

INFLUENCE OF FEEDING PROGRAMS ON THE PARTICIPATION OF LEARNERS AT EARLY CHILDHOOD DEVELOPMENT EDUCATION INSTITUTIONS: A CASE OF BUNGOMA SOUTH DISTRICT

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ABSTRACT

The main objective of this study will be to find out the influence of feeding programmes on participation of learners in early childhood development, (ECDE) institutions in Bungoma South District. The specific objectives of the study were; to establish the extent to which school feeding program affect enrolment, attendance, retention and learning/ performance of learners in ECDE institutions of Bungoma South District. The findings of this study may be of use to the various ECDE centres for it would assist them understand better the issues related to school feeding programmes. This would see school managers in the various centres provide learners with balanced feeding programs and create awareness to parents on its importance to proper learning and holistic development of their children. The study would also go along way to helping the government in making relevant policy to safeguard the wellbeing of ECDE learners by providing well balanced feeding programs to these centres as well as budgetary allocation to the same. This study used descriptive survey research design to obtain information that will be used to describe the existing phenomena. The target population of this study was 206 ECDE centres in Bungoma South District, which summed up to 1130 respondents. Stratified random sampling was applied in this case whereby 114 respondents were picked to fill the questionnaire. This research study used the split half technique requires only one testing session. In this approach, an instrument is designed in such a way that

there are two parts. Subject's scores from one part are correlated with scores from the second part. The instrument used in this study was a questionnaire as the only data collection tool. Descriptive statistics analysis was employed whereby the SPSS (Statistical Package for Social Sciences) programme is used. Tables and graphs were used to present data as was found appropriate. On enrolment, study concludes that feeding programme in the centre enhance enrolment to a very great extent. The study further concludes that the ECD centres sampled by had enrollment of between 21- 30 pupils and over 30 pupils per school and that enrollment of most schools is done early every year. The study concludes feeding programs enhance attendance levels in the centres to a very great extent that there were cases of children who miss school because of the feeding program in place and that children miss school because of sickness, family affairs, lack of school uniform and food at home, poor performances which make them shy away, lack of parental support and guidance as well as poor characteristics developed by students. On improved learning, School feeding program increase pupils participation in class assignment duties and discussion, there are only a few meals provided during the day hence pupil do not fully participate in class work rendering to low performance, the healthy pupils in the centre are always active and perform well in the exam and a feeding program is important than other factors towards the improved performance. On retention, the study concludes that there were transfer cases in

the centre and that most parents take their children to private schools citing many reasons which range from poor performance in public early childhood education centres, poor teaching methods, lack of skilled staff in public centres, and to a little extent due to poor feeding habits in the local ECD centres.

Key Words: *Feeding programmes, early childhood development, enrolment, attendance, retention and learning/performance*

INTRODUCTION

School feeding programs are common in both developing and industrialized countries, (Del Rosso, 1999). The objective of feeding programs is to provide meals or snacks to reduce short-term hunger in the classroom so that the learners can concentrate and learn better. In addition, it aims at attracting learners to school and to have them attend regularly. According to Ahmed (2003), children affected by hunger and malnutrition as well as ill-health did not have the same potential to do well at school in comparison with well nourished and healthy children, poor healthy children. Poor health and malnutrition lowered children's cognitive development and performance through physiological changes or reduced capacity to participate in learning activities or both.

Early Childhood Development Education (ECDE) caters for children between 0-3 years and 3-6 years of age. The ECDE programmes are largely provided by communities, individuals and local authorities and are crucial for social, physiological and cognitive development of children. It lays a firm foundation for primary, secondary and further education, exposing children to various experiences that enhance their development, prepare them for high-level professions and ultimately help them to lead a better life, (Cueto, 2005).

In 1994 the South African Department of Health introduced a national-scale primary school feeding program. This program was subsequently taken over by the Department of Education in 2004. The principles of South Africa's school feeding program (SFP) are outlined in Section 18 of the constitution, which declares the provision of basic education a right for all. The National School Nutrition Programme (NSNP) in South Africa aims to foster better quality education by enhancing children's learning capacity ,encouraging regular attendance and punctuality, decreasing gender disparity, addressing micronutrient deficiencies, and alleviating short-term hunger by providing 30% of daily energy requirements of the child . Additionally, the three key pillars of South Africa's national school feeding policy are: to have a school feeding program in place; to use school gardens to stimulate local farm production; and to promote healthy lifestyles (Cueto, 2005).

As a result, in 2004 steps were taken to standardize coverage and menu options. The minimum policy is to feed all grades from R (preschool) to grade 7 for 196 school days per year. It was further decided that menus should provide at least 20% of the recommended dietary allowance for energy, protein, calcium, iron, zinc, and vitamin A. More recent guidelines (in the process of establishment) increase the requirement to 30%. Additionally, a meal must be served before 10 am to enhance learning capacity. Common ingredients in South African school meals include: beans, rice, canned fish, Soya, fortified maize meal, fortified bread, and fruits and vegetables (Alderman and Lehrer, 2008).

A survey of primary schoolchildren from a rural area in Kwa Zulu-Natal, where school feeding had been in operation at the school level for nearly two years, revealed a great number of children with persistent micronutrient deficiencies including inadequate vitamin A status (40%) anemia (28%), and iodine deficiency (97%) . Additionally, evaluations have demonstrated that not all children entitled to school feeding received food, with great variation in food availability between rural and urban areas. While urban schools often report that their stocks are sufficient to provide food regularly, rural schools may not always have sufficient ingredients. Also, there may be inadequate communication mechanisms between schools and caregivers regarding whether or not children receive food on a daily basis (Ahmed, 2004).

The school feeding program initiative in Kenya did not start with the collaboration of world Food program (WFP) and the Kenya government in 1980. It existed even before as early as 1969 and it was managed in the National School Feeding Council (NSFC). In his speech while outlining KANU election manifesto blueprint in 1969, the late president Mzee Jomo Kenyatta noted that school feeding programme which was then operating in some areas would be expanded to cover other parts of the country for KANU believed that only healthy children could utilize fully the opportunities provided by schools to develop fully their intellectual potential (KANU Manifesto 1969).

WFP's new five-year development program (2009-2013) has emphasized the need to hand the program over to the Kenyan Government after 28 years of assistance. Management responsibilities are gradually being transferred. The government receives external assistance for purchasing and providing food for the program, and is responsible for food distribution to each assisted school. One interesting, innovative approach to dealing with school feeding challenges in Kenya has been the development of computer-based monitoring system jointly run by the Ministry of Education and the WFP. This tool is designed to gather timely reports from school feeding project review committees and has resulted in the identification of poor management practices and the need for assistance in vulnerable areas (Alderman, Gilligan and Lehrer, 2008).

According to Whaley et al. (2003), the objective of the school feeding programme in Kenya is to promote UPE for the socio-economically disadvantaged and nutritionally vulnerable children, especially girls in pre -primary and primary schools in ASALs and informal urban settlements as

well as enhancing sustainability of the school feeding programme. The main strategy of the programme was to provide mid-day meal to 1.1 million pre-primary and primary school children in the 29 ASAL districts and Nairobi slums and support activities which will ensure the sustainability of the school-feeding programme. Food aid will also be used in the implementation and development of income generating activities at school level to sustain the school feeding programme.

The Kenyan Education Support Program provides an institutional framework by including school feeding as one of the main components of the School Health, Nutrition, and Feeding Program, and the 2008 National Nutrition and Food Security Policy includes a section on school meals and the need to enhance and expand the school feeding program. The current schools covered by the program include pre-primary and primary schools in arid and semi-arid areas, schools in unplanned urban settlements of Nairobi, and early childhood development centers in arid districts. Children in beneficiary schools receive a midday meal, with children in slum schools and early childhood development centers receiving an additional 40 grams of corn soya .Some additional support for the unplanned settlements comes from the private sector and from non-governmental religious organizations operating in the area. The full cost of running the school feeding program in Kenya, including community contributions, is estimated to be \$28 per child per year (Hall, Drake & Bundy DAP, 2001).

RESEARCH OBJECTIVE

The objective of this study was to find out the influence of feeding programmes on participation of learners in ECDE institution in Bungoma South District.

STATEMENT OF THE PROBLEM

The importance of school feeding programmes cannot be neglected at all costs. Millennium Development Goal 2 calls for increased primary school enrolment and reductions in the gender gap in school enrolment. Many policy solutions have been proposed to achieve this goal, from teacher quality initiatives to transfer programs. School feeding programs, a form of conditional transfer, have been an important and prominent part of this policy portfolio in recent decades, and have been implemented widely in developing countries and for low-income populations in developed countries. It is anticipated that the transfers associated with school feeding can improve educational participation (enrolment, attendance, and age at school entry), achievement and cognition (test scores, grade progression), and nutritional status (height and weight-for-age and micronutrient status) (Allen, 2001 & Levinger, 1986) and encourage students to stay in school longer as well s the performance/ improved learning.

Research by Bennett (2003) showed that children who are nutritionally fit are more likely to have the energy, stamina and self esteem that enhance their ability to learn. However, there are many factors that have contributed to poor nutrition such as poverty, big families, broken

families, and lack of feeding program among others. Poor nutrition and health among schoolchildren contributes to the inefficiency of the educational system. Children with diminished cognitive abilities and sensory impairments naturally perform less well and are more likely to repeat grades and to drop out of school than children who are not impaired; they also enroll in school at a later age, if at all, and finish fewer years of schooling. The irregular school attendance of malnourished and unhealthy children is one of the key factors in poor performance. Even temporary hunger, common in children who are not fed before going to school, can have an adverse effect on learning. Children who are hungry have more difficulty concentrating and performing complex tasks, even if otherwise well nourished. Research and program experience shows that improving nutrition and health can lead to better performance, fewer repeated grades and reduced drop out (Chopra, 2004).

Locally, there are few studies related to school feeding programmes effect on participation of learners in schools. For example, Nkinyangi (1980) did a study on socio-economic determinants of Repetition and Early school withdrawal at the primary school level and their implication for educational Planning in Kenya. Another study on randomized controlled trial of Kenyan preschoolers which demonstrated that children receiving breakfast scored 8.5% higher in school participation than a control group. The table below shows the enrollment levels in ECE Centers in Bungoma South District:

Table 1: Pupil Enrollment Numbers in ECE Centres in Bungoma south District, 2005-11

YEAR	TERM 1	TERM 2	TERM 3	TOTAL ENROLLMENT
2005	9199	8878	9279	27356
2006	9678	9347	9678	28703
2007	10525	10220	10545	31290
2008	12411	12033	12400	36844
2009	9583	9673	9840	29096
2010	13389	12876	13411	39676
2011	14970	14368	14965	44303

According to the table 1 above, it is clear that enrollment since 2005 increased slightly but suddenly reduced in the year 2009 increasing again in the year 2011. This means that the level of participation in the ECE centers in the region has not been harmonized. In ECDE centers, parents contribute maize and sugar which is used for the preparation of snack. The fact that feeding program is organized within the school by parents which may lead to higher or lower participation of learners. This study therefore seeks to find out the influence of feeding programmes on participation of learners in ECDE institution in Kenya specifically in Bungoma South District.

LITERATURE REVIEW

This study used Expectancy theory of motivation and the program theory as proposed by Vroom, Valence, in 1964. Porter and Blaufuss (2003) defines motivation as the process that starts with physiology or psychological deficiency (needs) that activates behaviour or drive that is aimed at a goal. The study was guided by the program theory, also called a logic model or impact pathway is an assumption, implicit in the way the program is designed, about how the program's actions are supposed to achieve the outcomes it intends. Providing food for consumption at school can be beneficial for learning because it relieves immediate short-term hunger. Children who are not hungry are more attentive and have higher cognitive abilities (Simeon, 1998). Achieving adequate food security is arguably a necessary first step toward the more general development objectives of improved human well-being, the alleviation of poverty, and sustainable, broad-based economic growth. The actual impact of these factors on the food security status of households and individuals may be achieved through a variety of possible pathways. School feeding leads to increased time spent in school, through increased enrolment and attendance and decreased drop-out rates (Ahmed, 2004).

The programme theory on the educational benefits of school feeding is generally well established and underpinned by an increasingly robust evidence base: School feeding programs can help to get children into school and help to keep them there, through enhancing enrolment and reducing absenteeism; and once the children are in school, the programs can contribute to their learning, through avoiding hunger and enhancing cognitive abilities. These effects may be potentiated by complementary actions, especially de-worming and providing micronutrients.

Enrolment

School feeding programs themselves contribute to enhanced enrolment. Several factors influence the enrollment of students in the primary grades. According to Ranivnder, (2007), the importance of the first (primary) years of school and that these years have the largest impact on success later in school and in life. Children in poor health start school later in life or not at all. A study in Nepal found that the probability of attending school was 5% for stunted children versus 27% for children of normal nutritional status (Moock and Leslie, 1986). In Ghana malnourished children entered school at a later age and completed fewer years of school than better nourished children (Jacoby, 2002). A recent evaluation of an on-going school feeding program in Burkina Faso found that school canteens were associated with increased school enrollment especially among girls.

A small pilot school feeding program in Malawi was evaluated for its effect on enrollment. Over a three month period there was a 5% increase in enrollment compared to control schools over the same period (WFP, 2001). The same study found out that providing food as a take home ration can be an effective incentive for school attendance, but alternative programs, such as cash transfers, may be more cost-effective and simpler to administer.

Attendance

In Bangladesh a program of school-based food distribution increased attendance rates by 20% versus a 2% decline in non-participating schools (Ahmed and Del Ninno, 2003). Successful schools begin by engaging pupils and making sure they come to school regularly. Attendance in FFE assisted schools was found to be 12 points higher than in non-assisted schools (70 percent compared to 58 percent respectively). Drop-out rates were also found to be 9 points lower in FFE assisted schools than in non-assisted schools (6 percent compared to 15 percent respectively). That may seem obvious. What's less obvious is that the consequences of low attendance are serious for all children and for the community, not just the students who miss school. The attendance rate tells you the average percentage of students attending school each day in the given year.

A 2008 study conducted by the Rodel Community Scholars at Arizona State University that tracked students from kindergarten through high school found that dropout patterns were linked with poor attendance, beginning in kindergarten. According to the National Centre for Student Engagement, schools are most effective in achieving high attendance rates when parents, school leaders and community members work together to focus on reducing absences and truancy, and keeping kids in schools (Ranivnder, 2007).

Performance

The number of hungry school-age children is unknown, but is likely to be a significant problem in various circumstances. Many factors contribute to hunger in schoolchildren: the long distances children have to travel to school, cultural meal practices that include no or small breakfasts or a lack of family time or resources to provide adequate meals to children before and/or during the school day. Simply alleviating this hunger in school children helps them to perform better in school. A US study conducted in 1998, showed the benefits of providing breakfast to disadvantaged primary school students. Before the start of a school breakfast program, eligible (low-income) children scored significantly lower on achievement tests than those not eligible. Once in the program, however, the test scores of the children participating in the program improved more than the scores of non-participants (Nokes, van den Bosch and Bundy, 1998).

In a study conducted by (Cueto, 1995), 23 malnourished and 29 well-nourished 9 to 11 year old boys were studied to assess the effects of breakfast on cognitive performance. Each boy served as his own control in a manner comparable to the Jamaica study cited above. Breakfast was a nutritionally fortified beverage and a baked grain product fortified with iron, similar to the meal provided in the government-sponsored school breakfast program. A series of cognitive tests were administered in an experimental setting. Speed in performing a short-term memory test and discrimination of geometric patterns were improved under the breakfast condition in both groups. The effect was more pronounced in the nutritionally disadvantaged children (Pollitt, Jacoby and Cueto, 1995).

Retention

It seems reasonable to assume that students who commit themselves to completing their education will be more motivated and perform at higher levels of achievement. Some schools seem more successful than others in retaining students through to completion of the required years. An effective school feeding program is known to influence students' participation in compulsory schooling and completion (Williams, 1987). Ainley, Batten, and Miller (1984) concluded that students' feelings of success and general satisfaction with school resources such as a good feeding program influenced their intention to remain at school. The effects of school feeding program on students' continuation in schooling and beyond have not been as carefully researched. Schools that provide a relevant curriculum and a supportive SFP would be expected to have higher retention rates. However, students' family background also contributes to their commitment to secondary education. Ainley and Sheret (1992) found that by middle years, pupils have educational plans about the level to which they intend to continue at high school. The educational objectives of the WFP's school feeding programme are well defined and associated with clear indicators. Schools which manage to effectively run their program well are guaranteed of keeping children in school. Giving three meals per every school day reduces school transfers since every parent is comfortable with their children's participation in school (Bennett, 2003).

RESEARCH DESIGN

Research Design

This study employed a descriptive survey research design. A descriptive study is concerned with determining the frequency with which something occurs or the relationship between variables (Bryman and Bell, 2003). Thus, this approach was appropriate for this study, since the researcher intends to collect detailed information through descriptions and is useful for identifying variables and hypothetical constructs. According to Orodho, (2003), a descriptive survey design is preferred because it is appropriate for educational fact finding and yields a great deal of information, which is accurate. It also enables the research team to gather data at a particular point in time and use it to describe the nature of the existing contentions (Cohen, Manion & Morrison, 2000).

Study Population

The target population of this study was collected from 206 ECDE centres in Bungoma South District, which summed up to 618. Data was collected from the school managers, teachers, ECDE representatives and the pupils so as to solicit enough information on the influence of school feeding programme on participation of learners in the ECDE centres. Stratified random sampling was applied in this case whereby 63 respondents were picked to fill the questionnaire

upon authority from the various managements. This study used a questionnaire as the only data collection tools.

Data Collection Procedure

To ensure validity of the instruments, the researchers liaised with the supervisors who are experts in the area of study while framing the questionnaires. The supervisors or lecturers in the departments were considered to be experts in research and reliably guided the researcher to develop valid instruments. This research study used the test-retest method which involves administering the same scale or measure to the same group of respondents at two separate times. This is after a time lapse of one or more weeks. A pilot study was conducted in 6 schools in the district of which the results were not be included in the main sample. A correlation coefficient of above 0.76 deemed the instrument as reliable. The researcher secured a research permit and research authorization letter from the National Council of Research before proceeding to the field for data collection. The instrument was administered through personal visits on appointment. Descriptive statistics analysis was employed whereby the SPSS (Statistical Package for Social Sciences) programme is used.

Data Analysis

Data was grouped into frequency distribution to indicate variable values and number of occurrences in terms of frequency. Frequency distribution table was informative to summarize the data from respondents. Tables and graphs were used to present the data collected for ease of understanding and analysis.

RESEARCH FINDINGS

This study found out that most of the children took meals in the school and that majority of the respondents indicated that parents contributed most towards donating meals in the schools as shown by 69%. Majority of the respondents as presented by 79% indicated that children took two (2) meals per day and that the feeding program in most of the centres were effective (34%).

SFPs and Enrollment

The study found out that majority of the respondents indicated that their classrooms had an enrollment of between 21- 30 pupils presented by 38% and more than 30 pupils (31%) and that majority of the respondents said that feeding programme in the centre enhance enrolment to a very great extent as shown by 46%. The study also found out that enrollment of most schools is done early every year. Finally, as regards to enrollment, majority of the respondents indicated that most of the parents are always willing to bring their children in the centre where dietary meal are provided and that teachers always find pupils in class every time they take a meal in the school as shown by the mean scores of 1.84 and 1.89 respectively. Other respondents fairly agreed that Most of the parents enquire about the meals provided to make a decision of whether

to enroll the children in the centre and that there has been no change on enrolment levels despite the presence of feeding programme as shown by the mean scores of 2.63 and 2.79 respectively.

School Feeding Programmes on Attendance

The results obtained indicated that 97% of the total respondents said that there were cases of children who miss school. The study established that children miss school because of sickness, family affairs, lack of school uniform and food at home, poor performances which make them shy away, lack of parental support and guidance as well as poor characteristics developed by students. Majority of the respondents were of the view that attendance was very good as presented by 49% and that feeding programs enhance attendance levels in the centres to a very great extent (59%).

School Feeding Program on Improved Learning

According to the study findings as presented in the table above that; School feeding program increase pupils participation in class assignment duties and discussion, there are only a few meals provided during the day hence pupil do not fully participate in class work rendering to low performance, the healthy pupils in the centre are always active and perform well in the exam and a feeding program is important than other factors towards the performance of pupils in the centre presented by the mean scores of 1.4286, 2.2857, 1.6190 and 1.5714 respectively.

School Feeding Program on Retention of Pupils

The study found out that majority of the respondents said that there were transfer cases in the centre. Majority of the respondents also indicated that most parents take their children to private schools citing many reasons which range from poor performance in public early childhood education centres, poor teaching methods, lack of skilled staff in public centres, and to a little extent due to poor feeding habits in the local ECD centres.

CONCLUSIONS

Enrollment

On enrolment, study concludes that feeding programme in the centre enhance enrolment to a very great extent. The study further concludes that the ECD centres sampled by the had enrollment of between 21- 30 pupils and over 30 pupils per school and that enrollment of most schools is done early every year. The study also concludes that most of the parents are always willing to bring their children in the centre where dietary meal are provided and that teachers always find pupils in class every time they take a meal in the school.

Attendance

The study concludes feeding programs enhance attendance levels in the centres to a very great extent that there were cases of children who miss school because of the feeding program in place and that children miss school because of sickness, family affairs, lack of school uniform and food at home, poor performances which make them shy away, lack of parental support and guidance as well as poor characteristics developed by students.

Improved Learning

On improved learning, School feeding program increase pupils participation in class assignment duties and discussion, there are only a few meals provided during the day hence pupil do not fully participate in class work rendering to low performance, the healthy pupils in the centre are always active and perform well in the exam and a feeding program is important than other factors towards the improved performance.

Retention

On retention, the study concludes that there were transfer cases in the centre and that most parents take their children to private schools citing many reasons which range from poor performance in public early childhood education centres, poor teaching methods, lack of skilled staff in public centres, and to a little extent due to poor feeding habits in the local ECD centres.

RECOMMENDATIONS

On enrolment, the study recommends that the school management be aware of the high congestion in classes which is over 30 pupils since this is normally brought about by effective school feeding program which attracts pupils from all over. The study also recommends the high spirit with the parents towards contribution of food in the school to continue since this has a positive effect on enrolment. The school management may also come up with more and more strategies related expanding the school to cater for a high capacity of children.

On attendance, the study recommends that the school management make sure that all the factors influencing school attendance be identified so as to reduce transfer cases as was established in the study. The school management should therefore effect on improving the school feeding program which has been noted to have an adverse effect on enhancing school attendance. To improve the school feeding programme, dietary foods interchangeably should be used.

On improved learning, the study recommends that a strong feeding program be encouraged since this enhances learning of pupils. The comfort ability created when a child is not hungry in class brings about motivation to read and learn without engaging in other dangerous activities which negatively influence achievement levels of the child in class. The study recommends that high nutritional reach foods be prepared for the children so as to enhance performance.

On retention, the study recommends that schools sampled and others not included be aware that an effective school feeding always attracts and ensures that children remain in school up to the highest level. This would go along way to ensuring that transfer cases are reduced categorically.

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