

Lunch Programme Management And Their Influence On Educational Outcomes In Public Day Secondary Schools In Mombasa And Kilifi Counties, Kenya

Julius Kinyanjui Kiiru *, Dr Daniel Mange*, Dr Daniel Otieno *

Kenyatta University, Department Of Educational Management, Policy And Curriculum Studies, Nairobi Kenya.

DOI: 10.29322/IJSRP.10.09.2020.p10517

<http://dx.doi.org/10.29322/IJSRP.10.09.2020.p10517>

Abstract- School feeding programs are primarily intended to enhance educational outcomes with a view to achieving Kenya's educational objectives of free and compulsory basic education. School feeding initiatives have the ability to increase access to primary education, minimize dropout rates, especially at lower primary school levels, and boost pupils' academic achievement. The purpose of the study was to assess lunch program management and its influence on educational outcomes at Mombasa and Kilifi Counties, Kenya's public day secondary schools. Many of the findings were done in elementary schools but not in secondary schools on the impact of school feeding programmes. The research objectives were to analyze the strategies of food safety control used in public day secondary schools and to figure out the monitoring and evaluation methods of the school lunch programme. The sample community consisted of all the Counties' 49 day high schools, 940 teachers, 49 superintendent, 49 lunch coordinators, and 18,847 students. The study utilized simple random sampling and random stratified sampling. Stratified random sampling was used in the following lines. The survey range would cover 17 high schools, 17 head teachers, 17 meal coordinators, 289 teachers and 377 students. For data collection, the analysis employed mixed sample style, questionnaires and schedules for interviews. Data were described using counts, frequency tables for distribution, bar graphs and pie-charts. The study's key results on the achievement of educational outcomes; there were shortcomings in tracking and assessing educational outcomes because most schools have a food safety plan because improved educational outcomes.

Index Terms- lunch programme, educational outcomes, school feeding programs, financial management, procurement procedures

I. INTRODUCTION

Control of food quality and health includes the implementation of hygiene standards to guarantee access to healthy food for the students. Other measures include the safeguarding by the Ministry of Education, the Department of Public Health and the school community of adequate food storage facilities. School officials will take measures to protect the food from rats and from bacterial pollution (MoE, 2001). School feeding schemes enable millions of poor children around the world to attend school effectively (Muvhango, 2016). School feeding systems have the

potential to increase exposure to primary education, reduce dropout rates, especially at lower primary school levels, and boost academic performance for Weru pupils (2014).

World Health Organization (2007) on food safety management indicated that food handlers should be qualified in food-borne disease prevention hygiene practices. This duty takes in the Kenya Ministry of Education (MOEST). The Ministry of Health, Science and Technology (2012) emphasized that a higher standard of education would ensure adequate food health and hygienic activities. Most food handlers failed to wash their hands as required, particularly when they did not offer hand wash basins. Workers in the kitchen need to be able to wash their hands correctly by following the five phases of washing hands: wetting, rubbing soap, 10-15 second wiping of hands and body, thorough rinsing and then drying hands with hand sanitizers or hot air dryers, Food Safety Agency (2006).

According to Richard (1993), certain essential grooming habits included wearing a hat or other hair protection, wearing clean uniforms every day, removing aprons while entering food preparation areas, removing jewellery from hands and arms and wearing appropriate shoes. Kitchens where food has been prepared need to maintain high cleanliness. Water was a major commodity for eating, cleaning and cooking food, washing up, washing hands, equipment, utensils, pots, garments and much more. Bad management activities induce food spoilage that can lead to serious illness (Wandolo, 2016). Poor food handling is threatening product quality and health. Many personal hygiene practices, such as wearing a new cloth every day.

A research by Wandolo (2016), found that the most important factor in the prevention of food poisoning is the personal hygiene of food handlers. Public hygiene consists of: clean hands and body, ensure proper public cleanliness, wear clean and appropriate clothes, follow hygienic sanitary procedures and promote good health and record any ill health. Children are at high risk of food-borne diseases; healthy food planning was therefore essential in school lunch programs (Richards et al., 1993). The meals consumed at lunch time would be nutritious and safe (Shield & Mullen, 2002). Absenteeism affects a student's success in colleges, especially where there is an outbreak of food-borne diseases. The school's management team, in collaboration with parents and members of the group, would ensure that the learners are given a hot meal every day. It not only improved efficiency but also enhanced understanding. Appropriate care should be paid to learners with special needs, in addition to their nutritional

requirements. Different research by Glewwe and Miguel (2008) on the impact of diet and safety among students on schooling for children in developed countries suggested that learners be taught how to monitor and avoid some of the contagious diseases as well as good hygiene.

Monitoring is a regular and structured information collection that helps track success when preparing and executing a program or project. This means the right message is done in the right way to the right people. According to a report by UNESCO (1999), many initiatives are impaired by a lack of adequate supervision and assessment. Monitoring and review consists of two main components: i provide feedback on implementation of the project to allow early detection of defects and provide solutions (ii) notify about program impacts of the project toward its stated goals. The Government's experience of implementing school meals to date has shown the need to improve monitoring and assessment thoroughly based and linked together with Education Management Information System (EMIS) at the national level.

The SFMC should also prepare duty iota for all those involved in school feeding programme. Accountability statements should be prepared that describes the committees' role in the SFP. This could demonstrate how they would perform oversight roles so that students got what they were meant to get from the SFP. The SMC documents cases of complains from students and parents which are used to improve on the program delivery by taking appropriate measures (Carozza, 2003). While many outside agencies can evaluate SFP, a few have the know-how and skills to employ monitoring and evaluation approaches and fewer still are able to design and implement effective monitoring and evaluation system (World Bank, 2004).

According to (Kibet, 2017) monitoring and evaluation should ensure checks and balances for the programme implementation, and whether the targets and objectives are met. Monitoring and assessment by experts and partners is of greater value due to the increased input they offer on the success state of the project. Through proper monitoring and evaluation, delays, project variations may be quickly detected by frequent reporting and prompt corrective steps taken in good time, so monitoring and assessment has a very important function in programme management (Lawal and Onahaebi, 2010).

II. RESEARCH DESIGN AND METHODOLOGY

The researcher used the mixed research methodology (qualitative-quantitative). This approach was useful because it had the ability to test relevant theories and obtain in depth information from the participants (Tashakkori & Teddlie, 2003). The research used questionnaires to collect information from principals, teachers and pupils. Questionnaires are a cost-effective way to collect data from big samples. Gay (1992) notes that questionnaires are useful because they allow for the privacy of the views and ideas of the respondents. The questionnaires included both open ended, and closed questions. The investigator utilized the supervisors support and expert opinions to enhance the validity of the instruments. As per (Borg and Gall, 1989), an instrument's content-validity is obtained through expert judgment. The researcher received assistance from his supervisors who helped improve the quality of the instruments' material. The validity test

was performed to determine the appropriateness and clarity of the response items. Ambiguous and insufficient elements were omitted or changed to boost instrument accuracy.

A pilot study allowed the researcher to clarify the accuracy of the questionnaire items so that the ambiguous items were either changed or entirely eliminated. The Cronbach alpha coefficient is the most commonly used indicator for internal accuracy evaluation. We tested reliability using the Social Sciences Statistical Package (SPSS). The SPSS findings are given below for the questionnaire for the principal, the questionnaire for the teachers and the questionnaire for the pupils.

Table 1: Summary of Cronbach alpha coefficient for study variables

Questionnaires	Number of items	Cronbach's Alpha	Cronbach's Alpha
Principals' Questionnaire	36	0.951	0.949
Teachers' Questionnaire	31	0.963	0.963
Students' Questionnaire	8	0.910	0.90

Participants in the research participated in a voluntary manner, free from coercion. Investigation was conducted competently and with due concern for the dignity and welfare of the participants. Standard ethical considerations were abided to, in the study period by the researcher. Respondents were also informed of their rights in research participation, withdrawing from the research at any time of the study was granted. High level of discipline, respect towards the respondents was displayed while conducting out the investigation. The investigator was knowledgeable on the area that he was studying and was therefore adequately prepared to handle any issues that emerged from the study.

III. RESULTS AND DISCUSSION

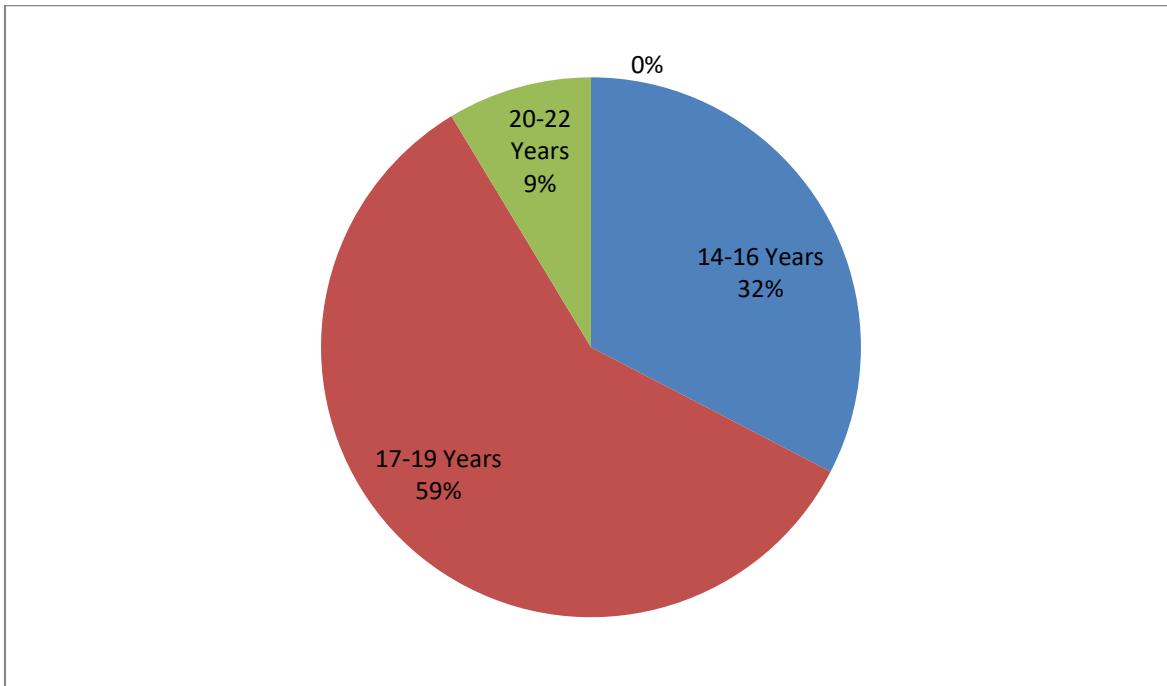
The study sought to determine the gender of the students participating in the study. Table 4.6 provides the demographic data for student class in both the Mombasa and Kilifi Counties.

Table 2: Gender of students

County	Mombas		Kilif		Tota	
	N	%	N	%	N	%
Student						
Male	120	35.29	75	22.06	200	58.82
Female	80	23.53	65	19.12	140	41.18
Total	200	58.82	140	41.18	340	100.00

Table 2 indicates that the majority of the students 200 (58.82%) were male while slightly below half 140 (41.18%) were females. There were more than half of students 200 (58.82%) in

Mombasa County than in Kilifi 140 (41.18%).The respondents were asked to state their age. The findings are shown in Figure 1.

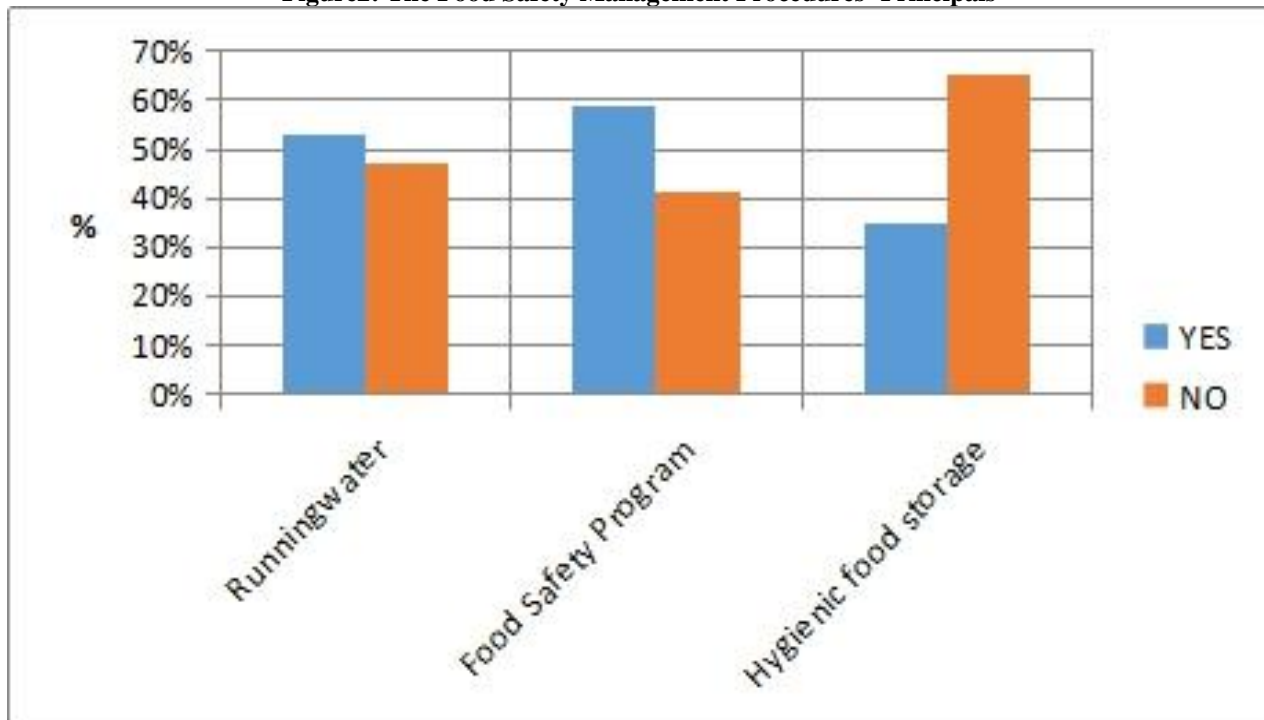


The bulk of respondents (59 percent) were aged 17-19 years from figure 1 above, while the minority (9 percent) was 20-22 years in the age group.

The first objective aimed to assess the lunch program's food safety management and its influence on educational outcomes in Mombasa and Kilifi Counties, Kenya's public day secondary

schools. The study sought to find out about managing food safety and its influence on educational outcomes in order to address this goal. The results of principals on food safety management procedures are represented in figure 2.

Figure2: The Food Safety Management Procedures- Principals



From figure 2 more than half of the principals 9 (53%) indicated that the school had running water, while 8 (47%) indicated that the school had no running. Majority of the principals 10 (59%) indicated that their school had a food safety program while 7 (41%) did not have. Most of the principals 11 (65%) stated that their schools had no hygienic food storage while 6 (35%) of the schools had. Such results are in line with MoE (2008), which discovered that food-borne pathogens existed in school environments due to causes including contaminated food, inadequate hygiene habits and inadequate planning. The study findings agree with studies done by (Wandolo, 2016) which found out that food safety and hygiene practices in the schools were not

strictly followed in the institutions. The research findings agrees with (Snow, 2011) who reported that most of the behavioural problems and academic performance faced by students in classroom situation is as a result of inadequate nutrition and inadequate understanding of the concept nutrition and its advantages. For children advancement and bright futures it is paramount to try to mitigate on the issue of undernourishment. The research also tried to evaluate the effect of the teachers' supervision and evaluation processes on instructional results. The findings are shown in table 3

Table 3 :Monitoring and Evaluation Procedures of School Lunch Programme and their influence on Educational Outcomes- Teachers

Indicators of Educational Outcomes	Improved performance	Improved discipline	Improved health status	Active participation in class	Improved time management
Improved performance	1	.983*	.993**	.941	.996**
Improved discipline	-.941	1	.732	.960	.971*
Improved health status	.993**	.997**	1	.971*	.987*
Active participation in class	.941	.970*	.971*	1	.945
Improved time management	.996**	.971*	.987*	.945	1

Table 3 shows the influence of monitoring and assessment procedures among indicators of educational outcomes in Mombasa and Kilifi County, Kenya. The relationship between improved performance and improved discipline is 0.983, for improved discipline and health status is 0.732. The relationship between improved performance and improved time management is 0.996 was statistically significant, $p > 0.01$. All the other pairs of educational outcomes pair were greater than 0.7 which was acceptable for our study. The study findings on association between monitoring & evaluation procedures and educational outcomes were very high and very close to one. These study findings agrees with (Sanya, 2015) who reported that monitoring and evaluation addressed the educational outcomes such as the levels of absenteeism, pupils' level of concentration and whether the number of dropouts has reduced. Other indicators include academic performance, wellbeing and health status. A positive impact from these components indicated that programme objectives had been achieved.

IV. SUMMARY AND CONCLUSION

Based on the objectives and the findings this study, the following conclusions were made;

1. To examine food safety management and its influence on educational outcomes in public day secondary schools in Mombasa and Kilifi Counties, Kenya.
2. To find out Monitoring and evaluation procedures of school lunch programme and their influence on educational outcomes in Public day secondary Schools in Mombasa and Kilifi Counties, Kenya.

The study found that most of the schools had a food safety programme which influenced attainment of educational outcomes. This was because students fed on hygienic food and cases of food poisoning were minimized. This ensured regular attendance to schools which lead to improved performance. However the study found out that most of the schools had no hygienic food storage which leads to food spoilage hence affecting achievement of educational outcomes negatively.

It was found out that most of the respondents indicated that majority of the cooks had clean uniforms and were well groomed.

The study found out that food supervision and food serving were not supervised. The study also found out that checking of food grains was monitored. The relationship between School Lunch Program Monitoring and Evaluation Procedures on Educational Outcomes was statistically significant at $r=0.945$, $p>0.05$.

Objective one: To examine food safety management and its influence on educational outcomes in public day secondary schools in Mombasa and Kilifi Counties, Kenya. From objective three the study found challenges on financial management of lunch programme and recommended the following:

1. Board of management should ensure the stores where foodstuffs are stored are cleaned and fumigated regularly.
2. MOEST to enforce schools to have water tanks for storage and water harvesting.

Objective two: To find out Monitoring and evaluation procedures of school lunch programme and their influence on educational outcomes in Public day secondary Schools in Mombasa and Kilifi Counties, Kenya.

1. Board of management should ensure there is efficient monitoring and evaluation of lunch programme in their school.
2. Teachers in charge of lunch programme /lunch programme coordinators should not be burdened with other responsibilities for effective Monitoring and evaluation.

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AUTHORS

- First Author** – Julius Kinyanjui Kiiru
kinyanjuijls@gmail.com, Kenyatta University, Department Of Educational Management, Policy And Curriculum Studies, Nairobi Kenya.
- Second Author** – Dr Daniel Mange mbirith.daniel@ku.ac.ke, Department Of Educational Management, Policy And Curriculum Studies, Nairobi Kenya.
- Third Author** – Dr Daniel Otieno coachdanco@gmail.com, Department Of Educational Management, Policy And Curriculum Studies, Nairobi Kenya.