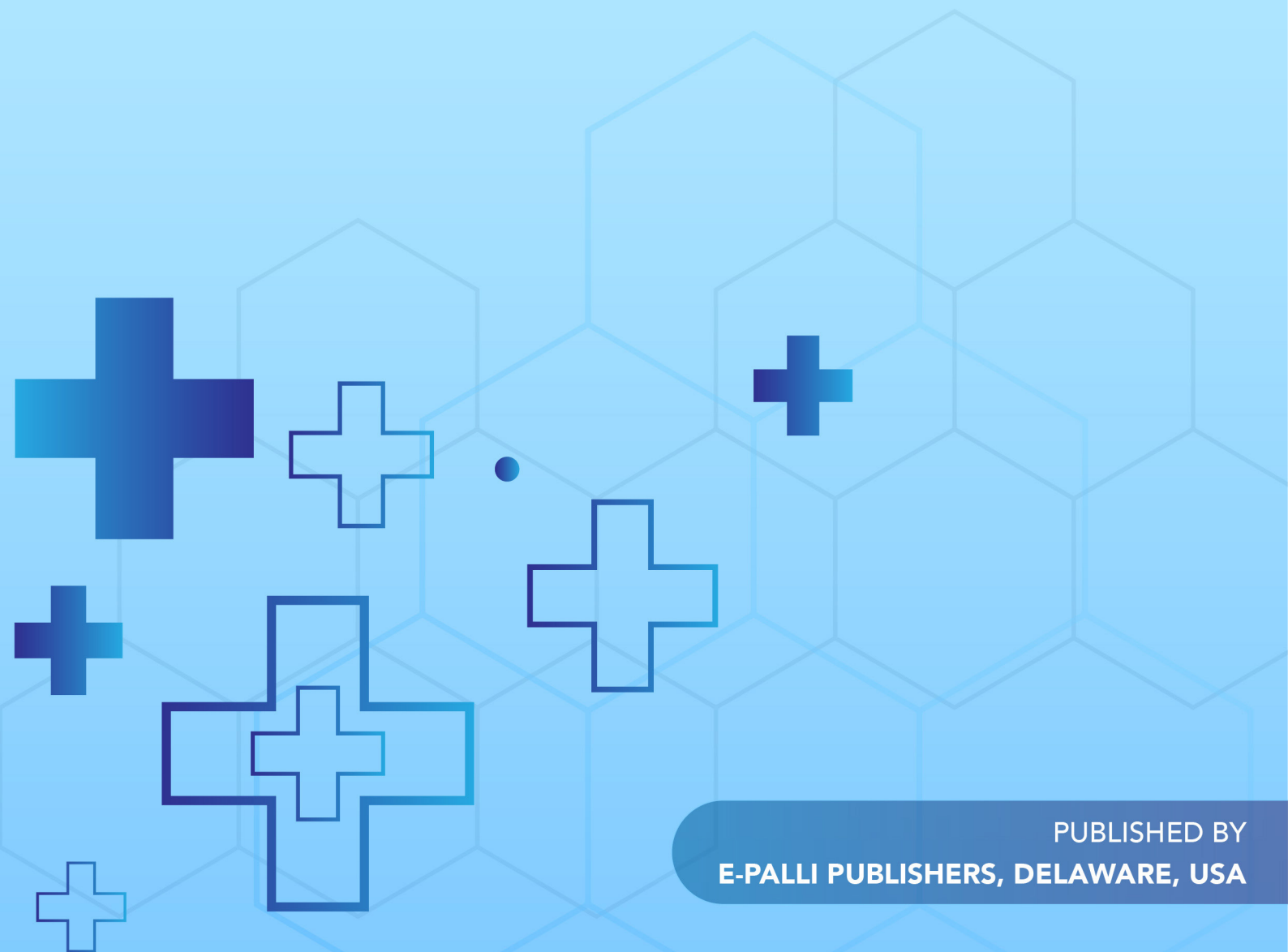




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Secondary School Physical Education Challenges: Case of South-East Botswana

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ABSTRACT

The study aimed at exploring physical education challenges in secondary schools in southeast Botswana using an interview guide developed from UNESCO's quality standard physical education guidelines for policymakers. This study used a qualitative descriptive phenomenological design to collect data from thirty purposively selected physical education teachers from fifteen randomly selected junior and senior secondary schools. A structured interview guide and observation were used to collect data from schools' physical education teachers and schools. Descriptive phenomenology was used to analyze and report results. Results of the study identified the following challenges facing secondary schools' physical education; inadequate infrastructure and equipment, lack of capacity development of teachers, inadequate time, inadequate school heads support, inadequate curriculum content, poor work conditions, no community partnership and low subject status. Positively, the program was inclusive, had appropriate class sizes in small schools, teachers were qualified to teach physical education and there was monitoring and evaluation of the program. The challenges identified were the basis for program improvement. National physical education policy framework developed from UNESCO's guidelines should be implemented in schools to guide the process of program implementation.

INTRODUCTION

Secondary school physical education challenges contribute to low program quality and could negatively affect its educational status in secondary schools possibly culminating in low funding, low positive health impact on students, low status as a subject in relation to other subjects, low perceived societal value, low perceived academic value of the subject with a resultant misconception of the subject as a mere "recreation", and low recognition. Consequently, this would result in inadequate funding from Ministry of Education and Schools as funds would be diverted to more important school subjects and activities in publicly funded schools. The diversion of funds from physical education would consequently culminate in marginalized subject lacking adequate equipment, facilities, and trained personnel. Le Masurier and Corbin (2006) suggested that, ...it was time for physical education to move on from its status as a low-status profession to first-class status, or as she put it, to become the renaissance profession of the new millennium.

Physical education as a low-status school subject is still prevalent in the school system throughout the world. As a lower status subject it occupies, 60% in Africa, Asia 33%, Latin America 33%, Europe 15%, Middle-East 67%, and North America 75%, (Hardman, 2016). The marginal, low status of physical education has been reported in Chinese schools by Chingquan (2016), in the European Union Schools by Katsarova (2016) in the United States of America, Mcloughlin *et al.* (2019). The 1999 Berlin Physical Education World Summit confirmed the marginal status of physical education worldwide. The

low status of physical education was perceived to have been caused by deficiencies in the quality of program delivery, gender and disability inclusion, deficient curriculum time, subject status, and human, material, and financial resources (Hardman & Marshall, 2000). There is overwhelming evidence generated by research carried out worldwide to suggest that indeed there is low status of physical education globally (Goslin, 2021; Hardman, 2016; Chingquan, 2016; Katsarova, 2016; Mcloughlin, *et al.*, 2019 and Hardman & Marshal, 2008).

United Nations Educational Scientific and Cultural Organisation (UNESCO) is a United Nations Agency mandated with the responsibility of ensuring that quality physical education and sports programs are provided to youths in schools throughout the world through the concerted collaborative action of stakeholders. UNESCO believes that participation by youth in quality physical education and sports programs in schools is an inalienable human right. UNESCO, recognizes the myriad benefits of youths' participation in quality physical education and sports programs in schools. In an attempt to develop and ensure quality physical education and sports programs in schools throughout the world for all youth age groups, UNESCO in partnership with several professional organizations developed quality physical education guidelines for implementation by schools throughout the world. These guidelines form a quality physical education policy development matrix and the basis for quality physical education programs in schools. The UNESCO suggested guidelines for quality physical education include the following factors, inclusivity, physical education curriculum, community

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partnership, monitoring and quality assurance, teacher education, supply and development, facilities, equipment, and resources.

Inclusivity means, gender equality, the provision of access to participation in schools' sports and physical education of the disabled and minority groups. A quality physical education curriculum according to UNESCO, is a balanced curriculum that ensures social development, problem-solving competencies, and promotion of cooperation. It should be a hands-on curriculum that develops important practical skills. Community partnership means the establishment of school-community links. Physical education departments should establish links with community sports clubs and national sports organizations so that students can be provided with further development opportunities. Monitoring and quality assurance according to UNESCO means, 'policy implementation, and the delivery of quality physical education, should be supported by clear systems for monitoring and quality assurance, accompanied by support systems that assist teachers and schools in developing strengths and addressing weaknesses' (UNESCO, 2015). UNESCO perceives quality physical education delivery to be the responsibility of well-trained physical education teachers. Quality physical education teacher education should be ensured by institutions responsible for teacher education. UNESCO sees the provision of quality facilities and adequate equipment as inalienable to quality physical education in schools.

American Medical Professional Association (2012) also supports the implementation in secondary schools of high-quality physical education programs that contribute to students' well-being and lifelong health. Inadequate physical activity levels have been found as one of the risk factors associated with chronic non-communicable diseases among children, young people, and adults, including cardiovascular diseases, chronic respiratory diseases, cancer, and diabetes in America (Granger, 2017; Habyarimana *et al.*, 2022). To prevent physical inactivity and its concomitant hypokinetic morbidity among American youth and high health costs, American Medical Professional Associations recommended the implementation of high-quality physical education programs in both primary and secondary schools in America. According to the Medical Professional Associations, a high-quality physical education program should be a core/mandatory subject in primary, junior, and senior secondary schools taught by trained physical education teachers where material conditions in terms of facilities and equipment are adequate. Physical education class enrolment should be the same as in other subjects. The Medical associations also recommended daily physical education lessons of 150 minutes for primary schools and 225 minutes for secondary schools.

Low-quality physical education programs in schools would not accomplish the desired goals of holistic human development, would not improve the health and well-being of students, and would not develop the desired

program outcomes for students. Such programs would be beset by incapacitating multitudes of challenges that prevent them from benefiting students and communities. The identification of challenges facing physical education based on universal standard quality criteria established by UNESCO would provide an effective impetus in developing a high-quality physical education program in Botswana. Physical education was introduced in secondary schools in Botswana in 2001 following the recommendation of the revised national policy on education (Republic of Botswana, 1994. Recommendation 32, paragraph 5.513). Ever since its introduction as a school subject in the school system, challenges facing PE as a subject in Botswana have not been assessed. Through this assessment, specific challenges facing physical education program implementation would be discovered and specific context-appropriate solutions to improve program quality suggested. This study is influenced by Hardman's study but would be using a context-specific case study to study in more details the context-specific challenges facing physical education in southeast Botswana using UNESCO's quality physical education guidelines.

The specific objectives of this study are;

- To use UNESCO's standard quality physical education guidelines for policymakers (2015) to assess context-specific challenges facing physical education program in southeast Botswana.

- Use a qualitative descriptive phenomenological research method to assess PE challenges in secondary schools based on physical education teachers' experiences.

- Use a structured interview guide developed from UNESCO's guidelines for quality physical education to assess physical education challenges from teachers' perspectives.

- Observe some factors such as facilities and equipment, physical education curriculum, lessons, and class enrolment.

LITERATURE REVIEW

Hardman (2008), in a study titled, "The Situation of Physical Education in Schools; A European Perspective" used UNESCO's quality physical education guidelines to review physical education in Europe to find specific physical education challenges and remedies geared towards accomplishing quality physical education in Europe and the World. The survey revealed the following challenges; inadequate curriculum time allocation for PE, poorly trained teachers especially in primary schools, inadequate facilities and equipment resulting from underfunding, large class sizes, insufficient physical education-community links and the general declining health status of youth.

Several other studies conducted throughout the world that were not based on UNESCO's universal guidelines of quality physical education found several challenges facing physical education. Such challenges could be categorized as, institutional-related, teacher-related, resources-related,

curriculum-related, and program implementation process challenges.

Institutional-related challenges facing PE in secondary schools include the following, marginal status within the school curriculum, lack of administrative support, and low program quality. The general institutionalized marginality of PE in school systems stems from practices that do not put PE on equal footing with other school-based activities and subjects (Toprak *et al.*, 2021; Burnett, 2020; Garmamo, 2018; Betram & Kaleeswaran, 2017; Osborne *et al.*, 2016; Aboshkair *et al.*, 2012).

Teacher-related challenges facing physical education programs in secondary schools are also varied and include the following: lack of trained qualified teachers, negative attitude of PE teachers, lack of content and teaching competency, and adequacy of teachers. Teacher-related challenges were reported by, (Burnett, 2020; Gouws *et al.*, 2020; Garmamo, 2018; Betram & Kaleeswaran, 2017; Osborne, 2016; Aboshkair *et al.*, 2012; Habyarimana *et al.*, 2022; Sarwar *et al.*, 2010). On the other hand, student-related problems in schools relate to inappropriate students' attitudes towards PE and undisciplined behaviour. Student-related problems have been reported by (Garmamo, 2018; Osborne *et al.*, 2016).

Lack of resources such as adequate facilities and equipment, poor conditions of sports facilities in schools, lack of trained qualified teachers, inadequate funds, lack of space, and lack of materials and supplies are the main resource-related challenges facing PE programs in secondary schools. The challenge of lack of resources for PE in schools has been reported by many previous studies (Toprak *et al.*, 2021; Burnett, 2020; Gouws *et al.*, 2020; Betram & Kaleeswaran, 2017; Osborne *et al.*, 2016; Allan, *et al.*, 2015; Aboshkair *et al.*, 2012; Habyarimana, *et al.*, 2022; Sarwar, *et al.*, 2010).

Curriculum issues include low syllabi content quality and shortcomings related to syllabus content scope, arrangement, skill outcomes, and processes of syllabus content delivery. Studies that reported challenges related to the PE curriculum include (Betram & Kaleeswaran, 2017; Osborne, *et al.*, 2016; Habyarimana *et al.*, 2022).

Program implementation process challenges include

implementation issues such as time allocation, implementation status, class enrolment, teachers' workloads, teachers' conditions of work, scheduling, examinations, and program management. Studies that reported implementation process challenges include the following. Toprak *et al.* (2021) in Turkey reported "inadequate time", Gouws *et al.* (2020) in Zimbabwe reported "absence of examination for the subject", Betram and Kaleeswaran, (2017) reported "large classes and "reduced time." Osborne *et al.* (2016) reported "low salaries of PE teachers." Oudat, (2016) in Jordan, reported "increased class enrolment." Allan *et al.* (2015) also reported "inadequate time." Unlike the above previous studies, this study would use a holistic standard approach in identifying context-specific physical education program challenges in southeast Botswana.

Theoretical Framework

This study is based on the philosophical theory of phenomenology. Phenomenology can be defined as the study of the structure of experience. That is the study of 'phenomenon,' how things appear according to our experience or the meanings we put to our lived experience. According to Hopkings (2005), Phenomenology is, A philosophy of experience. For phenomenology, the ultimate source of all meaning and value is the lived experience of human beings. All philosophical systems, scientific theories, or aesthetic judgments have the status of abstractions from the ebb and flow of the lived world. Phenomenology is related to the educational philosophical theory of constructivism that proposes that all forms of knowledge are constructed from human experience. People naturally construct their knowledge and understanding of their lived world through experience and reflecting on that experience. What exists is what we perceive to exist (Burr, 2015). Our knowledge is an invention of reality not a reflection of it (Watzlawick, 1980). Glasersfeld defines this as "epistemological solipsism". This is closely related to the autopoiesis theory developed by Chilean biologists Valera and Maturana (Antipina, 2019). The essence of the theory is that "the representation of the surrounding world

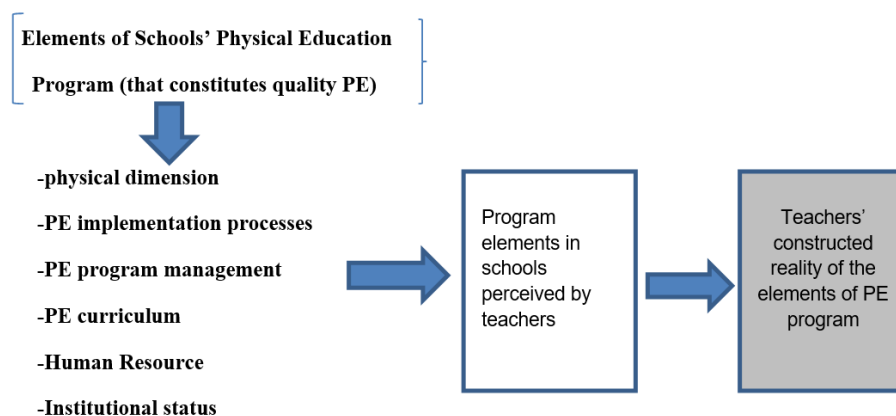


Figure 1: Contextualised phenomenological theory

Note: PE teachers experience all elements of PE program in schools and construct reality out of their perceptions

is always determined by the structure of the cognitive system of a living organism and not by the objective structures of the surrounding world” (Antipina, 2019). The phenomenon that this study investigates concerns teachers’ experience of physical education service scape in junior and senior secondary schools in the southeast region of Botswana. The study assumes that physical education teachers have lived the experience of physical education service-scape in public secondary schools and have a genuine experience and knowledge that they could share with this study.

Conceptual Framework

The conceptual theoretical framework for this study is based on a systems theoretical framework. According to this theory, a system consists of interrelated, interdependent parts that constitute a whole. An alteration of one component is more likely to affect the

whole system. In this study, components of the system are elements of the schools’ physical education program such as physical dimension, processes of implementation, program management, curriculum, personnel, and institutional status. These elements constitute various processes of program implementation and inputs. Shortage or inadequacy of any of the components of [inputs and processes] would adversely affect the quality of the physical education program resulting in a clearly definable output [high- or low-quality PE program]. Physical Education is perceived as a system that consists of different components experienced by teachers daily and have constructed reality out of their experiences. This study, therefore, explores the meanings physical education teachers attach to their experience of phenomena, which in this study is physical education service-scape in secondary schools.

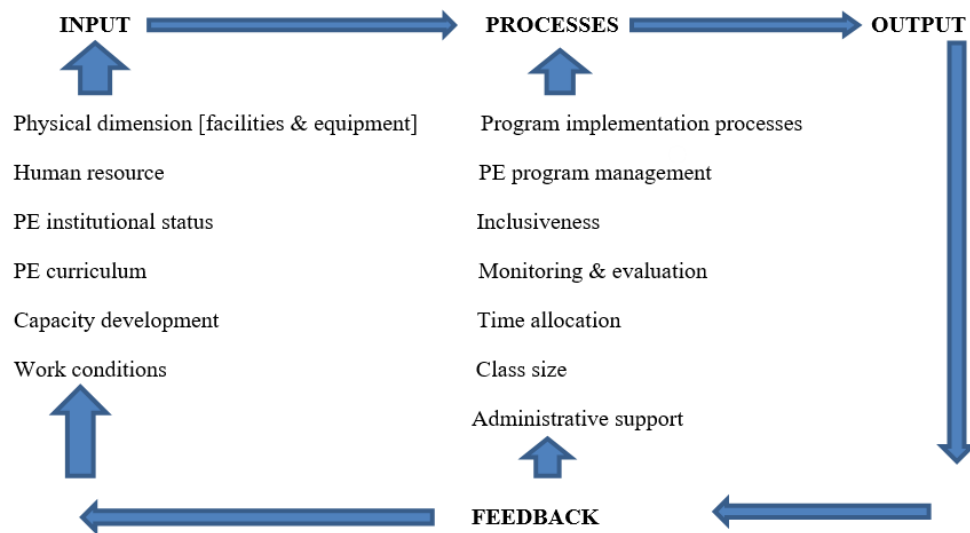


Figure 2: Adapted systems management theory

Note: PE program inputs and processes result in a specific output (high- or low-quality PE program) that forms the basis of feedback

METHODOLOGY

Research Design

A qualitative descriptive phenomenological design was used in this study. Qualitative descriptive phenomenological research “seeks reality in individuals’ narratives of their lived experiences of phenomena” (Yuksel & Yildirim 2015). It allows for an in-depth and detailed exploration of an individual’s thoughts, experiences, feelings, and interpretations Opsal *et al.* (2015). Lambert and Lambert (2012) defined qualitative descriptive research as a qualitative descriptive studies that tend to draw from naturalistic inquiry, which purports a commitment to studying something in its natural state to the extent that is possible within the context of the research arena. This study seeks to explore challenges facing physical and health education in secondary schools from the physical education teachers’ experiences and perspectives.

Participants

The main participants of this study were physical and

health education teachers both males and females in junior and senior secondary schools in the southeast region of Botswana. Physical and health education teachers experience physical education service-scape challenges in secondary schools in Botswana.

Sampling Procedure

According to Botswana Statistics (2018), the southeast region has twenty-seven secondary schools (27) and two thousand and twenty-one (2 021) total number of teachers for all subjects. Out of the 2 021 teachers, fifty-seven (57) were physical education teachers. Fifteen schools were randomly selected from the twenty-seven secondary schools in the region. A purposive sampling procedure was used to sample two (2) physical and health education teachers from each of the fifteen (15) randomly selected secondary schools in the region. The purposive sampling method was found ideal to use in this study because teachers have lived the experience of the challenges facing physical education in secondary

schools. Thirty (30) out of the fifty-seven (57) physical and health education teachers of the twenty-seven (27) secondary schools in the region were selected for this study. So, this study used a sample size of 56%. A reasonable sample size for a phenomenological study may range from 2-25 participants (Creswell, 2013).

Data Collection Instrument

Data were collected using a structured interview guide from physical and health education teachers in their respective schools. The interview sought to collect demographic information and attempted to discover challenges facing PE in the various components of UNESCO's criteria of program quality. The structured interview guide consisted of open-ended questions focusing on various broad themes such as syllabus, status in the curriculum, time allocation, facilities and equipment, teacher qualification, etc. Open interview questions give respondents latitude to express their thoughts, and feelings and to expand on their experiences. The content of the interview guide was informed and guided by UNESCO's quality standard physical education guidelines for policymakers (UNESCO 2015). For example, under physical resources respondents were asked the following questions: "According to your experience as a physical education teacher, would you say that all the required physical infrastructure for program implementation is adequate and are existing sports facilities well cared for? What sports facilities are currently available in your school and which ones are not available? What do you think should be done to address the problem of physical infrastructure inadequacy in schools?" After the structured interview guide was developed, it was given to a panel of experts in physical and health education pedagogy for content, face, and construct validation. This panel of experts was critical professionals in the professional area of pedagogy who engaged in a dialogue with each other to encourage reflection upon the interview instrument and to establish consensus. Their feedback was critical in developing a credible, trustworthy interview guide instrument. The interview strived to secure information about present practices and conditions in participants' current environmental settings. The interview guide was complemented by an observation method. The observation method was used to observe facilities, equipment, curriculum, class enrolment, and curriculum time.

Data Analysis

A descriptive phenomenological analysis was employed in analyzing interview data. Interviews and notes were first transcribed. Transcribed data were read and re-read to identify themes/codes. A more focused coding was used to develop categories of themes and identify data for each named category or theme.

Kiger and Varpio (2020) explained thematic analysis in the following six steps; "familiarising yourself with data,

generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report." A deductive approach was used to derive meaning and conclusions. For this study, open interview data was manually thematically analyzed by discovering repeating themes and developing a coding frame that captured themes in terms of code categories.

To improve the trustworthiness and credibility of the results, three members of the research team independently analyzed raw data and later met to discuss their findings so that they would reach a consensus on the results. To prevent "prejudicial" influence on data analysis and interpretation, the three members of the research team were encouraged to adopt reflective attitudes when reflecting on the phenomena as experienced by the respondents and not as experienced by themselves. The identified study themes were sent to the interviewees for approval and to establish the truthfulness of the findings.

Data Collection Procedure and Ethical Issues

The research permission was granted by the Southeast Education Regional Office in Gaborone under the Ministry of Basic Education. Sampled schools were visited to get permission from school heads and to make appointments with physical education teachers. The researcher visited the physical and health education teachers at the sampled schools at different times convenient to them.

At each school, the researcher introduced himself and explained the study and study processes to them before the actual interview so that they could make informed consent to participate in the study by signing a study consent form. Participants were interviewed and their responses were recorded after getting their permission to do so. The researcher also took notes of the interviews. The recorded voices were taken for transcribing and to identify common themes from transcribed data. Sport and physical education facilities, curriculum, lessons, class enrolment, and curriculum time were observed by the researcher.

RESULTS

According to table 1, thirty physical education teachers responded to the interview (17 male and 13 female teachers). Most of the respondents were aged 30-39 years (15, 50%), and very few aged 50-59 years (4, 13%). This means that most of the respondent teachers were in the middle adulthood ages. Most of them (15, 50%) had between five to ten years of teaching experience. In terms of teaching qualifications, many of them (27, 90%) had a Bachelor of Education Physical Education degree and very few of them had a diploma in secondary education. So, all the respondent teachers were qualified physical education teachers. Nineteen of the respondent teachers taught physical education in junior secondary schools while eleven taught physical education in senior secondary schools.

Table 1: Demographic Information

		Freq	%			Freq	%
Gender	Females	13	43%	Age	20-29 yrs	6	20%
	Males	17	57%		30-39 yrs	15	50%
Teaching experience	Below 5yrs	3	1%		40-49 yrs	5	17%
	5-10 yrs	15	50%		50-59 yrs	4	13%
	10-15 yrs	7	23%	Qualification	Diploma	3	1%
	15-20 yrs	5	17%		1st degree	27	90%
Schools	Senior	11	37%				
	Junior	19	63%				

Facilities and Equipment

The study intended to establish if sports and physical education facilities were adequate and if the existing sports facilities in schools were well maintained. How the problem of sports facilities inadequacy in schools could be addressed and why there are inadequate facilities and equipment in secondary schools. The study found that sports facilities were inadequate in schools and available facilities were not properly maintained. The study discovered the need for the construction of additional facilities in schools. The study found that the problem of lack of sports facilities in schools could be resolved by using central community sports facilities.

When participants were asked, ‘Are facilities and equipment adequate for implementing physical education program in your school, and are the existing facilities well maintained?’. Participant, (P3) states ‘facilities are inadequate for effective implementation of physical education program in secondary schools.’ Participant (P6) from one of the junior secondary schools in Gaborone stated, ‘Due to lack of space our school has no sports facilities.’ They indicated a lack of the following in schools in the region, swimming pools, changing rooms, and showers. Senior secondary schools unlike junior secondary schools have hard surfaced courts and tennis courts. It was concluded that indeed there were inadequate sports and physical education facilities in secondary schools in southeast Botswana. They indicated that the available sports fields are not well cared for. Participant (P1) stated, ‘not cared for, only graded once a year’. When respondents were asked to suggest ‘how sports infrastructure in schools could be improved’, most of them suggested that additional sports infrastructure should be constructed in schools such as indoor sports halls, swimming pools, change rooms, and showers and that netball, volleyball, and basketball courts should be hard surfaced in junior secondary schools. Participant, (P4) states ‘if outdoor fields and courts are not hard surfaced, they should at least be maintained in good condition throughout the year. It was indeed observed that facilities in most schools were not adequate. Outdoor facilities had grown tall grass. In all schools, there were no swimming pools changing rooms and showers, and no indoor activity halls. When asked, ‘Is equipment adequate for teaching physical activities?’ Most of the respondents

had similar responses, (24) 80% stated that equipment is not adequate. Participant, (P5) said, ‘There is a serious shortage of physical education equipment in secondary schools.’ Shortage of equipment was also observed in most schools and in some instances balls and implements used were very old. ‘When asked to air their views as to why there are inadequate facilities and equipment in schools?’ Their views were different. Nine (9) 30% of the respondents attributed this situation to lack of funds. Participant (9) said, ‘Ministry of Education cannot afford to construct all required sports facilities in each school.’ On the other hand, ten (10) 33% of the respondents attributed the lack of facilities and equipment to a lack of interest in the subject by the Ministry of Education Officials. Participant (P3) said, ‘Ministry of Education Officials do not have the interest to develop required facilities in schools for physical education.’ Eleven (11) 37% however, attributed this problem to a lack of strategy in sports facility construction. Participant (P10) had this to say, ‘If government through local authorities could build community sports facilities, then schools in a community could jointly use such facilities for PE lessons instead of building sports facilities in each school.’

Processes

Inclusiveness

This study wanted to find out if physical education in secondary schools is inclusive and whether teachers can provide inclusive instruction for mixed-ability classes. The study found that the program was inclusive and that teachers were not skilled enough to provide inclusive instruction. When asked, ‘Is the physical education program inclusive and are you capable of providing inclusive instruction?’ Most participants indicated that the program in secondary schools is inclusive in compliance with the inclusive policy.

However, most teachers stated that they were not well-skilled to provide inclusive instruction. Participants (P17, P18, and P21) had similar responses, ‘No, our course on adapted physical education did not provide adequate information and practice on adapting physical activity for teaching different partially disabled students.’ For all the lessons observed, teaching was mainly focused on mainstream teaching. Special learning needs of less practically inclined students were not met.

Teacher Capacity Development

The study wanted to find out if there had been any in-service workshops organized for teachers in the past two years. It was found that teachers had not attended in-service workshops for teacher capacity development in the past two years. When asked 'have you attended any in-service workshop in the past two years,' most of the respondents, twenty-five (25) 83% had similar responses and reported having not attended any physical education workshop in the past two years. Only five (5) 17% reported to have attended a physical education workshop. Participants, (P6 and P1) reported to have attended 'item writing and course workshop on softball, gymnastics, and dance. It was concluded that there was no in-service workshop organized for PE teachers in the past 2 years for teacher capacity development.

Monitoring and Quality Assurance

The study wanted to establish if there has ever been monitoring and quality assurance in physical education in the past 5 years in secondary schools. It was found that there was program monitoring and evaluation in the past 5 years. When asked, 'Has there been any physical education program monitoring and evaluation in the past five years?' Sixty-three percent (63%) of the respondent teachers reported that there was physical education program monitoring and evaluation in secondary schools in the following key areas, curriculum, teaching, students' achievement, and program management. Participants (P22, P24 and P16) had similar responses and stated that 'there was once monitoring, and evaluation organised by department of curriculum and evaluation that evaluated PE syllabus, teaching, students' achievement, and program management.' On the other hand, thirty-seven percent (37%) of the participants had indicated that there had never been any evaluation and monitoring of PE program in their schools. The conclusion reached here is that there was monitoring and quality assurance for PE in secondary schools.

Program Implementation Process

The study wanted to establish implementation processes regarding, program time allocation, class sizes, and work conditions.

Time Allocation

The study found that there was not enough time allocated for PE. When asked, 'how many hours and minutes per week are allocated for physical education, and is this time adequate?' All the thirty (100%) teachers had indicated that PE has been allotted two hours thirty minutes (2hrs 30min) per week and that this time was inadequate to effectively provide enough activity levels for students per week and to adequately cover the syllabus. Participants (P13 and P12) had similar responses and stated, 'time allocated for PE is inadequate, 2 hrs 30 min per week per class is completely not adequate for students to have adequate activity levels per week.' It was concluded that

the time allocated for PE in secondary schools is not adequate.

Physical Education Class Size

Regarding class sizes, the study found different class sizes for PE depending on the size of the school. When asked to indicate their class sizes, they responded differently. Some indicated class enrolments of between twenty to thirty (20-30) students while others indicated class sizes of 40 students. Respondent (19) states, 'Since PE is an optional subject, PE classes are created by students from other classes and there are generally adequate students who opt for PE.' Despite this, it was observed that class enrolment was appropriate in small schools but was large in big schools in high-population communities. Based on this finding, class size depends on school size, and there is no standard class size for PE classes.

Work Conditions

The study wanted to establish the nature of work conditions that teachers did not like. The common abhorrent work conditions that many teachers execrated included the following: high workload, slow progression to promotion, lack of infrastructure and materials, and negative attitude of other teachers towards physical education and teaching outdoors. When asked to 'state work conditions that they did not like in their respective schools?' Participant, (P6) listed 'lack of equipment, limited facilities, negative attitudes of staff towards PE, not enough time and high workload.' In addition to the above conditions participant, (P3) stated that 'teaching practical activities outdoors in summer is not comfortable because of the extreme heat, so most of the time I have to be quick to avoid spending too much time under the sun.'

Program Management

Community Partnership

This was to establish whether there are physical education-community links. It was established that there were no PE-community links. When asked, 'have you established links with community sports clubs and or national sports organizations to foster talent development of students?' All thirty (30) 100% of teachers in the southeast district of Botswana quite honestly stated that they had not established any links with local and national sports clubs and organizations to foster the talent development of students. Participant (P17) said, "In our school, we have not yet established links with local clubs to open opportunities for talented PE students to further develop their talents. Students who currently participate in local and national sports teams do that on their own."

Administration Support

Here researchers wanted to establish if teachers and physical education programs were supported by their school administrations and school Heads. It was found that teachers and PE received adequate support from school

administrations and inadequate support from school heads. When asked, 'Do physical education program and teachers receive adequate support from school administration?' There were mixed responses, most of the respondents stated that 'they received adequate support from school administration in purchasing equipment.' Participant (P18) states, 'the only support we get from the school administration is purchasing equipment. Since PE finances are not always adequate, we hardly ever purchase adequate equipment.'

When asked, 'Does your school headmaster take an active role in promoting physical education in the school and the community?' Most of the respondents had similar responses and stated that school headmasters 'do not take an active role in raising awareness of the intrinsic and extrinsic values of physical education to the entire school population and wider communities.' Participant (P11) states, 'Our Headmaster hardly ever expresses his perceived value of PE to the school community and parents. This is indicative of their lack of understanding of its benefits to students and their interest in the subject.'

Physical Education Curriculum

The study wanted to know the scope of junior and senior secondary syllabi contents. The study found PE syllabi content deficiencies in both junior and senior secondary schools' curriculum and when participants were asked to 'air their views regarding junior and senior secondary syllabi adequacy in covering all areas of physical education,' most of them indicated syllabi content deficiencies. They said that the junior certificate syllabus is dominated by practical sports activities. Regarding the senior secondary (BGCSE) physical education syllabus, most of the respondent teachers had similar responses and indicated syllabus content deficiencies in most areas of physical education and felt that students at this level should be introduced to all the components of physical education such as sociology of sport, history of sports, biomechanics, sports psychology, organization of sports, anatomy and physiology, exercise physiology, leisure, and recreation, etc. Participant, (P7) states that 'Junior Certificate (JC) and Botswana General Certificate in Secondary Education (BGCSE) syllabi are lacking in most key important content areas such as biomechanics, sociology of sports, history of sports and organization and administration of sports.' It was indeed observed that JC and BGCSE syllabi are activity performance-based lacking in very key epistemological content areas that would assist learners understand physical education in its entirety.

Teacher Development

This was meant to establish whether teachers were qualified to teach physical education. It was found that teachers were qualified to teach the subject. When asked if they have a physical education teaching qualification or not, 27 (90%) of the respondent teachers had indicated to have a Bachelor of Education, Physical Education

degree, and only 3 (1%) had a teaching Diploma. When asked 'if they were adequately prepared to teach physical education in secondary schools?' Most of the respondents responded positively. Participant (18) states, 'The courses we received adequately enhanced our knowledge of the discipline and effectively prepared us to teach PE in secondary schools.'

Institutional Status

The study wanted to establish the status of physical education within the secondary school curriculum and establish the attitudes of other teachers toward PE. The study found out that PE is an optional subject in secondary schools and teachers' attitudes towards the subject are negative. When asked to express their 'general perception of the status of PE as a school subject and define the attitudes of teachers towards the subject,' Most of them (21, 70%) had similar responses, they stated that PE is an optional subject and holds a low status as compared with other school subjects. Most of them defined the attitudes of teachers towards physical education as being 'negative'. They said, 'Staff members consider physical education as 'recreational play.' Participant, (P5) stated that the 'attitude of other subject teachers towards PE is negative because of a misconception that it is just a play time subject.'

DISCUSSION

UNESCO believes that youth participation in quality school-based physical education and sports programs is a fundamental human right. This fundamental human right is also buttressed by the American Medical Professional Association (2012) which also supports the implementation of high-quality physical education and sports programs in schools to prevent hypokinetic morbidity and mortality among youths in America. Hardman (2008) used UNESCO's quality physical education guidelines to review physical education to find specific physical education challenges and remedies for accomplishing quality physical education in Europe and the World. This study used UNESCO's quality physical education guidelines to identify in detail the context-specific challenges of accomplishing quality physical education in southeast Botswana.

The challenges facing secondary school physical education program in southeast Botswana could be said to stem from the inputs and processes (adapted systems management theory). The input challenges include inadequate infrastructure and equipment in schools, lack of capacity development of teachers, and poor work conditions, and the process challenges include inadequate time allocation for physical education, lack of school-community partnership, inadequate curriculum content, and low status as a school subject. The experience of these input and process challenges by teachers comes as feedback that could be the basis for improving program quality in secondary schools.

This study found inadequate facilities and equipment as a

major challenge facing physical education in all schools in southeast Botswana. According to Hardman (2008), one-third (1/3) of countries in Europe had indicated average /inadequate quality of facility and equipment provision. Other studies that reported inadequate infrastructure and equipment for physical education in schools include (Habyarimana *et al.*, 2022; Toprak *et al.*, 2021; Gouws *et al.*, 2020; Burnett, 2020; Stroebel *et al.*, 2018; Betram and Kaleeswaran, 2017; Kaite, 2017; Osborne *et al.*, 2016; Chekol, 2015; Allan *et al.*, 2015; Sarwar, et., 2010; Aboshkair *et al.*, 2012; UNESCO, 2013). Hardman (2008) found inadequate funding for facilities, equipment, facility maintenance, and teaching materials in most schools in central, eastern, and southern Europe. This inadequate funding would result in inadequate sports facilities, poorly maintained facilities, and a lack of teaching materials in schools.

The lack of capacity development of teachers in southeast Botswana negatively impacts the quality of the program as the effectiveness of teachers is compromised. Capacity development of teachers should be a priority of departments of curriculum development and evaluation and departments of testing and evaluation as part of an in-service training program. There is a teacher in-service training opportunity in Botswana, but the main problem is the frequency of its application.

Inadequate time was also an important challenge of PE program in secondary schools in southeast Botswana. Hardman (2008) also found a gradual erosion of time for physical education across Europe. World Health Organization recommended 1 hour of physical activity of moderate to high intensity every day for young persons aged 5 to 17 years old to accomplish mental and physical health benefits (WHO, 2010). Insufficient time for physical education was also reported by previous studies (Habyarimana *et al.*, 2022; Toprak, 2021; Betram & Kaleeswaran, 2017; Kaite, 2017; Oudat, 2016; UNESCO, 2013; Marshall & Hardman, 2000). An Irish physical education teacher commented that “PE is being squeezed out of the education system by more compulsory academic discourses... which hold little benefit compared to PE” (Hardman, 2008).

This study found high workload, slow progression to promotion, lack of infrastructure and materials, and negative attitude of other teachers towards the physical education program as poor work conditions faced by PE teachers in southeast Botswana. Poor work conditions usually negatively affect teachers’ morale. Osborne *et al.* (2016) found similar work conditions in Niteroi (Brazil) as, low salaries, old, dilapidated infrastructure, and lack of equipment, devalued physical education that is considered as mere recreation, lack of indoor sports halls exposed teachers and students to heat, cold and dust that lead to headaches, sinusitis, and vocal cords problems.

Lack of physical education-community partnership in southeast Botswana constrains the development of talented PE students. Hardman (2008) also found low direct school-community links in 51% of European

countries. There should be a good collaboration between schools, local clubs, and sports federations to enhance elite sports pathways for students. Betram and Kaleeswara (2017) also identified a lack of school-community partnership in their study. Schools should establish mutually cooperative relationships with private and commercial organizations, and governmental and non-governmental organizations to open opportunities for students to apply their skills and knowledge in furthering their talents.

This study found physical education curriculum content inadequacy. This concern was also echoed by UNESCO, (2013); Toprak (2021), and Jabir *et al.* (2020). This study therefore confirms the findings of the above studies that one of the main important challenges facing physical educators in public schools relates to the inadequate nature of physical education curriculum that is reinforced and perpetuated by a lack of school administrations’ interest in physical education. It is, therefore, necessary to transform the PE performance sports discourse curriculum and move the subject into the 21st century and beyond with a performance outcomes curriculum, the outcomes of which would be related to human health and various professional skills.

The low institutional status of PE was found to be a challenge in secondary schools in southeast Botswana. Hardman (2008) found out in Europe that despite being equal in law to other subjects in the curriculum, physical education occupies a lower hierarchical status as compared to other core subjects. Kaite (2017) also revealed the low status of the subject and those of its teachers as compared to other subjects and teachers in Zambia. The institutional, marginal status of the program and its teachers is responsible for the negative attitudes towards the program and teachers within schools. Studies that found negativity of teachers towards the program of physical education include (Gouws *et al.*, 2020; Osborne *et al.*, 2016; Oudat, 2016; Chekol 2015; Jenkinson & Benson, 2010; Sarwar, *et al.*, 2010). Negativity towards the program may contribute to the low self-esteem of teachers and may contribute to their burnout. Toprak *et al.* (2021) also identified a low level of significance and marginalized status of PE in Turkey.

All the above challenges negatively impacted program quality in secondary schools in southeast Botswana and most countries. These challenges should therefore be addressed to improve PE program quality.

Positively, the study identified the following in secondary schools; teachers were trained and qualified and the programme was inclusive; class enrolment was appropriate (between 20 to 30 students) in small schools and there was administrative support for teachers.

CONCLUSIONS

On the basis of the above-identified challenges, the following recommendations were made to improve physical education program quality in southeast Botswana;

- Adequate standard infrastructure and materials

for physical education programs in junior and senior secondary schools be constructed and availed. If too expensive, centralised community facilities for schools should be constructed in communities.

- Capacity development programs for teachers should be prioritised.
- Constant monitoring and evaluation of the program is required so that key program implementation problems or challenges can be identified.
- Appropriate adequate time-table time allotment for the program be determined.
- There is a need to improve school-community partnerships to enable continued talent development of physical education students.
- Transformation of secondary schools' physical education curriculum should be an urgent priority.
- Schools' administrations should strengthen their support to improve program status in schools.
- Policy guidelines based on UNESCO's policy framework of quality physical education programs should be developed to guide program implementation in secondary schools in Botswana.
- Conditions of work for teachers; better salaries, facilities, and better recognition of the subject and its teachers be improved.

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