

**SUSTAINABILITY OF THE IMPLEMENTATION OF THE PRESCHOOL PHYSICAL EDUCATION CURRICULUM IN NAIROBI AND NYERI COUNTIES**

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**Abstract**

The purpose of the study was to establish the extent to which the implementation of the preschool Physical Education (PE) curriculum was sustainably done in Nairobi and Nyeri Counties. Unlike in the traditional African society where play was embedded in every day's life, today, PE does not enjoy prominent status like the other examinable subjects. Thus, children are denied their right to psychomotor and life skills. The results of the study showed that there were challenges in the teaching of PE such as lack of adequate learning resources which could impede on the sustainability of the implementation of the PE curriculum. Key different stakeholders supported the implementation of PE curriculum with the aim of enhancing physical fitness and health. However, more effort such as provision of adequate learning resources and adherence to PE teaching policies was needed to make the implementation of the PE programme sustainable.

**Keywords:** Implementation, Physical Education Curriculum, Sustainability

## 1. Introduction

The need for promoting physical activity, healthy nutrition and lifestyles has taken central stage world over as without the benefits of exercise, healthy diet and living, individuals face a reduced quality of life and the society increased health care and social costs. For instance, chronic diseases such as heart diseases, cancer, stroke and diabetes which are caused by tobacco use, unhealthy diet, insufficient physical activity and harmful use of alcohol have been reported to be the leading cause of mortality worldwide (WHO, 2011).

Lifestyle diseases which were previously associated with elderly people have not spared children both in developed and developing countries. World Health Organization (2011) reports that in African nations, non-communicable diseases are rising and are expected to exceed communicable, maternal, prenatal and nutrition diseases as the most common causes of death by 2030. Jamah (2010) posits that, in Kenya, cases of diabetes which are triggered by obesity have increased among children and this has been attributed to technology, inadequate play space and lack of engagement in physical activity. This trend can be prevented by ensuring that children take a proactive approach to their health such as participating in regular physical activity. Jenkinson and Benson (2010) argue that, since most children spend majority of their day in educational settings, PE programmes should be sustainably implemented in schools as these are the best settings to influence and change children's physical activity patterns.

In the Early Childhood Education Curriculum (ECE) in Kenya, PE is an activity area and is referred to as outdoor and physical activities. It is meant to address children physical activity needs and to help young children develop positive attitudes and regular patterns of physical activity which can enhance their health. As Pica (2011) points out, children who learn a myriad of movement skills are more likely to be physically active throughout school which facilitates the development of lifetime patterns of physical activity. For children to acquire the intended objectives of the PE programme, it should be sustainably implemented and thus, the need to examine the implementation of the PE curriculum in pre-schools.

To examine the sustainability of the implementation of the pre-school PE curriculum, the study sought to establish the administrators and parental support towards the PE programme, challenges faced in the teaching of PE that may hinder the sustainability of the PE programme and the strategies used to overcome the challenges. Studies have been done to evaluate the implementation of PE programmes at different levels of education in Kenya and in other countries. Madeje (1981) conducted an evaluation study on the implementation of the PE programme in Dar-es-salaam city primary schools and found unavailability of PE teachers, negative attitude of some teachers, city education administrators and parents contributed towards poor implementation of PE programmes. Muniu (1986) conducted an evaluation of the implementation of the PE curriculum in Kenya's Teachers' Diploma Training Colleges and found that the teaching and learning of PE was affected by time allotment and inadequate resources.

Administrative support is crucial for achieving as well as sustaining the implementation of a programme as administrators provide a number of supports to help personnel responsible for implementing a programme overcome challenges along the way (Mobarak, 2013). However, one of the major problems faced by teachers in curriculum implementation is lack of support and encouragement from the administrators and parents (Wai-Yum, 2003).

In pre-schools in Kenya, parents and local communities also play a key role as they are expected to meet the large proportion of the investment by supporting infrastructure development, paying teachers, equipping schools with learning and play facilities, supporting feeding and health programmes (Abagi, 2008). Besides Kenya, many countries have developed strategies aimed at promoting parental involvement in education. For instance, the School Based-Management (SBM)

emphasizes on collaborative efforts among teachers, parents and other stakeholders for improving quality of education (World Bank, 2008). However, this involvement especially in developing countries is hindered by various factors such as poverty, lack of financial resources, lack of interest and lack of understanding of the need to invest in pre-schools by the parents and the local communities (Abagi, 2008).

Despite the essential role that physical activity plays in the life of a child, PE faces various challenges in most African countries. These challenges include; reduced curriculum time due to pressure for good academic performance, lack of adequately prepared teachers, poor state of facilities, inadequate equipment and a negative perception from head teachers, teachers, students and parents (DiFiore, 2010). A survey about the status of PE in African countries revealed that 75% of schools in Africa did not meet the legal policy requirements for PE. The gaps included poor curriculum policies, low perceived importance of PE, diversion of resources for PE to other projects, insufficient financial and material resources (Hardman & Marshall, 2000). There has been concern of the decline of PE and this has been raised in various global forums such as the World Summit on PE held in November in Berlin. PE experiences a low profile and status in African schools compared to other subjects. It has to compete for time and resources yet it requires high initial capital costs for facilities, recurrent maintenance, purchase and replacement of equipment in the schools (Hardman & Green, 2011).

To sustainably implement the PE programmes, strategies need to be put in place to overcome the challenges faced in the teaching of PE. Policies should be set for the implementation of the PE programme, funds should be allocated for the purchase of PE learning resources and parental support should be incorporated in the implementation of the PE programme. Creative teachers could also make the best of available space and equipment both within the school and the community by using improvisation.

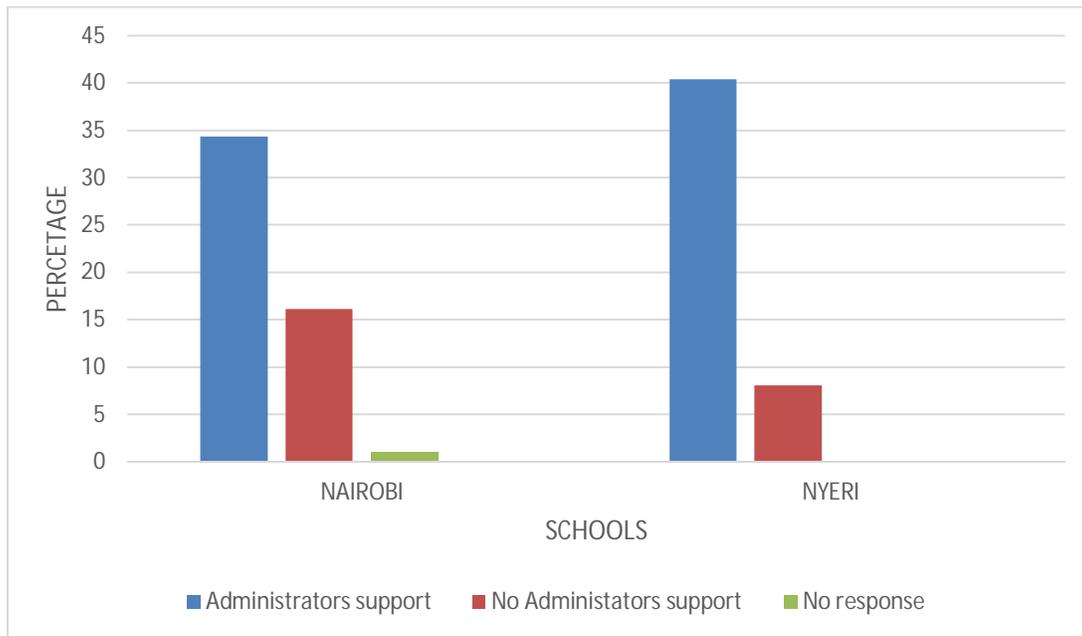
## 2. Methodology

The study employed the cross-sectional survey design. Nairobi and Nyeri Counties were purposively sampled to provide a geographical comparison. Using stratified and simple random sampling, 99 preschools were selected from the two Counties. The respondents included 60 head teachers, 99 teachers and 4 county ECE officers who were selected using stratified random and simple random sampling. Research instruments used were questionnaires and interviews. Content analysis and descriptive statistics such as frequency and percentages were used to analyze the data.

## 3. Results and Discussion

### *Findings on administrators' support and PE curriculum implementation*

From the study, it was found that 74(74.75%) of the teachers, 34 (34.34%) from Nairobi and 40 (40.40%) from Nyeri pre-schools indicated that the administrators supported the achievement of the PE programme objectives, 24(24.24%) indicated that the administrators did not support the achievement of the PE programme objectives while 1(1.01%) did not respond. Out of the 25 (25.25%) teachers who reported that the administrators did not support the achievement of the PE objectives and the teacher who gave no response, 17 (17.17%) were from Nairobi pre-schools and 8 (8.08%) were from Nyeri pre-schools. This implied that more administrators from Nairobi pre-schools did not support the achievement of PE programmes objectives. Figure 1 shows the levels of administrators' support towards the achievement of the PE objectives in Nairobi and Nyeri pre-schools.

**Figure 1: Levels of Administrators' Support towards PE Objectives Achievement**

The 74 (74.75%) teachers who indicated that the administrators supported the achievement of the PE programme objectives gave various responses as shown in Table 1.

**Table 1: Nature of the Administrators' Support**

Response	Nairobi Schools	Nyeri Schools	F	%
Provided PE learning materials	20	21	42	42.42
Allocated time for PE teaching	9	11	20	20.20
Monitored PE teaching	5	7	12	12.12
Repaired PE equipment	3	4	7	7.07
Provided PE references	4	2	6	6.06
Supported sports days	2	-	2	2.02

Table 1 shows that majority of teachers 42 (42.42%) both from Nairobi and Nyeri preschools reported that the administrators provided PE learning materials, followed by 20 (20.20%) allocated time for teaching PE, 12 (12.12%) monitored the teaching of PE, 7 (7.07%) repaired PE equipment, 6 (6.06%) provided PE references, 2 (2.02%) provided PE references while 2 (2.02%) supported sports days. The results showed that most of the administrators from Nairobi and Nyeri preschools supported the PE programme by providing learning materials. This would ensure the sustainability of the implementation of the PE programme as learning materials are integral components of the teaching-learning process (Bolick, Berson, Coutts & Heinecke, 2003).

The 24 (24.24%) teachers who indicated that the administrators did not support the achievement of the PE programme objectives gave various responses as shown in Table2.

**Table 2: Teachers Responses on Lack of Administrators' Support**

Response	Nairobi Schools	Nyeri Schools	F	%
No provision of adequate PE learning materials	9	6	15	15.1
No provision of funds for purchase of PE materials	6	5	11	11.11
Poor attitude towards PE	3	5	8	8.08
No repair of PE equipment	3	3	6	6.06

Table 2 shows that 15 (15.15%) of the teachers both from Nairobi and Nyeri preschools stated that administrators did not provide PE learning materials, followed by 11 (11.11%) administrators did not provide funds for purchase of PE materials, 8 (8.08%) administrators' poor attitude towards PE, while 6 (6.06%) stated that the administrators did not repair PE equipment. This implied that most of the administrators from Nairobi and Nyeri preschools who did not support the achievement of the PE programme objectives did not provide adequate PE learning materials and funds for the purchase of PE materials. This would negatively affect the sustainability of the implementation of the PE programme due to lack of resources and funds.

The results of the study on administrators' support of the PE programme show that 74 (74.75%) teachers from Nairobi and Nyeri preschools reported that administrators supported PE programme. This implied that the administrators were supportive towards the achievement of PE programme objectives. This is in line with Vives-Rodriguez (2005) who points out that administrators should be involved in the implementation process of the PE curriculum as their support on provision of learning resources has an impact on the outcome of the PE programme.

#### *Findings on parental support and PE curriculum implementation*

The results of the study revealed that 56 (56.57%) of the teachers both from Nairobi and Nyeri preschools stated that parents supported the PE programme, 38 (38.38%) stated that parents did not support the PE programme while 5 (5.05%) stated that parents were not involved or requested to support the PE programme. Out of the 56 (56.57%) teachers who stated that parents supported the PE programme, 32 (32.32%) were from Nyeri pre-schools. This implied that there was more parental support of the PE programme from Nyeri preschools than from Nairobi preschools.

The 56 (56.57%) teachers who stated that the parents supported the PE programme indicated the nature of the parental support. The teachers' responses are presented in Table 3.

**Table 3: Nature of Parental Support**

Response	Nairobi Schools	Nyeri Schools	F	%
Paid schools' fees	17	15	22	22.22
Provided PE learning materials	6	14	20	20.20
Appreciated the teaching of PE	5	4	9	9.09
Provided children with PE kits	6	2	8	8.08
Attended sports day	5	-	5	5.05

Table 3 shows that 22 (22.22%) teachers from Nairobi and Nyeri preschools indicated that parents paid school fees which was used to purchase play materials, followed by 20 (20.20%) provided PE learning materials, 9 (9.09%) appreciated the teaching of PE as a learning activity area, 8 (8.08%) provided children with PE kits, while 5 (5.05%) indicated parents attended sports day. This implied that most of the parents who supported the PE programme did this through the payment of school fees and the provision of PE learning materials. This would enhance the sustainability of the implementation of the PE programme.

It was noted that more teachers 14 (14.14%) from Nyeri preschools indicated that parents provided PE learning materials than teachers from Nairobi preschools while teachers from Nairobi preschools indicated that parents attended sports day while none of the teachers from Nyeri preschools indicated this. Parents from Nairobi preschools paid school fees and expected the schools to purchase PE learning materials. On the other hand, sports days were mostly held in Nairobi preschools than Nyeri preschools.

The 38 (38.38%) teachers who said that the parents did not support the PE programme gave the responses presented in Table 4.

**Table 4: Teachers Responses on Lack of Parental Support of the PE Programme**

Response	Nairobi Schools	Nyeri Schools	F	%
No provision of PE learning materials	12	8	20	20.20
No school fees payment for purchase of play materials	6	10	16	16.16
Poor attitude towards PE	8	6	14	14.14
No appreciation of PE teaching	6	5	11	11.11
Complain of dirt or dust	5	3	8	8.08
Emphasis on academic performance	3	3	6	6.06

Table 4 shows that 20 (20.20%) teachers both from Nairobi and Nyeri preschools stated that parents did not provide PE learning materials, followed by 16 (16.16%) did not pay school fees used for purchase of play materials, 14 (14.14%) poor parental attitude towards PE, 11 (11.11%) no parental appreciation of PE teaching as PE was seen as a waste of time, 8 (8.08%) parents complained of dirt or dust, while 6 (6.06%) stated that the parents emphasized on academic performance. More teachers 12 (12.12%) from Nairobi preschools indicated that parents did not support in the provision of PE learning materials while more teachers 10 (10.10%) from Nyeri preschools indicated that parents did not provide school fees for purchase of play materials. One of the teachers commenting on the parental support of the PE programme stated:

Some parents do not know what is taught and what is not taught in pre-school. [T 81]

This teacher's comment showed that some parents were not aware of what was taught in pre-school and this implied that parents may not know the value of different activity areas and hence the lack of support. The lack of support either through lack of provision of PE learning materials, non-payment of school fees or poor attitude towards PE would affect the sustainability of the implementation of the PE programme. As Adeogun (2001) points out, effective teaching cannot take place if basic instructional resources are not present.

The results of the study further showed that, 30 (50%) head teachers both from Nairobi and Nyeri preschools said that parents had a positive attitude towards PE as they cooperated and appreciated

the schools programmes. They provided play materials when requested, donated play materials, provided their children with PE attire and attended schools' sports days. However, 30 (50%) of the head teachers said that parents had a negative attitude towards PE as they saw PE as a waste of time. They preferred the preschools to give more time to academic activity areas.

The results of the study revealed that 56 (56.57%) teachers both from Nairobi and Nyeri pre-schools reported that parents supported the PE programme. This implied that parents were supportive of the PE programme. As Mbugua (2004) points out, parents and local communities are expected to help gather materials, and use locally available resources to make children's toys in ECE. This is supported by Swadener, Kabiru and Njenga (2000) who point out that, pre-schools are funded and supported by parents and the local community.

#### *Findings on challenges faced in the PE curriculum implementation*

The results of the study showed that, 69(69.70%) of the teachers both in Nairobi and Nyeri preschools indicated that there was lack of PE resources, followed by 13(13.13%) inappropriate facilities, 12 (12.12%) lack of administrators and parental support, 10(10.10%) unfavourable weather, 10(10.10%) stubborn children, 10(10.10%) children's lack of exposure and inability, 9 (9.09%) limited time while 8(8.08%) indicated negative attitude from parents. The results showed that the upmost challenge facing the teachers in the teaching of PE was lack of PE resources. The head teachers' responses were similar with the teachers' responses as shown in Table 5.

**Table 5: Head teachers' Responses on the Challenges Faced in the Teaching of PE**

<b>Response</b>	<b>Nairobi Schools</b>	<b>Nyeri Schools</b>	<b>F</b>	<b>%</b>
Lack of PE learning materials and equipment, lack of references	22	19	41	68.33
Lack of play grounds	6	8	14	23.33
Negative attitude of teachers and parents	4	3	7	11.67
Limited time	0	3	3	5.00
Unfavourable weather	1	2	3	5.00
Children's lack of exposure and inability	2	0	2	3.33
Injuries	2	0	2	3.33
Lack of PE kits	0	2	2	3.33
Large classes	1	0	1	1.67
PE being non-examinable	1	0	1	1.67
Preparation for Std. one admission	0	1	1	1.67

Table 5 shows that 41 (68.33%) of the head teachers both in Nairobi and Nyeri preschools indicated that there was a challenge of lack of PE learning materials, equipment and resources, 14 (23.33%) lack of playgrounds, 7 (11.67%) negative attitude from the teachers and parents, 3 (5.00%) limited time, 3 (5.00%) unfavourable weather, 2 (3.33%) children's lack of exposure and inability, 2 (3.33%) injuries, 1 (1.67%) large classes, 1 (1.67%) PE not being examinable and 1 (1.67%) indicated children's preparation for standard one admission. The results showed that lack of PE learning materials, equipment and facilities was the main challenge that Nairobi and Nyeri pre-schools faced in the teaching of PE.

The 4 (100%) ECE county officers from Nairobi and Nyeri Counties stated that preschools faced various challenges in the teaching of PE. The biggest challenge was the lack of PE equipment and

play materials which hindered the sustainability of the PE programme. Adequate playground was also a challenge as some preschools had no play spaces at all while others had limited play spaces. Some preschools shared playgrounds with the primary schools' sections and this was not conducive for the preschool children. The officers pointed out that some preschools had limited funds to buy land or to purchase play equipment as the school fees paid by the parent was used to cater for all the expenditures of the preschools. The officers stressed that the provision of PE learning resources was also hampered by the negative attitude of the preschools administrators, teachers and parents towards PE. The pressure for preschools to perform well academically and the parents' expectations from the preschools had a negative impact on the teaching of PE. This situation can be summarized by a quote from one of the teachers:

There is no time for play in school as the parents demand for good grades and the head teacher has to ensure the grades are delivered. [T 14]

The teacher's comments showed that there were various challenges that affected the sustainability of the PE programme such as the negative attitude of parents towards PE and their emphasis on academic performance in preschools. If preschools administrators bowed to the parents' demand, this would affect the teaching of PE and thus the sustainability of the PE programme. No resources would be earmarked for the sustainability of the PE programme as all resources would be diverted to ensure academic excellence in the pre-schools.

The ECE county officers' responses on the challenges faced in the teaching of PE were also similar with the teachers and the head teachers' responses. The ECE county officers also reported that the major challenge experienced in the teaching of PE was lack of PE facilities and equipment. This implied that effectiveness and efficiency of the implementation of the PE programme in both Nairobi and Nyeri preschools was affected by lack of PE facilities and equipment.

Studies have noted that the challenges faced in the teaching of PE at all tiers of education in Kenya and in other countries include; lack of funds, inadequate learning facilities and equipment, inadequate time allocation, large classes, inadequate references, negative attitude of some school administrators, teachers and parents (Madeje, 1981; Muniu, 1983; Kiganjo, 1987; Simiyu, 1990; CARICOM, 2011; Maina, 2011). Studies have also established that PE even in the class setup has not been accorded the weight it deserves as it is seen as a waste of learning time (Muindi, 1998; Mukala, 2002). Parents' expectations also affect ECE as most parents want their child to perform well in literacy and numerical skills (Wawire, 2006). This makes the teachers concentrate on academics at the expense of the other aspects.

#### *Findings on the strategies used to overcome the challenges and PE curriculum implementation*

From the study, 69(69.70%) teachers both from Nairobi and Nyeri preschools stated that they improvised PE resources, 13 (13.13%) encouraged and motivated the stubborn and weak children to participate in play, 6 (6.06%) used break time for play, 5 (5.05%) allowed more practice time for skills in order for children to acquire skills, 5 (5.05%) used indoor lessons when the weather was unfavourable, 5 (5.05%) modified the play activities to suit the available play areas, 2(2.02%) used the guided play approach more in order to effectively use available play area and resources, 1(1.01%) borrowed play materials from community resources while 1(1.01%) borrowed references from neighbouring schools. This is presented in Table 6.

**Table 6: Teachers' Responses on Overcoming of Challenges Faced in Teaching PE**

Response	Nairobi Schools	Nyeri Schools	F	%
Improvisation of PE resources	25	26	69	69.70
Encouraging and motivating children to play	7	6	13	13.13
Using break times for play	3	3	6	6.06
Enhancing practice of skills	3	2	5	5.05
Use of indoor lessons	3	2	5	5.05
Modification of activities to suit play areas	3	2	5	5.05
Talks to parents	3	2	5	5.05
Use of activities children like	2	3	5	5.05
Seeking donations	4	-	4	4.04
Enhancement of safety	3	3	3	3.03
Use of groups for large classes	1	1	2	2.02
Use of more guided play	1	1	2	2.02
Borrows play materials	1	-	1	1.01
Borrows reference books	-	1	1	1.01

The results presented in Table 6 reveal measures taken by teachers both from Nairobi and Nyeri preschools to overcome challenges in the teaching of PE such as improvisation of PE resources through use of locally available materials and use of community resources to ensure the sustainability of the PE programme. The teachers suggested that to overcome the challenges and to sustain the teaching of PE, the schools administrators should strive to provide adequate play resources, hire play fields or use community grounds, ensure enough time is allocated to PE, give guidance and school policies to ensure PE is well-taught, ensure use of available play space in turns instead of the whole school being in the field at once to make maximum use of available play space and hold workshops or sports days to sensitize parents on the importance of PE.

To overcome the challenges, 48 (80%) head teachers said that their preschools improvised play materials, 4 (6.67%) increased practice time, 4 (6.67%) used indoor PE lessons in instances of unfavourable weather, 2 (3.33%) used groups for large classes, 2 (3.33%) used safety rules to minimize injuries, 4(6.67%) talked to parents to sensitize them on the importance of PE, 4 (6.67%) followed up teachers and 2(3.33%) purchased play materials.

Majority of the teachers and the head teachers both from Nairobi and Nyeri preschools reported that improvisation was the major strategy used to overcome the challenge of lack of PE facilities and equipment to enhance the sustainability of the PE programme.

#### 4. Conclusions

The findings of the study showed that 74 (74.75%) and 56 (%6.57%) teachers both from Nairobi and Nyeri preschools indicated that administrators and parents supported the PE programme respectively. This support was essential for the sustainability of the implementation of the PE programme. However, 24 (24.25%) teachers both from Nairobi and Nyeri preschools reported that administrators did not support the achievement of the PE programme as they did not provide adequate PE learning materials or funds to purchase the PE learning materials. It was also reported by 38 (38.39%) teachers both from Nairobi and Nyeri preschools that parents did not support the PE programme as they did not provide PE learning materials or pay school fees which was used to purchase the PE learning materials.

The results of the study also revealed that both Nairobi and Nyeri preschools faced various challenges such as lack of PE learning materials and equipment due to lack of sufficient funds in the preschools. The teachers and the head teachers tried to overcome the challenges faced in the teaching of PE in order to make the teaching of PE sustainable.

To achieve the PE objectives, the PE programme needs to be sustainably implemented at all tiers of education and this calls for full and consolidated effort from all the stakeholders. PE needs to be taught as this will address the risk of insufficient physical activity which contributes to non-communicable diseases. PE promotes children's health which will in turn contributes to a sustainable future as no sustainable development can be achieved without focusing on health.

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