and learner participation.

ACKNOWLEDGEMENTS

I express my gratitude to the University of Nairobi for granting the opportunity to persue a Doctor of Philosophy Degree in Project Planning and Management. My heartfelt gratitude to my academic supervisors, Dr. Charles M. Wafula and Dr. John M. Mbugua for invaluable and all-inclusive professional guidance, and encouragement accorded to me. They tirelessly progressed with me step by step and directed me successfully. My recognition to; Prof. Dorothy Kyalo, Dr. Angeline Mulwa, Prof. Wanyonyi Luketero, Prof. Christopher Gakuu, Prof. Harriet Kidombo, Prof. Nyonye and Dr. Lilian Otieno for their meticulous guidance during the entire course. My special appreciation goes to Prof. Charles Rambo for providing useful comments and critique that shaped this study. His dedication, persistence, and sincerity were evident in every discussion we had, which gave me the motivation to continue working diligently throughout every phase of this work. I recognize the University of Nairobi library staff, especially Regina Mutonga for providing me with the relevant reference materials. To all my inspirational mentors, all my friends who contributed ideas, time and moral support, I thank them all. Above all, I also thank God for caring and granting me the power to concentrate.

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