

Availability and Conditions of Sports Equipment and Learners' Participation Levels in Sports in Primary Schools in Katima Mulilo, Namibia

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ABSTRACT: *Sports equipment and facilities play a vital role in the teaching of Physical Education (PE) and are equally important in developing sports-related skills among learners. The main purpose of this study was to investigate and assess the availability and conditions of sports equipment and facilities in primary schools in Katima Mulilo, in the Zambezi Region of Namibia. An observational study was adopted for this study, where Physical Education school teachers were observed using the available sports equipment in the schools during their PE classes. The targeted population consisted of 10 teachers within 10 respective primary schools. Two questionnaires were administered to collect data on available facilities and equipment. Data was analysed using SPSS statistics software. Based on sports code level of participation, athletics was found to be the most popular activity with 35% of learners taking part. Soccer came in second with 25%. Netball was the third most played sport, with 20% of participants in annually scheduled competitions at regional and national levels. Volleyball was the fourth highest with 10% of learner participation. The lowest four sports codes were boxing at 5%, rugby 3%, gymnastics 1%, and cricket 1%. Sport facilities available in all the schools were all found to be in deplorable conditions. This study therefore concluded that sports equipment and facilities were either unavailable or completely in poor condition in all primary schools under study. So, it is very important to get the right tools and facilities so that physical education and sports can be taught and learned well.*

KEYWORD: availability, conditions, sport equipment, sports facilities, primary schools,

INTRODUCTION

Sports equipment and facilities are extremely important in every modern school of the twenty-first century because they aid in the teaching-learning process and allow students to easily engage and participate in sports-related activities at any time. Several governments all over the world have embarked on a building journey and billions of dollars have been spent to establish contemporary schools with sports equipment and facilities that meet the needs of the modern generation (W.H.O, 2018).

Research has shown that the availability and conditions of sports equipment and facilities in most schools in developing countries is below standard, resulting in poor sports involvement and a lack of interest in participating in sports-related activities (Orunaboka and Nwachukwu, 2012). The availability of suitable equipment, facilities, and supplies, as well as their use, are important elements in any physical education and sports plan. In recent years, it has been closely observed that sports and physical education seem to be losing momentum and steam in almost all the primary schools within the study areas. Presumably this is being well-thought-out as part of the reason why the country has not been scouting and discovering new athletes to perform at regional, national, and international levels (Lawson, 2021).

Prior global and national studies as well as other inquiry literature have drawn attention to deficiencies in the delivery of physical education equipment and facilities in schools. According to the World-wide Survey of School Physical Education-Final Report (2013), worldwide countries reported unhappiness with equipment to be below average and inadequate by (44%), with the quality of facilities being better than excellent and good by (26%). In just less than one third of states, the quality of facilities is considered to be satisfactory. Locally, the quality of facilities is commonly observed as lower in economically developed regions with low incomes, such as Africa (52%), the Middle East (64%), and Latin America (65%).

According to Zealand and Stergiadis (2014), the Namibia School Sport Union's main mandate is to provide for the sporting needs of all schools and school-going learners, which on average would be around 600 000–700 000 learners. The school union's objectives are to develop school sport in all facets and with reference to "under-developed areas", to promote all sports codes at school level, to foster good relations among learners through participation in sport, to create a balance between different regions, and to formulate a code of conduct for school sport. The Namibia School Sports Union has local organisations in all 14 regions of Namibia. All regions are sub-divided into different districts. The NSSU at present provides for 14 sports codes within the country. The main reasons for this pre-arrangement are to focus the Union's drive and funds on the most common and popular sports codes in most of the regions. The main codes NSSU funds and puts emphasis on are: athletics, soccer, netball, volleyball, rugby, cricket, gymnastics, cricket, boxing and cycling (Zealand & Stergiadis, 2014).

Problem Statement

The availability and conditions of sports equipment and facilities are deemed inadequate in most of the schools in the developing world, which has resulted in poor teaching of physical education, low learner participation in sports activities, and low scouting and discovery of new talent (New Era Sports Desk, 2021). The main purpose of this study is to investigate the participation levels, availability, and conditions of sports equipment and facilities in primary schools in Katima Mulilo, in the Zambezi Region.

Research Objective

The objective of this study was to establish the participation level, availability and conditions of sports equipment and facilities in primary schools in Katima Mulilo.

LITERATURE REVIEW

Sport facilities are structures built for sporting activities such as athletic fields, sports complexes, stadiums, basketball courts, volleyball courts, netball courts, lawn tennis courts, gymnastics buildings, and boxing arenas, among others (Ngeti et al., 2018). Track hurdles, netballs, whistles, bars, boxing gloves, chin pads, and cricket bats are examples of disposable sports equipment (Ngeti et al., 2018). Research suggests that adequate facilities and equipment in any institution play a significant role in sports development for learners. Nevertheless, it is initially very difficult to set standards for sports from the standards of facilities and equipment available for the training of learners (Ekpe, 2001).

The delivery of suitable and sufficient sports facilities has an extensive influence on involvement in sport in any institution. Sports equipment has proven to be the most important aspect of progress that motivates effective participation in sports events (Omalawon, 2000). The availability of sports equipment and facilities provides schools with a variety of program options, such as conducting sports-related extra-mural activities. In order to stay competitive in today's sports, athletes have to be familiar with new or latest modern sports equipment and facilities, which enhance and stimulate speed, time, and perception (Kabunge, 2012). It has been discovered that the availability of sporting facilities promotes sports in schools and workplaces among students and teachers, allowing them to stay at work more frequently to participate in sports activities. On the other hand, lack of adequate sports equipment and facilities has a serious negative impact on learners, such as; gaining weight, obesity, living life in solitude, anti-social behaviour, low self-esteem, poor concentration in class, un-sportsmanship, lack of team-work, poor performance in school, prone to diseases like cancer, cardiac diseases, respiratory diseases, mental and physical health issues, drug abuse and violence (World Health Organisation, 2021).

The study conducted by Mungai, Sang and Wamutitu (2014), which examined equipment and facilities in Nyandarua County, found that 72.1% felt soccer status was enough, 44.5% felt netball courts were moderately adequate, 57.9% felt handball courts were partially adequate, 93.8% felt basketball courts did not exist or were inadequate, and 83.3% found rugby fields to be of low standard and inadequate. While the study carried out by Kabunge (2012) in Mombasa found that participants indicated that there were no swimming pools or gymnasiums, which affected the teaching curriculum of PE. Due to the lack of equipment and sports facilities in most schools in Africa, teachers have relied heavily on improvisation. Studies have shown and suggested that if the right kind of equipment isn't available, teachers can come up with creative ways to teach using similar tools or pieces of the same size (New Era Sports Desk, 2021).

The government does not provide sports equipment or facilities in Namibian schools; schools must solicit donations from non-governmental organizations (NGOs). These donations have been given to schools in urban areas frequently. According to the New Era Newspaper published on the 29th September 2021 in Namibia by De-Klerk (2021), Project Hope donated items including 50 soccer balls, whistles, and chessboards to the event that took place in

Omuthiya. These kinds of donations imply a big shortage of equipment within the sports fraternity in the entire country. One of the challenges faced by sports administrators at school level is that of management and taking care of sports equipment and facilities for future use (Njubei, 2021). Most of the little equipment in schools has been reported missing without a trace and some has been broken without repair. All these elements have affected sports participation and teaching of physical education in Namibian schools (Njubei, 2021).

Theoretical Framework

This study adopted the Theory of Change Approach by Weiss (1995), which uses logic models to articulate how sports programs are intended to operate and to test empirically whether and how they achieve their stated objectives. The theory for change approach seeks to increase participation in sports to ensure all benefit. The application of the Theory of Change Approach to this study guided and unearthed deeper information needed to increase participation in sports-related activities in primary schools.

METHODS

An observational study design was adopted for this study. Physical education school teachers observed the availability and conditions of sports equipment at schools.

Study setting and Sample: The study settings were all primary schools in Katima Mulilo, purposefully selected. The sample consisted of 10 physical education teachers representing their 10 primary schools in Katima Mulilo in the Zambezi region.

This study used a two-personal form designed by the researcher. The first questionnaire consisted of 9 sports facilities, and the second questionnaire consisted of 67 items withdrawn from 9 sports facilities. Participants were required to fill out the forms by indicating yes/no to whether the sports equipment or facilities were available at their respected schools by further indicating the conditions, whether the equipment or facilities were in poor, good, or best condition based on their self-observation.

Data analysis: Data was analysed using SPSS statistics software. Percentage, mean, and standard deviation scores were used to interpret the data.

RESULTS

Figure 1 below shows sport participation levels as per sport codes supported by the Namibia School Sports Union (NSSU). Athletics is the most popular activity, with 35% participation annually according to the school calendar, with various sports events such as field events (high jump, long jump, 100 and 200 meters, discus, javelin) incorporated. Soccer is the second most popular sport event annually, with 25%. Netball is the third most played sport in schools, with 20%, with calendared annual competitions at regional and national level. Volleyball is the fourth highest with 10% of learner participation at school level with instantly organised matches and tournaments. The lowest four sports codes are boxing (5%), rugby (3%),

gymnastics (1%), and cricket (1%), with only one un-calendared event by the Namibia school annual programmes. Moreover, figure 1 further shows 8 sports codes supported by the Namibia School Sport Union (NSSU) mandated to ensure that all Namibian school-going learners should be free to participate in any sports of their choice without discrimination based on gender, race, and religion.

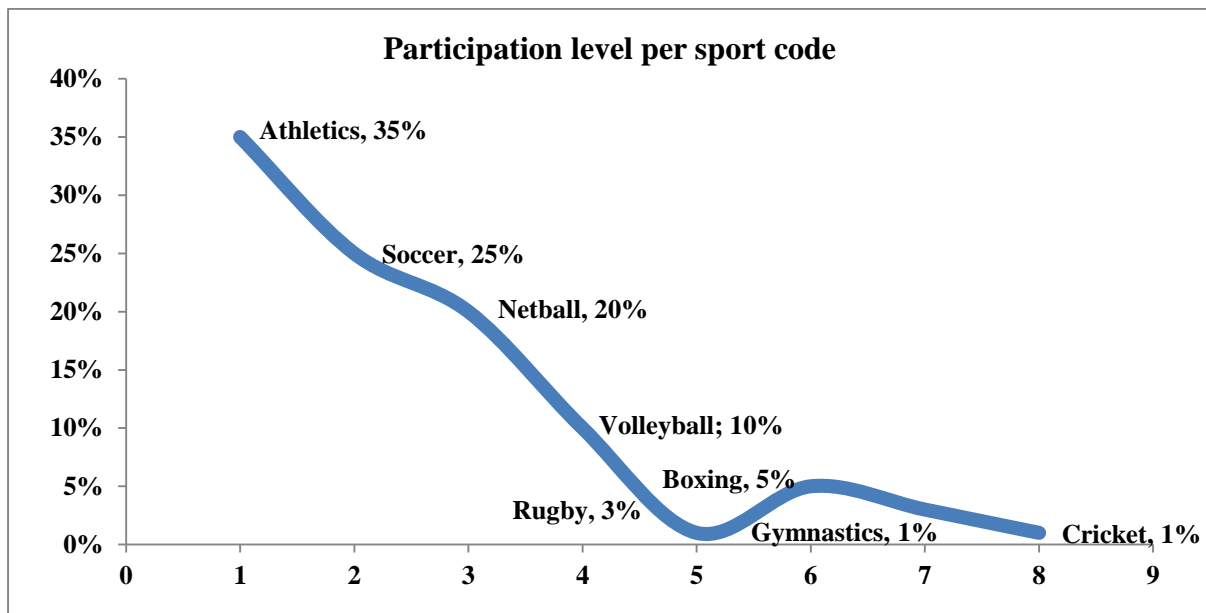


Figure 1 Participation level per different sport code

Table 1 shows the number of sports facilities, school participation, percentage of available sports facilities, condition of sports facilities, and mean and standard deviation scores per sport facility. Athletics fields were available in schools by 90%, over the 10% that did not have a field at all, with poor conditions and a mean and standard deviation score ($M = .90/SD = .316$). Soccer fields were also discovered to be available at 90 percent of the schools that lacked them. Also, these soccer fields were found to be in poor condition ($M = .90/SD = .316$). Netball courts were available in 8 out of 10 schools, which represents 80%, though the conditions were of lower standard ($M = .80/SD = .422$). Volleyball courts (20%) were available in 2 schools out of 10 in poor conditions with statistical scores of ($M = .20/SD = .516$). Only 1 school (10%) out of 10 had a rugby field in poor condition with ($M = .10/SD = .316$). Gymnastics buildings, boxing facilities, and cricket fields totally did not exist in all 10 primary schools that participated in this study.

Table 1: Mean and Standard deviation scores of Sport Facilities

Sports Facilities	School Participant (n)	Availability (%)	Condition	Mean	Std. Deviation
Athletics Field	10	90%	Poor	.90	.316
Soccer Field	10	90%	Poor	.90	.316
Netball Court	10	80%	Poor	.80	.422
Volleyball Court	10	20%	Poor	.20	.422
Gymnastics Building	10	0%	N/A	.00	.000
Boxing Facility	10	0%	N/A	.00	.000
Rugby Field	10	10%	Poor	.10	.316
Cricket Field	10	0%	N/A	.00	.000

Key: N/A = Not available

Table 2 shows sports equipment, school participation, equipment availability, equipment condition, and mean and standard deviation scores. Furthermore, the table shows 67 pieces of sports equipment that have been withdrawn from athletics, soccer, netball, volleyball, rugby, boxing, and cricket. The table further shows 26(38.8%) out of 67 pieces of equipment to be available in schools and this equipment includes; Relay batons, shot put, and discus equipment were found to be 50% available and in good condition ($M = .50$ and $SD = .527$), High Jump Equipment was 20% available ($M = .20$ and $SD = .516$), and Long Jump Equipment was 10% available ($M = .10$ and $SD = .316$). Soccer Balls, Soccer Whistles, Soccer Cones, and Soccer Corner flags were reported to be available in schools by 90% in best and good conditions with a ($M = .90$ and $SD = .422$) collectively. Soccer Jerseys (80% available in good condition), Soccer Gloves (20% available with poor conditions), Soccer Nets (70% available with poor conditions) and Soccer Posts (70% available in good condition with an $M = .80$ and a $SD = .422$). 90% of soccer uniforms are in good condition ($M = .90$ and $SD = .422$).

Despite soccer showing a higher percentage in terms of availability in the results projected above, Netballs (best condition), Netball Ring (good condition) and Netball Post (good condition) were available in schools by 80% with ($M = .80$ and $SD = .422$). Netball Uniforms were found to be in (good condition) and were available by 70% in some schools with ($M = .70$ and $SD = .483$). Volleyballs (best conditions), court lines (not available), antennas (not available), nets and uniforms were 20% available with ($M = .20$ and $SD = .516$). Volleyball whistles were 80% available in good condition in school ($M = .80$ and $SD = .422$). Rugby balls (good conditions) and rugby headgear (poor conditions) were 10% available in schools with M

=.10 and SD =.316). Rugby field cones (in good condition) were available in 20% of the schools (M =.10, SD =.316).

On the other hand, 41(61%) out of 67 sports equipment were not available or did not exist at all in primary schools as per the results of this study. This equipment included the following; athletics track hurdles, athletics track, netball scoreboard, netball support gear, volleyball referee stand, volleyball bench for teammates, gymnastic flooring, gymnastic mats, gym safety equipment, rhythmic gymnastics equipment, gym balance beam, gymnastic pommel horse, gymnastic rings, gym vault, gym bars, boxing ring, boxing gloves, mouth guards, ring shoes, boxing trunk, boxing bell, double end bag, boxing speed ladders, and boxing equipment. cricket balls, cricket scorebook, boundary ropes, umpire's coat, cricket bails, cricket stumps, cricket bat, batting leg-guards, batting gloves, batting helmet, cricket training equipment with (M =.00 and SD =.000).

Table 2: Mean and Standard Deviation scores of Sports Equipment

Sport Equipment	School Participation (n)	Availability (%)	Condition	Mean	Std. Deviation
Track Hurdles	10	0%	N/A	.00	.000
Track Starting Blocks	10	0%	N/A	.00	.000
Relay Batons	10	50%	Good	.50	.527
Shot Put Implements	10	50%	Good	.50	.527
Discus Implements	10	50%	Good	.50	.527
High Jump Equipment	10	20%	Poor	.20	.516
Long Jump Equipment	10	10%	Poor	.10	.316
Soccer Balls	10	90%	Best	.90	.422
Whistles	10	90%	Best	.90	.422
Cones	10	90%	Best	.90	.422
Corner Flags	10	90%	Good	.90	.422
Soccer Jersey	10	80%	Good	.80	.422
Gloves	10	20%	Poor	.20	.516
Nets	10	70%	Poor	.70	.483
Post	10	80%	Good	.80	.422
Netballs	10	80%	Best	.80	.422
Netball Ring	10	80%	Good	.80	.422
Netball Posts	10	80%	Good	.80	.422
Scoreboard	10	0%	N/A	.00	.00
Support Gear	10	0%	N/A	.00	.00
Uniform	10	70%	Good	.70	.483
Volleyballs	10	20%	Best	.20	.516
Whistles	10	80%	Best	.80	.422
Court lines	10	20%	Poor	.20	.516
Antennas	10	20%	Poor	.20	.516
Net	10	20%	Good	.20	.516
Referee Stand	10	0%	N/A	.00	.000
Bench for teammates	10	0%	N/A	.00	.000
Uniforms	10	20%	Good	.20	.516

			Good		
Gymnastic Flooring	10	0%	N/A	.00	.000
Gym Mats	10	0%	N/A	.00	.000
Gym Safety Equipment	10	0%	N/A	.00	.000
Rhythmic Gymnastics Equipment	10	0%	N/A	.00	.000
Gym Balance Beam	10	0%	N/A	.00	.000
Gym Pommel Horse	10	0%	N/A	.00	.000
Gym Still Rings	10	0%	N/A	.00	.000
Gym Vault	10	0%	N/A	.00	.000
Gym Bars	10	0%	N/A	.00	.000
Boxing Ring	10	0%	N/A	.00	.000
Boxing Gloves	10	0%	N/A	.00	.000
Mouth Guards	10	0%	N/A	.00	.000
Ring Shoes	10	0%	N/A	.00	.000
Boxing Trunk	10	0%	N/A	.00	.000
Boxing Bell	10	0%	N/A	.00	.000
Double end Bag	10	0%	N/A	.00	.000
Speed Ladders	10	0%	N/A	.00	.000
Boxing Sparring Equipment	10	0%	N/A	.00	.000
Rugby Balls	10	10%	Good	.10	.316
Rugby Cleats	10	0%	N/A	.00	.000
Cones	10	20%	Good	.20	.516
Headgear	10	10%	Poor	.10	.316
Jersey	10	0%	N/A	.00	.000
Mouth Guards	10	0%	N/A	.00	.000
Shoulder Pads	10	0%	N/A	.00	.000
Tackle Dummy	10	0%	N/A	.00	.000
Tackle Pads	10	0%	N/A	.00	.000
Cricket Balls	10	0%	N/A	.00	.000
Cricket Scorebook	10	0%	N/A	.00	.000
Boundary Ropes	10	0%	N/A	.00	.000
Umpire's Coat	10	0%	N/A	.00	.000
Cricket Bails	10	0%	N/A	.00	.000
Cricket Stumps	10	0%	N/A	.00	.000
Cricket Bat	10	0%	N/A	.00	.000
Batting Leg-Guards	10	0%	N/A	.00	.000
Batting Gloves	10	0%	N/A	.00	.000
Batting Helmet	10	0%	N/A	.00	.000
Cricket Training Equipment	10	0%	N/A	.00	.000

Key: N/A = Not Available

DISCUSSION

According to the results of this research, the Namibia School Sport Union (NSSU) supports 9 of these sports codes; athletics, soccer, netball, volleyball, rugby, cricket, gymnastics, cricket, and boxing across all 14 regions in Namibia. Figure 1 shows the participation level and

popularity of each sport code in schools. Athletics is rated higher with 35% in terms of participation and popularity, followed by soccer with 25%, followed by netball with 20%, volleyball with 10%, boxing with 5%, rugby with 3%, gymnastics with 1%, and cricket with 1%. The availability of sports equipment and facilities provides schools with a variety of program options, such as conducting sports-related extra-mural activities. In order to stay competitive in today's sports, athletes have to be familiar with new or latest modern sports equipment and facilities, which enhance and stimulate speed, time, and perception (Kabunge, 2012).

Sport equipment and facilities play an important role in learner's sports lives. Its benefits include; access to participate in any sports code of choice; living an active lifestyle; avoiding a sedentary lifestyle; developing sports-related skills; and enhancing self-esteem. This study found that sports facilities such as athletics fields were 90% available in schools. Only 10% of these schools did not have an athletic field, and all of the fields were in poor condition. Soccer fields (90%), netball courts (80%), volleyball courts (20%), and rugby fields (10%) were available in schools with poor conditions. The study further found that despite school sports being supported by NSSU, facilities such as gymnastic buildings and boxing facilities did not exist in schools at all. The outcome found by this study can be related to the study conducted by Mungai, Sang and Wamutitu (2014), which examined equipment and facilities in Nyandarua County and found that 72.1% felt soccer status was enough, 44.5% felt netball courts were moderately adequate, 57.9% of volleyball courts were partially adequate, 93.8% felt basketball courts did not exist or were inadequate, and 83.3% found rugby fields to be of low standard and inadequate.

Furthermore, this study found that there is a lack of sports equipment in schools. Despite the school union (NSSU) support, some of the sports equipment and facilities (boxing and cricket) did not exist at the time. The shortage of sports facilities and equipment has a serious negative impact on learners, such as; gaining weight, obesity, living life in solitude, anti-social behaviour, low self-esteem, poor concentration in class, un-sportsmanship, lack of team-work, poor performance in school, prone to diseases like cancer, cardiac diseases, respiratory diseases, mental and physical health issues, drug abuse and violence (World Health Organisation, 2021). This study further found that sports equipment and facilities were below standard and most of them were in poor condition to support sports participation daily. These findings correlate with the study conducted by Orunaboka and Nwachukwu (2012), which found that the availability and conditions of sports equipment and facilities in most schools in developing countries were found to be below standard, resulting in poor sports involvement and a lack of interest in participating in sports-related activities. The study further found that lack of sports equipment and facilities hindered talent scouting and discovery and lowered the teaching of physical education, and this has seen the subject status relegated and been substituted with promotional subjects on the timetable. Equally, Larson (2021) found similar results in which it was reported that the availability of suitable equipment, facilities, and supplies as well as their use are important elements in any physical education and sports plan. It has been closely observed that sports and physical education seem to be losing momentum and steam in almost all the primary schools, and presumably this is being well-thought-out as

part of the reason why the country has not been scouting and discovering new athletes to perform at regional, national, and international level.

CONCLUSION

This study is intended to investigate the availability and conditions of sports equipment and facilities in primary schools in the Katima Mulilo circuit of the Zambezi region. The findings show that there is a lack of equipment and facilities in schools despite being supported by the Namibia School Sport Union (NSSU). Available school equipment and facilities were found to be in poor condition, and some did not exist in the school entirely. Sport equipment and facilities play a major role in the teaching and learning of physical education in schools. Health benefits were also included in this study, which included avoiding a sedentary lifestyle, decreasing anti-ill behaviours and increasing participation in sports.

Recommendation

Based on the results of this research, the following recommendations are made with the intention of encouraging sports participation in schools among learners:

- The government, through the ministry of sport, should provide schools with needed sports equipment and facilities.
- The government, through the ministry of education, should provide physical education with the needed sports equipment and facilities to ensure teaching and learning take its course.
- Schools should come up with awareness programs that teach the importance of managing well the available sports facilities and equipment.
- The school should be held responsible and accountable for the damaged and lost equipment and facilities once provided by the government.
- All young people should be given an opportunity to participate in any sport code of their choice without being hindered by a lack of sports facilities and equipment.
- The government should provide modern equipment that allows athletes to compete at world-stage arenas.
- The Namibia School Sports Union should engage other stakeholders and solicit donations from NGO's and the business world to boost the sports industry with needed aid.
- The teaching of physical education in schools should not only rely on improvisation of unavailable equipment and facilities; cross-teaching with schools that have those facilities should be done.

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