

## Enhancing Learning Through Athletics in Tanzanian Public Primary Schools: A Case of Kinondoni Municipality

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**Abstract:** This study aims to examine the effect of participation in athletic activities on the learning effectiveness of Primary School students in Kinondoni Municipality, Dar es Salaam, Tanzania. This study uses a mixed-method approach with data collection techniques through questionnaires and interviews. A total of 150 participants were involved, consisting of students, teachers, principals, parents, Athletic Club leaders, as well as local education and sports officials. The results of the analysis showed that involvement in athletic activities contributes positively to the improvement of physical fitness, cognitive function, as well as social skills of students, which ultimately increases the effectiveness of learning. However, constraints such as limited resources and cultural barriers are still challenges in the implementation of athletic programs in schools

**Keyword :** Athletics, Learning Effectiveness, Primary School, Physical Education, Student Development.

**Article info:** 19 January 2025 | Accepted : 28 February 2025 | Published : 29 March 2025

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How to Cite : L. Mhina, E., & M. Mwila, P. Enhancing Learning Through Athletics in Tanzanian Public Primary Schools: A Case of Kinondoni Municipality. *Journal of Asian Primary Education (JoAPE)*, 2(1). <https://doi.org/10.59966/joape.v2i1.1643>

### Introduction

The history of athletics, sports, and games in education dates back to the 19th century when outdoor activities became an integral part of school curricula (Naul, 2005). Over time, international organizations such as the International Labour Organization (ILO) and the International Olympic Committee (IOC) have played a critical role in promoting sports as a universal cultural practice (Lunenburg, 2010). The connection between physical activity and learning effectiveness was formally recognized in 1952 when UNESCO integrated outdoor activities into its education programs during its seventh General Conference in Paris. Later, the United Nations Convention on the Rights of the Child (UNCRC) (1989) further emphasized the importance of sports and recreation, affirming that every child has the right to play and participate in recreational activities (UNESCO, 2021). The promotion of sports as a fundamental right has since been reinforced by multiple global initiatives, including the UN Sustainable Development Goals (SDGs), specifically SDG 4 on quality education and SDG 3 on health and well-being, which highlight the importance of sports in cognitive and physical development (United Nations, 2022).

Involvement in sports contributes to several aspects of student well-being, including physical, mental, and social development (Nicole, 2019). Athletics, which encompasses track and field events such as running, jumping, and throwing, is known to enhance coordination, endurance, and overall fitness (Bailey et al., 2019). Moreover, research indicates that sports participation fosters teamwork, leadership, and self-discipline, all of

which contribute to improved academic performance (Khan et al., 2020). According to Brady and Khan (2002) and more recent findings by Mandigo et al. (2018), engagement in physical activities empowers marginalized groups, particularly girls, by improving self-confidence, leadership skills, and social inclusion. Sports participation among young learners has also been linked to enhanced cognitive function and increased classroom engagement (Singh et al., 2019). However, despite these benefits, many low- and middle-income countries, including Tanzania, still struggle with integrating sports into the school curriculum due to resource constraints and societal perceptions (Mwisukha & Wanderi, 2022).

In Tanzania, studies indicate that sports participation helps reduce absenteeism, truancy, and school dropout rates (Kimaro & Kapinga, 2020). Additionally, students engaged in athletics and other physical activities demonstrate better concentration, memory retention, and problem-solving skills (Komba & Nkumbi, 2019). However, gender disparities persist, with female students being less involved in sports due to cultural and institutional barriers (Kabeer, 2021). Furthermore, many Tanzanian public primary schools lack adequate sports facilities, trained teachers, and proper funding to support athletics programs (Mtebe & Raisamo, 2014). Despite efforts to include physical education in the curriculum, it is still perceived as secondary to academic subjects, resulting in declining participation levels (Kweka, 2022).

In Kinondoni Municipality, athletics and sports participation follow a structured progression from interclass competitions to municipal-level championships. While this has improved school attendance and students' social and academic skills, challenges persist. Many parents discourage their children from participating in sports, fearing that it detracts from academic success (Nyange, 2022). Additionally, the shortage of professional sports teachers in public primary schools continues to hinder the effective implementation of athletics programs. Given these challenges, this study aims to examine the role of athletics, sports, and games in enhancing students' learning effectiveness and academic performance in Tanzanian public primary schools.

### **Statement of the problem**

Despite global recognition of the role of sports in education, the impact of athletics, games, and sports on teaching and learning effectiveness in Tanzanian public primary schools remains underexplored (Benesová, 1990). While some studies highlight the positive relationship between sports participation and academic performance, many focus on secondary and higher education levels rather than primary school settings (Bailey et al., 2019). It has been argued that sports enhance motivation, teamwork, and teacher-student relationships, which are essential for academic success (Omari, 2002; Singh et al., 2019). However, for sports programs to yield meaningful outcomes, they must be supported by robust policies, well-structured systems, and adequate funding (United Nations, 2022). Tanzania has attempted to revitalize sports through various initiatives, including hiring international coaches for national teams, but has yet to fully integrate athletics into its education system (Nyange, 2022).

Despite government efforts, participation in athletics has declined across different educational levels. While primary schools still engage a relatively large number of students in sports, participation rates drop significantly at the secondary and university levels. This decline can be attributed to education authorities prioritizing team sports such as football and netball over individual sports like athletics (Kimaro & Kapinga, 2020). Additionally, a lack of trained sports instructors, insufficient funding, and inadequate facilities limit students' opportunities to engage in structured physical activities (Mwisukha & Wanderi, 2022). Gender disparities also persist, with girls facing more

restrictions and fewer opportunities to participate in school sports programs (Kabeer, 2021).

To address this gap, this study seeks to investigate the challenges hindering sports participation in Tanzanian public primary schools and propose effective strategies for increasing engagement. Specifically, the research will explore the impact of athletics, games, and sports on learning effectiveness, student motivation, and academic performance. By identifying existing barriers and potential solutions, this study aims to provide valuable recommendations for policymakers, educators, and stakeholders to improve sports integration in primary education and enhance overall student development.

## Methodology

This study adopted a concurrent mixed-methods approach combined with a cross-sectional descriptive research design to examine the impact of athletics participation on learning effectiveness in public primary schools in Kinondoni Municipality, Dar es Salaam, Tanzania. Mixed-methods research allows for the simultaneous collection and analysis of quantitative and qualitative data, providing a comprehensive understanding of the phenomenon under study (Creswell & Creswell, 2018). A sample of 150 respondents was selected, comprising 125 pupils, 15 teachers, 5 school heads, 6 parents or guardians, 2 athletics club leaders, 1 district education officer, and 1 municipal sports and games department representative. The study utilized a stratified sampling technique, ensuring that different population subgroups were adequately represented to enhance the accuracy and reliability of findings (Etikan & Bala, 2017). The selection of five public primary schools was based on their engagement in athletics programs and their geographic representation within the municipality.

Data were collected using questionnaires, interviews, observations, and document review to obtain a holistic understanding of athletics participation in schools. Structured questionnaires were administered to pupils, teachers, and some parents, while semi-structured interviews were conducted with school heads and education officials to gain deeper insights into institutional challenges and policy implications (Bryman, 2016). Observations were used to assess school sports infrastructure and participation levels, while document review provided historical data on student engagement and academic performance. Quantitative data were analyzed using descriptive statistics with the aid of Statistical Package for Social Sciences (SPSS), facilitating the interpretation of numerical trends (Pallant, 2020). Qualitative data were examined through thematic analysis, identifying recurring themes and patterns within interview responses and observational data (Braun & Clarke, 2021). This integrated approach ensured a comprehensive evaluation of the role of athletics in enhancing students' learning effectiveness in Tanzanian public primary schools.

## Result and Discussion

### Major athletic, sports and games performed in public primary schools

The study identified a wide range of athletics, sports, and games actively performed among public primary schools in Kinondoni Municipality, Tanzania, highlighting their role in physical fitness, cognitive development, and social interaction (Falt, 2006). Among these, group jogging was found to be the most common activity, with 96% of respondents acknowledging its presence. This aligns with previous research suggesting that aerobic exercises such as jogging improve cardiovascular endurance, brain function, and overall academic performance (Donnelly et al., 2016). Similarly, long-

distance running, mentioned by 100% of respondents, was identified as a significant activity, reinforcing the argument that endurance-based exercises enhance pupils' mental resilience, concentration, and discipline (Ratey & Loehr, 2011). These findings support the Health and Fitness Theory, which posits that regular participation in physical activities significantly contributes to cognitive function and learning efficiency in children (Sibley & Etnier, 2003).

Beyond endurance-based activities, short-distance races were also widely practiced, with 92% of respondents confirming participation. Sprint races are essential for developing speed, agility, and a competitive spirit among students, which are critical components of both physical and psychological development (Bailey et al., 2009). Additionally, high jump (84%) and long jump (86%) were identified as major field events, aligning with studies indicating that explosive power sports improve neuromuscular coordination and proprioception (Tompsonowski et al., 2015). According to Piaget's Cognitive Development Theory, physical activities such as jumping, running, and balancing contribute to the sensorimotor development of young learners, enhancing their problem-solving skills and adaptability (Piaget, 1952). These findings indicate that structured athletics programs are not only recreational but also fundamental to children's holistic development and academic success.

In addition to conventional athletics, the study revealed several non-traditional games actively practiced in Kinondoni's public primary schools. For example, walking in sacks race (61%) and walking with an egg on a spoon (73%) were common activities that require balance, coordination, and patience, crucial for motor skills development (Lopes et al., 2012). Similarly, rope pulling (87%) and chicken chasing (60%) were identified as key activities that foster teamwork, resilience, and strategic thinking (Bailey, 2006). These findings align with Vygotsky's Sociocultural Theory, which emphasizes that physical activities provide children with opportunities for social learning and cooperative engagement, ultimately improving their social adaptability and problem-solving skills (Vygotsky, 1978). The inclusion of traditional and indigenous games such as chicken chasing underscores the role of culturally relevant physical activities in promoting engagement and community values in learning (Hardman, 2014).

Furthermore, the study revealed a strong presence of strength-based activities such as shot put (90%) and javelin throw (84%), which promote muscle strength, coordination, and self-discipline. Acrobatics (83%), which enhances flexibility and risk assessment skills, was also a significant activity. The most widely performed event, baton stick relay race (99%), highlighted the importance of teamwork, communication, and coordination in sports. These results align with Bandura's Social Learning Theory, which suggests that children learn through observation, imitation, and social interaction (Bandura, 1986). When pupils engage in sports that require collaboration, discipline, and strategic execution, they internalize values of cooperation and perseverance, which contribute to better classroom behavior and academic performance (Diamond, 2015). Overall, the study confirms that athletics participation in public primary schools plays a vital role in enhancing cognitive skills, social development, and overall learning effectiveness, reinforcing the need for integrating structured sports programs within the school curriculum.

### **Importance of participation in athletes among pupils**

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### Importance of participation in athletes among pupils

The study established that participation in athletics among public primary school pupils in Kinondoni Municipality significantly contributes to their learning effectiveness, physical health, and mental well-being. A large proportion of respondents strongly agreed that engaging in athletics enhances cognitive abilities, increases classroom concentration, and fosters a positive attitude towards learning. These findings align with Donnelly et al. (2016), who argue that regular physical activity promotes brain function and improves academic performance among children. Furthermore, Bailey et al. (2009) emphasize that participation in structured sports fosters discipline, resilience, and motivation, essential attributes for academic success. The study further supports Ratey and Loehr (2011), who argue that athletics and other physical activities trigger endorphin release, reducing stress and anxiety, which can negatively impact pupils' academic focus and performance. However, a small percentage of respondents remained neutral or disagreed, indicating that some pupils and parents still perceive sports as a potential distraction from academic activities, a notion that requires further examination.

The study also found that athletics participation directly influences pupils' learning effectiveness by fostering self-discipline, teamwork, and social skills. The majority of respondents agreed that involvement in athletics helped pupils develop a sense of responsibility, perseverance, and cooperation, which are essential for both academic achievement and personal development. These results support Vygotsky's Sociocultural Theory, which suggests that social interactions and collaborative activities, such as sports, enhance cognitive development and knowledge retention (Vygotsky, 1978). Additionally, participation in sports increases engagement in school activities, as pupils who perform well in athletics often develop greater confidence and aspiration to excel in academics. This corresponds with Bandura's Social Learning Theory, which suggests that observing successful role models in athletics can inspire children to develop similar motivation and discipline in their studies (Bandura, 1986).

Furthermore, the study identified several key factors influencing the impact of athletics on learning effectiveness, including improved physical and mental health, enhanced self-confidence, and increased interest in school activities. Regular participation in athletics has been linked to better sleep patterns, reduced levels of anxiety, and greater focus in the classroom (Tompsonowski et al., 2015). Pupils who engage in sports tend to develop better coping mechanisms, leadership qualities, and a growth mindset, which helps them face academic challenges with resilience. Lopes et al. (2012) affirm that participation in athletics enhances motor coordination and cognitive flexibility, key aspects of learning readiness. Moreover, the sense of team spirit, cooperation, accountability, and self-discipline fostered by athletic participation aligns with Dewey's Experiential Learning Theory, which emphasizes that active engagement in structured activities cultivates practical skills and lifelong learning habits (Dewey, 1938).

Lastly, the study highlighted several advantages of athletics participation on pupils' learning effectiveness, including stress relief, improved emotional stability, and better adaptability to school life. Engaging in sports helps pupils develop problem-solving skills, manage emotions effectively, and build social networks that support their learning. Diamond (2015) argues that sports provide children with essential executive function skills, such as emotional control, cognitive flexibility, and working memory, all of which are critical for academic success. The study also noted that regular physical activity helps prevent health conditions such as obesity and arthritis, reinforcing the Health and Fitness Theory, which underscores the importance of physical well-being in achieving optimal cognitive function (Sibley & Etnier, 2003). Generally, by fostering psychological stability,

enhancing focus, and reducing anxiety, athletics positively contributes to pupils' ability to process and retain information, ultimately leading to improved academic performance and holistic development.

Ways for improving athletics participation among primary school pupils

The study revealed that pupil participation in athletics, sports, and games in public primary schools within Kinondoni Municipality was notably high, indicating an appreciation of the benefits associated with these activities. However, some respondents indicated a moderate or average level of participation, suggesting that while many pupils engage in athletic activities, there are still barriers limiting full participation. This aligns with Bailey et al. (2010), who highlight that the extent of participation in school sports is influenced by accessibility, facilities, and community perceptions. Despite the enthusiasm of pupils, there remains a gap in systematic implementation that could be hindering optimal participation levels. It is crucial to address these gaps, given that Tomporowski et al. (2015) argue that physical activity significantly enhances cognitive function, which, in turn, improves academic performance. The findings further suggest the need for deliberate intervention strategies to promote greater participation, ensuring that all pupils, regardless of socio-economic background or gender, have equal opportunities to engage in athletics, sports, and games.

A key aspect of improving participation rates is the development of infrastructural facilities, including sports fields, training areas, and indoor sports rooms. The study found that enhancing school environments to support athletics and games was a crucial factor in encouraging participation. This is consistent with Hardman (2014), who emphasizes that inadequate infrastructure negatively impacts pupils' motivation and ability to engage in sports. Furthermore, curriculum development that integrates modern coaching techniques and structured sports education is necessary to attract and retain pupil interest. Schools need to introduce trained and professional athletics instructors who can offer structured coaching and mentorship programs, as Sallis et al. (2012) argue that qualified coaches play a critical role in fostering a positive sporting culture among children. Additionally, the study suggested that equipping schools with adequate sports gear, such as proper footwear, training kits, and essential athletics equipment, is necessary to ensure effective participation. Without these resources, pupils face significant limitations in developing their athletic potential.

The study further revealed that community perception and parental support play a significant role in pupil participation in athletics and sports. Many parents and guardians in Kinondoni Municipality discourage their children from engaging in sports due to the misconception that it distracts from academic performance. However, this belief contradicts evidence from Donnelly & Lambourne (2011), who found that students who actively participate in athletics tend to perform better academically due to improved discipline, concentration, and time management skills. Educating parents on the benefits of athletics, sports, and games for children's holistic development is critical in reversing negative mindsets and fostering greater participation. Furthermore, collaborations between schools, communities, and policymakers can promote awareness and advocacy for inclusive sports programs, ensuring that all pupils, particularly girls and marginalized children, have equal access to athletic opportunities. Schools should organize regular sports awareness campaigns, emphasizing how athletics enhances both academic and social skills.

Despite the importance of athletics in public primary schools, several challenges were identified in its implementation. The study found that a lack of dedicated sports teachers, insufficient funding, and inadequate training facilities remain major barriers.

Many schools rely on untrained volunteer teachers to fill the gap, leading to inefficient training and lack of proper coaching. Additionally, the absence of structured physical education programs within the school curriculum exacerbates the problem, as sports are often treated as extracurricular rather than integral to education. Lopes et al. (2012) argue that embedding structured physical education into school curricula ensures a lifelong engagement in fitness and physical activity. Moreover, limited government investment in school athletics programs hinders progress, highlighting the need for stronger policy interventions. The Ministry of Education, Science, and Technology should ensure the integration of athletics, sports, and games into the education system, providing adequate resources and establishing policies that mandate active participation in athletics for all public primary schools. Strengthening school-community partnerships and securing funding from public and private stakeholders will further enhance the sustainability of school athletics programs.

## Conclusion

The study revealed that athletics, sports, and games play a significant role in the holistic development of primary school pupils in Kinondoni Municipality, Tanzania. A wide array of athletic activities such as long-distance running, group jogging, short-distance races, and field events like high jump and long jump were actively practiced, contributing to pupils' physical fitness, cognitive development, and social interaction. These activities support a variety of theories on learning and development, including the Health and Fitness Theory, Piaget's Cognitive Development Theory, Vygotsky's Sociocultural Theory, and Bandura's Social Learning Theory. It was found that participation in athletics not only enhances physical health but also boosts cognitive abilities, mental resilience, and academic performance, with students demonstrating improved discipline, concentration, and teamwork skills.

The study also highlighted that while participation in athletics is generally high, several barriers to full participation still exist. Issues such as limited infrastructure, inadequate teacher training, and misconceptions about the impact of sports on academic performance were identified. However, the benefits of athletics on physical and mental health, self-discipline, teamwork, and cognitive function were overwhelmingly supported by the respondents. These findings underscore the importance of integrating athletics into the primary school curriculum to foster well-rounded students who are better prepared for academic and social success.

To improve athletics participation and maximize its benefits for primary school pupils in Kinondoni Municipality, it is essential to address key barriers such as inadequate infrastructure, limited teacher training, and misconceptions about the impact of sports on academic performance. Schools should prioritize the development of adequate sports facilities and ensure that physical education programs are structured within the core curriculum, rather than as extracurricular activities. Proper training for physical education teachers is crucial to ensure that athletic programs are effectively implemented, offering professional coaching and guidance to students. Additionally, there should be greater efforts to educate parents and the community about the positive relationship between sports and academic success, which will help shift perceptions that sports are a distraction.

Furthermore, the government and educational authorities need to provide stronger policy support and resources for athletics programs in public primary schools. This includes allocating funds for sports equipment, providing training opportunities for teachers, and ensuring that all students, regardless of gender or socioeconomic

background, have equal access to sports activities. Collaboration between schools, communities, and policymakers will be key to fostering an inclusive environment where athletics can contribute to the holistic development of every pupil. By addressing these areas, schools can enhance the overall effectiveness of their athletics programs, leading to improved physical health, mental well-being, and academic performance among students.

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