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Physical Education in Public Primary Schools in Machakos County, Kenya**

Kithuka Raphael Munyao, Prof. Simon P. Munayi and Dr. Michael Otieno

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<sup>1</sup>Kithuka Raphael Munyao  
PhD Student, University of Nairobi



<sup>2</sup>Prof. Simon P. Munayi  
Associate Professor, Department of Physical Education and Sport, University of Nairobi



<sup>3</sup>Dr. Michael Otieno  
Senior Lecturer, Department of Physical Education and Sport, University of Nairobi

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**Abstract**

**Purpose:** This study investigated the influence of teacher preparedness on teaching of traditional sports and games in physical education in public primary schools in Machakos County, Kenya.

**Methodology:** A descriptive research design was employed, utilizing questionnaires from 322 teachers, and focus group discussions with 32 groups of learners. Stratified random sampling was used to select participants. Descriptive analysis was used, which included means, standard deviation, relative frequencies, and percentages. A computer software programme, Statistical Package for Social Scientists (SPSS) version 21.0, was used for analysis to generate data array that was used for subsequent analysis of the data. Qualitative data was analysed using thematic analysis. Inferential statistics using the Chi-square test was applied to examine the relationship between the research variables. Tables and graphical presentation were used to present the data that was collected for ease of interpretation. The analyzed data was presented using tables.

**Findings:** The findings of the study indicated that teachers have received formal training on teaching TSGs in PE ( $\chi^2 = 20.681$ ;  $df = 1$ ;  $p = 0.000 < 0.05$ ), teachers have attended workshops on traditional sports and games ( $\chi^2 = 55.546$ ;  $df = 1$ ;  $p = 0.000 < 0.05$ ), and teachers have experience in playing the traditional sports and games that they teach during PE ( $\chi^2 = 137.195$ ;  $df = 1$ ;  $p = 0.000 < 0.05$ ). All study investigated teachers' preparedness factors had  $p$ -value  $< 0.05$  therefore confirming that teachers' preparedness has a significant influence on teaching of traditional sports and games in physical education in public primary schools in Kenya.

**Unique Contribution to Theory, Practice and Policy:** The study recommended providing structured teacher training, and formally incorporating TSGs into the PE curriculum. Also, Teachers should be provided with comprehensive manuals, curriculum outlines, and educational movies to enhance their confidence and expertise.

**Keywords:** Sports, Analysis, Education, Resources, Traditional Sports, Cultural Heritage, Public

**JEL Codes:** L83, I18, I21

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## INTRODUCTION

Globally, Traditional Sports and Games (TSGs) are recognized as a valuable part of cultural heritage and a means to promote physical activity, inclusivity, and lifelong health. UNESCO, among other international bodies, has emphasized the need for preserving and promoting TSGs within educational settings, as they provide unique opportunities for children to engage in physical activities that also foster cultural awareness and pride (UNESCO, 2015). Traditional Sports and Games (TSGs) are activities deeply rooted in the cultural practices of communities around the world, including Kenya. They encompass a variety of physical activities (PA) that not only promote fitness but also reflect the values, traditions, and history of a society. In Kenya, games such as *kati* (a catching game), *dandi* (hopscotch), and *mweso* (a traditional board game) serve as cultural touchstones that provide children with opportunities to connect with their heritage.

Teacher preparedness significantly affects effectiveness of teaching TSGs in physical education. Preparedness includes not only the content knowledge of TSGs but also the pedagogical skills necessary for effective delivery (Mugweru et al., 2022). Many teachers in Kenya may not have received formal training focused on TSGs, leading to uncertainty in implementing these activities in the classroom. Without adequate preparation, teachers might lean towards more mainstream sports, resulting in the marginalization of TSGs within the curriculum. Lack of teacher training in specific cultural contexts can impede the integration of traditional games, preventing students from fully experiencing the physical and cultural benefits these games offer (Okwiri & Omollo, 2022).

Additionally, ongoing professional development plays a crucial role in teacher preparedness. Teachers who participate in workshops or training sessions focused on TSGs are better equipped to address the diverse skill levels and learning styles present in their classrooms. In Kenya, where classroom sizes can be large and vary widely in terms of student ability, adaptability in teaching is essential. When teachers feel confident in their preparedness to teach TSGs, they are more likely to integrate these games into their lessons, enhancing the overall quality of physical education and promoting a culturally rich learning environment.

Teacher preparedness in terms of training and equipping with the right content and active learning techniques are issues of paramount importance for any meaningful learning (Syomwene & Tsindoli, 2018). However, their professional training commits them to the rationale and practices of a Western derived school curriculum, their personal identities, together with those of their learners, are rooted in their own cultures and traditions. The unfortunate bit as Hodge et al. (2017), Tsindoli (2018) and Williams et al. (2017) observes is that, most teachers (in most parts of the World) were never trained on how to teach culturally appropriate curricula and therefore do not have the prerequisite skills which can make teaching of such games in PE effective. This came out clearly in this study. This supports the findings of UNESCO (2015), which states that teachers at all academic levels continue to get insufficient instruction in traditional sports and games for both formal and recreational learning.

Furthermore, administrative neglect affects teacher preparedness and the integration of TSGs into PE in Kenya. Administrative support strategies are essential for promoting the teaching of TSGs in physical education. Mwangi and Omondi (2019), argued that school leaders play a crucial role in setting the priorities and expectations for teachers and when they actively endorse TSGs, it signals their importance in curriculum. Administrative strategies that foster collaboration among

teachers can significantly impact the teaching of TSGs. Encouraging a culture of sharing best practices and resources allows teachers to learn from one another, fostering innovative approaches to TSG instruction (Njoroge & Murithi, 2020). Support can come in various forms, including providing professional development opportunities, allocating resources, and establishing policies that encourage the integration of traditional games. Karanja (2022), indicated that effective administrative backing not only enhances teacher morale but also motivates educators to implement TSGs as part of their teaching practice.

Nurhikmah, Syam, and Saman (2022), indicated that the lack of standardized teaching manuals and curriculum resulted in inconsistency and limited preparedness among teachers. Rather than being formally documented, traditional sports and games are frequently passed down orally. Finding a curriculum to incorporate into the educational system is difficult as there is no standardized records. Additionally, some teachers reported time constraints and pressure to meet the national curriculum standards, which often prioritize mainstream or modern sports. Modern sports being competitive sports and performance-based activities that are discriminative and exclusive (European Commission, 2008, Ferry & McCaughy, 2013; SHAPE, 2014). The dominance of team sports affects teachers' preparedness to deliver a P.E. program that supports diverse physical abilities, backgrounds, and interests. This necessitates reviewing and improving the physical education curriculum to include a range of inclusive activities for students.

### **Problem Statement**

The global push for TSGs in education aligns with UNESCO's Convention on Safeguarding of Intangible Cultural Heritage, which underscores the importance of protecting cultural knowledge, including sports and games, for future generations (Kinchin, Penney & Clarke, 2005). The majority of countries in the world have laws and policies requiring the integration of traditional sports and games (TSG) into physical education and sport (PES) curricula due to the significant value of these activities. The global discourse on TSGs has led to various educational reforms in regions like Europe, Asia, and Latin America, where TSGs are now included in the physical education curriculum (UNESCO, 2015). However, the implementation varies widely due to challenges such as lack of resources, teacher training, and curriculum flexibility (Medica & Pavlović, 2017).

Mwinsa and Dagada (2024), conducted a participatory action research study aimed at evaluating the effectiveness of indigenous games in enhancing literacy and numeracy skills among preschool children in rural Zambia. This study was grounded in the growing recognition of traditional and culturally relevant pedagogical tools as critical instruments for improving foundational learning outcomes in early childhood education, particularly in underserved and resource-constrained contexts. The researchers adopted participatory action research (PAR) as their methodological framework, which allowed for continuous reflection, active collaboration, and adaptive interventions involving both researchers and participants. This approach was particularly suited for the study's goal of not only assessing existing practices but also actively co-developing context-specific strategies to enhance the pedagogical use of indigenous games. The study was conducted across four Early Childhood Education (ECE) centers in rural Zambia and involved ten ECE teachers, purposively selected based on their willingness to participate and their ongoing use of play-based learning strategies.



Data collection methods included semi-structured interviews, participatory classroom observations, and action planning meetings, which enabled the researchers to capture both the experiential insights of teachers and the practical challenges they faced in implementing indigenous games. The iterative nature of PAR also involved cycles of planning, action, observation, and reflection, which allowed the study to move beyond static assessment toward actionable improvement. Findings from the study revealed that indigenous games, when systematically integrated into classroom activities, had the potential to significantly enhance literacy and numeracy development among preschool learners. Teachers reported increased learner engagement, improved recognition of letters and numbers, and better peer collaboration when indigenous games were embedded within daily lesson plans.

In Kenya, national education policies that support culturally appropriate learning experiences encourage the inclusion of traditional sports and games (TSGs) in the Physical Education (PE) curriculum. In order to embrace cultural diversity and improve inclusive education, the Physical Education and Sports Policy for Basic Education (2021) places a clear emphasis on the promotion of traditional sports and activities.

Although some studies have looked at physical education problems in general, there is a lack of context-specific research that looks at how these factors affect TSGs instruction, especially in rural and semi-urban counties like Machakos. Moreover, the data that is now available is frequently quantitative and provides statistical insights without adequately representing the lived realities, perspectives, and experiences that students, teachers, and school administrators confront. In order to give a thorough grasp of the problem, this study uses a mixed-methods approach. While the qualitative component will investigate the viewpoints and experiences of learners and teachers to gain a deeper understanding of the fundamental issues, the quantitative component will evaluate the frequency and magnitude of the elements that have been identified. The goal of this integrated approach is to provide useful and culturally sensitive solutions for enhancing the sustainability and teaching of traditional sports games in public primary schools in Machakos County, Kenya.

## **Theoretical Framework**

### **Social Learning Theory**

Social learning theory is highly applicable to assessing the factors influencing the teaching of traditional sports and games in physical education in schools, particularly in terms of how teachers and peers influence the adoption and integration of these activities in school curricula. The theory explains how teachers, through their preparation and professional development, serve as role models for students in the teaching of traditional sports. Teachers who are well-prepared, both in terms of skills and knowledge, are more likely to engage students effectively, which increases the likelihood of traditional sports being taught properly. According to a study by Zhao et al. (2022), students who participate in TSGs led by well-prepared teachers report higher engagement levels and a deeper appreciation for their cultural heritage. Without proper training, however, teachers may miss these opportunities to connect TSGs to students' identities, making TSGs less impactful as a learning tool (Zhao et al., 2022).

Bandura (1986), emphasized that modeling plays a key role in learning, meaning that when teachers actively demonstrate and effectively teach traditional sports, students are more likely to

observe and replicate these behaviors. If teachers are not adequately prepared, they may lack the confidence to introduce and teach traditional sports, limiting their role as effective models. Teachers who have positive attitudes toward traditional games are also more likely to be motivated to teach them effectively, further reinforcing positive behaviors among students (Zimmerman, 2018). Social Learning Theory highlights that attitudes are often shaped through observation of role models and interactions with others. In the context of traditional sports, teachers who perceive these games as important for cultural preservation and student development are more likely to model positive behaviors related to their teaching (Bandura, 1977). Conversely, if teachers dismiss traditional sports as less valuable than modern sports, students may adopt similar attitudes, perpetuating the marginalization of indigenous games in the PE curriculum. Waduma (2017), conducted a study to examine the effect of teachers' attitudes on the teaching of Physical Education (PE) in Uganda and found that ineffectiveness and poor performance of PE was largely attributed to negative teacher attitudes.

Social learning theory suggests that supportive school leadership can encourage teachers to model desired behaviors by providing resources, training, and a conducive teaching environment. When school administrators emphasize the importance of cultural education and allocate resources for traditional sports, teachers are more likely to adopt and incorporate these activities into their curriculum. Additionally, administrative support helps reinforce the legitimacy of traditional sports within the school context, motivating teachers to engage in such teaching practices. According to Ayot (2019), schools with strong administrative backing are better able to integrate cultural practices, including traditional sports, into their educational programs. Social learning theory emphasizes the significance of a nurturing social environment in facilitating skill learning and fostering cultural appreciation of traditional sports within educational contexts.

### **Ecological Systems Theory**

Ecological Systems Theory posits that an individual's development is shaped by the interactions across multiple levels of their environment: the microsystem (immediate surroundings like family and school), mesosystem (interactions between various parts of the microsystem), exosystem (indirect environmental factors like community resources), and macrosystem (cultural and societal influences). This framework provides a useful lens for understanding how the teaching of traditional sports in Kenyan schools is shaped by factors such as teacher preparedness. It provides a framework for exploring how traditional activities integrate into these multiple layers to impact young people's development and strengthen community ties.

According to Bronfenbrenner (1979), teacher preparedness is influenced by both the direct environment (training, resources, and support within the school) and external systems (such as educational policies and professional development initiatives). In Kenya, teachers may receive insufficient training in traditional sports if curriculum designers and teacher training programs do not emphasize their cultural significance, resulting in teachers feeling unprepared to teach these games. The mesosystem level interactions between schools and teacher training institutions can either support or hinder effective preparation. Bronfenbrenner's theory highlights how teachers' perceptions of cultural practices like traditional sports are shaped by societal values, cultural heritage, and historical contexts (Bronfenbrenner, 1979). If the broader society values and supports the inclusion of traditional sports in education, teachers are more likely to develop a positive

attitude toward teaching them. Conversely, in societies where there is less emphasis on cultural preservation or where modern sports dominate, teachers may not prioritize traditional games, affecting their teaching efficacy.

For any meaningful learning to take place, teachers must be well-trained and supplied with the necessary materials and active learning strategies (Tsindoli, 2018; Edward, 2015). Mugweru et al. (2022), in concurrence stated that teacher preparedness and knowledge are a necessity, as students' outcomes depend strongly on the effectiveness of the teacher. Mumba et al. (2021), argued that teachers who are well versed in TSGs demonstrate greater efficacy in delivering engaging lessons that foster cultural appreciation and physical fitness among students. Additionally, teacher preparedness positively correlates with student engagement, as well-prepared teachers provide structured and culturally relevant activities that resonate with students' experiences and backgrounds (Njoroge, & Oduor, 2022). Teachers who lack the necessary preparation often struggle to integrate TSGs into their physical education curriculum, limiting students' exposure to these culturally significant activities.

The support from school administration is a key factor in the ecological system that influences the teaching of traditional sports in schools. Administrators are responsible for creating policies and allocating resources that enable or hinder the inclusion of traditional sports in the curriculum. Bronfenbrenner's theory emphasizes that the school environment, shaped by administrators' decisions, plays a significant role in curriculum implementation (Bronfenbrenner, 1979). In Kenyan public primary schools, school administrators who value and actively support the integration of traditional sports create an environment where teachers are more likely to prioritize these activities. Administrative support can also influence the availability of time, funding, and resources for the successful delivery of these games.

The two complementary theories: Social Learning Theory (Bandura, 1977) and Ecological Systems Theory (Bronfenbrenner, 1979) provide a comprehensive understanding of the influence of teacher preparedness on teaching of traditional sports and games in physical education in public primary schools in Machakos County, Kenya. Together, they emphasize that teacher preparedness for TSG in P.E. depends on both the broader social-cultural ecosystem and active, social learning processes within it.

### Gaps

**Conceptual Gap:** Mwangi, Kigo, and Owiti (2022) primarily focus on the impact of teacher training on pupils' participation in sports but do not delve into the importance of teacher training, it does not comprehensively examine the broader aspects of teacher preparedness, such as pre-service and in-service training, curriculum integration, and ongoing professional development. The Machakos County study addresses this gap by exploring the multifaceted nature of teacher preparedness and its impact on the effective teaching of traditional sports and games.

**Geographical Gap:** Migosi (2018) explores teacher-related factors influencing the implementation of physical education in public primary schools, but it does not specifically address traditional sports and games, which are integral to Kenya's cultural heritage. A key gap in this study is the lack of focus on the specific preparedness of teachers to teach traditional sports and games, which requires distinct knowledge and skills. While teacher preparedness is discussed

broadly in terms of physical education, the study does not investigate the unique challenges and opportunities associated with integrating traditional sports into the curriculum. Furthermore, Migosi's research is limited to Manga Sub County, which may not reflect the regional variations found in other counties like Machakos, where cultural and educational dynamics may differ. This gap highlights the need for further research examining how teacher preparedness in Machakos County influences the teaching of traditional sports in primary schools.

**Contextual Gap:** Adi et al., (2021) conducted a study in Yogyakarta, Indonesia, to examine kindergarten teachers' perceptions of using traditional games to develop motor skills in early childhood education. The findings of the study revealed several important issues related to the use of traditional games in early childhood education. First, the study found that teachers had a superficial understanding of traditional games. This superficial understanding hindered their ability to implement the games effectively, as teachers were unable to adapt them in ways that could maximize their developmental benefits for children. The study also found that the implementation of traditional games was inconsistent across the sample. Furthermore, the study identified a lack of teacher preparedness as a key challenge. In addition, the study noted that teachers primarily used curriculum-based resources for teaching traditional games, which further limited their ability to explore the full potential of these activities. While the study by Adi et al. (2021) provides valuable insights into the challenges faced by kindergarten teachers in Indonesia, it also highlights several gaps that need further exploration. One significant gap is the lack of in-depth exploration into the specific training programs required to better equip teachers to use traditional games. The study does not explore teacher preparedness in primary schools of traditional games.

## METHODOLOGY

The research used a descriptive study design because it's suitable for assessing influence of teacher preparedness on teaching of traditional sports and games in physical education in public primary schools in Machakos County, Kenya. This study adopted a multistage sampling technique, combining stratification and random sampling to ensure fair representation of all relevant groups; learners and teachers, thereby enhancing the validity, reliability, and generalizability of the findings. Public primary schools in Machakos County were first grouped according to sub-counties (e.g., Athi River, Mwala, Yatta). Simple random sampling was then applied within each sub-county's list of schools to ensure each school had an equal chance of being selected. Schools were then categorized based on enrollment size (e.g., small, medium, large). Each stratum contributed a proportional number of schools, teachers, and learners, selected through random sampling within each category. For each selected school only teachers responsible for teaching Physical Education (PE) in Grades 4-6 were considered. The target population for this study included two key groups; teachers and learners. These respondents provided diverse perspectives, ensuring a comprehensive understanding of the Influence of teaching resources on teaching of traditional sports and games in physical education in public primary schools in Machakos County, Kenya. Data from Machakos County Director of Education and the Teachers Service Commission (2024) showed that there are 862 public primary schools and 8110 primary school teachers in Machakos County. Learners were stratified by grade (Grades 4-6) and gender to ensure representation across different age groups and both boys and girls.



Data on resource availability was gathered from PE teachers in Grades 4-6 using a structured questionnaire. For learners, focus group discussions (FGDs) were organized with groups of eight students per class, stratified by grade and gender. Additionally, an observation checklist was employed to assess the physical environment, the availability of sports facilities, and the extent to which TSGs were integrated into PE lessons. A pilot test of 40 respondents selected from eight sub-counties was conducted via questionnaire to assess its appropriateness and comprehension. This research used content validity to assess the accuracy and meaning of the data. The specialist in TSGs assessed data collection instruments to guarantee content validity, and as a result, the material met the goal clearly. Validity test was conducted using KMO and Bartlett's Test of Sphericity measures. The drop-and-pick method was used specifically for collecting teacher questionnaires. Two research assistants were responsible for distributing and collecting the questionnaires. Both descriptive and inferential statistical techniques were employed to clean, code, and analyze the data collected. Data analysis for the study included quantitative and qualitative methods. The mean, standard deviations, and frequencies/percentages are all part of the descriptive analysis. The Chi-square test, a non-parametric statistical method, was employed to evaluate the associations between the independent factors and the dependent variable.

## RESULTS

### Validity of Research Instruments

The researcher conducted a pilot test of the questionnaire to assess its appropriateness and comprehension. A sample of 40 respondents was selected from eight sub-counties for this pilot study. This number represents approximately 10% of the total sample size of 367 respondents, aligning with Kumar and Kothari's (2014) recommendation for pilot testing. Validity test was conducted using KMO and Bartlett's Test of Sphericity measures. The method is employed to assess if research instrument accurately measures its intended target. Table 1 presents the study KMO and Bartlett's Test summary results. It shows that a KMO statistic on teacher preparedness. The findings indicate a KMO statistic results on the teacher preparedness of 0.857, which is statistically significant as it exceeds the threshold level of significance set at 0.5. The Bartlett's test of Sphericity yielded a statistically significant result (Chi-Square = 296.838, df = 21,  $p < 0.05$ ). This indicates that the acquired sample data on the teacher preparedness is sufficient for drawing inferences and reaching results via the examination of the data. The data findings are very reliable.

**Table 1: KMO and Bartlett's Test Summary Results**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.857
Bartlett's Test of Sphericity	Approx. Chi-Square	296.838
Teachers preparedness	Df	21
	Sig.	0.000

### Reliability of Research Instruments

The data collected from the pilot study was analyzed for correlation within the items. Cronbach's alpha test was used to determine the internal consistency of the measuring instrument, as well as if various items within a scale measure the same construct and whether the data collected on each variable had significance for the dependent variable. The results in Table 2 above indicated that

the research instrument was reliable since the measured variable indicated reliability values above 0.8.

**Table 2: Questionnaire Reliability in the Analysis Results**

Teacher preparedness	0.853	9
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### Descriptive Statistics

Teacher preparedness remains a critical factor in successful TSG implementation. This study sought to determine the influence of teacher preparedness on teaching of TSG in physical education in public primary schools in Machakos County, Kenya. The descriptive and inferential (Chi-square) results are as discussed therein. The results on the statement that teacher have a clear understanding of TSG teaching methods, content and evaluation, majority teachers (108) 33.5% strongly disagreed; (85) 26.4% disagreed; (53) 16.5% neither agreed nor disagreed; (47) 14.6% agreed; and (29) 9.0% strongly agreed with the statement. The results indicated that the majority of primary school teachers in Machakos County, Kenya lack a clear understanding of TSG teaching methods, content, and evaluation.

**Table 3: Teacher preparedness (Training on TSG)**

Statements on training on TSG	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I have a clear understanding of TSG teaching methods, content and evaluation	(108) 33.5%	(85) 26.4%	(53) 16.5%	(47) 14.6%	(29) 9.0%
I have received formal professional training on teaching TSG	(101) 31.4%	(124) 38.5%	(46) 14.3%	(44) 13.7%	(7) 2.2%
All teachers in my school have the required professional skills to teach TSGs.	(93) 28.9%	(144) 44.7%	(77) 23.9%	(8) 2.5%	(0) 0.0%

### Preparation of Professional Documents

Teacher's professional documents are essential for professional development, accountability, and assessment. Plans, records, and resources that assist teachers in successfully integrating these culturally significant activities into PE classes are considered professional documentation in the context of teaching traditional sports and games. The study results on teacher preparation of professional documents revealed that (152) 47.2%, and (76) 23.6% of the teachers respectively strongly disagreed and disagreed that they are able to prepare TSG professional documents; (43) 13.4% of teachers were not sure; (26) 8.1% of teachers agreed; and (25) 1.9% teachers strongly agreed. These results implies that the majority of teachers in primary schools in Kenya are unable to prepare TSG professional documents.

**Table 4: Teacher Preparedness -Preparation of Professional Documents**

<b>Statements on the preparation of professional documents</b>	<b>Strong disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I am able to prepare TSG professional documents	(152) 47.2%	(76) 23.6%	(43) 13.4%	(26) 8.1%	(25) 7.8%
The school has curriculum designs on TSG that guide in preparing professional documents for teaching	(111) 34.5%	(144) 44.7%	(43) 13.4%	(18) 5.6%	(6) 1.9%
I understand the traditional sports and games curriculum	(67) 20.8%	(168) 52.2%	(34) 10.6%	(35) 10.9%	(18) 5.6%

**Subject Matter Knowledge**

Subject matter knowledge denotes a teacher's deep comprehension of the material they are tasked with instructing. The study results on subject matter are as summarized in Table 5 below. The study's findings show, (158) 49.1% and (68) 21.1% of teachers respectively agreed and strongly agreed that they are familiar with the various traditional sport and games; (48) 14.9% were unsure; (37) 11.5% strongly disagreed; and (11) 3.4% respondents disagreed. The findings suggest that a majority of teachers possess a familiarity with the diverse array of traditional sports and games. TSGs present a valuable occasion to honor diversity and educate students regarding the cultural heritages of various communities.

**Table 5: Teacher Preparedness-Subject Matter Knowledge**

<b>Statements on subject matter knowledge</b>	<b>Strong disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
I am familiar with the various traditional sport and games	(37) 11.5%	(11) 3.4%	(48) 14.9%	(158) 49.1%	(68) 21.1%
The school provides in-service/retooling opportunities on TSG	(162) 50.3%	(83) 25.8%	(72) 22.4%	(5) 1.6%	(0) 0.0%
I am confident that I understand how to instruct students in TSG	(167) 51.9%	(92) 28.6%	(35) 10.9%	(18) 5.6%	(10) 3.1%

The study also inquired the respondents to indicate whether they have received formal training on teaching TSG in PE in primary public schools in Kenya. The study findings are as indicated in Table 6. The study results illustrated that a significant majority of teachers (93.2%) in primary public schools have not undergone formal training in teaching TSG in physical education. In contrast, only a small percentage (6.8%) of teachers agreed with this statement. These findings suggest that a large number of teachers in primary public schools in Machakos County, Kenya lack the necessary training to effectively teach TSG in physical education.

**Table 6: Formal Training on Teaching TSG in PE**

Have you received formal training on teaching TSG in PE	Frequency	Percent
Yes	22	6.8
No	300	93.2
<b>Total</b>	<b>322</b>	<b>100</b>

Secondly, the respondents were asked to give their opinions on whether they have attended TSGs workshops or professional development programme. Table 7 presents the results. The results presented indicated that a significant majority (87.9%) of the respondents reported no attendance at traditional sports and games workshops or professional development. In contrast, only a small percentage (12.1%) of respondents confirmed their participation in such activities. These findings suggest that a considerable number of teachers in public primary schools in Machakos County, Kenya have not taken part in workshops on traditional sports and games.

**Table 7: Attended traditional sports and games workshops**

Have you attended traditional sports and games workshops or professional development workshops?	Frequency	Percent
Yes	39	12.1
No	283	87.9
<b>Total</b>	<b>322</b>	<b>100</b>

Thirdly, the study sought to determine whether the respondents agree that have experience in playing the traditional sports and games that they teach during PE lessons. The study results are shown in Table 8. The results shows that 34.8% of teachers reported having experience playing traditional sports and games (TSGs) during PE lessons, while 65.2% indicated they lacked such experience. These findings reveal a significant gap: despite some teachers acknowledging practical exposure to TSGs, the majority still lack firsthand experience.

**Table 8: Experience in Playing the TSGs that you teach during PE**

Do you have experience in playing the traditional sports and games that you teach during PE?	Frequency	Percent
No	210	65.2
Yes	112	34.8
<b>Total</b>	<b>322</b>	<b>100</b>

### Chi-Square Test

The chi-square test results are shown in Table 9 below. The study findings indicate a significant correlation between the teaching of traditional sports and games in physical education in public primary schools in Kenya and three factors related to teachers' preparedness. These factors include whether teachers have received formal training on teaching TSGs in PE ( $\chi^2 = 20.681$ ;  $df = 1$ ;  $p = 0.000 < 0.05$ ), whether teachers have attended workshops on traditional sports and games ( $\chi^2 = 55.546$ ;  $df = 1$ ;  $p = 0.000 < 0.05$ ), and whether teachers have experience in playing the traditional sports and games that they teach during PE ( $\chi^2 = 137.195$ ;  $df = 1$ ;  $p = 0.000 < 0.05$ ). All study investigated teachers' preparedness factors had p-value  $< 0.05$ . These findings confirm that



teachers' preparedness has a significant influence on teaching of traditional sports and games in physical education in public primary schools in Kenya.

**Table 9: Chi-square Test between Teacher Preparedness and Teaching of TSGs in PE**

Statement	Response	Have you ever taught traditional sports and games during physical education lesson		Df	Chi-Square ( $\chi^2$ )	P-value (Sig at 0.05)
		Yes	No			
Have you received formal training on teaching TSG in PE	Yes	20 (6.2%)	2 (0.6%)	1	20.681	0.000
	No	123 (38.2%)	177 (55.0%)			
<b>Total</b>		143 (44.4%)	179 (55.6%)			
Have you attended traditional sports and games workshops or professional development?	Yes	33 (10.2%)	6 (1.9%)	1	55.546	0.001
	No	110 (34.2%)	173 (53.7%)			
<b>Total</b>		143 (44.4%)	179 (55.6%)			
Do you have experience in playing the traditional sports and games that you teach during PE?	Yes	143 (44.4%)	67 (20.8%)	1	137.195	0.000
	No	0 (0.0%)	112 (34.8%)			
<b>Total</b>		143 (44.4%)	179 (55.6%)			

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Based on the findings, the study concluded that teaching preparedness has an influence on teaching of traditional sports and games in physical education in public primary schools in Machakos County, Kenya. The study found that in order to promote the teaching of traditional sports and games during physical education lessons in public primary schools in Machakos County, Kenya, it is important to ensure that teachers possess the skills to prepare professional documents related to TSGs. The schools should have curriculum designs that provide guidance on preparing professional documents for teaching TSGs, and that teachers have a good understanding of the traditional sports and games curriculum. The study also found that the level of teacher expertise in the subject topic had a substantial impact on the instruction of TSG during physical education classes in public primary schools in Machakos County, Kenya. Enhancing teachers' familiarity with diverse TSGs, offering in-service/retooling opportunities on TSGs in the schools, and assuring their understanding of how to instruct children on TSGs would result in improved

teaching of TSG during physical education sessions in public primary schools in Machakos County, Kenya.

### **Recommendation**

The study established that teacher preparedness including training, lesson planning, and subject knowledge has a significant influence on the teaching of TSGs. The study recommended that structured training programs should be introduced to equip teachers with the skills, confidence, and knowledge necessary for effective delivery. Also, schools should provide standardized templates and instructional guides tailored to TSGs to support teachers in developing lesson plans, schemes of work, and assessment tools, ensuring lessons are organized, consistent, and aligned with curriculum objectives. Lastly the study recommended that subject-specific workshops should be organized to help teachers build a strong foundational understanding of various TSGs, including rules, techniques, and historical significance. This will allow teachers to deliver lessons with authenticity and confidence.

## REFERENCES

- Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Edward, D. A. (2015). The description of mate choice. *Behavioral Ecology*, 26(2), 301–310.
- Flora, D. B. (2017). *Statistical methods for the social and behavioural sciences: A model-based approach*. [Publisher if available].
- Hodge, S. R., Lieberman, L. J., & Murata, N. M. (2017). *Essentials of teaching adapted physical education: Diversity, culture, and inclusion*. Routledge.
- Karanja, J. (2022). Administrative support in primary schools: The role of leadership in enhancing physical education. *Journal of Educational Administration*.
- Kumar, C. S., & Kothari, H. (2018). Pilot test for reliability and validity of the study on exploring factors of training effectiveness for IT competency among employees of public sector banks. *Splint International Journal of Professionals*, 5(3), 33–44.
- Medica, A. F., & Pavlovic, D. K. (2017, June). The role of organizational culture in tourist destination development. In *International Scientific Conference Proceedings* (pp. 305–326). Sveučilište Jurja Dobrile u Puli, Odjel za Ekonomiju i Turizam "Dr. Mijo Mirković".
- Migosi, Z. N. (2018). *Teacher related factors influencing the implementation of physical education in public primary schools in Manga Sub County, Kenya* (Doctoral dissertation, Maasai Mara University).
- Mugweru, M., Munayi, S., Chumba, J., & Gathoni, B. (2022). Determinants affecting the teaching of physical education to learners with different kinds of disabilities: PE teacher preparedness. *African Journal of Education and Practice*, 8(5), 64–73.
- Mumba, A. B., Ochieng, S. N., & Asante, M. T. (2021). The role of teaching resources in facilitating traditional sports in physical education: An African perspective. *African Journal of Physical Education and Sports Sciences*.
- Mwangi, M. T., Kigo, J., & Owiti, B. (2022). The impact of investment in sports teachers' training on pupils' participation in sporting activities in public primary schools in Kenya. *European Journal of Education Studies*, 9(3).
- Mwangi, T., & Omondi, P. (2019). Teacher training and its impact on the implementation of physical education in Kenya. *Journal of Education and Practice*, 10(5), 33–40.
- Mwinsa, H., & Dagada, R. (2024). Efficacy of indigenous games on literacy and numeracy development in pre-schoolers in Zambia. *South African Journal of Childhood Education*, 14(1), 1–10.

- Njoroge, G., & Murithi, K. (2020). Challenges in integrating traditional sports into Kenya's primary school curriculum. *East African Journal of Educational Research*, 7(2), 45–59.
- Nurhikmah, Syam, H., & Saman, A. (2022). Implementation of local wisdom in physical education of senior high school in Bantaeng, South Sulawesi, Indonesia. In *Proceedings of the 1st World Conference on Social and Humanities Research (W-SHARE 2021)* (pp. 225–228).
- Okwiri, C., & Omollo, K. (2022). Understanding teacher preparedness for traditional sports in Kenya. *African Journal of Physical Education and Sports*.
- Penney, D., Clarke, G., Quill, M., & Kinchin, G. D. (2005). *Sport education: Research-based practice in physical education*. Routledge.
- Society of Health and Physical Educators (SHAPE). (2014). *The essential components of physical education*. SHAPE America.
- Syomwene, A., & Tsindoli, S. (2023). Experiences and constraints of teacher trainees on integration of 21st century skills in the instructional process during teaching practicum in Kenya. *The Educator: A Journal of the School of Education, Moi University*, 3(1), 1–19.
- Tsindoli, S. (2018). Teachers' perception towards integration of indigenous knowledge in teaching of mathematical concepts in primary schools in Kenya. *International Journal of Education and Research*, 6(10), 1–14.
- UNESCO. (2015). *Traditional sports and games: An integral part of the world's intangible heritage*. UNESCO Publishing.
- Williams, J. (2017). Embedding indigenous content in Australian physical education—Perceived obstacles by health and physical education teachers. *Mystery Train*.
- Wiyono, I., Rumini, R., & Fakhruddin, F. (2018). Physical education teacher professional competence in traditional game learning of elementary schools in Kudus. *Journal of Physical Education and Sports*, 7(2), 152–157.
- Zhao, L. W., Koh, T. Y., & Banerjee, P. R. (2022). Influence of instructional materials on teaching traditional games in physical education in Asian public schools. *Journal of Asian Physical Education and Sport Research*.
- Zimmerman, B. J. (2018). Social cognitive theory and the role of motivation in educational settings. *Educational Psychologist*, 53(4), 239–252.