THE IMPACT OF INVESTMENT IN SPORTS TEACHERS TRAINING ON PUPILS’ PARTICIPATION IN SPORTING ACTIVITIES IN PUBLIC PRIMARY SCHOOLS IN KENYA

Muthoni Tabitha Mwangi¹, Josephat Kigo², Beatrice Owiti³
¹PhD Candidate, Kenya Methodist University, Kenya
²PhD, School of Education and Social Sciences, Kenya Methodist University, Kenya
³PhD, School of Education, Meru University, Kenya

Abstract:
The introduction of the ‘Competence Based Curriculum’ (CBC) in Kenya’s basic education system in 2017 was meant to promote early identification of talents along with arts and sports among other talents. The realization of these can be best achieved through deliberate investment in talent development. One of the key investment and development areas is the training of sports teachers. However, the extent to which primary schools in the country invested in professional or ‘specialist’ training of sports teachers and its effects on pupils’ participation in sports was not well understood. Therefore, the main objective of the study was to establish the impact of investment in sports teachers’ training and its influence on pupils’ participation in sporting activities in Nairobi County, Kenya. Gardner’s theory of Multiple Intelligences theory guided the study. Concurrent triangulation design was used for the study which targeted 68 school heads and teachers in charge of games in 68 public primary schools within Nairobi County using systematic random sampling and purposive sampling techniques. Data was collected using questionnaires and was analyzed using both descriptive and inferential statistical methods with the aid of Statistical Package for Social Scientists (SPSS) software version 22.0. The results revealed that school investment in teachers’ training for talent management could significantly influence pupils’ participation in sports in primary schools in Nairobi County. However, presently there was a low investment in specialist sports teachers’ training. The study, therefore, recommends that; there is a need to emphasize that the sports teachers get at least one specialist training
once posted as teachers apart from the general training they receive in the teacher training colleges.

**Keywords:** investment in sports teachers training, pupils’ participation, public primary, schools

1. Introduction

For a long time, the understanding of talent was for the most part confined to scientific ability, music performance, academics, religion or sporting activities. However, the advent of ‘war for talent’ as proclaimed by McKinsey close to two decades ago in the early 21st century raised the profile of talent in the strategic agenda or organizations as well as in educational institutions in the world (Van, Mathafena & Ras, 2015). Subsequently, the last decade has seen many organization managers train their focus on talent management (TM). Indeed, it is emerging that obtaining and enlisting talented persons has been a key preoccupation for institutional managers over the last 10 years (Van et al., 2015; Renström & Stenling, 2019; Prieto-Ayuso et al., 2020).

Evidently then, talent is a rare and valuable resource for society and a great deal of potentially valuable human talent will be wasted if society does not pay attention to understanding how that talent develops and how it should be managed. As such, identification and management of talent are very important to its development. Williams et al., (2020) explain that the identification of talent entails the prediction of one’s capabilities by assessing attributes such as psycho-social, physiological on individual or combinational scales. Talents, when well identified and managed in schools, provide pupils with flexibility and opportunities for communicating their feelings beyond the school rules and regulations could be more important and fulfilling for the learners (Baum et al., 2014). It, therefore, means that if the talents are well managed in the schools, they would provide the talented pupils with chances of self-expression in addition to providing passages through which they can flow their surplus energies.

Present-day education in schools globally points at the holistic development in children’s lives. Overall development of children while in school is a topic that has attracted the attention of scholars and academicians (Flashman, 2012). Research shows that involving learners in extra-curricular activities can help improve their performance and motivate them regarding their individual capabilities. In cognizance of this, the Kenya government introduced ‘Competence Based Curriculum’ (CBC) in the country’s basic education system in 2017 (Kenya Institute of Curriculum Development [KICD], 2017). The CBC seeks to promote early identification of talents along with arts and sports, social sciences and science, technology and mathematics (STEM). The design of the new curriculum is such that at the completion of every learning cycle, the learners will have acquired seven core competencies. These competencies are meant to be in problem-solving and critical thinking, collaboration and communication, creativity and innovation, learning aptitude, citizenship, self-efficacy and digital literacy as espoused
by Gardner in the theory of Multiple Intelligences. The CBC also recognizes the need for
talent identification and development within the school learning context earlier on in the
learning process.

Prior to the introduction of the new Competence Based Curriculum (CBC) in
Kenya, public primary schools spent one hour (3:10 pm - 4:10 pm) in co-curricular
activities four days per week. In addition, 30 minutes was allocated for Physical
Education (PE) per class in one day a week. In 2013, for instance, Kenya allotted 80
minutes weekly for PE on average among primary school pupils compared to Ethiopia’s
225 minutes per week on average for their pupils (Murithi, 2015). Moreover, studies
suggest that there are inadequate sports teachers in primary schools. Inadequacy of
teachers’ trainers has recently been recognized as a main area of weakness that is facing
most the majority of teacher training institutions in the sub-Saharan African context
(infoDev, 2010). Trainers’ inadequacy is categorized into the inadequacy of the needed
numbers as well as incompatibility in teacher educators’ qualifications, which is coined
with specifications of an educator’s job. The deficiency has undermined the quality of
teacher education at the pre-service and in-service levels. In Kenya, however, all primary
school teachers are required to take physical education as a subject during their training
in the Teachers Training Colleges. However, upon graduation, most teachers who end
up teaching sports are considered generalists with no specialization in any particular
sports (MOEST, 2001; Muriithi, 2015; Onyancha, 2018). Hardman and Marshall (2009)
similarly observed this inadequacy of qualified PE teachers pointing out that both
‘generalist’ and ‘specialist’ qualified personnel teach physical education in primary
schools: generalist teachers feature in 66% of countries and specialists in 69% of countries.

Proficient teachers usually comprehend how the development of children as well
as their learning process is manifested. They integrate the predominant cognition theories
as well as aptitude in their teaching practices. Normally, they are attentive to how culture
and context influence student behaviour. They focus on developing the cognitive
capacity of the students as well as the students’ reverence for learning. Correspondingly,
they foster self-esteem on students’ character, motivation, civic obligation as well as their
admiration for cultural, individual, racial and racial differences (Castellano, 2013).
Engaging and managing pupils that are talented does depend on a teacher’s skills.
However, Petrie, Jones and McKim (2007) observed that most PE teachers continue using
a series of outdated courses that had little impact on the nurturing of the PE talents
among learners. This can be addressed through additional training of sports teachers to
make them specialists, and this requires substantial investment. However, the question
is, do school managements in primary schools in Kenya invest in additional professional
training of their sports teachers? and what are the impacts of school managements’
investment in teachers’ training on pupils’ participation in sporting activities in public
primary schools in Kenya and specifically Nairobi County?

Nairobi County is cosmopolitan and diverse in terms of its populations and school
settings making it representative of the country at large. It contains a fairly large number
of public schools displaced in the urban and peri-urban areas of the County making it
information-rich for study purposes. As the premier urban location in the country, Nairobi is expected to lead the way in terms of investment in education and talent management due to the high resource endowment and increased opportunities for development compared to other regions in the country. While the status of investment in general education and teaching and learning resources in the county’s public primary schools is well documented both in research and policy documents, the level of investment in sports talent development and especially professional teacher training in sports is hardly known. Therefore, the objective of the study is to determine the impact of investment in sports teachers’ training on pupils’ participation in sporting activities in public primary schools in Kenya.

2. Literature Review

2.1 Teacher Training in Sports Talent Management and Pupils Participation in Sports

Non-academic gifts and talents have now been recognized globally as pertinent ingredients that boost the quality of education among students, and also goes an extra mile to nurture healthy and economically viable societies (Redlinger-Grosse et al., 2021). School teachers are also very important to nurturing and developing these non-academic talents. Finding and supporting extraordinary abilities in children and youth, and seeing those students and their gifts blossom are among the incredible joys of teaching. In reality, teachers’ errand in school ought to concentrate on educating fundamental abilities as well and as early as conceivable and to distinguish and support students’ qualities (Pangrazi & Beighle, 2019). Skilled teachers normally assist their students to utilize their giftedness and also provide the necessary resources to them. They also offer improved learning chances to the students, which help in enlarging their natural gifts. This way, the students are pushed towards advanced personal living standards as opposed to just giving the students more work, or even forcing some students to teach other less capable students (Lohman & Renzully, 2017). Therefore, for talent management to be successfully realized in the school setting, there a is need for skilled teachers and training is important to impart the vital skills for the teachers.

In order to nurture skills, identification of advanced scholars from large populations and the creation of a learning atmosphere that is supportive of student needs, the schools’ leadership needs to engage in consistent professional development that aims to address several issues. First, professional development will enable teachers to identify the learning features and behaviours of gifted populations that are under-represented. Secondly, they can identify cultural differences existing among gifted and talented children as well as the ones with numerous exceptionalities. Thirdly, they are able to develop a constructive peer culture in their classrooms that are coined with non-biased and equitable assessments (Brevik et al., 2018). All these underscore the value of teacher training in pupil talent management.

Training is the viable application of information, which gives the essential experience, abilities and the capacity to deliver the wanted outcomes (Varela-Losada et
It may, moreover, be called a man-made module for giving viable experience, abilities and the capacity, which is required to meet particular needs and guidelines. The world that students are being nurtured by their teachers in schools is changing rapidly, the teaching skills that are needed are advancing rapidly as well, therefore; there is no beginning program of instructors’ education that can be satisfactory for getting ready teachers for careers of 30 or 40 years. Student characteristics also continue altering as a result of statistic matters, and there exists a persistent weight that requires scholastics to dominate their subjects, as they continually pass skills on to the students. Therefore, continuous teacher training through programs like the Continuous Proficient Development (CPD) which entails processes that enable teachers (like other experts do) to regularly reflect concerning their core competencies, update, and advance them further are important (Yemini et al., 2019).

The ideas and thinking of teachers are usually manifested through the pedagogic methods that they apply to talent management. These methods come from the types of training experienced by the teachers in their school days. Such methods are usually taught in the ITE (Initial Teacher Education) as well as in and CPD (Continuing Professional Development) programs, which are clearly specified in most of the present schools’ curriculum (Castellano & Diaz, 2013). In Kenya, the Teacher Education and Professional Development (TEPD) program provide support for educational innovations in Kenya by offering technologically improved training and materials. Its main aim is to advance the preparation of Kenya’s public schools’ teachers and also come up with new pedagogics intended to enhance the learning process in public primary schools in Kenya (KICD, 2017).

A study conducted in Brazil by Cross, Stewart and Coleman (2013) reveals that students with high abilities usually have high achievements, and are characteristically attended to in regular classrooms. The study suggests that; it is essential for the government to train all teachers in a way that they can be in a position to identify and meet all education-related requirements of advanced students. Such training would enable them to respond to the strengths of individual students, and also refer some of them to further assessment where applicable. In addition, it is essential that staff from various institutions like schools, district-level education offices and other education institutions that have expertise in handling talented and gifted avail themselves for the support of regular classroom instructors in the teaching work (Halaidiuki et al., 2018).

In England, highly trained and developed teachers are advised and required to follow a pragmatic approach in the process of identifying 5-10% of gifted or talented students. They are required to use this pragmatic approach out of a great concern focusing on making sure that schools come up with certain provisions for learners that are most gifted (Valk, et al., 2012). Teachers trained in the management of talents in the majority of the schools in Malaysia are usually devoted to offering knowledge to all students. They usually take action following the belief that every student has the ability to learn. They normally treat their learners with equality, being familiar with personal differences distinguishing each student from the others, taking into consideration those
dissimilarities in the teaching practice. Teachers usually adjust their practices depending on the knowledge and observation of the abilities, interests, knowledge, skills as well as prevailing family circumstances, in addition to peer relations.

Inadequacy of teachers’ trainers has recently been recognized as a main area of weakness that is facing most the majority of teacher training institutions in the sub-Saharan African context (infoDev, 2010). Trainers’ inadequacy is categorized into the inadequacy of the needed numbers as well as incompatibility in teacher educators’ qualifications, which is coined with specifications of an educator’s job. The deficiency has undermined the quality of teacher education at the pre-service and in-service levels. A contention was made by National Council for Teacher Education (NCTE) in 2009 in relation to efficient teachers’ preparation implying that; professional training and education of teachers can only be effective when delivered by teachers’ educators as they are the ones who are competent, knowledgeable and equipped professionally to handle such kind of work. There are also high incidences where under-qualified and unqualified teachers have been employed in schools. This is an issue that has seriously undermined educators’ energies in advocating for a resilient teaching profession in nations. Some countries like Tanzania, Togo and Cape Verde have less than 50 per cent teaching forces that are professionally skilled (EFA Global Monitoring Report, 2011). Castellano & Diaz (2013) study indicates that managements of schools usually involve impermanent teachers, school leavers and volunteers qualified from brief instruction courses to assist in teaching.

In Kenya, in-service teaching programs are offered for already working teachers. The in-service training ought to be delivered continuously and reliably and in different approaches. The goal of in-service training for teachers is to advance teaching quality amongst teachers, and also acclimatizing new ones to the teaching system in order for them to conduct efficient teaching and learning in schools. When there is no such training, the teachers may not manage changes well, and may also lose the capability of working efficiently and effectively. At most times, in-service teaching is given through seminars, short courses, meetings, workshops and other specified training methods. The teaching is made available by the Kenyan government in conjunction with other educational stakeholders who are either in the country or outside. Indeed, teacher preparations and training on such as identifying and nurturing gifted and talented children are faced with various challenges. Among the major challenges include changes in the duration of the training and the consequent dilemma on whether a curriculum’s focus ought to be only on subject matters (contents) or pedagogies (methodologies) or both ways (Kamau, 2010). The preceding discussion on this variable has underscored the values of teacher training on the talent management of pupils. However, while there are programs geared towards the training of teachers in talent management, they do not explicitly indicate the extent to which these trainings cover sports teacher training in sports talent management. Further, it is not known the extent to which the school management invests in sports teacher training through seminars, professional clinics and certifications in Kenya. This is the subject of the present study.
2.2 Gardner’s Theory of Multiple Intelligences

Present-day curriculum-based reforms have shifted from pedagogic approaches that are ‘teacher-centred,’ and are focusing more on ‘student-centeredness.’ In most cases, though sometimes more abstractedly, pedagogical approaches are often informed learning theories that may include behaviourism theory and social constructivism theories (Castellano & Diaz, 2013). However, for talent management, these theories are inadequate and others such as Gardner’s theory of Multiple Intelligences may be instrumental in guiding the teachers is identifying the pupil’s competencies and managing their talents.

Gardener’s Theory of Multiple intelligences was developed by Gardner (1987). Howard Gardner’s work on multiple intelligences in the Harvard Graduate School of Education has brought about great revolutions in the intelligence concept. Gardner noted that a large number of pupils possess comparative strengths and gifts, such that some of them naturally have greater abilities as compared to others. Natural intelligence and abilities are what can be referred to as talents. Gardner adds that there is a great need for recognition and nurturing of all viable human intellects as well as other great intelligence combinations (Gardner, 1987). However, intelligence needs to be well recognized and nurtured in order for the individual to realize his/her potential to the maximum. Effective recognizing and teaching of a gifted pupil require unprecedented efforts from gifted teachers. This implies that teachers should have the ability to teach gifted children in an intuitive manner. Teachers should, therefore, undergo thorough training on talents identification, nurturing and management. Therefore, the theory of multiple intelligence lays a strong foundation on the establishment of methods for teachers to employ in managing gifted and talented learners based on their varied characteristics and abilities. It underscores the importance of having well-trained teachers for the nurturing of pupils’ talents in the school setting.

3. Materials and Methods

The location of this study was Nairobi County. Nairobi is the capital and the largest city in Kenya. The county has a total of 225 public primary schools. This study used a concurrent triangulation design approach. This is because the study sought to separately collect and analyze data from qualitative and quantitative sources in order to best understand the research problem. Understand the research problem. Due to the combination of different methods of data collection, the use of different data sources results in data reduction. The design allowed data to be collected in quantity and quality and in the same way during the same phase of research (Creswell & Clark, 2017).

The population of this study comprised all the 225 public primary schools within Nairobi County (County Education Offices, Nairobi). The unit of observation were the school heads, games teachers and games captains in all the target primary schools in Nairobi County. The researcher used a sample size of 68 schools which translates to 30% of the 225 public primary schools in Nairobi County. Mugenda and Mugenda (2009)
recommend that a sample size of between 10% and 30% can ideally represent a small population. As such, the study purposively selected 68 school heads, 135 games teachers and 68 games captains from the same sampled schools bringing the total sample size of actual respondents to 271. Systematic random sampling technique was used to select the schools while purposive sampling will be used to select the respondents. Since specific persons in the school are responsible by their designation as head teachers, games teachers and games captains, the researcher first identified the head teachers of the sampled schools and then identify the other respondents through the head teacher.

A questionnaire was used as the main tool in gathering the data needed in this study. The questionnaire was preferred as the main instrument of data collection as it enabled the obtaining of information from a large group of respondents spread over a large area of coverage over a relatively short period of time hence being economical. The use of questionnaires enabled the researcher to collect data by engaging in a special type of conversation with respondents in which the researcher asks questions relevant to the study problem (Creswell, 2013). The questionnaire was pilot tested over a period of 10 days in Thika Town, Kiambu County and involved 7 public primary schools. Afterwards, the questionnaires were subjected to both reliability and validity tests and were revised and adjusted according before being administered in the actual study in public primary schools in Nairobi County. The Statistical Package for Social Scientists (SPSS) software Version 22.0 was employed for statistical analysis. Measures for descriptive statistics used included frequencies, percentages, means and standard deviations. Inferential statistics like regression, the correlation was also used to indicate the strength of the independent variables on the dependent variable.

4. Results

4.1 School Managements’ Investment in Teachers Training on Talent Management in Nairobi County, Kenya

The objective of the study was to determine the impact of investment in sports teachers’ training on pupils’ participation in sporting activities in public primary schools in Kenya. The head teachers’ views are summarized in Table 1.

Table 1 shows that the aggregate $M = 2.647$; $SD = 1.074$ implies that there is a high variation on whether there is an investment in teachers training on talent management in primary schools in Nairobi County, the low mean value indicates that few head teachers agree on the availability of investment in teachers training on talent management. This is evidenced by findings suggesting that the schools did not have adequate qualified sports teachers as indicated by the majority of respondents ($mean = 3.79$). There are indications that most schools did not organize workshops for training teachers on the management of pupils’ sports talent as suggested by 50% of the respondents who disagreed with a low mean of 2.45. Further, as indicated by a mean of 2.83 it is evident that most head teachers disagreed or were uncertain with the view that the schools sponsored teachers for talent management training. With a mean of 2.69 and a rating of 53.4%, most of the head
teachers disagreed that the teachers are facilitated by the school to attend professional sports clinic management of pupils’ sports talent.

**Table 1: Investment in teachers training on pupil’s talent management (Head teachers) (N= 58)**

| Statement                                                                 | SD | D  | N  | A  | SA | Mean | Std. Dev. |
|---------------------------------------------------------------------------|----|----|----|----|----|-------|-----------|
| We do not have adequate qualified sports teachers in our schools.        | 0  | 0  | 21 | 28 | 9  | 3.79  | 0.695     |
| The school organizes workshops for training teachers on management of pupils’ sports talent. | 9  | 29 | 5  | 15 | 0  | 2.45  | 1.046     |
| The teachers are sponsored by the school to attend workshops on management of pupils’ sports talent. | 6  | 23 | 14 | 5  | 10 | 2.83  | 1.258     |
| The teachers are facilitated by the school to attend professional sports clinic management of pupils’ sports talent. | 8  | 31 | 0  | 9  | 0  | 2.69  | 1.366     |
| The teachers in our school are facilitated to attend in-service training of management of pupils’ sports talent to enable them learn new methodologies of talent identification and development. | 17 | 27 | 4  | 10 | 0  | 2.12  | 1.027     |
| The school management ensures that the sports teachers obtain certified training. | 0  | 43 | 5  | 10 | 0  | 2.43  | 0.775     |
| The sports teachers are also exposed to professional sports coaching training by accredited bodies such as FIFA, NOCK. | 17 | 31 | 0  | 0  | 0  | 2.22  | 1.351     |
| Aggregate                                                                | .  | .  | .  | .  | .  | 2.647 | 1.074     |

There were also indications that most teachers in the schools in the area were not facilitated to attend in-service training of management of pupils’ sports talent to enable them to learn new methodologies of talent identification and development as indicated by the low means of 2.12 which implied that most head teachers disagreed with the statement on teacher facilitation. These findings imply that the teachers in most schools did not receive sponsorship or facilitation from their respective schools’ management to attend workshops on the management of pupils’ sports talent. The findings also show that majority of the head teachers with a mean of 2.43 and a high percentage of 74% disagreed that the school managements ensure that the sports teachers obtain certified training. It is also evident that most of the sports teachers were not exposed to professional sports coaching training by accredited such as FIFA, NOCK as indicated by most of the head teachers who disagreed with a mean of 2.22.

The study also sought the views of the sports teachers concerning the status of investment in sports teachers’ training on pupils’ participation in sporting activities in public primary schools in Kenya. The findings are summarized in Table 2.
Table 2: Investment in teachers training on pupil’s talent management (Sports teachers) (N= 90)

| Statement                                                                 | SD  | D   | N   | A   | SA  | Mean | Std. Dev. |
|---------------------------------------------------------------------------|-----|-----|-----|-----|-----|-------|-----------|
| We do not have adequate qualified sports teachers in our schools.         | 0   | 0   | 46  | 33  | 11  | 3.61  | 0.698     |
| The school organizes workshops for training teachers on management of pupils' sports talent. | 11  | 42  | 15  | 22  | 0   | 2.53  | 0.997     |
| The teachers are sponsored by the school to attend workshops on management of pupils' sports talent. | 8   | 34  | 24  | 15  | 9   | 2.81  | 1.131     |
| The teachers are facilitated by the school to attend professional sports clinic management of pupils' sports talent. | 10  | 60  | 0   | 11  | 9   | 2.43  | 1.152     |
| The teachers in our school are facilitated to attend in-service training of management of pupils’ sports talent to enable them learn new methodologies of talent identification and development. | 21  | 54  | 6   | 9   | 0   | 2.03  | 0.841     |
| The school management ensures that the sports teachers obtain certified training. | 0   | 76  | 5   | 9   | 0   | 2.26  | 0.628     |
| The sports teachers are also exposed to professional sports coaching training by accredited such as FIFA, NOCK. | 31  | 50  | 0   | 9   |     | 1.96  | 1.121     |
| Aggregate                                                                 |     |     |     |     |     | 2.519 | 0.938     |

Table 2 shows that the aggregate M = 2.519; SD = 0.938, the mean value is low and the corresponding standard deviation is also less than 1 suggesting that there was low variation in the responses. Therefore the implication is that most of the sports teachers disagreed with the view that school managements’ investment in teachers training in talent management in public primary schools. Most of the sports teachers were uncertain on whether their schools did not have adequate qualified sports teachers (mean = 3.61). However, this was unlike the head teachers who expressly disagreed that their schools did not have adequate qualified sports teachers. With a mean of 2.53, however, most sports teachers like the head teachers disagreed that their school organizes workshops for training teachers on the management of pupils’ sports talent. Most sports teachers (mean = 2.81) indicated that they are sponsored by the school to attend workshops on the management of pupils’ sports talent. The findings also show that with a mean of 2.43 majority (66.7%) of the teachers disagreed that they are facilitated by the school to attend professional sports clinic management of pupils’ sports talent. Therefore, consistent with the head teachers, the majority of the sports teachers confirmed that most of the schools in the area were not financially supportive of teacher development through training for talent management of pupils. Like the head teachers, with a mean of 2.26, the majority (84.4%) of the sports teachers disagreed with the view that the school management ensures that the sports teachers obtain certified...
training implying that professional certification of the sports teachers was not emphasized by the schools. This is evidenced by the finding that most sports teachers were not exposed to professional sports coaching training by accredited bodies such as FIFA, NOCK as indicated by very low means (M = 1.96) and with very few teachers (10%) agreeing with this statement compared to those who disagreed. These findings imply that there was generally low investment in professional teacher development and training in sports talent management in the schools.

4.2 Pupils’ Participation in Sports Activities in Primary Schools of Nairobi County

The study also sought to establish the status of pupils’ participation in sporting activities in public primary schools in Nairobi County, Kenya. The responses from the head teachers are summarized in Table 3.

Table 3: Pupils’ participation in sports activities in primary schools (Head Teachers)

| Statement                                                                 | SD | D | N | A | SA | Mean | Std. Dev. |
|---------------------------------------------------------------------------|----|---|---|---|----|-------|------------|
| Our school allocates more time effectively to sports education classes.   | 9  | 0 | 19| 30| 0  | 3.21  | 1.056      |
| (15.5)                                                                   |    |   |   |   |    |       |            |
| Our school discourages the reassignment of sports lessons to non-sports   | 27 | 12| 9 | 10| 0  | 2.03  | 1.154      |
| education lessons.                                                        | (46.6)| (20.7)| (15.5)| (17.2)| (0)  |       |            |
| The students complete the minimum hour per week prescribed for sports     | 9  | 11| 9 | 29| 0  | 3.00  | 1.155      |
| education in our school.                                                 | (15.5)| (19)| (15.5)| (50)| (0)  |       |            |
| More than 90% of the lessons allocated for sports education are completed in our school. | 9  | 16| 28| 5 | 0  | 2.5   | 0.863      |
| (15.5)                                                                   | (27.6)| (48.3)| (8.6)| (0) |       |       |            |
| A good number of pupils remain to participate in sports activities after classes. | 0  | 18| 19| 21| 0  | 3.05  | 0.826      |
| (0)                                                                      | (31) | (32.8)| (36.2)| (0) |       |       |            |
| Pupils in our school participate fully in outdoor sports activities.      | 0  | 9 | 23| 26| 0  | 3.29  | 0.726      |
| (0)                                                                      | (15.5) | (39.7)| (44.8)| (0) |       |       |            |
| Pupils in our school participate fully in indoor sports activities.       | 18 | 24| 11| 5 | 0  | 2.05  | 0.926      |
| (31)                                                                     | (41.4) | (19) | (8.6) | (0) |       |       |            |
| The school is able to participate in all competitions and tournaments in outdoor games. | 0  | 33| 5 | 20| 0  | 2.78  | 0.937      |
| (0)                                                                      | (56.9) | (8.6) | (34.5) | (0) |       |       |            |
| The school is able to participate in all competitions and tournaments in indoor games. | 22 | 30| 6 | 0 | 0  | 1.83  | 0.881      |
| (37.9)                                                                   | (51.7) | (10.3) | (0) | (0) |       |       |            |
| Aggregate                                                                |    |   |   |   |    | 2.638 | 0.947      |

The results in Table 3 show that the aggregate M = 2.638; SD = 0.947, the standard deviation is close to zero and the mean is low meaning that most head teachers disagree that their pupils fully participated in the sports activities in the schools. With a mean of 3.21 and a value of 51.7%, most of the head teachers indicated that their schools allocate more time effectively to sports education classes. Most also strongly disagreed that their schools discourage the reassignment of sports lessons to non-sports education lessons as indicated by a mean of 2.03 and a value of 46.6%. This implies that most schools in the
area did not prioritize sports education lessons equally with other subjects. Nevertheless, there were indications that the students completed the minimum hour per week prescribed for sports education in the schools as indicated by most head teachers who agreed with a mean of 3.00 and a value of 50%. However, with a mean of 2.5 and a value of 48.3% of the head teachers being neutral, it was doubtful whether the schools were able to complete more than 90% of the lessons allocated for sports education.

The findings also show that in most schools, a good number of pupils remain to participate in sports activities after classes as indicated by most head teachers who agreed with a mean of 3.05 and a value of 36.2%. There were indications that in most schools, pupils participate fully in outdoor sports activities as indicated by a mean of 3.29 and a value of 44.8% of the head teachers who agreed. However, there were also indications that in most schools the pupils did not participate fully in indoor sports activities as shown by most of the head teachers who disagreed with a mean of 2.05 and a value of 41.4%. Other findings suggest that most schools were not able to participate in all competitions and tournaments in outdoor games as suggested by most head teachers who disagreed with a mean of 2.78 and a value of 56.9%. Further, with a mean of 1.83 and values of 51.7% of those who disagreed and 37.9 who strongly disagreed it was evident that the majority of the schools were not able to participate in all competitions and tournaments in indoor games.

The study also sought the views of the sports teachers concerning the status of pupils’ participation in sports resources in public primary schools in Nairobi County, Kenya. The findings are summarized in Table 4.

Table 4: Pupils’ participation in sports activities in primary schools (Sports Teachers)

| Statement                                                                 | SD | D   | N   | A   | SA  | Mean | Std. Dev. |
|----------------------------------------------------------------------------|----|-----|-----|-----|-----|-------|-----------|
| Our school allocates more time effectively to sports education classes.   | 11 | 0   | 33  | 46  | 0   | 3.27  | 0.969     |
| Our school discourages the reassignment of sports lessons to non-sports   | 30 | 21  | 21  | 18  | 0   | 2.3   | 1.136     |
| education lessons.                                                        | (33.3) | (23.3) | (23.3) | (20) | (0) |       |           |
| The students complete the minimum hour per week prescribed for sports      | 11 | 26  | 21  | 32  | 0   | 2.82  | 1.056     |
| education in our school.                                                  | (12.2) | (28.9) | (23.3) | (35.6) | (0) |       |           |
| More than 90% of the lessons allocated for sports, education is completed | 11 | 22  | 42  | 15  | 0   | 2.68  | 0.897     |
| in our school.                                                            | (12.2) | (24.4) | (46.7) | (16.7) | (0) |       |           |
| A good number of pupils remain to participate in sports activities after   | 0  | 30  | 33  | 27  | 0   | 2.97  | 0.8       |
| classes.                                                                  | (0) | (33.3) | (36.7) | (30) | (0) |       |           |
| Pupils in our school participate fully in outdoor sports activities        | 0  | 11  | 29  | 50  | 0   | 3.43  | 0.704     |
|                                                                             | (0) | (12.2) | (32.2) | (55.6) | (0) |       |           |
| Pupils in our school participate fully in indoor sports activities.        | 19 | 45  | 13  | 13  | 0   | 2.22  | 0.945     |
|                                                                             | (21.1) | (50) | (14.4) | (14.4) | (0) |       |           |
| The school is able to participate in all competitions and tournaments in   | 0  | 44  | 15  | 31  | 0   | 2.86  | 0.906     |
| outdoor games.                                                            | (0) | (48.9) | (16.7) | (34.4) | (0) |       |           |
| The school is able to participate in all                                  | 25 | 57  | 0   | 8   | 0   | 1.9   | 0.794     |
Table 4 shows the aggregate $M = 2.717$; $SD = 0.912$, the low means and standard deviation close to zero suggests that most sports teachers disagreed that their pupils fully participated in the sports activities in the schools. There were indications that most of the schools allocate more time effectively to sports education classes as suggested by most of the sports teachers who agreed with a mean of 3.27 and a value of 51.1%. Consistent with the head teachers, most of the sports teachers indicated that their schools discourage the reassignment of sports lessons to non-sports education lessons as suggested by a mean of 2.82 and with 28.9% disagreeing and 12.2% strongly disagreeing, it was evident that the students did not complete the minimum hour per week prescribed for sports education in most schools. Most were uncertain whether more than 90% of the lessons allocated for sports education were completed in their schools as indicated by a mean of 2.68 and a value of 46.7% who were neutral. The findings also show that most sports teachers, unlike the head teachers, were uncertain on whether a good number of pupils remained to participate in sports activities after classes as indicated by a mean of 2.97 and a value 36.7% of teachers who were neutral regarding the statement.

With a high mean of 3.43 and with most teachers agreeing with a value of 55.6, it was evident that in most school pupils participate fully in outdoor sports activities. Most of them, nevertheless, disagreed that their pupils participate fully in indoor sports activities as indicated by a low mean of 2.22 and a value of 50%. Most sports teachers further indicated that their schools were not able to participate in all competitions and tournaments in outdoor games as indicated by a mean of 2.86 and a value of 48.9%. There were also indications that most schools were not able to participate in all competitions and tournaments in indoor games as evidenced by most of the teachers (mean = 1.9) who either strongly disagreed (27.8%) or disagreed (63.3%).

### 4.3 Regression Analysis of Investment on Teacher Training on Pupils’ Sports Participation

Bivariate regression analysis was carried out to evaluate the relationships between the dependent and independent variables. The findings are summarized in Table 5.

Table 5 indicate that school management investment in Teachers Training significantly influenced affecting pupils’ participation in sporting activities in public primary schools in Nairobi County ($\beta = -0.176$, $p = 0.032 < 0.05$). The results further suggest that the model with investment in Teachers Training as the independent variable could explain 2.4% (adjusted R-Square) of the variations in the dependent variable, pupils’ participation in sporting activities. This means that the current state of investment in teachers’ training in sports talent management could explain very small but significant variations in the pupils’ participation in sporting activities in public primary schools in the County. However, these variations were in the negative sense suggesting that the lack
of investment in qualified sports teachers in the schools and as such was adversely impacting on the pupils’ participation in sporting activities in schools in the area.

| Model Summary | R | R Square | Adjusted R Square | Std. Error of the Estimate | . | . |
|---------------|---|----------|--------------------|---------------------------|---|---|
| .             | .176 | .031     | .024               | 4.50711                   | . | . |
| ANOVAa        | .  | Sum of Squares | df | Mean Square | F | Sig. |
| .  | Regression | 94.93 | 1 | 94.93 | 4.673 | .032 |
| .  | Residual | 2965.847 | 146 | 20.314 | . | . |
| .  | Total | 3060.777 | 147 | . | . |
| Model Coefficients | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
| .  | B | Std. Error | Beta | . | . |
| .  | (Constant) | 26.92 | 1.325 | . | 20.31 | .000 |
| .  | Teachers Training | -0.153 | 0.071 | -0.176 | -2.162 | .032 |

Table 5: Regression Analysis

4.4 Discussions

The finding that most of the schools did not have adequate qualified sports teachers as indicated by the majority of respondents corroborates the various observations made locally and internationally about the adequacy of PE teachers in schools. Vlcek (2009), for example, observed that in Turkey, there is a general lack of provision of qualified teachers responsible for the delivery of the sports-related program. Hardman and Marshall (2019) similarly observed this inadequacy of qualified PE teachers pointing out that both ‘generalist’ and ‘specialist’ qualified personnel teach physical education in primary schools: generalist teachers feature in 66% of countries and specialists in 69% of countries. In Kenya, the generalist approach is seen where all primary school teachers receive training in the subject and are expected to teach it (MOEST, 2001). It was also evident that most schools in the area did not organize workshops, sponsor or facilitate teachers to attend in-service training or professional sports clinic management of pupils’ sports talents. These findings agree with Mungai (2015) who found that most PE teachers in Nyandarua County had not undergone any professional training in seminars, workshops and short in-service courses to update their PE skills. Kahiga, Rintaugu and Gatumu (2015) also established that most teachers in Nairobi County and Nyeri County were professionally trained thus competent to implement the PE curriculum through professional development programmes such as seminars and workshops were lacking most teachers lacked specialist training on areas of sports.

There was also the finding that the schools’ management did little to ensure that the sports teachers obtain certified training. However, as observed by Onyancha (2018), most teachers had certificate qualifications and their knowledge and skills were acquired in college, therefore teacher training was not a hindrance to the implementation of PE. This certification was, nevertheless, basic and earned during the ordinary teacher training curriculum and did not imply specialist professional training of any sort as noted by
McKenzie et al., (2001) who indicated that Certified PE specialists provide more and higher quality PE than classroom teachers.

Petrie, Jones and McKim, (2007) observed that most PE teachers continue using a series of outdated courses that had little impact on the nurturing of the PE talents among learners. Muriithi (2015) also noted that while primary schools may have many teachers with basic training in PE, these teachers may not be adequately trained because of the way the course is structured. Shehu, (2009) in Botswana also found that school cultures have isolated PE teachers and deprived them of meaningful, badly needed support systems necessary for professional learning. Therefore, both Petrie et al., (2007) and Muriithi (2015) recommended that there was a need to deliberately consider the role of training, both pre-service and workplace and augment their current generalist training with some professional training. Chakraborty, Nandy and Adhikari (2012) also argue that for teachers to effectively carry out the role of curriculum implementation, adequate and elaborate training is a must.

The findings on time allocation for sports subjects per week suggest that most of the schools allocate more time effectively to sports education classes and discourage the reassignment of sports lessons to non-sports education lessons. The findings agree with Onyancha (2018) whose study in Nyamira County revealed that PE was allocated time on the master timetable. This was, however, in contrast to most studies (such as Hendricks, 2014; Lees, 2014; Muriithi, 2015; Gaudreault et al., 2018; Gabbard, 2019; Burnett, 2020) that suggest that in spite of its importance, Physical Education (PE) is often viewed as a marginal subject within the curriculum and many schools are actively reducing PE time in favour of what is deemed more “serious” or “important” subjects. Statistics indicate that globally schools allocate minimal time to physical education which may mean that the sports talent may not be well developed, especially in resource-constrained contexts such as those in the developing countries (Stroebel et al., 2016). However, this did not imply that the schools were able to achieve the recommended time allotment per week for PE. For example, the findings of the current study suggest that the students did not complete the minimum hour per week prescribed for sports education in most schools. Further, there was uncertainty on whether more than 90% of the lessons allocated for sports education were completed in their schools.

It was evident that in most schools’ pupils participate fully in outdoor sports activities, however, most could not participate fully in indoor sports. Most schools were, however, not able to participate in all competitions and tournaments in outdoor and indoor games. Mungai (2015) found that while outdoor sports were the most practiced, when the weather was not conducive for outdoor activities the students just spend time in class and hold discussions that may not be related to PE. Onyancha (2018) found that there was the inadequate provision of indoor and outdoor facilities for teaching PE and there was also limited availability of standard fields for athletics and football thus affecting the participation of learners in both indoors and outdoors sports. Maina (2011) also pointed towards the inadequacy of PE facilities and equipment where schools were
even found to be lacking playgrounds as some of the barriers to pupils’ participation in sports activities.

The negative but significant correlation observed in the relationship between investment in sports teachers training on pupils’ participation in sporting activities in public primary schools in Nairobi County, Kenya could be explained by the readiness of teachers to teach PE as found by Shimishi and Ndhlovu (2015) that teachers’ readiness to transfer physical learning skills can influence learners’ attitude towards physical education management.

5. Conclusions

The study concludes that investment in teachers’ training on talent management significantly influenced pupils’ participation in sports in primary schools in Nairobi County. However, as things currently were in the schools, there was little investment in teachers’ training on talent management in the schools and as such there was a shortage of specialist teachers in sports. This meant that talent identification and nurturing was not being realized as envisioned. There were indications that the schools were not very supportive of sports teachers’ development through training as evidenced by the findings that most schools did not organize workshops for training teachers on the management of pupils’ sports talent. Also, only a few of the schools sponsored teachers for talent management training while the majority did not facilitate the sports teachers to attend professional sports clinic management of pupils’ sports talent. Most schools did not facilitate their sports teachers to obtain certified professional training nor did they accredit them to professional sports bodies in the country. As such, the lack of investment in qualified sports teachers in the schools and as such was adversely impacting the pupils’ participation in sporting activities in the primary schools in the area and was also limiting their talent development.

6. Recommendations

There is a need to emphasize that the sports teachers get at least one specialist training once posted as teachers apart from the general training they receive in the teacher training colleges. The school management should, therefore, be encouraged to support the development of the sports teachers through seminars, clinics and in-service training. The Ministry of Education should also support the specialist training of sports teachers by availing in-service courses and workshops to increase the adequacy of professional sports teachers in the schools.

Conflict of Interest Statement
All the authors participated in the research at different levels. Therefore, the authors declare no conflicts of interest.
About the Authors

Tabitha Muthoni Mwangi: I am an educationist with 30 years teaching experience and a member of Professional Association of Special Educators, Kenya (PASEK). Currently, I am Education Executive Committee Member (CECM), Laikipia County, Kenya. I hold B. Ed and M.Ed and I am also a PhD candidate in Education Leadership and Management. My research interests are in the areas of Special Education and Talent development/management. I was also a participant in the Education Linkage Program between Kenya-Britain-Zambia, and also the CAPA International Conference in Rwanda 2019.

Josephat Kigo (PhD), Senior Lecturer in the School of Education and Social Sciences, Kenya Methodist University, Kenya.

Beatrice Owiti (PhD), Senior Lecturer in the School of Education, Meru University, Kenya.

References

Baum, S. M., Schader, R. M., & Hébert, T. P. (2014). Through a different lens: Reflecting on a strengths-based, talent-focused approach for twice-exceptional learners. Gifted Child Quarterly, 58(4), 311-327.

Brevik, L. M., Gunnulfsen, A. E., & Renzulli, J. S. (2018). Student teachers’ practice and experience with differentiated instruction for students with higher learning potential. Teaching and Teacher Education, 71, 34-45.

Burnett, C. (2020). A national study on the state and status of physical education in South African public schools. Physical Education and Sport Pedagogy, 1-18.

Castellano, J. A & Diaz, E. (2013). Reading new horizons: Gifted and talented education for culturally and linguistically diverse students. Boston: Allyn & Bacon.

Castellano, J. A. (2013). The "browning" of American schools: Identifying and educating gifted Hispanic students. In J.A Castellano (ed.), Special populations in gifted educations working with diverse gifted learners (pp. 29-44). Boston: Allyn & Bacon.

Chakraborty, B., Nandy, S., & Adhikari, S. (2012). A Study on Physical Education Teachers’ Training Programme on Development of Attitude towards Physical Education. IOSR Journal of Humanities and Social Science, 2(4), 01-03

Creswell, J. W., & Clark, V. L. P. (2017). Designing and conducting mixed methods research. Sage publications.

Creswell, J. W. (2013). Research design: Qualitative, quantitative, and mixed methods approaches. London: Sage publications.

Cross, T. L., Stewart, R. A., & Coleman, L. J. (2013). Phenomenology and its implications for gifted studies research: Investigating the lebenswelt of academically gifted students attending an elementary magnet school. Journal for the Education of the Gifted, 26, 201-220.
Flashman, J. (2012). Academic achievement and its impact on friend dynamics. Sociology of Education, 85, 61-80.

Gardner, H., & Hatch, T. (1987). Multiple intelligences go to school: Educational implications of the theory of multiple intelligences. Educational Researcher, 18(8), 4-9.

Gaudreault, K. L., Richards, K. A. R., & Mays Woods, A. (2018). Understanding the perceived mattering of physical education teachers. Sport, Education and Society, 23(6), 578-590.

Halaidiuk, M., Maksymchuk, B., Khurtenko, O., Zuma, I., Korytko, Z., Andrieieva, R., & Maksymchuk, I. (2018). Teaching approaches in extracurricular physical activities for 12-14-year-old pupils under environmentally unfavourable conditions.

Hardman, K., Murphy, C., Routen, A., & Tones, S. (2014). World-wide survey of school physical education. UNESCO Publishing.

Hendricks, P. C. (2014). The Role of Physical Education in South African Primary Schools

Kahiga, R. M. (2018). Preschools Stakeholders’ Perceptions of Relevance of Physical Education and Implementation of Its Programme in Nairobi and Nyeri Counties, Kenya (Doctoral dissertation, University of Nairobi).

Kamau, R. W. (2010). A study of measures used in the identification of Gifted and Talented children in Three Districts of Kenya. (Unpublished doctoral dissertation). Kenyatta University, Nairobi.

Lohman, D., & Renzully. J. (2017). A Simple Procedure for Combining Ability Test Scores, Achievement Test Scores, and Teacher Ratings to Identify Academically Talented Children (Draft). University of Iowa. http://faculty.education.uiowa.edu/dlohman/pdf/Lohman_Renzulli_ID_system.pdf.

MoEST (2011). Circular MKS/ED. A/86/A/VOL:4/288 and Circular MKS/ED. A/86/A/VOL: 4/289. 11 January 2011

Mugenda, O.M. & Mugenda, A.G (2009). Research Methods, Quantitative & Qualitative Approaches, Nairobi, Acts Press

Pangrazi, R. P., & Beighle, A. (2019). Dynamic physical education for elementary school children. Human Kinetics Publishers.

Prieto-Ayuso, A., Pastor-Vicedo, J. C., González-Villora, S., & Fernández-Río, J. (2020). Are Physical Education Lessons Suitable for Sport Talent Identification? A Systematic Review of the Literature. International journal of environmental research and public health, 17(6), 1965.

Renström, A., & Stenling, C. (2019). Pupil-athletes' Learning Dispositions and Their Potential Effects in School Sports-situated Talent Development Programs. Journal of Athlete Development and Experience, 1(3), 130-143.

Shimishi, G., & Ndhlovu, D. (2015). Teachers’ Perceptions towards Physical Education as an Academic Subject in Zambia’s Primary Schools: A Case Study of Kombaniya Primary School, Mansa District. International Journal of Multidisciplinary Research and Development, 2(8), 200-204
Stroebel, L. C., Hay, J., & Bloemhoff, H. J. (2016). Physical education in South Africa: Have we come full circle? *South African Journal for Research in Sport, Physical Education & Recreation, 38*(3).

Valk, T. van der, & Pilot, A. (2012). Empowerment and heterogeneity among talented pre-university science students in an enriched learning environment. In S. Markic, I. Eilks, di Fuccia, D., & B. Ralle (Eds.): *Issues of Heterogeneity and Cultural Diversity in Science Education and Science Education Research*. Aachen: Shaker Publishing 978-3-8440-1599-7. p.133-14

Van Zyl, E., Mathafena, R. and Ras, J. (2015). ‘The development of a talent management framework for the education sector’, SA Journal of Human Resource Management, 15(1), pp. 820-827.

Varela-Losada, M., Arias-Corra, A., Pérez-Rodríguez, U., & Vega-Marcote, P. (2019). How Can Teachers Be Encouraged to Commit to Sustainability? Evaluation of a Teacher-Training Experience in Spain. *Sustainability, 11*(16), 4309.

Williams, A. M., Ford, P. R., & Drust, B. (2020). Talent identification and development in soccer since the millennium. *Journal of Sports Sciences, 38*(11-12), 1199-1210.

Yemini, M., Tibbitts, F., & Goren, H. (2019). Trends and caveats: Review of literature on global citizenship education in teacher training. *Teaching and Teacher Education, 77*(1), 77-89.
