

**BARRIERS TO THE IMPLEMENTATION OF QUALITY
PHYSICAL EDUCATION: THE CASE OF SECONDARY
SCHOOLS IN KERSAWOREDA OF EAST HARARGE
ZONE**

BY

GEMECHIS FEKADU BAYISA

**A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTERS OF EDUCATION IN PHYSICAL
EDUCATION**

**NOVEMBER , 2016
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Department of Science and Mathematics education

Chair of the Department	signature	Date
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Abstract

Title:- Barriers to the Implementation of Quality Physical Education: The Case of Secondary Schools in Kersa Woreda of East Hararge Zone

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Addis Ababa University 2016

The purpose of this study was to assess the Barriers to the implementation of Quality Physical education in government secondary schools of Kersa Woreda of East Hararge Zone. Three basic questions were formulated, which emphasized on the perception of teachers and students towards barriers to the implementation of quality physical education curriculum in secondary schools of Kersa Woreda, focusing on the major barriers and their impact to the implementation of quality Physical education curriculum in the secondary schools and the extent to which the principals discharge their responsibilities in the implementation of quality Physical education curriculum in the secondary schools. To conduct this study, descriptive survey method was employed. All the 3 government secondary schools found in Kersa Woreda were selected using availability sampling. From these sample schools, all the 3 available physical education teachers were included using availability sampling, 150 students were participated in the study through random sampling technique and 3 principals were included using availability sampling technique. Questionnaire was used as main tool of data collection. Interview and Observation were used to substantiate the data gathered through questionnaires. Frequency, percentage and mean were utilized to analyse quantitative data gained through the questionnaires. The qualitative data gathered through interview and observation were analysed by narration. The result of the study indicated that physical education teachers were not well oriented to the implementation of quality Physical education curriculum where they lacked awareness to take on leadership role in the implementation of quality physical education, and where they lacked commitment and motivation in implementing quality physical education curriculum in the schools, the implementation of quality Physical education was overwhelmed by many barriers; such as: teachers' lack of interest, limited practice opportunity offered to students, lack of background knowledge and skill on the part of students, students giving low priority to physical education, inadequate time, lack of facilities, lack of equipment, shortage of Physical education staff, high student ratio, shortage of school finance, absence of quality care, guidance and support from school administration, and principals' under valuing of Physical education. On the other hand, the study discovered ineffectiveness of the school principals in providing the necessary assistance and guidance for the implementation of quality Physical education curriculum through organizing appropriate teaching and learning environment by providing abundant Physical education facility and equipment in the school, working to reduce budget constraints and making close discussions with physical teachers. Finally, to overcome the barriers to the implementation of quality Physical education curriculum, it is recommended to give important emphasis to the implementation of quality Physical education curriculum by providing adequate practice opportunity to students, adequate physical education staff, and providing necessary facilities and equipment, relevant in-service trainings for physical education teachers and creating awareness of school principals through continuous training were suggested.

Key terms: quality Physical education, teachers' related barriers, institutional related barriers, role of principals.

Acknowledgments

Most importantly, I would like to give my special gratitude to the Lord Almighty for helping and blessing me through this program. Words cannot express my gratitude to my Lord, who without His amazing grace; I would still be lost. The completion of this research is a result of so many People's efforts that deserve appreciation.

First of all, I would like to express my heartfelt thanks to my advisor Desta Gebeyehu (PhD). I really cannot put into words how incredibly grateful I am for everything he has done for me. For everything he has taught me and for his professional advice and constructive criticisms in my attempts to make this work a success, I sincerely thank him.

I have to express my sincere love and appreciation for my father Mr. Fekadu Bayisa and my mother Ms. Martha Mamo for their overall support and encouragement, and also I will never forget their efforts to make me overcome various challenges in my life.

I am very appreciative to my lovely wife. Hawi Beyene you are the love of my life, thanks for believing in me!

I have to send my heartfelt thanks to my staff Jemal Abdushakur, Sefu Abata, Abdella Ahmed, and Ahmed Tayib Tahir for their moral support.

Thanks to my friends Obsa Gizaw, Mosissa Fatula, Gemechis Solomon and many others that have encouraged me throughout this journey.

Last, but not least, I would like to send my sincere thanks for my school principal Mr. Abraham Jemal for his material and moral support starting from the initial to the completion of this research work.

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ACRONYMS AND ABBREVIATION

EGSECE: Ethiopian General Secondary Education Certificate Examination

MoE: Ministry of Education

NASPE: National Association for Sport and Physical Education

PE: Physical Education

SPSS: Statistical Package for Social Science

UNESCO: United Nations Educational, Scientific and Cultural Organization

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Physical Education has a special significance, unique role and has made unlimited contribution to the modern society as it caters to the biological, sociological and psychological necessities of man. Lack of knowledge on Physical Education and sports in our society, inadequate understanding about the importance of Physical Education classes and physical activity habits on health, and gradually adapting an inactive life style have become the top reasons causing an increase in Chronic diseases like Obesity, Cardiovascular diseases, High blood pressure, Diabetes, Osteoporosis (Bailey et al., 2009). When expressing the importance of Physical Education, UNESCO (1998) declared that: *“Children should have access to Physical Education because It is a basic human right just like other rights.”*

Physical Education is a formal content area of study in schools that comprises of standardized programs of instruction designed to develop and maintain motor skills, cognitive abilities, physical fitness, social and emotional adjustments, positive self-expression and healthy habits. It is an avenue for engaging in developmentally appropriate physical activities designed for children to develop their fitness, gross motor skills, and health (Sallis et al., 2012).

Physical Education in secondary school does not mean free game or a simple break between class sessions. Physical Education class is as a laboratory where in a child takes part in how to move, which is important, and learns through movement. Happiness, diversity and entertainment are by products of a good Physical Education class. Education means to guide forward. Physical Education as a component of education, deals with body training and training through the body. It is a wide field in the education system. Since students are as fundamental parts of education system in the country to achieve educational goals, they are of great importance and have a principal role.

Therefore, paying attention to this population in terms of education and physical and mental health results in the flourishing of educational system in the society. Hence, the implementation of Physical Education courses and sport sessions between classes concerns health, vitality and emotional balance and social education.

Quality Physical Education is not specific curriculum or program, it reflects an instructional philosophy that emphasizes providing intensive instruction in motor and self-management skills needed to enjoy a wide variety of physical activity experiences, including competitive and non-competitive activities, keeping all students active for most of the class period, building students' confidence in their physical abilities, influencing moral development by providing students with opportunities to assume leadership, cooperate with others, and accept responsibility for their own behaviour and having fun (NASPE, 2009).

The Curriculum of Physical Education is very dynamic in nature and have to be monitored at a regular interval of time for sustainable development. Physical Education, as an integral part of general education, great emphasis should be given to its quality implementation in school. The academic experts, Physical Education teachers, principals as well as parents of students across the country should promote and implement quality Physical Education programs that emphasize participation in lifelong physical activity among all students. To provide quality Physical Education program in school; factors such as proper time allocation, adequacy of facilities and equipment, qualified Physical Education teachers, professional development programs and sufficient budget must be considered. Regarding this, Seidentop (2007) noted that the major concern and issues in the implementation of Physical Education and sport curriculum are: time, specialist teachers, facilities and developmental appropriate practice.

The benefits of participation in Physical Education are numerous & have been highlighted by Bailey et al., (2009), who categorize them as being physical, life style, affective, social & cognitive. With exercise & activity habit commencing early in life & the development of healthy life style behaviors among the children's & adolescents translating in to reduced health risks in adulthood, (Dobbins et al., 2009), quality education at early age is paramount. However, it becomes increasingly

difficult to provide quality Physical Education & Physical activity opportunities in schools when constrained by many institutional, teacher & student related barriers.

In the secondary schools of Kersa Woreda, Physical education curriculum is losing its' identity due to the prevalence of multifaceted barriers. Even teaching Physical education is becoming boring activity on the part of the teachers. In most cases students have no opportunity to participate in physical activity programs at school and are suffering from sedenterianism. It is obvious that Physical education has both theoretical and practical component. However, most of the time Physical education teachers teach only theory part in the classroom, exempting practical part or field exercises. This situation is leading to poor implementation of quality Physical education program. Put differently, as observed by the researcher; the barriers are rooted in the school organization and the role of agents such as Physical education teachers and principals. Hence, schools have been identified as key health settings & are being called up on to give greater attention to their Physical Education & physical activity programs (Naylor & Mckay, 2009; Pate et al., 2006). It is also apparent that Physical Educators are becoming more accountable than ever before as their role continues to evolve & they pursue opportunities to facilitate activities that engage students & provide education on life style choices & healthy behaviors. With this view the major concern of this study was assessing the barriers to the implementation of quality Physical education curriculum in the secondary schools of Kersa Woreda.

1.2. Statement of the Problem

Implementation of Quality Physical Education Curriculum requires appropriate time allocation, adequate facility and equipment, qualified Physical education teachers, and standard based curriculum. Regarding this, Starc and Strel (2012), noted that Quality Physical education depends on five factors: allocated time, available facilities and equipment, the contents of Physical education curriculum, number of students per teacher, and the teacher competencies.

As many researches indicated that several obstacles are hindering the implementation of quality Physical Education curriculum. In many countries Physical Education is suffering from reduction of curriculum time, lack of facilities and equipment, deficiency in number of properly qualified personnel, lower importance of school Physical Education in general, lack of official assessment, financial constraints and attitudes of significant individuals such as head teachers (Hardman, 2008). Morgan and Hansen (2008), classified barriers to the implementation of quality Physical Education program as external (outside of the teacher's control) and internal (arising from the teachers' behaviour). Barriers within school that restrict teachers in providing quality physical education programs have been classified by Jekinson and Benson (2010) as being either institutional or teacher related. Tinning (2008) suggested that teachers must know what to do to provide engaging experience for all young people in physical education. However, the ability to do so is influenced by many factors identified by teachers as institutional barriers affecting provision of physical education, such as lack of equipment, facilities, and teaching spaces.

It is known that in Ethiopia quantitative improvement of education has been experienced. However, quality of education is becoming a major concern of the education sector across the country. Consequently, implementation of quality physical education is leaving a lot of discussions in secondary schools, particularly in the area under the study. In the government secondary schools of Kersa Woreda, there were several observed barriers trapping the implementation of quality physical education curriculum. These barriers were multifaceted highly limiting the outcome of physical education. With this

implication, this study has tried to identify the barriers to the implementation of quality Physical education curriculum in Government Secondary school of Kersa Woreda.

1.3. Objective of the Study

1.3.1 General objectives

The general objective of the study was to assess the barriers hindering the implementation of Quality Physical Education in the Secondary Schools of Kersa Woreda of East Hararge Zone.

1.3.2 Specific Objectives

The specific objectives include:

1. to assess the perception Physical education teachers and students towards the barriers hindering the implementation of quality Physical Education curriculum;
2. to find out the major barriers and their impacts on the implementation of quality Physical Education curriculum; and
3. to discover the extent to which principal's discharge their responsibility in the implementation of quality Physical Education Curriculum in secondary schools of the woreda.

1.4. Research Questions

With the above objectives, the study was expected to answer the following basic research questions:

1. What is the perception of physical teachers and students towards the barriers to the implementation of Quality Physical Education Curriculum?
2. What are the major barriers and their impacts on the implementation of Quality Physical Education Curriculum?
3. To what extent do the principals discharge their responsibility in the implementation Quality of Physical Education Curriculum?

1.5. Significance of the Study

This study is believed to have at least the following significance;

1. It will increase the opportunity of students to access & benefit from quality Physical Education program.
2. It helps increase the attention of the educational institutions to strive to prepare the best ground for the implementation of quality Physical Education in the secondary schools in particular for the schools under the study.
3. It will initiate Physical Education teachers & the school principals to work hard to minimize & avoid barriers to teaching Physical Education.
4. Enables to take intervening actions to alleviate the adverse effects of barriers to the implementation of quality physical education curriculum.

1.6. Delimitation of the Study

In order to make the study more manageable, it was confined to secondary schools. Even though the problem under the study might be the problem of many secondary schools in East Hararge Zone, it was difficult for the student researcher to visit all of them. Due to this, the study is delimited to barriers to implementation quality Physical education curriculum in the government secondary schools of Kersa Woreda .

1.7. Limitation of the Study

It is obvious that research work can not totally free be from limitation. Hence, some limitations were also observed in this study. One apparent limitation was that most of the time secondary school principals were busy and had no enough time to respond to interview. Another limitation was lack of contemporary and relevant literature on the topic, especially on Ethiopian condition. There is acute shortage of books or lack of updated related literature in the area. In spite of these short comings, however, it was attempted to make the study as complete as possible.

1.8. Operational Definitions of Terms

According to their usage in the study, the following terms are defined in the manner stated below:

- ✓ **Barriers:** - factors that inhibit the implementation of quality Physical education program such as insufficient curriculum time, inadequate facility and equipment, poor teach, principals under emphasis for Physical education.
- ✓ **Implementation of curriculum:** - is putting the curriculum that was planned and developed in to practice (Beauchump, 1968).
- ✓ **Quality physical education:** – is a program which consists of appropriate instruction, meaningful content that provides students an opportunity to learn and use physical activity for life time (NASPE 2009c).
- ✓ **Secondary school:** According to Ethiopian School Structure secondary first level includes grade 9 and 10 (MoE, 1994)

1.9. Organization of the Study

The study has five chapters. The first chapter focuses on the back ground of the study, statement of the problem, objectives of the study, research questions, significance of the study, and delimitation of the study, limitation of the study and operational definition of key terms. The second chapter consists of review of related literatures. The third chapter contains research methodology which incorporates research design, research method, source of data, population, sample size and sampling technique, instrument of data collection, data collection procedure, method of data analysis and ethical consideration. The fourth chapter deals about the discussion, analysis and interpretation of data. Whereas chapter five presents summary of findings, conclusions and recommendations of the study. Finally, list of reference materials used for conducting the study, questionnaire and interview questions are annexed at the end.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURES

2.1. The Concept of Quality Physical Education

Quality Physical Education programs are critical in helping all to attain the proper skill and knowledge of physical activity for life time. It is based on the national standards and these standards provide a framework for the design, implementation and assessment of Physical education curriculum.

2.1.1. Characteristics of Quality Physical Education Program

National Association for Sport and Physical Education (2009c) described the characteristics of high quality Physical education program as follows:

A. Opportunity to learn

- All students are required to take Physical education.
- Instructional periods should be total 150 minutes per week for elementary schools and 225 minutes per week for middle and secondary schools.
- Physical education is consistent with that of other subjects.
- A qualified Physical education specialist provides a developmentally appropriate program.
- Equipment and Facilities are adequate and safe.

B. Meaningful Content

- A written, sequential curriculum for grades pre k-12 is based on state and or national standards for Physical education.
- Instruction in a variety of motor skills is designed to enhance the physical, mental, social and emotional development of every child.
- Fitness education and assessment are designed to help children understand, improve and maintain physical wellbeing.

- Curriculum fosters the development of cognitive concepts about motor skill and fitness.
- Opportunities are provided to improve emerging social and cooperative skills and gain a multicultural perspective.
- Curriculum promotes regular amounts of appropriate physical activity now and throughout life.

C. Appropriate Instruction

- Full inclusion of all students.
- Maximum practice opportunities for class activities.
- Well designed lessons that facilitate student learning.
- Out of school assignments that support learning and practice.
- Physical activity not assigned or withheld as punishment.
- Regular assessment to monitor and reinforce student learning.

D. Student and Program Assessment

- Assessment is ongoing, vital part of the Physical education program.
- Formative and Summative assessments of student progress are conducted.
- Student assessments are aligned with state/national Physical education standards and the written Physical education curriculum.
- Stakeholders periodically evaluate the effectiveness of the total Physical education program.

2.1.2. Benefit of Quality Physical Education

Quality Physical education programs help all students develop health related fitness, physical competence, cognitive understanding, positive attitudes about physical activity so that they can adopt healthy and physically active life style (Wuest & Bucher, 2009). Quality physical education programs should teach children basic fundamental motor skills that will later serve as the foundation for running a pass route in football, rounding the bases in softball, or sprinting down the track during a meet. Such programs help them

develop the cognitive skills needed to understand why they are not successful when taking a shot in basketball, and how to fix it so they can create success instead of failure with the next shot they take. Students need to be taught to break an action into parts so they can better understand it and how to accomplish the skill. Most importantly, a quality physical education program should instill a love and appreciation for physical education.

2.1.2.1. The Impact of Physical Education on Health

The public is generally aware that being healthy is important. However, the public may not know, or understand, the importance of physical education. Opinions regarding past physical education experiences in school often distort the link between quality physical education and personal health. Central to the association between physical education and health is the teacher. Teachers trained as physical educators exhibit higher levels of effective teacher behaviors (Constantinides et al., 2013) and create quality physical education programs. Trained physical education teachers can achieve, for example, greater physical fitness improvement in children than physical education teachers who lack appropriate training (Starc & Strel, 2012).

According to the latest Shape of the Nation Report (NASPE, 2012), both the *National Association of Sport and Physical Education* and the *American Heart Association* believe physical activity achieved through participation in physical education improves one's overall well-being and is one of the best preventers of significant health problems linked to many chronic diseases (e.g., obesity, high blood pressure, and high cholesterol). No other school subject has the potential to fulfill these health needs. If schools are to make a positive impact on our children's health now and in the future, physical education must be present in schools, be taught by qualified teachers, and focus on healthy behaviors.

Physical education experiences can have positive, immediate, and long-term effects on children's health:

- Physical education plays an important role in promoting healthy behaviors. Students in physical education, when compared to those who are not in physical education, are more physically active, eat more fruit, and watch less television (Tassatano et al., 2010).

- When meeting national recommendations, participation in physical education diminishes the potential for future body mass increase among children (Fernandes & Sturm, 2011).
- When physical education increases, overweight or obese females decrease their Body Mass Index (Datar & Sturm, 2004).
- More physical education is associated with lower Body Mass Index scores (Madsen et al., 2009).
- Quality physical education with quality teaching represents an important predictor of health enhancing cognitions and behaviors in elementary school children (Wilson et al., 2012).
- The odds of being an overweight adult decrease 5% for each day per week of physical education (Menschik et al., 2008).
- Males participating in physical education three or more days per week gained less in waist circumference than males who were in physical education less frequently (Wardle et al., 2007).
- Normal weight children are 25% more likely to be normal weight adults when they participate in physical education five days per week (Menschik et al., 2008).
- Physical education lowers Body Mass Index scores and reduces the probability of obesity among grade-five male students (Cawley et al., 2013)
- Even when physical education is offered at low frequencies, participation is associated with improved mental health and dietary choices (Simms et al., 2013).
- Quality physical education results in significant improvement in health-related fitness and psychological well-being in high school students (Sdrolas, 2009).
- Physical education programs that include frequent meetings, focus on prevention of obesity, and focus on management of obesity are effective in reducing the prevalence of childhood obesity (Gonzalez-Suarez et al., 2009).
- Secondary school students have less waist circumference gain when participating in more frequent physical education (Wardle et al., 2007).

Physical education promotes lifelong physical activity and provides opportunities for frequent physical activity:

Quality Physical education programs help to prevent unhealthy behaviors by minimizing sedentary habits in school aged populations (Sallis and McKenzie, 1991). It is also suggested that well established habits of regular physical activity instilled by quality Physical education programs will sustain in to adulthood and thus contribute to healthier decisions and behaviors over a life time (Shepard and Trudeau, 2000).

The following research studies serve as evidence that learning during physical education experiences can have positive, immediate, and long-term effects on children's physical activity levels.

- Quality physical education creates experiences which will enable students to transfer skills learned during physical education to their future. (McKenzie & Lounsbery, 2014).
- We have evidence from multiple large studies that the HOPE (Health Opportunities through Physical Education) can improve physical activity and academic outcomes. (Sallis et al., 2012).
- Student who enjoy physical education are more likely to have higher levels of cardiovascular fitness (Madsen et al., 2009).
- More active physical education class is related to higher levels of vigorous physical activity for females (Cawley et al., 2007).
- Middle schools students who are more active during physical education and receive greater enjoyment from physical education are significantly more likely to participate in leisure time physical activity (Cox et al., 2008).
- Quality physical education provides students with the knowledge, skills, abilities, behaviors, and confidence to be physically active throughout their lifetime. (Houston & Kulinna, 2014).
- Students that participate in physical education are much more likely to achieve the recommended daily levels of moderate to vigorous physical activity than those students who are not enrolled in physical education (Gordon-Larsen et al., 2000).

- High school students in physical education have greater potential for participating in physical activity (Tassitano et al., 2010).
- More frequent physical education class is strongly related to higher daily levels of moderate to vigorous physical activity (Gordon-Larsen et al., 2000).
- Girls who are enrolled in high school physical education report higher levels of moderate to vigorous physical activity than those who are not (Pate et al., 2007).
- On days when students have physical education, they are more active after school in various physical activities (Morgan et al., 2007).
- Students who receive more frequent physical education participate in more daily physical activity than those who attend physical education less frequently (Dale et al., 2000).
- Males in high school physical education that focuses on health are more likely to be physically active in the next five years than those who take traditional physical education (Dale et al., 1998).
- Females in high school physical education focusing on health are more likely to participate in strength training exercises and are less sedentary in the next five years than those who take traditional physical education (Dale et al., 1998).
- More physical education in high school is associated with greater adult physical activity levels (Peterson, 2013).
- Attitudes toward physical education are correlated with energy expenditure and moderate and vigorous physical activity (Woodfield, 2014).
- Teaching physical education, combined with health education, can increase physical activity in middle school adolescents (Clocksin et al., 2009).

2.1.2.2. The Impact of Physical Education on Motor Skills

The acquisition of motor skills is important for children. Proficient motor skills lead to feelings of competence and results in more competent performance during sport and recreational sport-like activities. In one example, Barnett et al. (2011) found that children who develop proficient object control skills (e.g., throwing, catching, and kicking) were more likely to become physically active later in life. Overall, there is ample evidence to

support the link between motor skill development during childhood and long-term physical activity (e.g., Lopes et al., 2010; Okely et al., 2001; Wrotniak et al., 2006). Likewise, there is sufficient evidence to support the connection between low motor proficiency and lower physical activity (Williams et al., 2008; Wrotniak et al., 2006).

The importance of motor skills is recognized by SHAPE America (2014), who require physical education teachers to develop students who “demonstrate competency in a variety of motor skills and movement patterns.” The importance of effective teachers is not only exposed within national standards but in research as well. For example, McKenzie and Lounsbery (2014) recently reported that the potential of a physical education program to effectively teach students’ skills is closely tied to the quality of the physical education teacher (e.g., the skills and behavior they display). They also propose, from their data analyses, that effective physical education programs must include assessments and the use of data to support subsequent curricula.

The following research studies substantially support the relationship between participation in physical education and motor skill development:

- A study of over 700 elementary students revealed physical education programs delivered by properly trained specialists can improve throwing, kicking, and catching skills (McKenzie et al., 1998).
- Quality physical education lessons lead to significant improvements in elementary students’ fundamental motor skill mastery (van Beurden et al., 2003).
- Physical education lessons, using appropriate instructional models, can significantly improve object control skills in early elementary-aged students (Amui, 2006).
- Physical education programs that utilize developmentally appropriate motor skill learning experiences delivered by qualified physical education specialists significantly improve motor skills in youth (Morgan et al., 2013).
- Physical education teachers using appropriate teaching strategies positively influence more advanced throwing skill in elementary students (Lorson, 2003).
- Motor skill intervention is necessary and valuable for economically disadvantaged students in physical education programs (Robinson, 2007).

- Skill interventions like those in physical education have a lasting effect on object control skills, which are important as they influence health-related activity (Barnett, 2009).
- A well-planned physical education curriculum, in comparison to poorly planned programs, can be beneficial for motor skill proficiency (Andruschko, 2013).
- Well-designed instructional methods in physical education which focus on learning skills have a significant effect on fundamental movements of children (Fotrousi et al., 2012).
- A sport unit in physical education can reduce body mass index, percent body fat, and motor skill proficiency in early adolescents (Elsaved, 2014).
- School physical education stimulates the proper development of motor skills when children attend physical education more than two times per week (Ericsson, 2011) While differences in motor skills exist between boys and girls, frequent physical education involving organized lessons and high physical activity decrease the differences (Ericsson, 2011).
- Daily physical education with motor skill training has the potential, in comparison to less frequent physical education, to eliminate motor skill deficits (Ericcson & Karlsson, 2012).
- Children who receive physical education from a physical education teacher have significantly greater motor development than those who receive physical education from a classroom teacher (Starc & Strel, 2010).

2.1.2.3. The Impact of Physical Education on Brain Function and Academic Achievement

Proponents of physical education often declare that participation in their subject area has a positive impact on academic achievement. If these assertions are to be believed, we must specifically look at the impact of a standards-based physical education curriculum. A standards based physical education curriculum follows an appropriate set of objectives and goals based on national recommendations. All five national standards capture goals grounded in physical activity and movement (SHAPE America, 2014). Therefore, since

physical activity is a primary focus in physical education curricula, the relationship between physical education and academic achievement may be observed through the potential academic benefits of physical activity.

Research literature consistently reports that children who participate in quality physical education are physically active outside of the school setting. We know that the activities in which students are taught during physical education (e.g., sports, games, exercise) are directly related to activities and sports students participate in outside of school (Eddy, 2011). Andruschko (2013) found well-planned physical education curricula, in comparison to poorly planned programs, to have potentially large benefits on children's physical activity outside of the school. Another study reported that physical education increases daily physical activity and decreases sedentary time in middle school age children (Chen et al., 2014). In the long term, Trudeau et al. (1999) found daily primary school physical education to have a strong positive effect on the exercise habits of adults.

To note, brain function includes cognitive skills while academic achievement includes learning behaviors (e.g., on-task behavior, planning, and organization) and performance on subject-area standardized tests and other formal assessments. Vigorous and intense physical education is related to optimal gain in cognitive performance, improvement, and speed. The Association between school-based Physical activity, including physical education, and academic performance. (Retrieved from http://www.cdc.gov/healthyyouth/health_and_academics/pdf/pa-pe_paper.pdf)

The effect of Physical Activity on brain function and/or academic achievement

The following recent research studies support the belief that children's physical activity level is related to greater brain function and higher academic achievement:

- Physical activity is related to measures of executive function (Hillman et al., 2008; Sibley & Etnier, 2003; Tomporowski et al., 2011).
- Physical activity during childhood can positively influence brain function (specifically the volume of hippocampus and basal ganglia), the integrity of white matter tracts, and brain activation in the prefrontal cortex (Chaddock, 2013).

- Physical activity results in greater memory recall and develops greater memory storage processes (Pesce et al., 2009).
- Aerobic physical activity improves cognitive function through reaction and choice response time (Ellemberg & St-Louis-Deschenes, 2009).
- There is a significant positive relationship between children's physical activity and cognitive functioning (Sibley & Etnier, 2003).
- Physical activity increases time on task in class (Fisher et al., 2011; Mahar et al., 2006).
- Physical activity reduces classroom problem behaviors (Fisher et al., 2011; Mahar et al., 2006).
- Greater physical activity at age 8 was positively associated with higher grade point average at age 16 (Kantomaa et al., 2012).
- In a study of nearly 5000 students, higher physical activity at age 11 was associated with higher academic attainment across all academic subjects at age 11, age 13, and then age 16 (Booth et al., 2013).
- Physical activity of children age 7 to age 11 results in improved executive function and brain activation (Davis et al., 2011).
- Vigorous physical activity was associated with higher grades in grade 6 students (Coe et al., 2006).
- Physical activity has beneficial effects on attentional processes (Syvaaja et al., 2014).
- Physical activity influences concentration, memory, and classroom behavior (Trudeau & Shepherd, 2008).
- Physical activity, primarily aerobic exercise, has a significant and positive effect on children's academic achievement and cognitive outcomes (Fedewa & Ahn, 2011).
- Adolescent physical activity at a leisure level is associated with greater cognitive performance (Ruiz et al., 2010).

Effects of Physical Education on brain function and/or academic achievement

In a recent review of literature, the CDC discovered 14 studies that examined the effect of physical education on academic achievement (CDC, 2010). Nearly all of these studies revealed one or more positive associations between physical education and academic achievement. The following research studies from recent years support the belief that participation in standards-based school physical education programs is related to greater brain function and higher academic achievement:

- Cognitively challenging physical activity programs such as physical education promote attention development in elementary-age children (Pesce et al., 2013).
- Physical education with higher physical activity intensity significantly improves adolescents' non-verbal and verbal ability, abstract reasoning, spatial ability, and numerical ability (Arday et al., 2013).
- Frequent physical education with high intensity physical activity significantly improves adolescents' academic achievement in relation to less frequent physical education with lower intensity physical activity (Arday et al. 2013),
- When students meet appropriate physical activity levels in physical education, data shows that more physical education and less classroom time does not hinder academic achievement (Trudeau & Shepherd, 2008).
- High school students have higher grade point averages during semesters taking physical education when compared to those semesters without physical education (Hamilton, 2014).
- Academic performance improves when less time is spent in the classroom and more time is spent in physical education (Sallis & McKenzie, 1999, Shepard, 1997).
- Daily physical education can increase various cognitive abilities, such as fluid intelligence and perceptual speed, of children in grade 2 through grade 8 (Reed et al., 2013).
- In a study of over 5000 kindergarten students, girls had significantly higher academic achievement in both math and reading when enrolled in more frequent physical education. Overall, there were no negative effects on academic

achievement for students who participate in physical education (Carlson et al., 2008).

- Organized school physical education focusing on physical activity levels can improve children's inhibitory control (Chaddock-Heyman et al., 2013).
- Physical activity in school-based interventions like physical education can increase children's working memory performance (Fisher et al., 2011; Kamijo et al., 2011).
- Children's abilities to plan can be improved through physical education and associated physical activity (Davis et al., 2011).
- Quality physical education leads to gains in grade point average (Trudeau & Shepherd, 2008).
- Physical education focusing on health does not interfere with academic achievement and has potential favorable effects on standardized test scores (Sallis et al., 1999).
- Even when physical education is offered at low frequencies, participation is associated with improved academic achievement (Simms et al., 2013).

Effects of high Fitness levels on brain function and/or academic achievement

The following research studies from recent years support the belief that participation in standards-based school physical education programs is related to greater brain function and higher academic achievement:

- High aerobic capacity (measured by fitness gram) is associated with higher academic achievement (measured by standardized test scores) in children. This relationship is maintained over time if children stay in the healthy fitness zone (Wittberg, et al., 2012).
- A high fitness level of children at age 10 is associated with attention, working memory, and memory response speed (Hillman et al., 2005).
- Children who are more aerobically fit, compared to less fit peers, have more fibrous and compact white-matter tracts in the brain (Yates, 2014).
- Fitness is associated with academic attainment (Castelli et al., 2007; Chaddock et al., 2001).

- Aerobic capacity and muscular endurance (measured by fitnessgram tests) positively affect middle schools students' standardized test scores for reading and math (Bass et al., 2013).
- A consistent positive relationship was found between overall fitness through fitnessgram scores and standardized norm-referenced achievement tests (Grissom, 2005).
- Children's aerobic fitness predicts cognitive performance over time (Chaddock et al., 2012a).
- Children who have greater aerobic fitness levels have better inhibitory control (Chaddock et al., 2012b; Pontifex et al., 2011).
- High fitness rates of children increase the chances of schools achieving high performing status (Welk, 2013).
- Higher aerobic fitness, when compared to lower aerobic fitness levels, can lead to better working memory (Chaddock et al., 2010).
- Children's odds of passing standardized tests, such as math and reading, increases with greater performance on fitness tests (Chomitz et al., 2008).
- The relationship between fitness and academic achievement is strengthened through the positive effect of fitness on executive functioning (van der Niet et al., 2014).

The Benefits of Physical Education on Learning in the Affective Domain

It has been long established in education that there are three key learning domains that make up the foundation of teaching and learning: psychomotor, cognitive, and affective (Bloom, 1974). The affective learning domain encompasses the social, emotional and psychological components of life, including getting along with others, respecting physical and cultural differences, developing an appreciation for fitness and physical activity for longevity and overall health and wellness, working with partners and within groups successfully, respecting authority, embracing fair play and sportsmanship, and increasing self-esteem, to name just a few examples. Two of the five national standards for physical education require physical educators to teach students “responsible personal and social behavior that respects self and others” and the “value of physical activity for health,

enjoyment, challenge, self-expression and/or social interaction” (SHAPE America, 2014). Physical education curriculum includes teaching and learning opportunities that address social, moral and emotional areas of growth and development. Students in physical education classes experience the benefits of teaching, skill development, cognitive learning, sport play, and moderate-to-vigorous physical activity on their social and emotional well-being.

Physical education classes provide students opportunities to develop interpersonal relationships and improve social skills

Studies have shown that K-12 students develop positive social skills while participating in physical activity within a physical education class setting. Social and moral behavior learned in the quality physical education setting transfers to life skills in other settings and interactions.

- When students feel supported in their learning they often exhibit leadership qualities; they become decision-makers (Azzarito & Ennis, 2003).
- Within a physical education setting, students engage in activity with others who possess varying skill levels and abilities and are charged with the task of including all peers in a given sport/fitness activity (Perlman, 2014).
- Students develop an appreciation for the importance of lifelong physical activity and recreation (Graham et al., 2012; Hansen, 2011).
- Physical education content includes the affective domain with group/partner work, peer collaboration, self-assessment and reflection skills, sportsmanship and fair play (Payne & Isaacs, 2008).
- Physical educators encourage individual growth and social awareness among the diverse community of learners (Azzarito & Ennis, 2003).
- Quality physical education supports positive social behaviors such as cooperation, personal responsibility, and empathy (Bailey et al., 2009).
- It is the inherent process and nature of the physical education setting (regardless of the task) that affords students opportunities for personal, social and moral skill development that transfer to other areas of life (Sandford et al., 2006).

- Cooperative physical education learning environments foster development of social skills (Ruiz et al., 2010).
- A quality sport education model for secondary physical education can provide support for students' needs of relatedness among peers (Perlman, 2014; Wallhead et al., 2012).
- Models created for physical education, such as Sport Education, create a sense of connection with peers, and lend itself to a caring and empathetic environment among peers and between the teacher and students. All levels of physical ability are accepted, and students are able to work on communication and problem-solving skills (Perlman, 2014; Wallhead et al., 2012).
- Quality secondary physical education settings where cooperation and peer interaction are incorporated into lesson activities offer opportunities for development of social skills and give students practice at adapting to social norms in a physical activity setting; students develop a sense of care toward others (Ruiz et al., 2010).
- There is sufficient evidence to support claims of positive benefits between physical education and youth. Benefits are mediated opportunities to learn leadership, decision-making skills, social relationships, and learning processes (Bailey et al., 2009).
- Secondary students display autonomy in a quality sport education model of physical education. Students become responsible for their own learning and skill development, choosing ways in which to practice and selecting specific skills to focus on within a sport activity (Perlman, 2014).
- Self-determination theory suggests that the affective domain (psychological need) is critical for growth, development and well-being in students; in physical education, students have the opportunity to experience autonomy, competence, and relatedness, components of learning that lead to increases in self-efficacy and successful self-management (Shen et al., 2009).
- Quality physical education that includes the sport education curriculum content and model not only leads to increased social interaction and skills, but the social

connections and interactions can lead students to choose extra-curricular exercise activities outside of school (Wallhead et al., 2012).

- Quality physical education courses that are designed to include student choice for physical activity can result in students who enjoy physical activity and are better prepared to manage their own fitness efforts (Condon & Collier, 2002).
- The promotion of a quality, comprehensive physical education experience can expose students to the benefits and importance of lifelong physical activity for social interaction, challenge, motor and skill development, fun and enjoyment throughout life; students can become self-directed in their fitness efforts (Kretchmar, 2006).
- There is a potential for reduction in sedentary activities in young people after high school graduation (Dale & Corbin, 2000; Le Masurier & Corbin, 2006).

Quality physical education classes provide Students with meaningful experiences

When the course is structured in a way that allows students to have some choice in the activities that interest them, the physical education experience is more meaningful and relevant.

- Students learn through peer interactions and authentic experiences in the classroom with the curriculum. Data show that students construct knowledge and make meaning of content relevant to them by making connections to peers and connecting the physical activity content to their own lives, their communities and the real world (Azzarito & Ennis, 2003).
- A quality physical education class leads to positive student attitudes about physical activity and that can lead to subsequent, long-term physical activity and overall healthy habits as adults (Shen et al., 2009).
- A secondary physical education class that includes rich, relevant curriculum content, positive teacher behavior toward the content and the students, a pleasant class atmosphere and safe, sufficient facilities leads to increases in positive student attitudes about physical education and physical activity (Bibik et al, 2007).

- Quality physical education classes that are developed to present content in attractive, enjoyable ways lead young people to experience intrinsic motivation to continue in those physical activities, to experience an improvement in self-esteem and an increase in their level of autonomy with their physical efforts (Bailey et al., 2009; Perlman, 2014).
- Athletic participation is found to enhance girls' self-esteem, body concept, and self-efficacy (Sabo et al., 2004).
- Physical educators who focus on the joy of movement and provide play-oriented tasks in the elementary setting have more chance to produce young people who participate in moderate-to-vigorous physical activity long-term and can potentially help prevent childhood obesity (Kretchmar, 2008).
- Lifelong participation in physical activity (responsible, healthy lifestyles in adults) depends largely on positive, effective physical education class experiences (Bibik et al, 2007).
- Physical activity promotion programs, such as physical education, should address specific intrapersonal, social-environmental, and physical-environmental barriers to physical activity (Dwyer et al., 2006).

Quality physical education class teaches students to value physical activity for sport and health reasons

Quality physical educators teach children about the importance of including fitness, exercise and sport activities throughout their lives.

- Quality physical education courses promote physical activity for lifetime wellness, with strong health-related fitness components (Le Masurier & Corbin, 2006).
- Students in elementary physical education classes enjoy relevant active-gaming activities whenever possible; teachers can incorporate technology-related physical activities that are engaging to students in the 21st century; students exhibited optimal engagement in active gaming tasks according to the flow theory of play (Hansen, 2009).

- Successful online physical education courses offer students the opportunity to select physical exercise that is comfortable and interesting for them, therefore creating a successful experience and experiences that are relevant to their own lives, thus potentially leading to more and long-term fitness activity in our youth (Ransdell et al., 2008).
- Quality physical education teachers incorporate technology that engages students to a greater degree in the content and helps to create physically literate young adults. Some physical education classes include a predominant online, technology-related component (blended learning) to enhance the health-related fitness components of the course (Rhea, 2011).
- Quality secondary physical education has been shown to provide students with the background knowledge needed to make informed decisions about selecting physical activity that interests them and that is beneficial for longevity (Condon & Collier, 2002; Ransdell et al., 2008).
- Quality physical education that includes 21st century skills and technology is ideal for getting students interested in being active, and students today learn and understand the benefits of physical activity (Hansen, 2009).

Participation in Quality physical education program increases students' self-esteem and feelings of well-being

K-12 physical education classes are the ideal settings for promoting positive self-esteem and overall feelings of well-being, through physical activity and motor/skill development and positive feedback and support from teachers and peers (Payne & Isaacs, 2011). Sport participation and physical activity, goals established by physical education curricula, play a significant role in children's current and future psychological well-being.

- Positive self-esteem begins with a sense of well-being. Students in high school that attended physical education three to five days per week were less likely to report feelings of sadness (Brosnahan et al., 2004).
- Well planned physical education is associated with increases in general self-concept (Schmidt et al. 2013).

- High school students who attended physical education and participated in physical activity 5-6 times per week were less inclined to have suicidal thoughts (Brosnahan et al., 2004).
- Quality physical educators can support students by providing proper education about body image and defeating culturally defined, unrealistic expectations about body types. Teachers can encourage increases in self-esteem, self-efficacy and motivation through discussions and lessons that address these critical issues for adolescents; a supportive, safe physical education setting is appropriate for this type of education (Lodewyk et al., 2009).
- After a six month term of physical education with an experimental group of grade five students, where the focus was on individual goals, non-competitive physical activities and games, and students receiving positive praise often, the enhancement of self-concept and increase in self-esteem was significant compared to the group of students participating in the regular physical education program, as reported by the students on a self-assessment survey (Goni & Zulaika, 2000).
- Participation in formal and informal sport activity has been related to enhance emotional well-being (Donaldson & Ronan, 2006).
- Participating in sport, one outcome of physical education has the potential to improve self esteem, social interaction, lessen the potential for depression (Eime et al., 2013).
- Children who spend more time in team sports report higher self-concept and self-esteem than non-participating peers (Slutzky & Simpkins, 2009).
- Physical inactivity was found to be associated with emotional and behavioral problems in adolescents (Kanomaa et al., 2008).
- Motor coordination affects emotional functioning via self-perceptions (Rigoli et al., 2012).
- Quality physical education fosters healthy peer interaction and peer collaboration. Healthy social identity in secondary school can lead to an increase in college enrollment in students graduating high school (Fletcher, 2011).

- Reduced participation in physical activity has been associated with reduced emotional self efficacy in high school students (Valois et al., 2008)

2.2. Barriers to the implementation of Quality Physical Education

A main goal in the field of physical education is to produce daily quality physical education lessons. Physical education specialists have an obligation to provide each student the opportunity to learn, meaningful content, with appropriate instruction (Wuest & Bucher, 2009). Furthermore, in an age of rising overweight and obesity rates among adolescents and children (McKenzie & Kaha, 2008; Walhead, 2007), daily physical education needs to provide quality movement time in each lesson to help in the fight against overweight and obesity among children (Bloom, 2007). Yet, physical education specialists who desire to deliver daily quality physical education can be hindered by any number of variables: limited equipment and supplies (LaFee, 2007), inadequate teaching facilities, indifference toward physical education among students apathy of coworkers and large class sizes (Hastie, Sanders, & Rowland, 1999) to name few.

Barriers to the implementation of quality Physical education have been identified by Morgan and Hansen (2008), and Jenkinson and Benson (2010) as being either institutional (outside of the teachers' control) or teacher related barriers (arising from the teachers' behavior). Institutional related barriers include time allocation, lack of facilities and equipment, budget constraints, absence of support from principals and administration, students' enthusiasm, lack of sustainable professional development and crowded curriculum. Teacher related barriers include: low interest, colleagues' under valuing activities, attitude, skill and experience. Hence, the following part will try to give a brief discussion on these barriers as follow.

2.2.1. Teacher Related Barriers

Physical education specialists have an obligation to provide each student the opportunity to learn, meaningful content, with appropriate instruction (Wuest & Bucher, 2009).

Posiner (1992) stated that play a crucial role in determining the success and failure of

curriculum implementation thus the interest, attitude, skill and experience of the teacher are among determining factors of implementation quality Physical education curriculum.

2.2.1.1. Teachers' Interest

Individual's willingness to participate in certain kind of program or activity determines the outcome of that program or activity to the most considerable extent. Graber (2001) identifies students displayed greater achievement when teachers are enthusiastic. Locke, Lawrence and Griffin's (1986) paper on "profiles of struggle" noted that obstacles to effective teaching or implementation of quality physical education programs were directly influenced by teacher's strategies demonstrating characteristics such as compromising, substituting, ignoring, giving up, tinkering, challenging, overcoming, and getting out.

From among the factors affecting teachers' efficiency, the factor of satisfaction and interest has the greatest effect on Physical education teacher's (Safari and Alam, 2015). In Ethiopian educational system, most of the time teachers join teaching profession unwillingly. The poor working condition, low salary and low acceptance of the profession by the society led to low interest and poor commitment in teachers.

2.2.1.2. Teachers' Attitude

Teachers' attitude is the basic ground to act in a positive or negative way towards persons, ideas/events/ happening in the environment. Also, teacher's curricular and instructional decisions and, ultimately, student learning are affected by their belief systems (Pajares, 1992). Attitude permeates everything we do. It is an important component in all aspects of human endeavor. Attitude influences whether we begin or continue with certain activities and whether we achieve in certain areas (Silverman & Subramaniam, 1999). Teachers' attitudes and values toward teaching comprise their educational value orientations and value orientations describe the relative importance of several key factors in the teaching-learning process (Kulinna & Silverman, 2000). Teacher attitude is an important factor in the delivery of quality physical education programs. It has been proposed that the quality of physical education is associated with a

teacher's commitment to physical education and the way it is perceived and valued by the teacher (Morgan, 2008). Traditionally, most African societies associate Physical education with play and leisure. Such societies think of Physical education as only involving the physical and not intellectual activities. The implication is that a subject viewed as such results in teachers and society contributing negatively towards its teaching. In schools where Physical education is rated lowly and still at its infant stage, teachers might have negative attitudes towards teaching it (Musangeya et al., 2000). Furthermore, Mudekunya and Sithole (2012) indicated that Physical education was still not given its true identity in the school curriculum and was still looked down upon; hence this contributed to negative teachers' attitudes resulting in its unsuccessful implementation.

Most educators are convinced that teachers' attitudes are very important dimensions in teaching process. A successful innovation depends substantially on teachers' attitude towards proposed curriculum alterations. Mcloughlin (1987) refers to attitude of teachers as a critical factor for implementation. Students with teachers of positive attitude towards teaching and the curriculum are found to be high level achievers in learning (Kynes, 1986; Couper, 1986) and Kallhan, 1988) consider the teachers attitude as very important aspect in the teaching process. Noen (1993), asserted that trust is the important ingredient, which the facilitator provides. The more effective teacher were rated higher on every attitude measured by any inventory; they were seen as more real, as having a higher level of regard for their students, showed more emphatic understanding. No matter how good the written curriculum is and the extent of back-resource supplied, no matter how much incentive is applied through the accountability of a national assessment skill, no matter how much politicians exhort, unless teachers are with good enthusiasm for the subject and methods with their students, teaching will never become better than adequate (Wool, 1994).

2.2.1.3. Teachers' skill and Experience

The ability of teacher to implement the curriculum has to be given equal importance to other factors, because the extent to which the curriculum is implemented depends up on the extent to which teachers are clear about, and the degree to which they are competent

to perform it. Teachers cannot teach what they do not know (Solomon, 2007). Syner, Alexander and Lewis (1981) have also affirmed that a teacher's instructional plan and a curriculum may not connect if a teacher neither understands nor accepts the basic assumption of the curriculum.

Teachers' knowledge of subject matter as teacher related factor influencing the implementation of the quality Physical education curriculum is of most sensitive point. In relation to this, Mc-Cormick, et al., (1995) pointed out that teachers will teach best in areas which they are knowledge-able, have effective materials and techniques. Walter (1981), Posiner (1992), Bennet and Care (1995) also claimed that teachers knowledge and understanding of the subject matter is a major factor that affects implementation. Newton and Newton (2005), argued that class teachers feel insecure especially in physical education classes and, the main reason of this is that they lack the motor skills physical education requires.

Teachers pedagogical belief is another important factor related to teacher skill. Regarding this O'Neil (1995) suggested that: *"given that a syllabus statement is text from readers must construct meanings on which to plan action, teachers interpreted syllabus statements on the bases of their constructed conceptualization of the subject and their pedagogical theory what it means to teach and learn."*

Furthermore, O'Neil (1995) described that teachers marginalize or avoid parts of the syllabus which are not in agreement in their theoretical position. This is termed as 'a filleting process' by Genkies and Shipman(1976), a process by which teachers use the parts of the syllabus which are in congruent with the way they teach and those parts which are not in harmony with their principles. This virtually leads to drastic mutation rather than strait forward adoption of the syllabus (O'Neil, 1995).

Another major factor is related to teacher is teachers experience. Borko and Bucher (1984) have indicated that lower level of teaching performance will be obtained with less experienced teachers /below 6 years of teaching/ than those with more experience. Comparably in studying grade 11th and 12th teachers thought couples rating Gage and others 1960, also found that teachers with less than five years of service tend to be rated

lower than teachers with more than 8 years of service. Confirming findings mentioned above, Erkyhun and other (1991) have posted positive correlation between experience and teaching performance there by concluding the higher the service years teachers have, the better the performance they could have in teaching and lesson planning. Among the many byproducts of increased teaching experience is a physical education teacher's ability to adapt to their teaching environment. Notwithstanding that teaching in large class settings is not the most optimal situation, assumption could be made that with gained teaching experience, physical education teacher's become more efficient at delivering daily, quality physical education in the least restrictive teaching environment possible. That regardless of the numbers or other limiting effects that are placed on them, they develop the ability to produce daily lessons that engage students in learning and limit off-task behavior (Gross, 2009).

2.2.2. Institutional Related Barriers

Curriculum implementation highly relies on the organizational, settings where in it comes to life. There are many organizational aspects in school that affect the implementation of curriculum. In relation to this, Solomon (2007:33) mentioned that: “ *the quality and quantity of staff development, the channels of communication that allow continuous flow of information between the curriculum developers and implementers and the availability and adequacy of instructional materials are amongst the variables to be considered in relation to the organization of individual school.*”

Tirusew (1998) also described that for effective teaching and learning to take place classroom must be adequately organized and conducive enough. The crux of educational quality among others heavily relies op on the environmental (both internal and external) conditions and materials of classrooms.

On the other hand, the communication culture of school communities parents principals, students and so on influence curriculum implementation. In this regard Amare (1999) stated the greater quality and quantity of sustained communication channel through interaction among people involved in curricula activities, the greater the degree of implementation.

In addition, the extent of professional development of the school staff also determines the effectiveness of curriculum implementation while confirming this McNeil (1990) asserted that, now staff development through workshops, seminars or short term training is the central focus in successful implementation.

2.2.2.1. Inadequate Curriculum Time for Physical education

Curriculum time is one of the major factors influencing the implementation of quality physical education. The very nature of quality physical education program is that it requires adequate time to evolve lifelong physical activity habits in the participants. However, in many countries physical education is suffering from reduced curriculum time (Marshall and Hardman, 2000).

Globally, the average allocated time for Secondary school physical education is 100 minutes per week. The European physical education Association (2002), recommended at least 60 minutes daily for elementary grades and 3 hours per week for post elementary grades. National Association for Sport and physical education (2004), also recommended a minimum of 150 minutes per week for elementary grades and 225 minutes per week for middle and high school students.

In Ethiopia, only 40 minutes per week is allocated for secondary school physical education curriculum which is significantly below the International average. This is definitely inadequate for meaningful learning and also inconsistent with the established goals of physical education syllabus.

2.2.2.2. Inadequate Facilities and Equipment

Conducting Quality physical education program requires the fulfilment of necessary facilities and equipment. Regarding this; Harry and Richard (1958:2) pointed out that: *“The very nature of physical education necessities the use of extensive out door and in door activity areas as well as expensive equipment and service facilities.”*

Quality and quantity of school facility determines quality of education (Fuller, 1986; Mutsotso and Nasongo, 2013). Similarly, Quality physical education program depends on

the amount and quality of facilities and equipments available in the school. Pearson (1958) elaborated that physical education program can be greatly impended by an absence of adequate facilities, equipment and supplies. The availability and use of facilities and supplies is part of both long range and short range planning. Regular satisfying use of spaces, places, equipment and materials is a must for sound programs.

Inadequacy of facilities and equipment adversely affect the teachers' teaching method and students' participation in the lesson. Indicating this, Fait (1960) stated that different types of activities require different facilities; consequently any limitation of facilities creates difficulties in presenting the desired varieties of activities. Furthermore, physical education classes are often vastly overcrowded, lack of sufficient time, poor facilities, and in adequate equipment, coupled with large number of pupils, present gigantic problems to the teacher (Vannier and Fait, 1964).

2.2.2.3. The Role of Principals

The school management team is considered the heart of the school. Roles of the school principal and the manner in which they are communicated to members of the school system determine the quality of the school. More than ever, in today's climate of heightened expectations, principals bare in the hot seat to improve teaching and learning. They are expected to broker the often conflicting interests of parents, teachers, students, district office officials, unions and state, and federal agencies, and they need to be sensitive to the widening range of student needs (Davis et al., 2005).

Because, of their closeness to the classroom situation and their opportunity to alter work place conditions; probably the most powerful potential source of help or hindrance to the teacher in the implementation process is the school principal (Fullan, 1991). The principal has a leadership role for the implementation of the curriculum. Ornstein and Hunkins (1998), considered the school principal as a key guarantor of successful implementation. According to them, successful principals are those who are knowledgeable and committed to the curriculum.

Cuban (1988), after reviewing a historical role of principal, concluded that whilst styles differ the managerial role not instructional leadership, has dominated principal's

behaviour. Usually principals have little time for change; if implementation is to occur effectively at school level, the role of the principals must be changed from managerial to instructional aspects. Principals within the same system operating in almost identical circumstances could work with change or avoid it depending on their conception of the role. Just teachers' sense of efficacy and sense of ownership is important in bringing about school improvement so is the principal's, perhaps even more significantly, because it affects the whole organization.

Principals are the leaders of school systems and schools. Teachers look to their administrators for guidance, structure, and opportunity to teach in a receptive environment. Physical education teachers are no exception to this rule, desiring equal opportunity to apply their trade to the lives of the students in their charge. Yet, physical education is constantly under attack through large classes, shortening class time to accommodate for other school functions, and requiring physical education teachers to perform tasks at school not required of classroom teachers. Smartschan (2004) says that school leaders need to see the harm they might commit by reducing instruction in second languages, the arts and physical education in order to maximize time for preparing students for high-stakes tests. Administrators are under pressure for academic accountability but it cannot come at the expense of physical education. One could also safely speculate that in the Ethiopian context many principals are diffident about their change leadership role; one reason might be because they do not feel prepared or clear about how to carry it out but in addition they have a sense of insecurity concerning staying in office for a reasonably long period (Solomon, 2007).

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

This chapter presents the research design and method, the sources of data, the study site and population, the sample size and sampling technique, the data gathering tools, the procedures of data collection, the methods of data analysis and Ethical considerations.

3.1. Design of the Study

In this study descriptive survey research design was employed. Because the major goal of this study was to describe barriers to the implementation of quality physical education curriculum in secondary schools, as it exists at present, and it is also relevant to gather detailed information concerning current status of the barriers to the implementation of quality physical education curriculum in secondary schools. Moreover, descriptive research design makes possible the prediction of the future on the basis of findings on prevailing conditions. In line with this, Jose & Gonzales (1993) state that descriptive research gives a better and deeper understanding of a phenomenon, which helps as a fact-finding method with adequate and accurate interpretation of the findings. Similarly, Cohen (1994) describes that descriptive survey research design as it helps to gather data at a particular point in time with the intention of describing the nature of existing condition or identifying standards against which existing conditions can be compared or determining the relationship that exist between specific events. Most importantly, this kind of method is more appropriate to gather a variety of data related to the study and to the data mixed type of qualitative and quantitative approach (Creswell, 2003).

3.2. The Research Method

In this study, mixed method approach, which involves both qualitative and quantitative approach was used, whose framework employed field data on the barriers to implementation of quality physical education curriculum in Secondary Schools of Kersa Woreda. The qualitative research helped the researcher to generate or gather in-depth opinions directly from respondents related to the barriers to the implementation of quality

physical education curriculum in Secondary Schools of Kersa Woreda through interviews, and observation checklists. Similarly, the quantitative approach, which is number-oriented and statistical procedures, was used to complement the study. Therefore, the use of both approaches made the researcher in a good position to confirm, cross-validate the findings within a single study (Creswell, 2009).

3.3. Source of Data

In order to strengthen the findings of the research, the relevant data for the study were generated from both primary and secondary sources. These are described below.

3.3.1. Primary source of data

The primary data is which relies on the interactive methods based on discussions between informants and the researcher. In this study, primary data sources were employed to obtain reliable information about the barriers to the implementation of quality physical education. The major sources of primary data were physical education teachers, students (both grade 9 and 10) and principals of government secondary schools of Kersa woreda.

3.3.2. Secondary source of data

This includes the information which has already been collected and compiled for other purposes. These are encyclopaedias, newspapers, journals, books, periodicals and compiled statistical statement and reports. Secondary data are provided by an individual or individuals who may not have directly observed the event, object, or condition (Cohen et al., 2000). In this study the secondary source of data were gathered through observation of documents such as syllabus, teacher guide, and student's text book in the respective schools.

3.4. Study site and population

3.4.1. Study site

This study was conducted in government secondary schools of Kersa woreda which is one of the eighteen Woredas in the East Hararge Zone of Oromia. It is bordered on the

North by Bedeno woreda, on the South by Dire Dawa city, West by Goro Gutu woreda and East by Haramaya woreda.

3.4.2. Population

Population is a group of units with one or more characteristics in common that is of interest of the researcher (Best and Kahn, 1998). The population of the study comprises Physical education teachers, students and principals of the 3 sampled schools. Accordingly, 3 Physical education teachers, 150 students and 3 principals were the population of the study.

3.5. Sample and Sampling Technique

Sample: - is the unit subjects that represent the population (Cohen, 2000). A number of factors were considered for the selection of samples such as: the information required, purpose of the study, budget and time.

Sampling technique:-is used to select an important element of a population in such a way that they represent actual characteristics of the total population (Cohen et al., 2000). In order to obtain reliable data for the study, various sampling techniques were employed. Accordingly, all the three government secondary schools in Kersa woreda were selected using availability sampling. Since the sampled schools' physical education teachers number was too small; the researcher has used availability sampling technique to include all the three schools' physical education teachers. Due to their responsibility to follow up the overall activities of the school, all the three principals of the schools were selected through availability sampling. Then, in order to increase the validity of the study, 150 students (i.e. 50 students from Kersa secondary school, 50 students from Langey secondary school and 50 students from Weter secondary school) were included in the study using random sampling technique. Moreover, the sample size and sampling techniques used in this study has been illustrated in Table 3.1 below.

Table 3.1: Summary of sample size and sampling techniques

No	Samples		Population	Sample size		Sampling technique
				No	%	
1	Physical education teachers	Kersa secondary school	1	1	100	Availability
		Langey secondary school	1	1	100	Availability
		Weter secondary school	1	1	100	Availability
2	Principals	Kersa secondary school	1	1	100	Availability
		Langey secondary school	1	1	100	Availability
		Weter secondary school	1	1	100	Availability
3	Students	Kersa secondary school	426	50	11.7	Random (lottery method)
		Langey secondary school	410	50	12.1	Random (lottery method)
		Weter secondary school	376	50	13.2	Random (lottery method)

As indicated in item 1 of table 3.1 above 3 (100%) Physical education teachers were included in the study using availability sampling technique. Item 2 of table 3.1 indicates the number of principals participated in the study. Accordingly, 3 (100%) principals were selected through availability sampling technique. Finally, item 3 in table 3.1 indicates

that 50 (11.7%) students were included from Weter secondary school, 50 (12.1) students were selected from Langey secondary school and 50 (13.2) students were selected from Weter secondary school using random sampling technique.

3.6. Data Collection Instruments

In this study, multiple instruments of data collection were used. A single study can use both quantitative and qualitative data tools (Best et al., 1999). According to Cresswell (2003), using more than one data collection techniques has an advantage to combine the strength and the weaknesses of one source of data. In order to collect necessary information regarding the barriers to the implementation of quality physical education, in this study questionnaire, interview and observation were used.

3.6.1. Questionnaire

Questionnaires can be defined as written form that asks exact questions of all individuals in the sample group, and which respondents can answer at their own convenience (Gall et al., 2007). A questionnaire is the most widely used type of instrument in education. The data provided by questionnaires can be more easily analyzed and interpreted than the data obtained from verbal responses. Questionnaires provide greater uniformity across measurement situations than do interviews. Each person responds to exactly the same questions because standard instructions are given to the respondents. Questionnaire design is relatively easy (Haines, 2007). Therefore, questionnaires are believed to be better to get large amount of data from large number of respondents in a relatively shorter time with minimum cost. Both open and closed ended items. Questionnaires were developed as main instruments of data collection from the respondents. The questionnaires were prepared in English Language and translated in to Afan Oromo by English and Afan Oromo specialists, and administered to all Physical education teachers and students participants with the assumption that they can better understand the language. The closed type items of the questionnaires were in the form of Likert-scale by which the researcher has the chance to get greater uniformity of responses of the respondents that will help him to make it easy to be processed. In addition to this, few open ended type items were used in order to give opportunity to the

respondents to express their feelings, perceptions, problems and intentions related to barriers to the implementation of quality physical education in the schools. In supporting the above idea, Cohen, L., et al., (2000) recommended that, the larger the sample size, the more structured, closed and numerical, questionnaires may have to be, and the smaller the size of the sample, the less structured, more open and word-based questionnaire may be. The questionnaire consisted of two parts. The first part deals with the general background of the participants. The second and the largest part contained the whole number of both closed and few open-ended question items that address the basic questions of the study.

3.6.2. Observation

Observation checklist was used to obtain necessary information regarding the lesson presentation and instructional materials in physical education class. Each school in the study area was observed three times. The observation regarding instructional process of physical education conducted twice and the third observation was made to identify the available instructional materials of physical education at the secondary schools of the study area.

3.6.3. Interview

The interview is a process of communication in which the interviewee gives the needed information orally in a face-to-face with the interviewer. According to Best and Kahn (1993), the purpose of interviewing people is to find out what is in their mind –what they think or how they feel about something. Thus, semi-structured interview items were prepared for the interviewees. Because, the semi-structured interview is flexible & allows new questions to be brought during the interview for clarification as a result of what the interviewee says (Lindlof and Taylor, 2002). To this end, in order to obtain detailed supplementary information, interview sessions were conducted with school principals and physical education teachers. The interview sessions was conducted in the Afan Oromo language, and subsequently translated to English.

3.7. Validity and Reliability

Checking the validity and reliability of data collection instruments before providing to the actual study subject is the core to assure the quality of the data (Yalew, 1998). Scale (1999) stated that trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability. To ensure validity of instruments, initially the instruments were prepared by the researcher and developed under close guidance of the advisors, who were involved in providing their inputs for validity of the instruments. The English version questionnaires were checked and corrected by English subject specialist teachers from Kersa Preparatory school. Moreover, the questionnaires were pilot tested at Weter secondary school. The respondents of the pilot test were not included in the main study. Based on respondent's response additional, omission and modification of question were undertaken. The questions that have problems to barriers to the implementation quality physical education initially 15 were reduced to 11 and the questions regarding the students' perception of barriers to the implementation quality Physical education were initially 13 reduced to 9. On the other hand, modification was made on item 4, 8, and item 2, 5,7 were corrected. A reliability test was performed to check the consistency and accuracy of the measurement scales. Moreover, Table 3.2 illustrates the results of Cronbach's alpha coefficient of the items.

Table 3.2. Result of reliability coefficient of the items

No	Detail description of the title of the questions	Reliability coefficient
1	How teachers perceive the barriers to the implementation of quality Physical education?	0.75
2	How students perceive barriers to the implementation of quality Physical education?	0.82
3	What are the major barriers hindering the implementation quality physical education?	0.78
Reliability coefficient		0.78

As illustrated in table 3.2 above, the first item indicates the result of Cronbach's alpha for the items regarding how the teachers perceive the barriers to the implementation of quality Physical education curriculum is 0.75, the second item indicates that the result of Cronbach's alpha coefficient of items regarding the perception of students towards barriers to the implementation of quality Physical education curriculum that is 0.82 and third item shows that major barriers to the implementation of quality Physical education curriculum in Secondary schools of Kersa Woreda is 0.78. Finally, the last indicates the average reliability coefficient of the items is 0.78. With this result it can be said that the reliability coefficient of the instrument is satisfactory (between 0.71 and 0.93), indicating questions in each construct are measuring a similar concept. As suggested by Cronbach (cited by Tech-Hong & Waheed, 2011), the reliability coefficients between 0.70–0.90 are generally found to be internally consistent.

3.8. Procedures of data collection

The researcher has gone through a series of data gathering procedures. These procedures helped the researcher to get accurate and relevant data from the sample units. Thus, after having letters of authorization from Addis Ababa University and Woreda Education office (for additional letters towards schools) for ethical clearance, the researcher directly went to Weter secondary school to pre-test the data gathering instruments. At the end of all aspects related to pilot test, the researcher has contacted the principals of respective schools for consent. After making agreement with the concerned participants, the researcher introduced his objectives and purposes. Then, the final questionnaires were administered to sample teachers and students in the selected schools. The participants were allowed to give their own answers to each item independently and the data closely assisting and supervising them to solve any confusion regarding the instrument. Finally, the questionnaires were collected and made ready for data analysis. On the other hand, school principals were interviewed. While interview was being conducted, to minimize loss of information, the obtained data were carefully recorded with tape recorder and written in notebook. In addition, observation was made to collect information regarding the Physical education instructional process and available instructional materials from the

sample schools. Finally, the data collected through various instruments from multiple sources were analyzed and interpreted.

3.9. Method of Data Analysis

The data were analyzed both quantitatively and qualitatively. The analysis of the data was based on the responses collected through questionnaires, interview and observation. The data collected through close-ended questions were tallied, tabulated and entered in to SPSS version 20 and interpretation was made with the help of percentage, mean and independent sample t-test. Because, the percentage was used to analyze the background information of the respondent whereas the mean was derived from the data as it serve as the basis for interpretation of the data as well as to summarize the data in simple and understandable way (Aron et al., 2008).

Apart from this, t- test was used to test the significant difference between the mean scores of the two groups of respondents (Physical education teachers and students). The existing response differences were tested at $\alpha = 0.05$ level of significance. On the other hand, the data obtained from the observation and semi-structured interview were stated by narrating the information. To this end, the results were triangulated with the quantitative findings. Finally, the findings were concluded and suggested recommendations were forwarded. The method of data analysis and the statistical tools employed in the study have been illustrated in table 3.3 as follows:

Table 3.3. Summary of data analysis

☐ Types of data	Statistical tool techniques	Purpose
Quantitative	Percentage	To state data of respondents' characteristics and other collected data.
	Mean	To express some of the data gather from Physical education teachers and

		students
	T-test	To observe the statistical significance difference among the opinions of the two respondents
Qualitative	Narration	To analyse the data collected through interview and observation.

As it can be observed from the above table, quantitative data were analyzed using percentage, mean and independent sample t-test. Percentage was used to state data of respondents' characteristics. Mean was used to express some of the data gather from Physical education teachers and students and t-test was used to observe the statistical significance difference among the opinions of the two respondents. At the end of table illustration, qualitative data collected through interview and observation were analyzed by narration.

3.10. Ethical consideration

To make the research process professional, ethical consideration were made. The researcher informed the respondents about the purpose of the study. The purpose of the study was also introduced in the introduction part of the questionnaires and interview guide to the respondents and confirmed that subject's confidentiality was protected. In addition to this, they were informed that their participation in the study was based on their consent. The research has not personalized any of the respondent's response during data presentations, analysis and interpretation. Furthermore, all the materials used for this research have been acknowledged.

CHAPTER FOUR

RESULTS AND DISCUSSION

The main aim of this study was to assess barriers to the implementation of quality physical education curriculum in secondary schools of Kersa Woreda of East Hararge Zone. Subsequently, this chapter deals with the presentation, analysis and interpretation of data collected on barriers to the implementation of quality physical education in secondary schools. It contains two major parts; the first part presents characteristics of respondents. The second part deals with the results of findings from the data gathered through the questionnaire, interview and observation.

4.1. Characteristics of Respondents

The respondents in this study were physical education teachers, students and principals from the secondary schools in Kersa woreda. Accordingly, the characteristics such as gender, age, education level (for teachers and students), grade level (for students) and service year (for teachers) of the respondents has been summarized in table 4.1 as follows:

Table 4.1. Characteristics of respondents

No	Items	Category	Respondents					
			Students		PE teachers		Principals	
			No	%	No	%	No	%
1	Gender	Males	90	60	2	66.6	3	100
		Females	60	40	1	33.4	-	-
		Total	150	100	3	100	3	100
2	Age	15-19	146	97.3	-	-	-	-
		20-24	4	2.7	-	-	-	-
		25-29	-	-	2	66.6	-	-
		30-34	-	-	1	33.4	1	33.4
		35-39	-	-	-	-	2	66.6
		>40	-	-	-	-	-	-
		Total	150	100	3	100	3	100
3	Education level, & or Grade level	Grade 9	75	50	-	-	-	-
		Grade 10	75	50	-	-	-	-
		1 st Degree	-	-	3	100	3	100
		Total	150	100	3	100	3	100
4	Service year	1-5	-	-	-	-	-	-
		6-10	-	-	2	66.6	1	33.3
		11-15	-	-	1	33.4	1	33.3
		16-20	-	-	-	-	1	33.3
		21-25	-	-	-	-	-	-
		Total	-	-	3	100	3	100

As presented in table 4.1 item 1, 90 (60%) and 60 (40 %) of student respondents were males and females respectively. Among the 3 physical education teachers, 2 (66.6%) of them were males and 1 (33.4%) of them was female. From this, one can realize that the number of female students and females teachers are lower than males in the sampled schools. All the interviewee participants were males. Accordingly, 3(100%) principals

were male, which implies that the leadership positions of secondary schools, at school level were controlled by males.

As item 2 of the above table shows that 146(97.3%) of the student respondents were found to be in the age range of 15-19 years, while 4(2.7%) of students were 20-24 years of age. Regarding the ages of teachers, 2 (66.6 %) of them were in the age range of 25-29 and 1(33.4%) of them was found in the age range of 30-34 years. Among the 3 principals, 1(33.4%) of them was in the range of 30-34 years and 2(66.6%) of them fall between age 35-39. From this description, principals were more mature than teachers in sample schools.

With regard to experience of teachers (service year) the majority of teachers 2(66.6%) had work experience between 6 and 10 years, 1(33.4%) of the teacher respondents had work experience between 11-15 years. On the other hand, 1(33.3%) of the school principals had work experience between 6 and 10, 1(33.3%) principal respondents had between 11 and 15 years experience, and 1(33.3%) of them had work experience between 16 and 20 years' experience. This implies that teacher respondents and principals had almost similar working experience, only one of the principals had more working experience than the teachers.

As far as educational level of teachers and principals is concerned, the whole 3 (100%) of teachers and 3(100%) of principals had first degree in education. From this fact, one may decide that there is no gap in the level of education between the teachers and principals.

4.2. Presentations, Analysis and Discussion of the Findings of the Study

The purpose of this part of the study is to provide the presentation, analysis, and discussion of the data obtained from various groups of respondents in relation to barriers to the implementation of quality physical education curriculum in government secondary schools of Kersa Woreda. Physical education teachers and students responded to 18 and 2 close-ended and open-ended items respectively. The closed-ended questionnaires were responded to and resulting answers interpreted in terms of the percentage, mean and

standard deviation scores. T-test was also computed to test the significant difference between the responses of the two groups of respondents (Physical education teachers and students).

Item scores for each category were arranged under five rating scales. The range of rating divided in intervals based on mean scores in order to avoid overlapping of response under similar scales. Thus the scales ≤ 1.50 = strongly disagree, 1.51 – 2.50 = Disagree, 2.51 – 3.50 = undecided, 3.51 – 4.50 = Agree, ≥ 4.51 = strongly agree. Finally, the data obtained from the interview sessions and document analysis were presented and analyzed qualitatively to substantiate the data collected through the questionnaires and to validate the findings of the study.

4.3. Perception towards the barriers to implementation of quality Physical education curriculum.

The perception of teachers and students regarding the barriers to the implementation of quality Physical education in the secondary schools of Kersa Woreda , which consisted of 18 items has been illustrated table 4.2 below.

Table 4.2. Response on perception of teachers and students towards barriers to the implementation of quality physical education

No	Items	Respondents	No	mean X	Sd	Overall mean $\bar{x}$	P-value
1	Teachers' lack of adequate knowledge and skills needed to take on leadership role in the implementation of Quality Physical education curriculum.	Teachers	3	2.57	1.40	2.70	.61
		Students	150	2.84	1.47		
2	Teachers' lack of commitment and motivation towards the implementation of quality physical education curriculum	Teachers	3	3.86	1.45	3.91	.07
		Students	150	3.97	1.56		
3	Absence of quality care, guidance and support from school administration.	Teachers	3	4.98	1.38	4.87	.13
		Students	150	4.77	1.41		
4	Feeling under pressure too much of the time.	Teachers	3	4.66	1.33	4.60	.52
		Students	150	4.55	1.44		
5	Students give less priority to Physical education when compared to other subjects.	Teachers	3	4.97	1.42	4.86	.22
		Students	150	4.76	1.35		
6	Students have no good background knowledge and skill they need to take part in Physical education and sport program.	Teachers	3	4.43	1.41	4.57	.84
		Students	150	4.71	1.47		
7	High student ratio affect the quality teaching and learning of Physical education subject in the school.	Teachers	3	4.83	1.45	4.70	.06
		Students	150	4.57	1.50		
8	Shortage of school finance to support implementation of quality physical education curriculum.	Teachers	3	4.97	1.48	4.89	.16
		Students	150	4.82	1.43		
9	Shortage of Physical education staff.	Teachers	3	4.87	1.55	4.74	0.20
		Students	150	4.62	1.44		
10	The school environment does not encourage implementation of quality physical education.	Teachers	3	4.55	1.40	4.65	0.36
		Students	150	4.76	1.47		
11	The school principals under valuing Physical Education Syllabus.	Teachers	3	4.67	1.33	4.52	0.33
		Students	150	4.37	1.50		
12	You have low level of interest in Physical education	Teachers	3	3.47	1.46	3.51	0.38
		Students	150	3.55	1.37		
13	The concepts and contents in physical education syllabus are complex and they are not clear for students.	Teachers	3	1.43	1.41	1.50	0.68
		Students	150	1.57	1.00		
14	Reduced curriculum time for Physical education program.	Teachers	3	4.95	1.50	4.87	0.2
		Students	150	4.80	1.45		
15	Lack of facilities	Teachers	3	4.98	1.34	4.95	0.71
		Students	150	4.93	1.40		
16	Lack of equipment	Teachers	3	4.77	1.33	4.83	0.54
		Students	150	4.89	1.54		
17	Teachers usually use out dated teaching methods	Teachers	3	3.64	1.38	3.97	0.22
		Students	150	4.30	1.44		
18	Limited practice opportunity offered by teachers	Teachers	3	3.89	1.41	4.19	0.35
		Students	150	4.50	1.00		

SD=standard deviation, $\bar{x}$ =Mean, p-value at $\alpha=0.05$ and degree of freedom=96

Scales; ≤ 1.50 = Strongly disagree, $1.51 - 2.50$ =Disagree, $2.51- 3.50$ = Undecided, $3.51 -4.50$ = Agree, ≥ 4.51 = Strongly agree

As shown in item 1 of table 4.2, respondents were asked whether or not the teachers were knowledgeable and skillful to take on leadership role in the implementation of quality Physical education curriculum. Accordingly, teachers with the ($X=2.37$, $SD=1.40$) and students with the ($X=2.84$, $SD=1.47$) were not sure about the issue. The overall mean $\bar{x} = 2.70$ show the uncertainty of the majority of respondents with the issue. Thus, it can be said that teachers not believe in their own knowledge and skill to play leadership role in the implementation of quality Physical education and students were not satisfied with the teachers' knowledge and skill in leading the implementation of quality Physical education. It is possible to conclude that teachers were not skillful enough in playing leadership role in the implementation of quality Physical education. The significance value (p-value) is 0.61 is greater than 0.05 shows there is no significant difference between the two groups.

As shown in item 2 of table 4.2, respondents were required to indicate their view whether or not teachers shown commitment and motivation towards the implementation of quality physical education in the school. Accordingly, teachers with the ($X=3.86$, $SD=1.45$) and students with (3.97 , $SD=1.56$) respectively agreed that teachers' lack of commitment and motivation towards the implementation of quality physical education. The overall mean $\bar{x} = 3.91$ shows both group agreed with the issue. The significance value (p-value) is 0.07, is greater than 0.05 shows there is no significant difference between the opinion of the two groups that teachers were not committed and motivated towards the implementation of quality physical education in the school under study.

With regards to item 3 of table 4.2, respondents were requested whether absence of quality care, guidance and support from school administration hindering the implementation of quality Physical education in the school or not. Accordingly, the teachers and students with ($X=4.98$, $SD = 1.38$) and ($X=4.77$, $SD=1.41$) respectively

agreed that there was no quality care, guidance and support from school administration in the implementation of quality Physical education at their school. The overall mean is $\bar{x}=4.87$ shows that both groups agreed with the idea indicating that no support and guidance was given to them in order to implement quality physical education in the school. The significance value (p-value) is 0.13 is greater than 0.05 shows there is no significant difference between the opinions of the two groups regarding lack of support and guidance in implementing quality physical education. Similarly, data obtained through interview indicated that lack of necessary support and guidance from school principals was widely seen in the secondary schools. One of the Physical education responded that: *“His principal and the school administration team did not make any action to support the implementation of quality physical education. Even the principal did not show willingness to make discussion with him on the issue of Physical education syllabus. They also tried to exempt physical education class and use for other subjects which are part of EGSECE.”* Regarding this, during interview session one of the principals that asserted: *“He had never planned to make close contact and discussion with Physical education teachers and other concerned bodies to provide necessary support for the implementation of quality physical education curriculum. He had no concept on how to play his part in the implementation of quality physical education curriculum. His school administration believes that the Woreda Education Office should provide all the necessary facility and equipment for the implementation of quality physical education curriculum. Due to over loading work of the school activity He could not make emphasis to the implementation of quality physical education curriculum.”* From this it possible conclude that there was lack of quality care, guidance and support from school administration in the implementation of quality physical education curriculum.

In the fourth item of table 4.2, respondents were asked to rate their agreement level whether they experience feelings of under pressure too much of the time or not. With the ($X=4.66$, $SD=1.33$) and ($X=4.55$, $SD=1.44$) teachers and students respectively confirmed that, they were feeling under pressure too much of the time. The overall mean $\bar{x} = 4.89$ shows the majority of the respondents were agreed that they were stuffed with the feelings of under pressure most of the time with their school administration. The

significance value (p-value) is 0.52 is greater than 0.05 shows there is no significant difference between the opinions of the two groups.

As the responses to item 5 indicate, respondents were asked whether or not students give less priority to Physical education; teachers and students with the ($X=4.97$, $SD=1.42$) and ($X=4.76$, $SD=1.35$) respectively agreed that students give low priority to Physical education lesson. The overall mean $\bar{x} = 4.89$ show the agreement of majority of the respondents with the issue. The significance value (p-value) is 0.52 is greater than 0.05 shows there is no significant difference between the opinions of the two groups regarding the students giving less priority to Physical education than other subjects.

As indicated on table 4.2, question (item 6) was also raised for respondents to rate their level of agreement on whether or not students had background knowledge and skills they need to take part in physical education and sport program. Both teachers and students with ($X=4.43$, $SD=1.41$) and ($X=4.71$, $SD=1.47$) respectively agreed on the point. The overall mean $\bar{x} = 4.58$ shows majority of the respondents agreed that there was lack of background knowledge and skills necessary to participate in physical education program on the part of students. The significance value (p-value) 0.84 is greater than 0.05 shows there is no significant difference between the opinions of the two groups regarding the students lack of background knowledge and skill they need to participate in Physical education program.

In item 7 of table 4.2, the impact of high ratio of students on the quality teaching and learning of Physical education in the school was rated by teachers and students. The mean value and standard deviation obtained were ($X=4.83$, $SD=1.45$) and ($X=4.57$, $SD=1.50$) respectively. The overall mean $\bar{x} = 4.7$ also indicate that high student's ratio affected the quality of Physical education program at the school. The calculated P-value 0.06 is higher than 0.05, this indicates that there is no significant difference between the opinions of the two groups on the issue.

Moreover, as confirmed from data obtained through classroom observation, in each secondary school of the study area, there was only one Physical education teacher. As a result the teachers were overloaded with teacher-student ratio of 1: 60-65 in each class.

From this, it can be concluded that high student ratio was one of the barriers hindering the implementation of quality of Physical education in secondary schools of the study area.

With regard to item 8 of table 4.2, respondents were required to rate their agreement levels on shortage of school finance to support the implementation of quality Physical education curriculum. Accordingly, the teachers and students with ($X=4.97, SD = 1.48$) and ($X=4.82, SD=1.43$) respectively agreed that the school finance was inadequate to support the implementation quality Physical education in the school. From this, it can be said that the school financial problem was one of the factors hampering implementation of quality Physical education in the school. The significance value (p-value) 0.84 is greater than 0.05 shows there is no significant difference between the opinions of the two groups.

In the same way the result of interview revealed that there was no adequate fund and budget in the school for the implementation of quality Physical education curriculum. Regarding this one of the principals responded that: *"His school was suffered from mismatching of school budget with the school needs. The schools' need was very big while the budget allocated was very small. Addition to this, lack of fund was another big problem, neither governmental nor non-governmental organization had come to fund Physical education program in his school."* Subsequently, it is possible to conclude that in the secondary school of study area the implementation of quality Physical education curriculum was highly affected by shortage of school finance and lack of fund.

On the same table item 9, respondents were requested whether there was shortage of Physical education staff in the school or not. Accordingly, the teachers and students with ($X=4.87, SD = 1.55$) and ($X=4.62, SD=1.44$) respectively agreed that there was shortage of Physical education staff in the school. The overall mean is $\bar{x} = 4.74$ shows that both groups agreed with the issue. The significance value (p-value) 0.20 is greater than 0.05 shows there is no significant difference between the opinions of the two groups. Similarly, the data obtained through observation confirmed that the number of physical education in the schools was insufficient for the implementation quality Physical education curriculum.

As indicated in item 10 of the above table, teachers and students were asked whether or not the school environment encourage the implementation of quality Physical education, teachers and students with the ($X=4.55$, $SD=1.40$) and ($X=4.76$, $SD=1.47$) agreed on the point. The overall mean $\bar{x} = 4.65$ show that the respondents confirmed the school environment was not conducive enough to the implementation of quality Physical education. The significance value (p-value) 0.36 is greater than 0.05, this indicates there is no significant difference between the opinions of the two groups. Moreover, the result of interview confirmed that the school environment does not encourage implementation of quality Physical education curriculum due to poor infrastructure. Regarding this, one of the principals responded that: *"It was beyond their capacity to create suitable infrastructure and organize conducive school environment for the implementation of quality physical education curriculum."*

As it can be observed from table 4.2 item 11, respondents were asked whether teachers and students perceived the school principal's under valuing Physical Education syllabus or not. Hence, teachers with ($X= 4.67$, $SD=1.33$) and students with ($X=4.37$, $SD=1.50$) indicated that school principals were under valuing physical education syllabus. The overall mean $\bar{x} = 4.52$ shows that all of the respondents agreed with the issue. The significance value (p-value) 0.33 is greater than 0.05, this indicates there is no significant difference between the opinions of the two groups. From this, it can be concluded that principal's under valuing Physical education curriculum was one of the major factor impeding the implementation quality Physical education in the schools.

With regard to item 12 of table 4.2, respondents were required whether they had low level of interest in Physical education. Accordingly, the teachers and students with ($X=3.47$, $SD = 1.46$) and ($X=3.55$, $SD=1.37$) respectively agreed with the issue. The overall mean $\bar{x}=3.51$ indicates that majority of the respondents agree that the teachers and students in the school show low level interest towards physical education lesson. The significance value (p-value) 0.38 is greater than 0.05, this indicates there is no significant difference between the opinions of the two groups regarding the idea. In the same way, results from interview indicated that the Physical teacher did not show interest in teaching Physical education. One of the teachers said that: *"Teaching Physical education*

was boring activity for him due to unfavorable working condition and His attention was always in searching for any other jobs rather than teaching Physical education.” From this it can be seen that, low level of interest in physical education was one major factor impeding the implementation of quality Physical education curriculum in the schools under study.

In the thirteenth item of table 4.2, respondents was asked to rate their agreement levels whether they perceive that the concepts and contents in Physical education are complex and they are not clear for students. With the ($X=1.43$, $SD=1.41$) and ($X=1.57$, $SD=1.00$) teachers and students respectively indicated that the concepts and contents in Physical education were not complex and they were clear for the students. The overall mean $\bar{x} = 1.50$ also shows the disagreement of the total respondents with the point. Hence, it is safe to conclude that concepts and contents in Physical education were not complex, and were clear for students. The calculated p-value, ($P= 0.64 > 0.05$), indicates that there is no significant difference between the opinions of teachers and students.

As indicated in item 14 of table 4.2, respondents were requested to rate their agreement level concerning reduced curriculum time for Physical education program. As a result teachers and students with ($X=4.95$, $SD=1.50$) and $X = 4.80$, $SD=1.45$) respectively agreed that reduced curriculum time was among the major factors that impede the implementation of quality Physical education. The overall mean $\bar{x} = 4.87$ show the agreement of the total respondents with the idea. Therefore, based on the overall mean score, sufficient time has not been allocated for the implementation of quality Physical education in the schools. The significance value of $P=0.20 > 0.05$ indicates that there is no significant difference between the opinions of teachers and students. Regarding this data obtained through interview indicated that Physical education curriculum time was a great challenge in the implementation of quality Physical Education curriculum. One of the Physical education confirmed that: *“Even the curriculum time for physical education syllabus contrast the nature Physical education itself. Physical education comprises repetitive and continuous activities. Therefore; time was a crucial thing to put Physical education in to effect, and it would be unthinkable to implement quality Physical education curriculum with the curriculum time of one period (40 minute) per week.”*

Regarding to item 15 of Table 4.2, respondents was asked to rate their agreement levels on the lack of facility needed in the implementation of quality Physical education. Accordingly teachers and students with ($X=4.98$, $SD=1.34$) and ($X=4.93$, $SD=1.40$) respectively confirmed that implementation quality Physical education curriculum has been affected by shortage of school facility. The overall mean $\bar{x}= 4.95$ show the agreement of the total respondents with the issue. The significance value of ($P=0.20> 0.05$) indicates that there is no significant difference between the opinions of teachers and students. Similarly, data obtained through observation indicated that there was no adequate and appropriate Physical education facility in the school. From this one can conclude that, lack of school facility was one of the impeding factors hindering the implementation of quality Physical education curriculum in the schools under study.

Similarly item 16 of table 4.2, teacher and student respondents indicate their agreement regarding lack of equipment required for the implementation of quality Physical education curriculum in their school with mean value ($X=4.77$, $SD=1.33$) and ($X = 4.89$, $SD = 1.54$) respectively. The overall mean $\bar{x} = 4.83$ show the agreement of the total respondents with the issue. The significance value of ($P =0.20 > 0.05$) indicates that there is no significant difference between the opinions the two groups regarding lack of equipment in the implementation of quality Physical education curriculum. In addition to this; as it was revealed from the data obtained through observation the Physical education equipment in the school were inadequate to high extent; there was no gymnastic equipment, no athletics equipment and the football and volleyball equipment are very much inconsistent with the number of students in the schools. From this, it can be stated that insufficiency of equipment in the schools was another major factor which led the implementation of quality Physical education in to unthinkable risk at the schools.

With regard to item 17 in table 4.2, respondents were asked to rate their agreement level on whether or not teachers usually use out dated teaching method. Accordingly, teachers with ($X=3.04$, $SD= 1.38$) and students with ($X=4.30$, $SD=1.44$) agreed teachers usually use out dated teaching method. The overall mean $\bar{x}= 3.97$ show the agreement of the majority of the respondents on the point. The significance value (p-value) 0.22 is greater than 0.05, this indicates there is no significant difference between the opinions of the two

groups regarding the idea. In line to this; data obtained through observation confirmed that, during theory class teachers mostly used teacher centered approach, participation of students in the lesson was very poor, the teachers did not create opportunity for students to discuss and communicate their opinion on the learning topic, the teachers did not give class work, home work and assignments for students and the teachers did not use teaching aids. Regarding the practical class; the teaching space and equipment were not arranged adequately and properly, the teachers did not prepare daily lesson plan for practical class and in most cases they throw ball to students and sit, and then they made students to get back to their class at the end of the period. From this one can conclude that the teacher's use of outdated teaching method affected the implementation of quality Physical education curriculum in the secondary schools of study area.

Finally, as indicated in item 18 of table 4.2, the teachers and students were requested whether or not the teacher offer limited practice opportunity for students in Physical education class. Accordingly, teachers and students with ($X=3.89$, $SD=1.41$) and ($X=4.50$, $SD=1.00$) respectively agreed that students were suffering from limited practice opportunity during physical education lesson. The overall mean $\bar{x}=3.97$ show the agreement of the majority of the respondents with the issue. The significance value (p-value) 0.35 is greater than 0.05, this indicates there is no significant difference between the opinions of the two groups regarding the idea. From this, it is possible to conclude that students of the schools under the study never experienced quality physical education program due to lack of practice opportunity in the program.

CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Summary

This part of the study deals with the summary of the major findings, general conclusions drawn on the bases of the findings and recommendations which are assumed to be useful to overcome the barriers to the implementation of quality Physical education curriculum in the government secondary schools of Kersa Woreda are forwarded for all concerned academic staffs.

Quality Physical education programs help all students develop health related fitness, physical competence, cognitive understanding, positive attitudes about physical activity so that they can adopt healthy and physically active life style. Therefore, the central purpose of this study was to assess the barriers to the implementation of quality Physical education curriculum in the public secondary schools of Kersa Woreda of East Hararge Zone. To address this purpose, the following basic research questions were raised:

1. What is the perception of physical teachers and students towards the barriers to the implementation of quality Physical Education curriculum?
2. What are the major barriers and their impacts on the implementation of quality Physical Education curriculum?
3. To what extent do the principals discharge their responsibility in the implementation quality of Physical Education curriculum?

To this effect, the study was conducted in 3 government secondary schools. Consequently, 3 Physical education teachers, 3 school principals and 150 students were selected as a sample by using availability and simple random sampling techniques respectively. For the study, primary and secondary data sources were employed.

The data were gathered through both quantitative and qualitative tools. Accordingly, 150+3 copies of a questionnaire were prepared and distributed for Physical education teachers and students. All the distributed questionnaires were returned. On the other hand, to obtain qualitative data, interview sessions were conducted with the principals and physical education teachers from the sample schools. Moreover, observation was made to obtain data regarding the Physical education instructional process in the sampled schools.

The quantitative data gathered through questionnaires were analyzed in percentage, mean value and standard deviation by using SPSS program version 20. The independent sample t-test was also utilized to check the statistical significance where there is difference or not between the opinions of the respondents. Whereas, the qualitative data gathered through the open-ended questionnaire, interview and observation were analyzed by narration.

Hence, the findings of the study are summarized as follows:

- Concerning the perception of teachers and students towards the barriers to the implementation of quality Physical education curriculum; teacher and student respondents gave their opinions. The result shows that both the teacher and student respondents have similar views. Teacher respondents replied that they were not sure about their knowledge and skill to play leadership role in the implementation quality Physical education curriculum. Similarly, majority of the respondents replied that students had lack of background knowledge and skill they needed to take part in Physical education and sport program. As a result, students have given less priority to Physical education syllabus and shown low level of interest in Physical education. Both teacher and student respondents asserted that they were not given quality care, guidance and support from school administration. Consequently, they felt that they were under pressure too much of the time and did not show commitment and were not motivated towards the implementation of quality Physical education curriculum at their school.
- Regarding the major barriers hindering the implementation of quality Physical education curriculum at the schools under the study; the respondents confirmed

that teachers' lack of interest, limited practice opportunity offered to students, lack of background knowledge and skill on the part of students, students giving low priority to Physical education syllabus, inadequate curriculum time, lack of facilities, lack of equipment, shortage of Physical education staff, high student ratio, shortage of allocated budget to facilitate implementation of quality Physical education program, absence of quality care, guidance and support from school administration, and principals under valuing of Physical education syllabus are the major ones. All these are presumed factors that could hamper the implementation of quality Physical education curriculum in secondary schools of the study area.

- Regarding the role of principals findings of the study reveal that school principals were in efficient in supporting and guiding the implementation of quality Physical curriculum in the schools of the study area, and even, they did not give emphasis to Physical education syllabus. Furthermore, data gathered through the interview sessions and close ended and open-ended questions of the questionnaire show that the school principals under valuing Physical education syllabus, they did not provide quality guidance and support to the implementation of quality Physical education, in most cases they set inappropriate schedule for Physical education, lack of discussion with Physical education teachers, allocating insufficient budget for Physical education program and unnecessarily utilization of the schools' sport budget.

5.2. Conclusions

Based on the findings of the study the following conclusions are drawn:

- 🌈 Teachers as key agents in the implementation of quality Physical education curriculum are not aware of how to handle the barriers to the implementation of quality Physical education. In the same way, students as a participant in Physical education program did not show responsibility in the implementation of quality Physical education curriculum at their school. The findings show that Physical education teachers were not well oriented to the implementation of quality

Physical education curriculum where they lacked awareness to take on leadership role in the implementation of quality Physical education, and where they lacked commitment and motivation in implementing quality Physical curriculum in the schools. Consequently, students were not aware of background knowledge and skill to participate in Physical education programs, as result they show low interest in Physical education syllabus. This indicates that Physical education teachers and students have limited participation in the implementation of quality Physical education curriculum. From this, it can be concluded that in secondary schools of Kersa Woreda Physical education teachers and students negatively affected the implementation of quality Physical education in such a way that they have limited knowledge and skill, low interest, lacked commitment and motivation in the implementation of quality Physical education curriculum.

✚ The results of the study discovered that implementation of quality Physical education was overwhelmed by many barriers; such as teachers' lack of interest, limited practice opportunity offered to students, lack of background knowledge and skill on the part of students, students giving low priority to Physical education syllabus, inadequate curriculum time, lack of facilities, lack of equipment, shortage of Physical education staff, high student ratio, shortage of school finance to facilitate implementation of quality Physical education program, absence of quality care, guidance and support from school administration, and principals under valuing of Physical education syllabus. As a result, students in the secondary schools of Kersa Woreda were not benefited from quality Physical education program.

✚ Finally, findings of this study revealed that the school principals were ineffective in providing the necessary assistance and guidance for the implementation of quality Physical education curriculum through organizing appropriate teaching and learning environment by providing abundant Physical education facility and equipment in the school, working to reduce budget constraints, making close discussions with Physical teachers to identify teaching learning problems and then to find solutions to these deficiencies. Furthermore, the findings revealed that

the principals did not give important emphasis to implementation of quality Physical education curriculum where they undervalued Physical education syllabus. From this finding, it can be concluded that, principals couldn't provide the optimum contribution to the implementation of quality Physical education curriculum.

5.3. Recommendations

On the basis of the findings obtained and the conclusions drawn, the following recommendations are forwarded to overcome the barriers to the implementation of quality Physical education curriculum in the secondary schools.

- ❖ Conducting a quality physical education program requires dedicated and competent physical education teachers. In order to provide quality, developmentally, appropriate physical education; physical education teachers must overcome a wide range of barriers that affect the delivery of their lesson content, and affect their professional attitude and outlook upon their profession. To this end, it is recommended for Physical education teachers in secondary schools of Kersa Woreda to avoid perception of hopelessness in their profession and perform their first hand role in the implementation of quality Physical education curriculum with full commitment.
- ❖ Physical education teachers may identify the barriers they have control over and those outside their control, and develop strategies to overcome those barriers.
- ❖ It is advisable for Physical education teachers in secondary schools of Kersa Woreda to give emphasis to prior planning and discussing with the school principals and other fellow organs to create awareness on the purpose of quality Physical education and to closely work with them to overcome specific barriers hindering the implementation of quality Physical education curriculum.
- ❖ Physical education teachers are also expected to make strong efforts to improve the attitude of the students towards Physical education syllabus and create adequate opportunity for all students to engage in quality Physical education programs in relation to student's individual needs.

- ❖ Student interest and motivation is key factor in successful learning. Therefore, students in secondary schools of Kersa Woreda are expected to build up their interest towards Physical education programs and increase their role and responsibility in the implementation of quality Physical education curriculum.
- ❖ The findings of the study pointed out that in secondary schools of Kersa woreda the implementation of quality Physical education curriculum was adversely impeded by various barriers. Hence, to alleviate these particular challenges, the following recommendations are forwarded:

Providing adequate resources:

- ✓ The finding of the study revealed that there was lack of facility, lack of equipment and shortage of school finance to facilitate the implementation of quality Physical education curriculum. Therefore; it is recommended for the school administration and the Kersa Woreda Education office to allocate adequate budget to fulfilment all the necessary facilities and equipment for the implementation of quality Physical education program. It is also advisable for Regional Education Bureau, the Zonal Education Department provide adequate fund to facilitate the implementation of quality Physical education in the secondary schools.

Providing adequate practice opportunity to students:

- ✓ It is recommended for physical education teachers in the secondary schools of Kersa Woreda to give assignments involving varied practical activities for students to keep on practicing.

Providing adequate Physical education staff:

- ✓ The finding of the study revealed that; there was high student ratio due to shortage of Physical education staff. Therefore; it is recommended for Oromia Education Bureau, East Hararge Zone Education Office and Kersa Woreda Education Office to provide adequate Physical education staff to

facilitate the implementation of quality Physical education in the secondary schools of Kersa Woreda.

Last but not least, Principals of secondary schools in Kersa woreda are expected to guide the implementation of quality Physical education curriculum through organizing and creating appropriate learning environment for quality learning and teaching of Physical education. They need to be aware of their responsibility and give enough emphasis to orienting, encouraging and making regular discussion with Physical education teachers to enhance the implementation of quality Physical education in the schools. Moreover, it is advisable for Kersa Woreda Education Office to provide appropriate and continuous training programs for school principals on the significance of quality Physical education and how it can be implemented in order to carry out their responsibility effectively.

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APPENDIX A
Addis Ababa University
School Graduate Studies
College of Education and Behavioral Studies
Department of Science and Mathematics Education

Questionnaire to be filled by Teachers and students

The main purpose of these questionnaires is to gather relevant data to regarding to the barriers to implementation of Quality Physical education curriculum in government secondary schools of Kersa Woreda. The response you provide will have a constructive and paramount importance for the successful accomplishment of this study. So, you are kindly requested to give your genuine response. Your response will be used only for academic purpose and remained confidential.

Thank you in advance for your cooperation!

Instruction:

1. Don't write your name on the questionnaire.
2. Use a thick mark “√” close-ended questionnaire from the given rating scales.
3. Write briefly your response for open-ended questionnaire.
4. Please, give appropriate response based on your school experience/context.

Part one: General Information and Respondents' Personal Data

Please, put a thick mark “√” in the box for your response or give short answers on the blank space

1. School: _____
2. Sex: Male ☐ Female ☐
3. Age 15-19 ☐ 20- 24 ☐ 25 -29 ☐ 30-34 ☐ above 40 ☐
4. Grade (for students only): 9 ☐ 10 ☐
4. Service year in teaching (for teachers only): 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-26 ☐
5. Level of education (for teachers only): Diploma ☐ First Degree ☐ Second Degree ☐

Part two: Perception of Teachers and Students on the barriers to implementation of Quality Physical Education Curriculum. Key: 5= Strongly Agree (SA), 4=Agree (A), 3=Undecided (UD), 2=Disagree (D), 1=Strongly Disagree (SD)

No	Items	SA	A	UD	D	SD
		5	4	3	2	1
1	Teacher's lack of adequate knowledge and skills needed to take on leadership role in the implementation of Quality Physical education curriculum.					
2	Teachers lack commitment and motivation towards implementation of Quality Physical education curriculum.					
3	Absence of quality care, guidance and support from school administration.					
4	Feeling under pressure too much of the time.					
5	Students give less priority to Physical education when compared to other subjects.					
6	Students have no good background knowledge and skill they need to take part in Physical education and sport program					
7	High student ratio affects the quality teaching and learning of Physical education subject in the school.					
8	Shortage of school finance to support implementation of Quality Physical education curriculum.					
9	Shortage of Physical education staff.					

10	The school environment does not encourage implementation of Quality Physical education.					
11	The school principals under valuing Physical Education Syllabus.					
12	You have low level of interest in Physical education					
13	The concepts and contents in Physical education syllabus are complex and they are not clear for students.					
14	Reduced curriculum time for Physical education program.					
15	Lack of facilities					
16	Lack of equipments					
17	Teachers usually use out dated teaching methods					
18	Limited practice opportunity offered by teachers					

19. Please list the major barriers hampering implementation Quality Physical education curriculum in your secondary school.

20. Please suggest the possible solution to overcome the barriers to the implementation Quality Physical education curriculum.

Appendix B
Addis Ababa University
School of Graduate Studies
College of Education and Behavioral Studies
Department of Science and Mathematics Education

Interview Schedule

Interview for Physical Education Teachers

The main purpose of this interview is to collect relevant data for the study on the Barriers to Implementation of Quality Physical Education Curriculum in Government secondary schools of Kersa woreda. The response you provide will have constriction paramount and importance for the successful accomplishment of this study. So, you are kindly requested to give your genuine response. Your response will be used only for academic purpose and the responses will be kept confidential.

Thanks you in advance for your cooperation!

Date: _____

Time interview started: _____ local time.

Time interview ended: _____ local time.

1. How is your interest in teaching Physical education curriculum?
2. To what extent you and your school provide the necessary support and guidance in the implementation of Quality Physical education activities in the school?
3. How do you make close contact and discussion with the school principal and other concerned bodies to in order to get support for proper implementation of Quality Physical education curriculum?
4. How often do you get In-service Training regarding implementation of Quality Physical education curriculum?
5. Do you think that Curriculum time provided for Physical education syllabus appropriate for implementation of Quality Physical education curriculum?

APPENDIX C
Addis Ababa University
School of Graduate Studies
College of Education and Behavioral Science
Department of Science and Mathematics Education

Interview questions for school principals:-

The main purpose of this interview is to collect relevant data for the study on the Barriers to Implementation of Quality Physical Education Curriculum in Government secondary schools of Kersa woreda. The response you provide will have constriction paramount and importance for the successful accomplishment of this study. So, you are kindly requested to give your genuine response. Your response will be used only for academic purpose and the responses will be kept confidential.

Thanks you in advance for your cooperation!

Date: _____

Time interview started: _____ local time.

Time interview ended: _____ local time.

Part I: General information and respondents' personal data

1. School _____
2. Sex _____
3. Age _____
4. Level of Education: Diploma _____ Degree _____ 2nd Degree _____
5. Qualification of subject: major _____ Minor _____
6. Service year _____

Part II: please, answer the following questions briefly related to the current practices of your school context.

1. How is the interest and ability of your teachers in teaching grade 9 and grade 10 Physical education syllabus?
2. How often do you make discussion on the issue of implementation of Quality physical education curriculum with Physical education teachers?

3. How do you perform your task as a director of the school to lead the organization through facilitating, coordinating and supporting the implementation of Quality physical education program?
4. Does your school get the appropriate fund and budget for the implementation Quality physical education curriculum?
5. To what extent your school administrations provide the necessary support for the implementation of Quality physical education curriculum?
6. Do you think that the school infrastructures are properly organized for the implementation of Quality physical education curriculum?
7. How often do you make close contacts with the concerned bodies to get necessary support to facilitate the implementation of Quality physical education curriculum?
8. What challenges you and your school has faced in the implementation of Quality physical education curriculum?

APPENDIX D
Addis Ababa University
School of Graduate Studies
College of Education and Behavioral Studies
Department of Science and Mathematics Education

Observation

Name of the school:_____.

Grade and Section: _____ Date of observation:_____

Observation Check list

I. Classroom Observation

Code of the Teacher:_____.

Number of students_____

Lesson topic:_____ Period_____ Time: from_____ to_____

A. For theory Class

No	Lesson presentation	Yes	No
1	Did the teacher prepare daily lesson plan?		
2	Did the lesson plan match with the actual presentation of the lesson in the classroom?		
3	Did the teacher write the lesson topic on the black board before starting presentation?		
4	Did the teacher specify the objective of the lesson clearly?		
5	Did the teacher revise the previous lesson before starting the new lesson?		
6	Did the teacher check the previous homework?		
7	Did the teacher give class work homework and assignment?		
8	Was there misunderstanding of some content element by the teacher?		
10	Did the teacher summarize the main points of the lesson?		
11	Did the teacher use teaching aids in the classroom?		
12	Did the student communicate (present) in classroom what they have done in group?		
13	Did the teacher properly use the black board?		
14	Did the teacher manage the classroom?		

B. For Practical class

No	Lesson presentation variables	Yes	No
1	Did the teacher prepare daily lesson plan?		
2	Did the lesson plan match with the actual presentation of the lesson on the field?		
3	Did the teacher demonstrate the activity properly?		
4	Are the sport facilities and equipment properly arranged for students learning?		
5	Did the teacher give equal attention to all students ?		
6	Did the teacher arrange the tasks to make it easier for student's to practice?		
7	Did the teacher guide the students during group activity?		
8	Did the teacher manage the classroom?		
9	Did the teacher give adequate time and practice opportunity for the students?		
11	Did the teacher encourage the students to wear sport clothes and shoes during exercise?		

II. Regarding Instructional materials in PE.

No	Observation items	Yes	No
1	Are there adequate Physical education facilities in the school?		
2	Are there adequate physical education equipment in the school?		
3	Are there adequate physical education text book in the school?		
4	Are there adequate physical education reference book in the school?		
3	Are there adequate physical education staff in the school?		

Yuunibarsitii Addis Ababaatti
Kolleejii Barnootaa fi Amala Namaa
Muummee Saayinsii fi Barnoota Herregaa

Gaafannoo barsiisota BGJQ fi barattootaan guutamuuf qophaa'e

Kaayyoo ijoon gaafannoo kanaa waa'ee gufuulee raawwii qulqullina Barnoota Guddinaa fi Jabeenya Qaamaa manneen barnootaa sadarkaa lammaffaa mootummaa Aanaa Qarsaa ilaalchisee odeeffannoo barbaachisaa ta'e funaanuudha. Deebiin isin kennitan milkaa'ina qorannichaatiif faayidaa murteessaa fi olaanaa qaba. Kanaafuu, deebii amansiisaa akka kennitan kabajaan gaafatamtaniittu. Deebiin keessan dhimma barnootaa qofaaf kan ta'ee fi iccitiin kan qabamuudha.

Deggersa keessaniif hedduu galatoomaa!

Qajeelfama

1. Maqaa keessan gaafannocha irratti hin barreessinaa.
2. Gaaffilee cufaa ta'aniif mallattoo “√” fayyadamaa.
3. Gaaffilee banaa ta'aniif deebii keessan gabaabsaa barreessaa.
4. Maaloo, haala mana barumsaa keessan keessa jiru irratti hundaa'uun deebii quubsaa kennaa.

Kutaa tokkoffaa: Odeeffannoo waliigalaa fi odeeffannoo dhuunfaa hirmaattotaa

Maaloo , saanduqa gadii keessatti mallattoo “√” kaa'uudhaan ykn bakka duwwaa qophaa'e irratti deebii gabaabaa kennuun deebisaa.

1. Mana barumsaa: _____
2. Koorniyaa: Dhiira ☐ Dhalaa ☐
3. Umrii: 15-19 ☐ 20- 24 ☐ 25 -29 ☐ 30-34 ☐ 40 ol ☐
4. Kutaa(barattoota qofaaf): 9 ☐ 10 ☐
5. Bara tajaajilaa(barsiisota qofaaf): 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21- 26 ☐
6. Sadarkaa barnootaa(barsiisota qofaaf): Dippiloomaa ☐ Digirii jalqabaa ☐ Digirii lammaffaa ☐

Kutaa lammaffaa: Hubannoo barsiisotaa fi barattootaa waa'ee gufuulee raawwii qulqullina Barnoota Guddinaa fi Jabeenya Qaamaa. Furtuu: 5=Cimseen itti waliigala(CW), 4= Ittin Waliigala(WG), 3= Hin murteeffamne (HM), 2= Itti Walii hin galu(WH), 1= Cimsee itti Walii hin galu(CWH)

Lakk.	Qabxiilee	CW	WG	HM	WH	CWH
		5	4	3	2	1
1	Barsiisonni gahee geggeessummaa rawwii qulqullina Barnoota Guddinaa fi Jabeenya Qaamaa keessatti bahuuf beekumsaa fi dandeettii gahaa hin qaban					
2	Qulqullina Barnoota Guddinaa fi Jabeenya Qaamaa hojiirra oolchuu keessatti barsiisonni kutannoo fi kaka'umsa dhabuu					
3	Bulchiinsa mana barumsaa irraa kunuunsa, qajeelchaa fi deggersa gaarii dhabuu					
4	Yeroo hedduu dhiibbaa jala jiraachuun namatti dhaga'amu.					
5	Barattoonni Barnoota Guddinaa fi Jabeenya Qaamaatiif xiyyeeffannoo gadaanaa kennuu					
6	Barattoonni beekumsaa fi dandeettii bu'uraa sagantaalee Barnoota Guddinaa fi Jabeenya Qaamaa keessatti hirmaachuuf isaan barbaachisu hin qaban.					
7	Reeshoon barattootaa ol ka'aa ta'uun qulqullina baruu fi barsiisuu Barnoota Guddinaa fi Jabeenya Qaamaa ni miidha.					
8	Raawwii qulqullina Barnoota Guddinaa fi Jabeenya Qaamaa deggeruuf manni barumsichaa hanqina maallaqaa (dinagdee) qabaachuu.					
9	Hanqina barsiisota Barnoota Guddinaa fi Jabeenya Qaamaa					
10	Haalli mana barumsichaa raawwii qulqullina Barnoota Guddinaa fi Jabeenya Qaamaa hin jajabeessu.					
11	Dura bu'oonni mana barumsaa Barnoota Guddinaa fi Jabeenya Qaamaa gadi xiqqeessanii ilaalu.					
12	Barnoota Guddinaa fi Jabeenya Qaamaatiif fedhii gadi aanaa qabda.					
13	Yaadrimee fi qabiyyeen Barnoota Guddinaa fi Jabeenya Qaamaa wal-xaxaa fi barattootaaf ifa miti.					
14	Yeroo gadi bu'aa ta'e sagantaa Barnoota Guddinaa fi Jabeenya Qaamaatiif kennuu					
15	Hanqina faasilitii					

16	Hanqina meeshaalee					
17	Barsiisonni yeroo hedduu mala barsiisuu boodatti hafaa ta'e fayyadamu.					
18	Barsiisonni shaakala barattootaatiif carraa dhiphaa kennuu					

19. Maaloo, gufuulee gurguddoo kanneen raawwii qulqullina Barnoota Guddinaa fi Jabeenya Qaamaa mana barumsaa keessan keessatti danqaa jiran tarreessaa. -

20. Maaloo, furmaatawwan gufuulee raawwii qulqullina Barnoota Guddinaa fi Jabeenya Qaamaa irra aanuuf ykn hambisuuf danda'an dhiheessaa.
