# The Participation and Challenges of Students with Disability in Participating the Practical Classes of Physical Education in Selected Secondary Schools North Wollo zone Amhara Regional State

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# Addis Ababa University

## School of Graduate Studies

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This is to certify that the thesis is prepared by Kassahun Berihun, entitled; The participation and challenges of students with disability in participating the practical classes of physical education in selected secondary schools and submitted to the partial fulfillment of master of education in teaching physical education complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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## Abstract

*The main objective of this study was to assess the participation and challenges of students with disability in participating the practical classes of physical education in selected secondary schools. The study mainly used primary sources of data. Descriptive survey research design were used. The study encompassed 5862 students, among them, 48 (34 male and 14 female) students are with disability. Moreover, 20 PE teachers, 8 directors and vice directors included in the study. Thus, the total population of the study was 5890. 48 (100 %) students with disability, 16 (80 %) physical education teachers, and 4 (50 %) school principals using simple random sampling and purposive sampling totally 68 samples were included. The study used questionnaire, interview, and field observation as a data gathering tool. Data inserted into SPSS version 22.0 software, recorded and statistical analyses (mean and standard deviation) were performed. The major findings indicate that challenges hindering the participation of students with disability were negative perception, lack of training for physical education teachers, shortage of materials, cultural influence and lack of stakeholders participation. Teachers should upgrade and update themselves and enhance the participation of students with disability.*



**Key words:** Disability, Perception, Inclusion, Participation, Practice

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## Acronyms and Abbreviations

| | |
|---|---|
| APE | Adapted Physical Education |
| DAPE | Developmental Adapted Physical Education |
| ICF | International Classification of Functioning |
| IE | Inclusive Education |
| MOE | Minster of Education |
| PD | Physical Disability |
| SWD | Students with a Disability |
| VD | Vision Disability |
| WHO | World Health Organization |

# Chapter One

# 1. Introduction

## 1.1 Background of the Study

Through physical education learning process human beings can foster the development of motor skills, can improve the health status, and it develops attitudes towards participating in a physical activities in a regular life style. In regular school setting, through physical education curriculum, teachers can facilitate the understanding of motor skills and human movement (Seid,. 2016).

In every school, PE have its vital contribution for students and the school society at large. Students show so much interest to participate in PE both in class and in practical activities. Thus, their interest should be respected. Not only for their interest but also they have a right to get all possible social, mental and physical benefits of PE and sport. Everyone has a right to develop his/her own physical, intellectual and moral wellbeing through physical education and sport and it must be respected within educational system and in every aspects of social life. Vander et al, (2004) also explained that students with disability can get a huge variety of benefits for their development; especially taking part with regular exercises, depression or anxiety can be markedly decreased that in turn increase positive mood and mental wellbeing.

Physical education should addressed to all students regardless of their ability level, conditions of disability, and other considerations. The way to apply PE to students with and without disability may require using variety of methodologies, strategies, adaptations, modifications and plans. However, the final goals and objectives of such adaptations will be on the same destinations. To deliver PE for students with and without disability.

In physical education there are various ways of meeting the needs of students with disability. Unique physical education needs of students with a disability can be addressed through adapted physical education program of developmental activities, exercises, games, rhythms, and sport designed (Joseph, 2000).

Physical education and sports play significant role to the whole society members at the same way with and without disability. It encompasses different social activities, leisure and recreational activities, organized and non-organized games, regular activities and regular exercises for wellbeing. However, in most situations students with disabilities have various challenges that hinder them from participating in sport and PE. In developing countries like Ethiopia, people with disabilities often face hindering factors and challenges to participate in sport and physical education class activities (Seid, 2016).

In schools there are a gap in understanding the situations, limitations and capabilities of students with disabilities. As a result of having disabled students are being abandoned abandoning by teachers and peers and they face segregations by both physical education teachers and peers in practical activities. However, physical a disability is restriction or a problem in body function or structure that limits a person from the ability to move, coordinate, or perform physical activities (Dohrmann,. 2011).

In Ethiopia, students with and without disability has equal rights inside the school and in full participation of different aspects of the society (Ministry of Education [MOE], 2006). However, in school physical education class, the written equality seems not practical. As the first instance, in secondary schools, physical education has only one period (contact hour) per a week and there are not any well planned individual program to students with disability. (MOE, 2006).

Physical education teachers should have the knowledge of how to adapt and modify a lesson, when to arrange typical programs considering the type and severity of disability. To deliver inclusion education and to meet the needs of students with disability PE teachers should have knowledge of physical impairments and linked restrictions, assistive technology to minimize their influence, teaching strategies and methodologies, and necessary accommodations and modifications (MOE, 2006).

Regarding students with a disability are deprived of regular interaction, participation and active lifestyle with the school rather than condemning stigmatized visions and offensive acts regarding their disability. To ensure participation of students with a disability in physical education classes and to maximize the opportunity to develop motor skills, physical and emotional wellbeing, it requires minimizing constraints, avoiding offensive acts and changing negative attitudes of the

school society. Regarding this idea, Simpson, K., and Mandich, A. (2012) stressed that all society members need to change their attitudes, behaviors, and stigmatized visions towards people with disability.

In Ethiopian schools, PE teachers may have negative attitudes and feelings towards students with disabilities and for inclusive education in physical education practical sessions. Nevertheless, teachers are the cornerstones of every steps of inclusive education that includes; planning and selecting the activities, adapting, modifying and arranging them, implementing and ensuring involvements of students with disabilities, assessing and evaluating success of the inclusion. Simpson, and Mandich, (2012) stated that teachers may have two reasons to ignore inclusive education in their classes; the first is "segregation" attitude, and the second is lack of knowledge or not knowing how and what to do to include students with disability in a regular classroom.

Establishing inclusive physical education may be difficult; especially in schools that located in rural areas of the country. there might be problems like instructional materials, lack of professionals, shortage of awareness towards a disability, lack of coordination between stakeholders and the like. as a result this study tried to assess these or any other challenges of students with disability in participating the practical classes of physical education. Teachers' professional development, innovation to teaching practices, searching new possibilities and fund raising strategies to fulfill materials and resources for inclusion education should be established (Lieberman, & Wilson, 2009).

Since the researcher is a member of the school staffs in the study area, the researcher observed multiple problems in delivering PE practical classes. Most common problems are verbal offences, segregation, misinterpretation of disability, and improper treatments to students with disabilities. Consequently, teachers and students with disabilities are abandoned from most competitive sports, and social activities in schools. This situation may have multi directional causes and sophisticated situations. The major possible reason may be the perception of teachers and students towards the participation of students with disability. This study include secondary schools located in North Wollo Zone; Lalibela, Chet, Kone and Woldia millennium secondary schools.

## 1.2 Statement of the Problem

For all groups of people, regardless age, and gender, for whom with or without a disability, participating in physical education and sport have vital role for the development of health and wellbeing. The Ethiopian government policy aims to ensure that all children with and without disability have the right to access equal opportunities in education. In the regular schools, like other subject matters, where Physical Education is timetabled and is supposed to be taught to both Children with and without disability, it is not clear whether the needs of children with disabilities in Physical Education and Sport activities, are being met (Mitku et al., 2015). However, in North Wollo Zone the practices and strategies

In the study area students with disabilities are ignored from the participation of physical education practical classes. Only students without disabilities are actively involving in PE practical activities. Those students' also seems ignored by their peers while the PE practical class is on. This is against the right of students with disabilities. Moreover, it has a significance impact on social, mental physical and psychological status of students with disabilities. The major cause for this limited or none participation of students from PE practical sessions may emerged from the perception of teachers and students even the perception of students with disability may be contributing.

Physical education teachers' perception towards the participation of students with disability may have main role for the participation of students with disability. For instance, participation may affect ways of delivering inclusion education. Also, it may have direct or indirect relation with teachers' preparation to include all students together, in physical education practical learning. Unless, physical education teachers' perception towards those students is positive, teachers may not be interested to adapt the regular education, to motivate them, to evaluate them. Therefore, at the beginning of assessment teachers perception should be assessed.

Perception of students without disabilities towards the participation of students with disabilities also may be the other factor. Their relationship, communication, friendship, interest to work in group assignments with students with disability, acceptance in class arrangement can be affect the participation of students with disability. Therefore, to ensure inclusion education, perception of students without disability should be assessing via various parameters.

The researcher also intended to assess perception of students with disabilities towards their own participation. Unless, those students have positive attitudes towards physical education practical activities and the benefits of physical education, it may be difficult to develop the participation of those students in regular PE practical activities.

Hence, this research was therefore, interested to assess the participation and challenges of students with disability in participating the practical Classes of physical education. Moreover, this study area was not selectively studied by other researchers in the study area. Thus, the researcher tried to assess the problem by raising basic research questions with reference to North Wollo Zone secondary schools; particularly Lalibela, Chet, Kone and Woldia Millennium. These schools selected because of the researcher have long time experiences in this area and part of the problem in the study area. In addition with that, these schools have 48 students with disability. It is important to assess the level of these students and to investigate the major challenges that inhibiting their participation to recommend the possible solutions.

## 1.3 Objectives of the Study

The general objective of this study was to assess the participation and challenges of students with disability in participating the practical classes of physical education in selected secondary schools.

Therefore, the specific objectives of the study are:

- ✓ To assess the participation of students with disability in physical education practical classes.
- ✓ The identify the major challenges of students with disability in participating physical education practical classes.
- ✓ To recommend the possible solutions to improve the participation of students with disability in physical education practical class.

## 1.4 Basic Research Questions

The researchers formulated the following basic research questions.

1. What is the level of the participation of students with disability in physical education practical classes?
2. What are the major challenges of students with disability in participating physical education practical classes?
3. What are the possible solutions to improve the participation of students with disability in physical education practical class?

## 1.5 Delimitation of the Study

This study delimited in four secondary schools of North Wollo zone, such as Lalibela, Chet, Kone and Woldia Millennium Secondary schools. The main reason that the researcher selected these schools and woredas were due to the researcher observed that problem in a higher level other than the remaining Woredas of North Wollo zone. And in this study the participation of students with disability on subject matters were excluded in this.

## 1.6 Significance of the Study

The greater participation of students with disability in practical classes of physical education is vital in all primary and secondary schools; because it can enhance these students' physical development, overcoming sophisticated life depressions and anxiety. Hence, the findings of the study may have the following significances for students with disability, physical education teachers, and the school community.

- It may help the school community to provide sufficient facility and create conducive school environment that strictly attracts and refresh students with disability in the teaching learning process as well as to create harmonious relationship among the school community.
- Since teaching students with disability with equal help those students somewhat challenging situation and effectively embedded implementation in schools, it may be a fruitful indication for physical education teachers, and the school community.
- Besides, it can provide some sort of information for federal and regional curriculum designers, preparation and implementation experts in particular and the regional government in general to

provide much enough attention for teachers and students without disabilities students' perception on disabled students' participation in PE practical classes.

- At the same time, it can be a supportive evidence for physical education teachers to get much enough training about how to effectively treat, guide and to enable disabled students active participant in physical education practical classes.
- Finally, this research would be an opening reference or help as aspiring board for other researchers who may strictly tolerate the bottle-necked harms of inquiry for discussion and serve as secondary information to carry out other in-depth studies for further investigation in the study area.

## 1.7 Limitations of the Study

The limitations of the study were finding internet access to review the literatures. Because, all study areas were rural areas and there would not have access internet. However, the researcher solved the situation by using smart phones and mobile data to review whenever it is mandatory. The other limitations were having open dialogue with the subjects; particularly with students with disability. The researchers fix this gap by explaining the purpose of the study, and by allowing them to participate only by their interest.

## 1.8 Definition of Terms

*Collaborative work* - work jointly on an activity and cooperate traitorously with others. Block, (2007)

*Disability* - refers to students with a physical and hearing problem who cannot use their part of the body completely or easily or that they cannot learn perform practical activities easily as compared to students. Block, (2007)

*Inclusive Education* – containing as part of a whole in an instruction, including all the expected students with and without disability in regular education. Block, (2007)

*Mobility* – the body part that able to move, be moved freely or easily. Block, (2007)

*Perception* - the belief or attitude of people towards every aspect of students' with disability inclusion and participation in PE classes. Block, (2007)

*Physical Education* - instruction in physical exercise and games in school. Block, (2007)

*Students with disability* - refers to students who are slow to do physical activities due to totally lost or partial impairments of certain parts of their body their legs and hands. Block, (2007)

# Chapter Two

# 2. Literature Review

In this Chapter theoretical, conceptual and empirical frameworks are reviewed. Therefore, concepts of disability, Physical education and its goals, positive aspects of physical education, perception of physical education teachers, benefits of physical activity and physical education for students with disability.

## 2.1. Overview of the Concepts of Disability

Understanding the concepts of disability is very important for developing perception of people towards impairment and disability. In our country Ethiopia the concept of disability may highly dependent on cultural values and norms of the society. Most people label disability only people with visible impairments. For instance, most individuals refer people with disability when they see loss or limitation in upper or lower extremities, or having problems in movement. According to Auxter, Pyter, and Hutting (2005). Explanations regarding disability, there is apperception by persons in the public that disability refers to person who are in wheelchair. However, in realty the number of person in wheel chair is small. Most disabilities are invisible from the public because they are neuromuscular, cardiovascular, cardiovascular, chronic respiratory and mental disorders .the term disability is any physical or mental condition that limits a person's movement, sense or activities. It is conventionally used to refer to attributes that are severe enough to interfere with, or prevent, normal day-to-day activities. They can affect people from birth, or be acquired later in life through injury or illness (Auxter, Pyter, and Hutting, 2005).

Disability may resulted from various causes and it begins with impairment which leads to disability that land to handicap. The main types of disability may be physical, cognitive, sensory, emotional, developmental, or some combination of these (Schechter and Feldman, 2010). This means that disability refers to problems or activity limitations that result from interactions between personal and contextual factors, and no longer determined by how a person looks or acts, but can be determined only by assessment of individual performance and context (WHO, 2004).

Physical disability is not specifically defined for physical impairments since the concept of disability is the concept of inclusive education. Inclusive education is a process of increasing the participation of all students in schools, including those with disabilities (WHO, 2004). This means, it is about disabled children learning effectively once they are in mainstream schools, that is, the focus is on quality of learning, not attendance (WHO, 2004).

## 2.2. Physical Education

Physical education is one of the subject matter that designed by MOE for all grade levels in different forms of programs. In schools, most students use 'sport' and 'physical education' interchangeably. It is one of the most loved subject matter in secondary schools. Regardless of their reason, students are very interesting to get out of the class in PE practical session.

Physical education is the development of motor skill and patterns through individual and group games, dance, cooperative activities, and lifelong recreational activities, and the individuals with disabilities education Act mandates access to physical education for students with disabilities (1DEA, 2004). It contributes to students' cognitive, affective and psychomotor development. Adapted physical education is defined as physical education modified to meet the unique needs of children with disabilities (Lieberman & Houston – Wilson, 2009). APE instruction can be delivered in a variety of placement, including those found in both public and special school settings. The entire multidisciplinary team makes decisions about the specific needs of students with disabilities, taking into consideration factors such as fitness level, motor skills development, ability to be in large groups, social needs, and safety (Columna, Davis, Liberman, & Lytle, 2010). There is no separate curriculum for children with disabilities since adaptive physical education teachers make adaptations based on individual characteristics, whether associated with a variety of co- occurring disabilities or with varying levels of vision (Lieberman, 2011). All children should learn the same units, with modifications when necessary, typically receiving an equal amount of instruction per weeks as their peers. Skilled peer tutors and Para educators can be a resource to assist with games, fitness, or other activities when needed (Rusotti & shaw, 2004). Without physical education, students with disabilities may not develop gross and fine motor skills, including loco motor skills, necessary for fitness, Wellness and independent living (Houwen, Hartman, & Visscher 2009).

## 2.3. Goals of Physical Education

In secondary schools of Ethiopia, unfortunately, Physical Education has only one contact hour (period) per a week for each sections. Even though, the researcher has a doubt on the frequency of Physical Education contact hours (period) in the school, the subject has clearly stated educational goals.

According to Siedentop (2011), what makes Physical Education different from other variants of teaching sports in physical education, are the ten main "features". One of the most unique and important features of Physical Education, is that seasons are used rather than traditional units. Another feature of Sport Education is that students are organized into mixed-ability teams that they stay with throughout the season. Within these teams, students can assume different roles throughout the season. These roles can be, but are not limited to, player, coach, scorekeeper, referee, journalist, sports caster, team captains, etc. Through these roles and responsibilities, modes of learning and application of knowledge can be seen in the psychomotor and cognitive domain as scores, records, statistics, and standings are kept (Siedentop, 2011).

The affective, psychomotor, and cognitive domains frame the goals of physical education. Affective domain goals are designed to strengthen self-concept and body image, to reduce social isolation, develop social behaviors, and to improve attitudes toward physical activity. Psychomotor domain goals include learning fundamental motor skills and patterns and their application to physical activity environments, developing physical fitness, and becoming acquainted with community resources for recreation.

Physical education has a goal to develop students' ability to use their knowledge, and it also have a significant role on improving their decision making quality. According to Siedentop (2011), Physical Education allow students to not only apply their knowledge of physical education though the use of their physical body, but also through discourse and other means of communication. This style of teaching allows students to apply their knowledge through other roles seen in sports such as referee, coach, sports caster, news writer, and others. Other valuable lessons can skills can be learned through the use of this method such as building teamwork, sportsmanship, leadership, and cooperation (Siedentop, 2011).

## 2.4. Positive Aspects of Physical Education

Physical Education has multidirectional features for all group of students regardless of students' disability conditions. It can be applied inside or outside of the school and that will help to foster physical, mental, social, emotional and spiritual conditions of an individual. Scientific evidence has shown that participation in regular physical activities provides people with all ages with significant physical, social and mental health benefits and well-being throughout their lifespan (Biddle, Fox, & Boutcher, 2000). Studies have shown that people who are physically active can live longer than those who are sedentary, besides those who participate in regular physical activity may have advantage in the ability to perform activities of daily living and enjoy aspects of life (Schenker, Coster, &Parush, 2005). The importance of participating in physical activity in reducing morbidity and mortality from chronic disease and conditions has been well documented (Yore, Ham, Ainsworth, Kruger, Reis, Kohal, &Macera 2007).

According to Auxteretal (2005) physical activity is predictor of subsequent disability in midlife and older populations, child hood and adolescence are ideal periods for cultivating regular physical activity to reap health benefits across the life span (Eriksson, Welandes, & Granlund, 2007). In addition to preventing chronic disease of lifestyle, greater levels of physical activity can lessen complications among people with chronic disease of life style (Hu, Willet, Stampfer, Colditz, & Manson, 2004).

Research shows that participation in physical activity can improve cardio vascular fitness, prevent or delay the development of high blood pressure and reduce symptoms of chronic depressions (Center for Diseases Control and Prevention, 2002). Moreover, participation in physical activity increase exercises capacity and plays a big role in both primary & secondary prevention of cardio vascular disorders (Schenker, et al, 2006).

## 2.5. Perception of General Physical Education Teachers

Teacher perception is the basic ground to act in a positive or negative way towards person ideas or events happening in the environment And most educator are convinced that teaches attitude are very important dimension in the teaching process. A successful innovation depends substantially on teacher's attitude towards proposed curriculum alterations.

According to Doulkeridou et al., (2011), a change of attitudes on the part of teachers is fundamental so that they can develop more favorable behaviors towards the inclusion of students with disabilities. According to the authors, attitude indicates the predisposition to adhere to or avoid some situations. Thus, positive attitudes on the part of teachers can strongly influence a positive approach to school inclusion, making the process more beneficial and enriching. Greguol and Rose Junior (2009) point out that some variables could interfere with the attitude of Physical Education teachers towards students with disabilities, such as academic preparation and previous experience in working with them. In addition, female and younger teachers would generally exhibit more positive attitudes towards the inclusion process (Hutzler, 2003; Greguol, Gobbi, & Carraro, 2013).

When analyzing the concepts of Physical Education teachers in relation to the inclusion of students with disabilities, Fiorini and Mazini (2015) found difficulties in adapting teaching strategies, and, in many cases, there was a greater predominance of individual activities with these students in relation to the collective ones. The greatest difficulties were the lack of support materials, assistants to help in classes and insufficient experience in working with students with disabilities.

The majority of contemporary research on perception towards inclusive programming for student with disabilities on the perception of general physical education teachers understanding how general physical education teachers regard inclusion may offer valuable in sight in to perceptions concerning inclusionary practices (Jerlinder, Danermark, & Gill, 2010).

Literature suggests that general physical education teachers largely possess negative perceptions toward inclusion of students with disability in regular physical education classes. These negative attitudes typically stern from reported inadequate training, paucity of knowledge, limited experience, and emphases is on competition (Klavina, Block,& Larins, 2007; Morley et 2005) Morley et al. (2005) reported mixed results from a qualitative study of 43 general physical education teachers' perceptions of inclusion over all teachers reportedly viewed inclusion as a progressive path toward a final goal. Many participants reported barriers impeding inclusion at any level, such as the need for additional lesson planning, time, limited knowledge and confidence about making appropriate adaptations. These findings are consistent with other results described in current professional literature. Klavina, Block, and Larins (2007) found that

94%. Of general physical education teachers surveyed reported insufficient training to work effectively with students with disabilities, and 84% indicated need for support personal assistance during class.

## 2.6. Benefits of Physical Education Participation for Students with Disability

Likewise their peers, students can get different benefits from participating in physical exercises and activities. For instance, physical improvement, mental improvements in confidence and wellbeing, and behavioral improvements in attention, relationship and academics.

Worldwide, more than 60% of an adult do not engage in sufficient level of physical activity (WHO, 2003). Physical inactivity is more prevalent among woman older adults' individuals from lower socio-economic group and the disabled (WHO, 2003). Individuals with disabilities participate less often in leisure and recreation opportunities and children with disabilities are more at risk of sedentary lifestyle as the presence of a disability can lead to deterioration of physical functioning with in turn results in a reduction in physical activity (Shermill, 1998). The sports Scotland study (2001) discovered that participation in sport physical activity is 24% lower for disabled adults than non- disabled adults.

Physical Education and exercise provide significant benefits for students with disabilities for their development. According to Physical Education School Specialty (2017), Physical Education has three benefits for students with disabilities. These are: Physical improvements, mental improvements, and behavioral improvements.

### A. Physical Improvements

Students with disability can improve their physical fitness level by participating in a regular exercise programs. These participations will help them to improve their physical qualities like strength, muscular endurance, agility, balance, cardiovascular endurance, and flexibility.It will help them to maximize their body parts mobility and coordination. Physical Education School Specialty (2017) has stated that participation in physical activity and sport leads to improved levels of well-being and physical health. Students who have a diagnosed intellectual disability may have additional physical disabilities which can result in below average level performance in typical motor skills.

### B. Mental Improvements in Confidence and Well-Being

According to Physical Education School Specialty (2017), participation in regular sports activities and physical education practical classes is beneficial for both child's physical state and their mind conditions. Physical activity improves general mood and wellness in sense of accomplishment and confidence. For students with special needs, developing a sense of self-esteem can be particularly important, as they may often feel isolated and removed from the group (Physical Education School Specialty., 2017).

### C. Behavioral Improvements in Attention, Relationships, and Academics

Physical Education by its nature has a tendency to facilitate interaction between participants. Also various competitive games and sports require attention to execute the skills of that particular game or sport. Which can develop attention of participants.

As Physical Education School Specialty (2017) stressed, the hands-on nature of physical education leads to cognitive improvements in children with special needs, allowing them to access skills that they couldn't challenge within a traditional classroom setting. The structure of sport – which comes with a set of rules and organization, can be a learning tool that helps children to practice self-regulation and enhance their decision making skills. On top of that, children with special needs can learn to focus on specific goals, and work on their verbal communication by interacting with peers through sport.

Physical education is about a lot more than simply learning how to engage in a particular sport, it teaches children a range of skills, from how to work as a team, to how to solve problems, increase attention span, and focus on task-based behavior. Eventually, those skills can transfer into other classroom settings too, so that students with special needs have a greater ability to learn and engage with their peers outside of physical education (Education School Specialty., 2017)

# Chapter Three

## 3. Methodology of the Research

This chapter presents research methodology of the research. Thus, it includes research design, research site and population of the study, sampling technique and sample size, data collection procedure, sources of data, instruments of data collection, reliability and validity test, methods of data analysis, and ethical consideration.

### 3.1 Research Design

To gather adequate information that meets the stated general and specific objectives of the research, the study design was descriptive survey. The main reason that the researcher preferred to apply this design was to deal with the present situation of the problem and this design will allow describing it as well. Ormrod (2005) stated that "descriptive survey grips acquiring information about one or more groups of people perhaps about their characteristics, opinion attitudes or previous experiences by asking those questions and tabulating their answers.

### 3.2 Research Site

The study area, North Wollo zone is located in Amhara regional state; and its seat is at Woldia town, which is located 358.3 km from Bahir Dar and 521 km from the capital of Ethiopia, Addis Ababa. It is bordered between at North and Northwest by Tigray region and at the south and south East by South Gondar, Gayint, and South west by Wag Humera Zone.

### 3.3 Population of the Study

The researcher identified the actual population in the study area. While determining a population, the researcher only included PE teachers. It is because of the objective and the scope of the study. Only in PE practical session, to investigate the participation and challenges of students with disability in participating the practical Classes of physical education

The study is conducted in Lalibela, Chet, Kone and Woldia millennium secondary schools of North Wollo zone. This woredas were selected as the result of the researchers experience based observation regarding the problem. The total number of students in Lalibela, Chet, Kone and Woldia millennium secondary schools of North Wollo zone is 1722, 1700, 1450, and 990 respectively and totally 2785 male and 3077 female, totally 5862 students. Among them, 34

Map of Ethiopia

male and 14 female totally 48 students are have disability. Moreover, there are 20 PE teachers, 8 directors and vice directors are available. Thus the total population of the study was 5890.

## 3.4 Sampling Technique and Sample Size

The researchers carefully tried to determine the sample size for this study. The researchers referred a variety of sampling size determination ways to get sufficient sample size. To avoid any mistakes in determining the sample size the researcher used the following formula:

$$S\ s=\frac{Z^2*(p)*(1-p)}{C^2}$$

Where: Z = Z value (e.g. 1.96 for 95 % confidence level)

p = percentage picking a choice expressed as decimal (0.5 used for sample size needed)

C = confidence interval (margin of error) expressed as decimal (e.g. 4 = ±4)

P = (population) = the researcher think or assume that he will cover 50% or 0.5 of the population)

Source: Chris Gratton and Ian Jones, (2004:104)

Accordingly by using this formula, with 95 % of confidence level, the researcher selected 68 (3.02 %) samples and the confidence interval was 2.48. It means that the researcher was 95 % certain that the true percentage of the population is between 0.54% and 5.5%. Samples were selected from Lalibela secondary school, Chet secondary school, Kone secondary school and Woldiya Millennium secondary school.

Therefore, the researcher used various sampling techniques to select them. The actual sample size of this study was; 34 male and 14 female totally 48 (100 %) students with disability, 12 male and 4 female totally 16 (80 %) physical education teachers using simple random sampling, and 4 (50 %) school principals using purposive sampling, were included in the study. The researcher believed that physical education teachers and directors (principals) of the school may help to gather more detailed information about the current problem than others subjects, as a result judgmental sampling was used.

## 3.5 Instruments of Data collection

To seek answer the basic questions of the study the researcher used a variety of data gathering tools. These tools were used to gather rich data from the subjects. Mainly, questionnaires were used to gather data from students with disability and physical education teachers. Besides, for detailed data students with disability and physical education teachers were also interviewed alongside directors of the schools. Data that are more relevant for observation were also considered and gathered through field observation. The tools were administered in the following manner.

### 3.5.1 Questionnaires

The questionnaire was closed ended in rating scale. The total of 33 questionnaires for 12 physical education teachers, and 31 questionnaires for 45 students with disability were prepared; and distributed and properly returned. The first part of questionnaires mainly concerned with demographic data and the second part dealt with handling all survey questions and therefore efforts have been made by the researcher so as to increase the response rates. The collected data were cleared for inconsistency and checked for its completeness.

### 3.5.2 Interview

An interview is one of the best data gathering tools to get more detailed and reliable data from the respondents. Therefore, in order to get rich information 10 semi-structured interview was conducted to the 4 physical education teachers, 4 school directors, and 3 students with disability.

### 3.5.3 Field Observation

The research prepare encompassed a physical education class's field observation checklist and observed in all selected schools. The observation was administered for four separate days (one for each school). The field trip data mainly focused the current physical education teachers' interactions, adaptation of the activity, students with and without disabilities participation and learning materials in the practical classes.

## 3.6 Sources of Data

To gather adequate data to seek answer the basic questions of the study. The researcher mainly used primary sources of data. In addition with that in the researcher also used secondary sources of data to gather supportive data about subjects.

### 3.6.1 Primary Sources of Data

This study mainly used primary sources of data. This primary source collected from physical education teachers, students with disability and school directors/ principals. Such data collected through using questionnaire, interview and observation.

### 3.6.2 Secondary Sources of Data

The secondary source of data were also collected from different secondary sources such as physical education annual plans, the school annual plans and lesson plans, minutes regarding students with disability, school records of students with disability and physical education tests.

## 3.7 Data Collection Procedure

Mainly the study used primary sources of data, but also it used secondary data regarding with annual plans of physical education subject and the school, tests and student profiles. Primary data were collected using questionnaires, semi-structured interviews, and direct observations. The secondary data entailed a review of relevant reports, and formal letters from research school amongst others. The data collection methods used to employ mostly general questions. The semi-structured interviews for targeted participants were accompanied with note taking while the interviews go on. These were facilitated data collection and analysis and the organization of the qualitative data depend on the part of what the data looks like (Berg, 2007:46).

The questions formulated in the semi-structured interview and employed in the study methodology reflected awareness that individuals understood the world in altering ways. Field observation is a method of gathering data through watching behavior, events or noting down physical characteristics in their natural settings. The researcher used it, in order to directly observe what PE teachers do in practical exercises and how much of disabled students participated or not rather than relying on what they say and do (Evaluation Brief, 2008). To ensure the authentic data collected from the respondents, data collection instruments were presented and revised accordingly.

## 3.8 Reliability and Validity Test

Validity and reliability are linked to the quality of the measurement in the study (Thomas et al., 2011). As Ringdal (2013) stated validity is concerned with whether the measurements include

what the research actually want to measure and whether they are accurate. Reliability is also linked to the quality of the study and if the stability of the measures yields constant result (Sapsford, 2007). Therefore, the researcher checked the questionnaires whether they are consistent. Since the result was reliable the data gathering tools were considered as valid. In addition with that to ensure content validity the questionnaires were submit to the English teachers in the school and then to the advisor for expert judgment. Thus, the sequence of the items and questions that combine two or more issues in a single question (double-barreled questions) were improved based on the comments of the advisor.

To measure the reliability and validity of the questionnaire as a tool the researcher conducted internal consistency reliability test using SPSS. Therefore, to quality of the questionnaire the researcher conducted a pilots testing for 5 physical education teachers, 50 students without disability and 6 students with disability totally for 61 subjects who were not selected in this study. These pilot tests were conducted in Hamusit secondary school. This was helping the researcher to avoid ambiguities, poorly worded questions and unclear items. Additionally, the pilot study will allow the researcher to assess the vague and inadequately presented questionnaires and to fix it, so that the items will be precise for respondents. Then, reliability of the tool was tested using Cronbach Alpha coefficient method of internal consistence. The coefficients' were;

**Table 1:Cronbach's Alpha**

| Pilot test | N of Items | post-test | N of Items |
|---|---|---|---|
| 0.73 | 61 | 0.74 | 61 |

Source: SPSS output file

According to Filled (2009), the figure of 0.70 or more usually treated as a rule of thumb to denote an accepted level of reliability. Therefore, as shown in the above table the pilot tests show that the questionnaires were reliable.

Accordingly, the pilot test provides an advance opportunity for the researcher to check the questionnaires validity and to minimize errors due to improper design of instruments, such as problem of wording or sequence (J. Adams, 2007).

As well as, the pilot test were helped to improve face validity of the instruments. Triangulations of data were also used to check the validity of interview, field observation and questionnaires.

## 3.9 Methods of Data Analysis

The researcher organized and analyzed the collected data to seek answer the basic questions of the study. Data that obtained through multi tools inserted into SPSS version 22.0 software, label, and recorded. Then, variables like perception, participation, interest, motivation, assessment, and disability computed and recorded. Then, several sets of statistical analyses were performed: mean point value, standard deviation, and Pearson product moment correlation coefficients were employee to identify the relationship between variables, and the effect of variables one another. Miller (1994) stated that the statistical significance of correlation is important, however, to better determine, the relationship of two variables, the coefficient of determination should be utilized. The coefficient of determination is the square of the correlation coefficient ($r^2$). It represents the common variance between two variables. Therefore, the data that gained from interviews, field observation and questionnaires were narrating and analyze thematically in line with the objectives both qualitatively and quantitatively. Data has been reported as mean ± Standard Deviation

## 3.10 Ethical Consideration

Throughout the research process ethical issues were well thought-out and considered. The documents and literatures reviewed were properly cited. All the participants were considered ethically. Beforehand, the respondents were thoroughly informed about the research, therefore, its purpose and why they are needed to participate in the research and therefore oral informed consent were achieved before involvement of all the respondents.

Before handing out the questionnaires and interview, the researcher told the participants that their participation is based on their interest; as a result, no-body can be forced to participate. The participants can quite at any point in the process if they want to do so; they can also ask any question for clarification. They were also told that the confidentiality for any information they provide will be maintained, and that they can refuse to give their names and personal identifications at any point in the process. They were also acquainted with that in case they give

their names the anonymity issue will be taken into account so that their identity shall not be uncovered.

In the case of the respondents interviewed, the researcher told to all interviewee that they can refuse to tape-recorder their sound to be recorded. It is recorded only after request if the respondents agreed. In case of document analysis the researcher first gets permission from the Schools principals to access records and profiles.

# Chapter Four

## 4. Presentation, Analysis and Interpretation of Data

This chapter contains presentation of data gathered from the qualitative and quantitative tool; they are descriptive in nature and are fully analyzed and interpreted in relation with the theoretical and conceptual frame work of the study as well as parallel with objectives and research question for the study. All tables of this chapter sources was from survey data.

### 4.1 Demographic Characteristics of Respondents

**Table 2: Demographic characteristics of respondents**

| No | Factors | Category | Frequency |
|---|---|---|---|
| **1** | Physical education teachers | Male | 12 |
| | | Female | 4 |
| | | Total | 16 |
| **2** | Directors /principals | Male | 4 |
| | | Female | - |
| | | Total | 4 |
| **3** | Students with Disability | Male | 34 |
| | | Female | 14 |
| | | Total | 48 |
| | | Total | 68 |

As indicated on the above table 1, in this study 12 male, 4 female totally 16 PE teachers were included. Moreover, since the study was conducted in the school compound directors were vital for multi used data and 4 male directors were participated. Also, 48 (34 male and 14 female) students' with disability were also participated in the study.

**Table 3: Work experience, age and educational background of respondents**

| No | Factors | Category | Frequency |
|---|---|---|---|
| **1** | Work Experience (teachers, Directors and Vice directors) | *< 5 years* | 4 |
| | | *5 - 10 years* | 7 |
| | | *More than 10 years* | 9 |
| | | Total | 20 |
| **2** | Age | < 20 | 48 |
| | | *21 - 30* | 9 |
| | | *31 - 40* | 7 |
| | | *41 - 50* | 4 |
| | | *> 50* | - |
| | | Total | 68 |
| **3** | Educational /qualification | *Grade 9 and 10 (student)* | 48 |
| | | *Diploma* | - |
| | | *BA/BSC* | 14 |
| | | *MA/MSC* | 6 |
| | | *PHD and above* | - |
| | | Total | 68 |

As indicated on the above table 2, regarding work experience of PE teachers and directors were 4 < 5 years of experience, 7 of them have 5 - 10 years of experience, 9 More than 10 years of experience. (Students were not listed in this item). Regarding their age, among the participants age were 48 participants < 20, 9 participants between 21 and 30, 7 participants 31 – 40 years, and 4 participants between 41 and 50years. In terms of educational background Grade 9$^{th}$ and 10$^{th}$ 158, BA/BSC 14, MA/MSC 6 participants included.

**Table 4: Categories of disabilities**

| No | Factors | Category | Frequency |
|---|---|---|---|
| **1** | Categories of disability, classification of the health components of functioning and disability (Based on the International Classification of Functioning /ICF/) | Upper limb(s) disability | 8 |
| | | Lower limb(s) disability | 15 |
| | | Manual dexterity | 2 |
| | | Disability in coordination | 4 |
| | | Spinal cord injury | 4 |
| | | Acquired brain Injury (ABI) | - |
| | | Traumatic brain injury (TBI) | - |
| | | Vision Disability | 6 |
| | | Hearing Disability | 7 |
| | | Cognitive or learning disabilities | - |
| | | Personality disorders | 2 |
| | | Schizophrenia | - |
| | | Invisible disabilities | - |

The above table 3 indicates that, among the participants the researcher recorded the categories of disability, classification of the health components of functioning and disability (Based on the International Classification of functioning /ICF/). Therefore, mobility and Physical impairment 13 (8 Upper limb(s) disability, 15 Lower limb(s) disability and 2 manual), spinal cord disability 4, Vision Disability 6, hearing disability 7 and Psychological disorders 2 (both grouped under Personality disorders).

## 4.2 Participation and Challenges of Students with Disabilities

Here, the data presents firstly, physical education teachers response and secondly, the response of students with disabilities towards the participation of students with disabilities in physical education practical classes.

### 4.2.1 Physical Education Teachers response

**Table 5: Application of inclusive Physical education in the practical class**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | In your school, students' with disabilities are participating in physical education practical class in regular physical education programs, with or without accommodations (adaptations). | Valid | Very Low | 9 | 75.0 | 1.25 | 0.452 |
| | | | Low | 3 | 25.0 | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100 | | |
| 2 | In your school, students' with disabilities are participating in physical education practical class in specially designed developmental adapted physical education (DAPE), a special educational instructional service. | Valid | Very Low | 12 | 100 | 1.00 | 0.00 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |

As shown on the above table 4, respondents were asked to evaluate the level of students' with disabilities participation in physical education practical class in regular physical education programs, with or without accommodations (adaptations). The mean value of their response is ($m = 1.25 \pm 0.452$), which is below the actual mean value ($m=3$). Hence, 9 (75 %) respondents replied 'very low' and 3 (25 %) replied 'low'. It implies that students' participation was limited in this case.

On the second item, the respondents mean value (m = 1± 0.0) all (100 %). All (100 %) PE teachers responded that students' with disabilities are not participated in physical education practical class in specially designed developmental adapted physical education (DAPE), a special educational instructional service.

**Table 6: The use of Inclusion in physical education class**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | As a Secondary school physical education teacher, you were positively disposed to inclusion as an educational philosophy. | Valid | Very Low | 4 | 33.3 | 2.08 | 0.996 |
| | | | Low | 4 | 33.3 | | |
| | | | Average | 3 | 25.0 | | |
| | | | High | 1 | 8.3 | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100 | | |
| 2 | In physical education everyday practical class, when necessary, you adapt (make changes) on the instructions, organization and implementation of activities at the level of the students. | Valid | Very Low | 2 | 16.7 | 2.83 | 1.193 |
| | | | Low | 2 | 16.7 | | |
| | | | Average | 5 | 41.7 | | |
| | | | High | 2 | 16.7 | | |
| | | | Very High | 1 | 8.3 | | |
| | | | Total | 12 | 100.0 | | |

As indicated on the above table 5, respondents were also asked to evaluate whether they positively disposed to inclusion as educational philosophy. Their response mean value is (m = 2.08 ± 0.996). Here, 4 (33.3 %) replied 'very low', and another 4 (33.3 %) replied 'low'; however, only 3 (25 %) replied 'average', and the rest 1 (8.3 %). Here no one replied 'very high'.

On the last issue PE teachers evaluation mean value is (m = 2.83± 1.193) show that only 5 (41.7 %) teachers averagely, 2 (16.7 %) highly and 1 (8.3 % %) very highly adapt (make changes) on the instructions, organization and implementation of activities at the level of the students. While, 2 (16.7 %) replied 'low' and another 2 (16.7 %) replied 'very low'. It indicates that 33.4 % of PE teachers were not adapting the instruction /activity/ to suit for their students.

**Table 7: Outcomes and challenges for participation of students with disabilities**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | The extent of your outcomes with respect to achieving successful inclusion and participation of students with disabilities in PE practical sessions. | Valid | Very Low | 4 | 33.3 | 1.83 | 0.718 |
| | | | Low | 6 | 50.0 | | |
| | | | Average | 2 | 16.7 | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |
| 2 | You encountered challenges while attempting to establish inclusive practice in their practical classes. | Valid | Very Low | 3 | 25.0 | 2.17 | 0.835 |
| | | | Low | 4 | 33.3 | | |
| | | | Average | 5 | 41.7 | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |

As indicated on table 6 above, PE teachers were requested to evaluate their achievement and success of inclusion for better participation of students with disabilities and their response mean value is (m = 1.83 ± 0.718). However, only 2 (16.7 %) were replied their outcome were 'averagely' successful. Whereas, 6 (50 %) replied 'low' and 4 (33.3 %) replied 'very low'. It implies that 83.3 % of the PE teachers achievement through inclusive were below average.

On the second item, their evaluation on how much they encountered challenges while attempting to establish inclusive practice in their practical classes mean value is (m = 2.17 ± 0.835). As the response indicates 5 (41.7 %) respondents replied averagely encountered challenges of inclusion delivery. While, most of the respondents 58.3 % replied their challenge encountering was below average; 4 (33.3 %) and 3 (25 %) replied 'low' and 'very low' respectively.

**Table 8: Type and severity of disability as inhibiting factor for participation**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | Type of the disabilities of students is an inhibiting factor to you to improve participation of students with disabilities using inclusive. | Valid | Very Low | - | - | 5.0 | 0.00 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | 12 | 100.0 | | |
| | | | Total | 12 | 100.0 | | |
| 2 | Severity of the disabilities of students is an inhibiting factor to PE teachers to deliver inclusion and to promote participation of students with disabilities. | Valid | Very Low | - | - | 5.00 | 0.00 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | 12 | 100 | | |
| | | | Total | 12 | 100.0 | | |

As shown on the above table7, PE teachers also asked to evaluate whether type and severity of the disabilities of students is an inhibiting factor to you to improve participation of students with disabilities in inclusive PE activities. On both issues their evaluation mean value is ($m = 5 \pm 0.0$). Here, all of respondents (100 %) agreed that type of disability is the inhibiting factor. Also, all (100 %) respondents agreed that Severity of the disabilities of students is also an inhibiting factor to PE teachers to deliver inclusion and to promote participation of students with disabilities.

**Table 9: Assessment criteria in the curriculum to students with disability**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | As a PE teacher, you perceived the assessment criteria in the curriculum is adequate and appropriate for assessing students with disability. | Valid | Very Low | - | - | 2.58 | 0.793 |
| | | | Low | 7 | 58.3 | | |
| | | | Average | 3 | 25.0 | | |
| | | | High | 2 | 16.7 | | |
| | | | Very high | | | | |
| | | | Total | 12 | 100.0 | | |
| 2 | You managed to assess students with disabilities in the same manner as students without a disability. | Valid | Very Low | 2 | 16.7 | 2.25 | 0.866 |
| | | | Low | 6 | 50.0 | | |
| | | | Average | 3 | 25.0 | | |
| | | | High | 1 | 8.3 | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |

As shown on the above table 8, respondents were evaluated the assessment of criteria in the curriculum, teachers assessment manner to students with a disability, ways of motivation and

teaching materials to deliver inclusion in PE practical session. Here, the mean value of their evaluation is (m = 2.85 ± 0.793). Their response ranged from 'high' to 'low'. Only 2 (16.7 %) replied 'high' and 3 (25 %) replied 'average'. While, more than half of the respondents 7 (58.3 %) replied 'low'. It implies that more than half of the respondents believed that the assessment criteria in the curriculum were not adequate for assessing students with a disability.

On the second issue, respondents evaluated how they managed assessment of students with a disability and others. The mean value of their response is (m = 2.25 ± 0.866). Most of PE teachers (66.7 %) admitted that they were not managed to assess students with disabilities in the same manner as students without a disability. Only 1 (8.3 %) replied 'high' and 3 (25 %) replied 'average'. While, 6 (50 %) replied 'low' and 2 (16.7 %) replied 'very low'. It implies that there is a gap in the way teachers managed the PE practical session assessment.

**Table 10: Motivation and evaluation for students with disabilities**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | You were motivating the student with disabilities in the same way as those without disabilities. | Valid | Very Low | 1 | 8.3 | 2.58 | 0.793 |
| | | | Low | 4 | 33.3 | | |
| | | | Average | 6 | 50.0 | | |
| | | | High | 1 | 8.3 | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |
| 2 | There are sufficient instructional materials for PE practical class to teach students with disabilities through inclusion. | Valid | Very Low | 11 | 91.7 | 1.08 | 0.289 |
| | | | Low | 1 | 8.3 | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |

The above table 9, also show that how PE teachers were motivating students with disability and their peers. Their response mean value is (m = 2.58 ± 0.793). More than half of the respondents (58.3 %) believed that they used various motivations equally for students with and without disabilities. 1 (8.3 %) replied 'high', and '6 (50 %) replied 'average'. Whereas, 4 (33.3 %) replied 'low' and 1 (8.3 %) replied 'very low'. It implies that 41.7 % of PE teachers should be improved their ways of motivation to the students.

Respondents also evaluated the instructional materials sufficiency for PE practical class to teach students with disabilities through inclusion. Their response mean (m = 1.08 ± 0.289). Nevertheless, all of the respondents replied that the instructional materials are not sufficient. 11 (91.7 %) replied 'very low' and 1 (8.3 %) replied 'low'.

**Table 11: The schools service and support to students with disability**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | Supports and services offered by the school are sufficient for PE teachers to teach/participate students with disabilities (physician, psychologist, speech therapist, assistants). | Valid | Very Low | 12 | 100.0 | 1.0 | 0.00 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |
| 2 | You get sufficient in-service training/workshop about inclusion and participation of students with disabilities in PE practical class. | Valid | Very Low | 8 | 66.7 | 1.33 | 0.492 |
| | | | Low | 4 | 33.3 | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |
| 3 | The extent of individual School- education programs to improve your participation in PE practical sessions. | Valid | Very Low | 12 | 100.0 | 1.00 | 0.00 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | - | -- | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |

As shown on the above table 10, respondents were evaluated Supports and services offered by the school are sufficient for PE teachers to teach/participate students with disabilities (such as, physician, psychologist, speech therapist, assistants). The mean value of their evaluation is (m = 1.0). Thus, all respondents (100 %) agreed that the schools support and service was 'very low'.

On the second issue, they were responding in regard to in-service training/workshop they took about participation of students with a disability and inclusive PE. The mean value of their response is (m = 1.33 ± 0.492). While, 8 (66.7 %) replied 'very low' and 4 (33.3 %) replied 'low'. It implies that in-service trainings/workshops are not delivering to physical education teachers to develop their knowledge in regard to inclusive physical education and participation of students with a disability.

The above table 10 also shows that the extent of individual school PE programs to improve participation of students with a disability is not worth enough. All (100 %) respondents replied 'very low'. The mean value of their response is (m = 1.0).

**Table 12: The belief and knowledge of PE teachers to participation of students with disability**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | Your beliefs towards the importance of inclusion (PE teachers teaching students with disabilities in PE practical sessions) | Valid | Very Low | - | - | 3.58 | 0.793 |
| | | | Low | - | - | | |
| | | | Average | 7 | 58.3 | | |
| | | | High | 3 | 25.0 | | |
| | | | Very high | 2 | 16.7 | | |
| | | | Total | 12 | 100.0 | | |
| 2 | Your interest to include students with disability and students without disabilities in your PE practical sessions. | Valid | Very Low | - | - | 4.17 | 0.577 |
| | | | Low | 1 | 8.3 | | |
| | | | Average | 8 | 66.7 | | |
| | | | High | 3 | 25.0 | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |
| 3 | Your knowledge about how to include, adapt and/or modified activities to students with disability in a regular physical education practical class. | Valid | Very Low | - | - | 2.67 | 0.651 |
| | | | Low | 5 | 41.7 | | |
| | | | Average | 6 | 50.0 | | |
| | | | High | 1 | 8.3 | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |

As shown on the above table 11, PE teachers' belief towards the importance of inclusion in PE practical teaching has the mean value of (3.58 ± 0.793). Which means their belief is more than the actual mean value (m = 3). While, 7 (58.3 %) replied 'average', 3 (25 %) replied 'high' and 2 (16.7 %) replied 'very high'. It implies that all of the respondents have positive belief towards the benefits of teaching students via inclusive PE practical class.

Respondents also evaluate their own interest to include students with disability and students without disabilities in your PE practical sessions. Their evaluation mean value is (m = 4.17 ±

0.577). Regarding this their evaluation is less heterogonous and much greater than the actual mean value (m = 3). Most of the respondents 8 (66.7 %) replied 'average' and 3 (25 %) replied 'high': but 1 (8.3 %) replied 'low'. It implies that 91.7 % of respondents are interested to include students with a disability and students without disability in PE practical learning.

The above table also shows that the respondents evaluation mean value to their knowledge of include, adapt and modified activities to suit their students is (m = 2.67 ± 0.651). Their response ranged from 'low' to 'high'. Only 1 (8.3 %) replied 'high' and 6 (50 %) replied 'average; while 5 (41.7 %) replied 'low'. It implies that no one has very high knowledge, half of PE teachers' knowledge is near average, and 41.7 % is below average.

**Table 13: Collaborative work between students with and without disability**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | Students without disability collaboratively work with students with disabilities in various group forms in PE practical sessions | Valid | Very Low | 3 | 25.0 | 2.75 | 1.357 |
| | | | Low | 2 | 16.7 | | |
| | | | Average | 3 | 25.0 | | |
| | | | High | 3 | 25.0 | | |
| | | | Very high | 1 | 8.3 | | |
| | | | Total | 12 | 100.0 | | |
| 2 | Behind important considerations, your do not (Never) categorized students as those with or without disabilities. | Valid | Very Low | 8 | 66.7 | 1.33 | 0.492 |
| | | | Low | 4 | 33.3 | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |

As the above table 12 indicates, the mean value of respondents evaluation towards collaborative work between students without disabilities and students with a disability is (m = 2.75 ± 1.357). Which evaluation is below the actual mean value (m = 3) and more heterogonous response. Only 1 (8.3 %) replied 'very high' and 3 (25 %) replied 'high'; (25 %) replied 'average'. While, 2 (16.7 %) replied 'low' and 3 (25 %) replied 'very low'. It implies that 41.7 % of the respondents

believed that students without disability are not working collaboratively with students with a disability.

On the other issue, PE teachers were requested to evaluate how they are categorizing their students. The mean value of their evaluation is (m = 1.33 ± 0.492). Here, all of the respondents admitted that they are categorizing their students' in terms of their disability. Statistically, 8 (66.7 %) and 4 (33.3 %) replied 'very low' and 'low' respectively to answer the statement never categorized students as those with or without disabilities.

**Table 14: In-service training for physical education teachers**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | You want to participate in-service trainings/workshops/seminars to increase my knowledge about the teaching methods and pedagogies about inclusive education. | Valid | Very Low | - | - | 5.0 | 0.00 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | 12 | 100.0 | | |
| | | | Total | 12 | 100.0 | | |
| 2 | Your frequency of contact with students with disabilities | Valid | Very Low | 1 | 8.3 | 2.83 | 1.193 |
| | | | Low | 5 | 41.7 | | |
| | | | Average | 2 | 16.7 | | |
| | | | High | 3 | 25.0 | | |
| | | | Very high | 1 | 8.3 | | |
| | | | Total | 12 | 100.0 | | |

As indicated on the above table 13, respondents were asked to evaluate their interest to participate in-service trainings/workshops/seminars to increase their knowledge about the teaching methods and pedagogies about inclusive education. Their evaluation mean value is (m = 5). All (100 %) of the respondents replied their interest is 'very high'.

The above table show that, of PE teachers contact frequency with students with disability, the response mean value is (m = 2.83 ± 1.193). Which is below the actual mean value and (m = 3) and more heterogonous. Only 1 (8.3 %) replied 'very high', 3 (25 %) replied 'high' and 2 (16.7 %) replied 'average'. While, 5 (41.7 %) replied 'low' and 1 (8.3 %) replied 'very low'. It implies that half of the respondents (50 %) have limited contact to students with a disability.

**Table 15: Programs and trainings to physical education teachers**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | You took part disability awareness programs | Valid | Very Low | 5 | 41.7 | 2.33 | 1.435 |
| | | | Low | 2 | 16.7 | | |
| | | | Average | 2 | 16.7 | | |
| | | | High | 2 | 16.7 | | |
| | | | Very high | 1 | 8.3 | | |
| | | | Total | 12 | 100.0 | | |
| 2 | You took part empathy training | Valid | Very Low | 10 | 83.3 | 1.17 | 0.389 |
| | | | Low | 2 | 16.7 | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |

On the other hand, as indicated on the above table 14, the respondents mean value to the extent of disability awareness program training is (m = 2.33 ± 1.435). Which is below the actual mean value (m = 3) and more heterogonous. 5 (41.7 %) replied ‘very low’, 2 (16.7 %) replied ‘low, 2 (16.7 %) replied ‘average’, 2 (16.7 %) replied ‘high’ and 1 (8.3 %) replied ‘very high’. It implies that more than half (58.3 %) of PE teachers do not took disability awareness program as the expected level.

The above table 14 also shows that all 10 (83.3 %) and 2 (16.7 %) replied ‘very low’ and ‘low’ respectively) of the respondents replied below average towards the item whether they took empathy training. Their response mean value is (m = 1.17 ± 0.389).

**Table 16: Professional preparation and competence of physical education teachers**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | To enhance participation of students with disabilities using inclusive education what is your self-evaluation regarding 'Your professional preparation' | Valid | Very Low | 1 | 8.3 | 2.75 | 0.754 |
| | | | Low | 2 | 16.7 | | |
| | | | Average | 8 | 66.7 | | |
| | | | High | 1 | 8.3 | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |
| 2 | To enhance participation of students with disabilities using inclusive education what is your self-evaluation regarding 'Your perceived competence' | Valid | Very Low | - | - | 2.67 | 0.651 |
| | | | Low | 5 | 41.7 | | |
| | | | Average | 6 | 50.0 | | |
| | | | High | 1 | 8.3 | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |
| 3 | To enhance participation of students with disabilities using inclusive education what is your self-evaluation regarding 'Your previous teaching experiences regarding inclusive education.' | Valid | Very Low | | | 3.00 | 0.603 |
| | | | Low | 2 | 16.7 | | |
| | | | Average | 8 | 66.7 | | |
| | | | High | 2 | 16.7 | | |
| | | | Very high | - | - | | |
| | | | Total | 12 | 100.0 | | |

Table 15 above indicates that respondents' self-evaluation towards their professional preparation to enhance participation of students with disability ranges from 'very low' to 'high'. The mean value of their evaluation is (m = 2.75 ± 0.754). Most of the respondents 8 (66.7 %) replied that their professional preparation was 'average'. While only 1 (8.3 %) replied 'high'. Whereas, 2 (16.7 %) replied 'low' and 1 (8.3 %) replied 'very low'. It implies that most of PE teachers (75 %) believed that their professional preparation for inclusive PE practical session is average and above.

As shown on the above table 15, respondents were asked to evaluate their perceived competence to enhance the participation of students with a disability in inclusive PE activities. Their evaluation mean value is (m = 2.67 ± 0.651). Only 1 (8.3 %) replied 'high', and 6 (50 %) replied as their perceived competence is average; while, 5 (41.7 %) replied 'low'. It implies that there are PE teachers (41.7 %) who have below average competence to work on the improvement of participation of students with a disability.

Regarding inclusive PE, the respondents evaluation mean value is (m = 3 ± 0.603). Their response ranges from 'low' to 'high'. Most of the respondents 8 (66.7 %) replied that their previous teaching experience regarding Inclusive PE was 'average' and 2 (16.7 %) replied 'high.

Whereas, 2 (16.7 %) replied ‘low’. It implies that most of PE teachers have above average experience and it may help them to enhance the participation of students with a disability in inclusive PE practical learning.

## 4.4 Response of students with disability towards their own participation

**Table 17: Participation of students with a disability in school physical education**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | In your school, students’ with disabilities are participating in physical education practical class in regular physical education programs, with or without accommodations (adaptations). | Valid | Very Low | 27 | 60 | 1.41 | 0.501 |
| | | | Low | 18 | 40 | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |
| 2 | In your school, students’ with disabilities are participating in physical education practical class in specially designed developmental adapted physical education (DAPE), a special educational instructional service. | Valid | Very Low | 32 | 71.1 | 1.21 | 0.412 |
| | | | Low | 13 | 28.9 | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |

As indicated on the above table 16, students with disability replied to whether they have an opportunity to participate in regular PE program. The mean value of their response is (m = 1. ± 0.501). Whereas, 27 (60 %) replied ‘very low’ and 18 (40 %) replied ‘low’. On the second issue, respondents replied (m = 1.21 ± 0.412). Among the respondents 32 (71.1 %) replied ‘very low’ and 13 (28.9 %) replied ‘low’, about students’ with disabilities participation in specially designed developmental adapted physical education, and special educational instructional service.

**Table 18: Physical education teacher's adaptation to students with disability**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| **1** | In PE everyday practical class, when necessary, you PE teacher adapt (make changes) on the instructions, organization and implementation of activities at the level of the students. | Valid | Very Low | 16 | 35.56 | 2.28 | 0.996 |
| | | | Low | 20 | 44.4 | | |
| | | | Average | 4 | 8.89 | | |
| | | | High | 5 | 11.11 | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |
| **2** | There are sufficient instructional materials for PE practical class to teach students with disabilities through inclusion. | Valid | Very Low | 45 | 100.0 | 1.00 | 0.00 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |
| **3** | Supports and services offered by the school are sufficient for PE teachers and students with disabilities (e.g. physician, psychologist, speech therapist, assistants). | | Very Low | 45 | 100.0 | 1.00 | 0.00 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |

The above table 17 shows that respondents were evaluated whether PE teachers adapt (make changes) on the instructions, organization and implementation of activities to suit for students in every day PE practical session. The mean value of their evaluation is (m = 2.28 ± 0.996). Here, 16 (35.56 %) replied 'very low', and 20 (44.4 %) replied 'low'. Whereas, 4 (8.89 %) replied 'average' and 5 (11.11 %) replied 'high'. It implies that 69 % respondents believed that PE teachers are not sufficiently adapting the instruction to students with a disability.

The above table also shows that, the mean value towards the evaluation of available materials to PE practical class is (m = 1.00). Hence, all respondents 45 (100 %) replied that the materials sufficiency is 'very low'. It implies that the school lacks to offer materials needed to teach students with a disability in a regular PE class. Although, regarding supports and services offered by the school for PE teachers and students with disabilities (e.g. physician, psychologist, speech therapist, assistants) was 100 % respondents evaluated 'very low'.

**Table 19: Belief and interest of students with disability to PE practical activities**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | Your beliefs towards the importance of inclusion (PE teachers teaching students with disabilities in PE practical sessions) | Valid | Very Low | - | - | 4.28 | 0.797 |
| | | | Low | - | - | | |
| | | | Average | 16 | 35.56 | | |
| | | | High | 15 | 33.33 | | |
| | | | Very high | 14 | 48.3 | | |
| | | | Total | 45 | 100.0 | | |
| 2 | Your interest to participate with students without disabilities in your PE practical sessions. | Valid | Very Low | 9 | 20 | 3.72 | 1.251 |
| | | | Low | 12 | 26.67 | | |
| | | | Average | 3 | 6.67 | | |
| | | | High | 13 | 28.89 | | |
| | | | Very high | 8 | 17.78 | | |
| | | | Total | 45 | 100.0 | | |
| 3 | Your perception towards your commitment to participate in inclusive PE activities. | Valid | Very Low | - | - | 4.28 | 0.797 |
| | | | Low | - | - | | |
| | | | Average | 16 | 35.56 | | |
| | | | High | 15 | 33.33 | | |
| | | | Very high | 14 | 31.11 | | |
| | | | Total | 45 | 100.0 | | |

As shown on the above table 18, the respondents mean value towards the issue of their beliefs towards the importance of inclusion PE practical sessions is (m = 4.28 ± 0.797). Among the respondents 16 (35.56 %) replied ‘average’ and 15 (33.33 %) replied ‘high’ and 14 (31.11 %) replied ‘very high’. It implies that all of the students with disability believed that inclusion PE practical session is important.

On the other issue, students with disability were asked to evaluate their interest with students without disabilities in your PE practical sessions. The mean value of their evaluation is (m = 3.72 ± 1.25). Here, even though, their response is heterogonous (SD = 1.251) it is above the actual mean value (m = 3). Among the respondents, only 9 (20 %) replied ‘very low’ and 12 (26.67 %) replied ‘low’. While, most of the respondents 13 (28.89 %), and 8 (17.78 %) replied ‘high’ and ‘very high’ respectively. Whereas, 3 (6.67 %) replied ‘average’. It implies that most of the students with disability have an interest to participate with peers in inclusive PE practical session.

Students with disability were also asked to evaluate their perception towards their commitment to participate in inclusive PE activities. The mean value of their response is (m = 4.28 ± 0.797). Here, 16 (35.56 %) replied ‘average’, 15 (33.33 %) replied ‘high’ and 14 (31.11 %) replied

'very high'. It implies that they believed that if PE teachers adapt the implementation and management of the instruction they are more committed to participate in inclusive PE activities.

**Table 20: Social acceptance of students with disability**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | Students with a disability are socially accepted by the peers (students without disabilities). | Valid | Very Low | 9 | 20 | 2.41 | 0.825 |
| | | | Low | 24 | 53.33 | | |
| | | | Average | 9 | 20 | | |
| | | | High | 3 | 6.67 | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |
| 2 | You tried to ensure to have participation/role in physical education practical sessions. | Valid | Very Low | 31 | 68.88 | 1.38 | 0.677 |
| | | | Low | 11 | 24.44 | | |
| | | | Average | 3 | 6.67 | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |

The above table 19 shows that, on respondents evaluation, social acceptance of students with disability by the peers is different for one another (m = 2.41 ± 0.825). As their response reviled 9 (20 %) believed their acceptance is very low, and 24 (53.33 %) replied 'low'. Thus, most of students with a disability believed that their social acceptance is under average. Whereas, 9 (20 %) replied 'average' and 3 (6.67 %) believed they have high social acceptance by the peers.

On the second item of the above table, respondents were evaluated how hard they tried to ensure their participation and to have some role in inclusive PE practical classes (m = 1.38 ± 0.677). Most of the respondents 31 (68.88 %) replied 'very low' and 11 (24.44 %) replied 'low'. While, 3 (6.67 %) replied they tried at average effort to ensure their participation. It implies that most of students with disability did not try their effort to participate in inclusive PE activities.

**Table 21: Feelings of Students with disability for physical education practical sessions**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | You face various challenges while attempting to participate in inclusive practice in PE practical classes. | Valid | Very Low | - | - | 4.10 | 0.86 |
| | | | Low | - | - | | |
| | | | Average | 9 | 31.0 | | |
| | | | High | 14 | 27.6 | | |
| | | | Very high | 22 | 41.4 | | |
| | | | Total | 45 | 100.0 | | |
| 2 | You have sense of belonging in PE practical classes. | Valid | Very Low | 29 | 64.44 | 1.45 | 0.68 |
| | | | Low | 13 | 28.89 | | 6 |
| | | | Average | 3 | 6.67 | | |
| | | | Total | 45 | 100.0 | | |
| 3 | You have feeling of being socially included in the fellowship of the PE classes. | Valid | Very Low | 31 | 68.89 | 1.38 | 0.67 |
| | | | Low | 11 | 24.44 | | 7 |
| | | | Average | 3 | 6.67 | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |

As indicated on table 20 above, students with disability evaluated their experience regarding with their participation. On the first item they evaluated the challenge they face while attempting to participate in inclusive PE activities (m = 4.10 ± 0.86). Most of the respondents experienced various challenges; 9 (31 %) average, 14 (27.6 %) high and 22 (41.4 %) very high.

The above table also shows that, most of the respondents did not feel sense of belonging in PE practical classes; 29 (64.44 %) replied ‘very low’ and 13 (28.89 %) replied ‘low’. While, 3 (6.67 %) replied they have average sense of belonging in PE practical classes (m = 1.45 ± 0.696). Moreover, their response reviled that the mean value of their feeling of being socially included in the fellowship of the PE classes is (m = 1.38 ± 0.677). Most of the respondents 31 (68.89 %) replied ‘very low’, and 11 (24.44 %) replied ‘low’: whereas, 3 (6.67 %) replied average on this issue.

**Table 22: Challenges of Students with disability in physical education practical sessions**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 4 | You experience distinguishing by social exclusion in PE practical classes. | Valid | Very Low | - | - | 3.93 | 1.03 |
| | | | Low | 3 | 10.3 | | |
| | | | Average | 7 | 24.1 | | |
| | | | High | 14 | 27.6 | | |
| | | | Very high | 21 | 37.9 | | |
| | | | Total | 45 | 100.0 | | |
| 5 | You have a sense of adaptation to the activities of PE practical classes. | Valid | Very Low | 30 | 69.0 | 1.31 | 0.471 |
| | | | Low | 15 | 31.0 | | |
| | | | Total | 45 | 100.0 | | |
| 6 | Your PE teacher told you your competences are insufficient to allow them be a part of practical activities. | Valid | Very Low | - | - | 4.31 | 0.806 |
| | | | Low | - | - | | |
| | | | Average | 6 | 20.7 | | |
| | | | High | 14 | 27.6 | | |
| | | | Very high | 25 | 51.7 | | |
| | | | Total | 45 | 100.0 | | |

The above table 21 indicated that the mean value of students with disability experience of distinguishing by social exclusion in PE practical classes is (3.93 ± 1.03). Only 3 (10.3 %) replied 'low', while, 7 (24.1 %) replied average, 14 (27.6 %) replied high and 21 (37.9 %) replied very high. Moreover, their evaluation mean value at sense of adaptation is (m = 1.31 ± 0.471), 30 (69 %) very low and 15 (31 %) replied low. It implies that most of the respondents missed sense of adaptation in PE practical sessions.

Students with disability were also asked to evaluate their experience whether the PE teacher told them their competences could insufficient to allow them be a part of a practical activities (m = 4.31 ± 0.806). On this regard, 6 (20.7 %) replied average, 14 (27.6 %) replied high and 25 (51.7 %) replied very high experience of disallowed by a teacher. It implies that even PE teachers hinder students with disability from participating in PE.

**Table 23: Ways of Motivation, assessment and categorization of students in PE session**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | Behind important considerations, your PE teachers do not (Never) categorized students as those with or without disabilities. | Valid | Very Low | 26 | 57.78 | 1.48 | 0.574 |
| | | | Low | 18 | 40 | | |
| | | | Average | 1 | 2.2 | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |
| 2 | Your PE teachers were motivating the student with disabilities in the same way as those without disabilities. | Valid | Very Low | 24 | 53.33 | 1.62 | 0.677 |
| | | | Low | 18 | 40 | | |
| | | | Average | 3 | 6.67 | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |

As indicated in the above table 22, students with disability evaluation on PE teachers ways of categorizing students is (m = 1.48 ± 0.574). 26 (55.2 %) very low, 18 (41.4 %) low, and only 1 (3.4 %) replied average. It implies that PE teachers categorized students as those with or without disabilities rather than important considerations. Also, regarding ways of motivation of PE teachers in practical sessions, they respondents rating mean value is (1.62 ± 0.677). Here, 24 (48.3 %) replied very low and 18 (41.4 %) replied low, and only 3 (10.3 %) replied average. It implies that ways of PE teachers' motivation to student with disabilities were not in the same way as those without disabilities.

**Table 24: Perception of students with a disability to factors of their participation in PE**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | Type of the disabilities of students is an inhibiting factor to you to improve your participation in PE practical class. | Valid | Very Low | - | - | 4.28 | 0.751 |
| | | | Low | - | - | | |
| | | | Average | 5 | 11.1 | | |
| | | | High | 17 | 37.78 | | |
| | | | Very high | 23 | 51.1 | | |
| | | | Total | 45 | 100.0 | | |
| 2 | Severity of the disabilities of students is an inhibiting factor to you to improve your participation in PE practical class. | Valid | Very Low | - | - | 4.66 | 0.484 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | 16 | 35.56 | | |
| | | | Very high | 29 | 64.44 | | |
| | | | Total | 45 | 100.0 | | |

As shown on table 23 above, on the first item, respondents evaluated that type of disability (m = 4.28 ±0.751is an inhibiting factor for participation in PE practical class. While, 5 (17.2 %) replied average, 17 (37.9 %) high, and 23 (44.8 %) very high. It implies that 82.8 % of respondents believed that type of disability is the inhibiting factor for participation of students with disability.

On the second item, the table also show that, students evaluate severity of disability is an inhibiting factor from improving the participation in PE activities (4.66 ± 0.484). Accordingly, 16 (34.5 %), and 29 (65.5 %) respondents replied high and very high respectively.

**Table 25: Perception of students with a disability to factors of their participation in PE**

| No. | Items to be evaluated | Ratings | | Frequency | Percent | Mean | St. Deviation |
|---|---|---|---|---|---|---|---|
| 1 | The extent of individual home - education programs delivered to improve your participation in PE practical sessions. | Valid | Very Low | 45 | 100.0 | 1.00 | 0.00 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |
| 2 | The extent of individual school - education programs delivered to improve your participation in PE practical sessions. | Valid | Very Low | 45 | 100.0 | 1.00 | 0.00 |
| | | | Low | - | - | | |
| | | | Average | - | - | | |
| | | | High | - | - | | |
| | | | Very high | - | - | | |
| | | | Total | 45 | 100.0 | | |

The above table 24 shows that, on the first and the second items, all respondents (100 % & m = 1) believed the extent of individual home and school education programs delivered to improve the participation of students with disability is very low. It implies that there is a gap regarding delivering especial school and home physical education practical activities in the study area.

### 4.7 Data Analysis from Observation

This tool used to gather data in relation to participation and challenges of students with disabilities and to observe how physical education teachers manage the practical class. As well as, it used to strengthen and triangulate data gathered through questionnaires and interview. Therefore, observations have been undertaken for selected four days, one day observation for each selected secondary schools. From each observation 42 minutes of periods were efficiently used to collect the data. Moreover, physical education teachers and school principals teachers highly participated in arrangements of the observation. Data were collected supporting by checklist; and presented as follows:

**Table 26: Observation Checklist**

| No | Activities to be observed | Observed Schools | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Kone | | Chet | | Woldia Millennium | | Lalibela | |
| | | Yes | No | Yes | No | Yes | No | Yes | No |
| **1** | The PE teacher asked/encouraged students' with disabilities to involve in regular physical education programs. | | √ | | √ | √ | | | √ |
| **2** | The PE teachers include developmental adapted physical education (DAPE), a special educational instructional service in his daily and annual plan. | | √ | | √ | √ | | | √ |
| **3** | Students with disabilities attempted to involve in to PE practical activities | | √ | | √ | √ | | | √ |
| **4** | Students with and without disabilities work collaboratively in various forms in PE practical sessions. | | √ | | √ | | √ | | √ |
| **5** | The PE teachers present adapted instructions, and/or organization and implementation of activities to suit for students. | | √ | | √ | √ | | | √ |
| **6** | The PE teacher motivated the student with disabilities in the same way as those without disabilities. | | √ | | √ | | √ | | √ |
| **7** | There are sufficient instructional materials that can advance the participation of students with disabilities. | | √ | | √ | | √ | | √ |
| **8** | Students with a disability are communicating with peers (students without disabilities). | √ | | | √ | √ | | | √ |
| **9** | The PE teacher managed assessments of students with disabilities in the same manner as students without a disability. | | √ | | √ | | √ | | √ |
| **10** | The school director, vice director or any other principal tried to support the PE teacher for inclusive education | | √ | | √ | | √ | | √ |

As indicated on the above 25 observation checklist, the observation reviled that most of the schools have similar experiences in relation to inclusive PE practical sessions and participation of students with disability. The observation shows the following findings:

In Kone, Chet, and Lalibela Secondary schools PE teacher were not asked/encouraged students' with disabilities to involve in regular physical education programs. But, in Woldiya Secondary school the teacher did it. Similarly, except Woldiya Secondary school PE teacher did not include developmental adapted physical education, a special educational instructional service in his daily and annual plan.

Except in Woldia, in other secondary schools (Kone, Chet, and Lalibela), students with disabilities did not attempted to involve in to PE practical activities. Moreover, in all secondary schools students with and without disabilities did not work collaboratively in various forms in PE practical sessions.

The observation shows that if students let to work together, students with and without disabilities will have the chance to work collaboratively in various forms (e.g. Woldiya Millennium secondary school). Only in Wodiya Millennium secondary school the rest schools the PE teachers neither presented adapted instructions, and/or organization and implementation of activities to suit for students nor motivated the student with disabilities in the same way as those without disabilities.

All schools of the study area lack instructional materials that could be vital for inclusive PE practical learning. As well as, the observation also reviled that in all schools, students with a disability were easily communicating with peers and teachers.

The data that gathered from four observation days also reviled that no practical assessment was undertaken by all of PE teachers. In addition with that the data also shows that no responsible body (mentor, director, vice director, PE department head, supervisor) was supervising what PE teachers are going to do regarding inclusion and PE practical learning.

### 4.8 Data Analysis from Interview

Semi structured interview were administered to 4 physical education teachers, 3 and 3 students with disability, and 4 directors; and they were asked to respond about their perception to participation of students with disability in inclusive PE practical sessions. Thus, they raised the following main ideas:

As respondents explained students with disability have limited participation in physical education practical classes. Cultural influences are one of the factors for students with disability in physical activity practical classes. They explained that, culturally, the society have visibly abandoned and underestimate people with a disability, and it is visible in the school society. The data through this tool reviled that most people discouraged students with disability from trying practical activities. As the data from interview shows, even students with disability have an interest to participate in any of PE practical learning others forbid them from trying it.

As the data show, another challenge was perception towards the participation of students with disability. Regarding these teachers, students, parents, Education Office experts (Stakeholders) are not playing their role in relation to maximizing awareness about disability and participation of participation of students with disability. They let PE teachers to do everything regarding inclusive education.

An interview with directors and physical education teachers reviled that the schools do not allocate budget to enhance the participation of students with disability in multidirectional ways. Safety considerations and practical learning requires materials but without budget it is difficult to apply not only inclusion but also the regular education.

The data from interview also shows that most schools are not convenient (e.g. Kone, Chet, and Lalibela secondary schools) for students with disabilities even to move place to place. The school compound has not standard trail networks for walkways, and wheelchairs.

The data show that in all secondary schools society there are a gap of understanding the limitations and capabilities of students with disability. The interview explained that most people refer the impairment and/or the limitation rather that the student; and the major perception gap is underestimation, misconception, ignorance and improper treatment towards students with disability.

In most of physical education practical classes, students' with a disability stayed in class rather than getting out to the field with the peers. If they get out to the field they sit alongside the field and watch others rather than taking part.

Data that collected from physical education teachers' interview have reviled that, PE teachers have methodological and pedagogical limitations to implement inclusive PE practical classes. They did not get in-service training, seminars, and workshops. As a result, as they explained, their knowledge is gained from college/university courses only. Their interview also reviled that

the PE curriculum (both grade 9th and 10th) did not properly designed for inclusive education, assessment of students with disabilities. As they explained, physical education teachers assess (evaluate) students with disabilities only theoretical aspects of physical education (only written exam) and it used as a result out of 100 %. It means students with disabilities are not evaluated in practice.

### 4.9 Discussion

For all group of ages, especially for midlife and older populations, physical activity is the critical means to maintain health and to cultivate active life style (Eriksson, Welandes, & Granlund, 2007). Past studies (Flintoff & Fitzgerald, 2012, Hodge et al., 2009) advocates that inclusion education in PE practical classes can minimize resources; especially, it is useful to use well trained teachers in adaptation curriculum, and pedagogy of inclusion programs.

Establishing in inclusive education in PE practical classes, teachers perception towards the participation of students with a disability is very important thing. In school regular education settings PE teachers are expected to adapt the lesson to ensure the participation of students with and without disabilities simultaneously. (Chireshe 2013; Mandina, 2012).

This study showed that the PE teachers perception towards participation of students with disability were not good. Parallel with this finding, several studies (Hodge et al., 2004; Lieberman, Lienert et al., 2001; Smith & Green, 2004) show that negative feelings towards inclusion of students with disabilities often derive from PE teachers' perception and inadequate training, limited experience and lack of knowledge about how to deliver inclusion education in PE practical activities. Findings of Forian (2012) also indicates inclusion education need to have trust on their decisions. Accordingly, perception of PE teachers and students to the participation of students with disability may enhance the collaboration work between students through inclusion education.

Consistent with this study, some past researches indicates that PE teachers have negative attitudes toward students with severe disabilities (Block, 2007; Hodge et al., 2009). For instance Lieberman et al. (2002) found that PE teachers believed they faced many barriers when delivering inclusion PE in the presence of students with visual impairments.

This study showed that PE teachers in Lalibella, Chet, Kone and Woldiya Millennium secondary schools did not have Planning and delivery of lessons in inclusive PE practical class to include students with any disability in a regular PE practical session. However, past studies, demonstrate that inclusion address the interests of students with and without disabilities (Forlin & Sin, 2010; Hsieh & Hsieh, 2012). Thus, the finding of this study was very significant and needs critical attention to improve the situation.

This study shows that most participants believed that close relationships between PE teachers and students with and without disabilities can improve the possibility of inclusion PE practical sessions. Consistent evidence shows that inclusion education promotes diversity of the class and encourages participation of all students with and without disabilities in PE practical sessions (Keddie, 2012; Simpson & Mandich, 2012). Close interaction and relationships between students with and without disabilities develop friendship, familiarity and partnership. This in turn facilitated inclusion in PE and allowed to have diverse grouping strategies to enhance participation of students with a disability rather than categorizing students based on their ability (Florian & Spratt, 2013; Pantic & Florian, 2015).

In addition with courses in the colleges/universities, in-service training of PE teachers in psychological, philosophical, and sociocultural issues of disability could foster their ability to plan and deliver inclusive PE practical class. Similarly, past studies, show that adequately trained PE teachers considered to the need of students with and without disability (Block, 2007; Hodge et al., 2009).

PE teachers are expected to deliver a variety of mechanisms and strategies to enhance the participation of students with disabilities in PE practical sessions. The PE curriculum is one pillar to foster the participation of those students. But, this study shows that, PE teachers believed the curriculum did not well designed to deliver inclusion education and to assess students with disabilities in a regular class setting. However, past evidences indicate, PE teachers should plan and demonstrate all activities to deliver inclusion in PE practical sessions based on the standards of the curriculum (Flintoff & Fitzgerald, 2012; Garrett & Wrench, 2006; Vickerman & Coates, 2009).

# Chapter Five

## 5. Summary, Conclusions and Recommendations

This chapter presents the summary of the major findings and conclusion of the whole study; finally, based on the major findings and conclusion drawn the recommendations are presented.

### 5.1 Summary

The objective of this study was to assess the participation and challenges of students with disability in participating the practical classes of physical education in selected secondary schools of North Wollo Zone. For this purpose, the researcher reviewed literatures in order to decide the focus of the study and methodologies and to strengthen the study through conceptual, empirical and theoretical framework. The study mainly used primary sources of data and it used secondary sources in a limited condition.

To describe the current state of the problem the study used descriptive survey research design and used both qualitative and qualitative analysis. In the study area there are 5862 students (2785 male and 3077 female), among them, 48 (34 male and 14 female) students are with disability. Moreover, 20 PE teachers, 8 directors and vice directors included in the study. By using online sample size calculator link with 95 % of confidence level, the researcher selected 68 samples.

The actual sample size of this study was; 34 male and 14 female totally 48 (100 %) students with disability, 12 male and 4 female totally 16 (80 %) physical education teachers using simple random, and 4 (50 %) directors of the schools selected using purposive sampling. The study used questionnaire, interview, and field observation as a data gathering tool. Data that obtained through multi tools inserted into SPSS version 22.0 software, label, and recorded. Then, several sets of statistical analyses were performed: such as mean point value, standard deviation.

Then, data that were collected through interview and observation were analyzed qualitatively, and data obtained through questionnaires were analyzed quantitatively. The findings obtained from the multi method tools were:

- In most of the schools, students' with disabilities are not properly participating in physical education practical class in regular physical education programs.

- In most of the schools, students' with disabilities are not participating in physical education practical class in specially designed developmental adapted physical education.
- In PE everyday practical classes, 66 % of students believed the instructions, organization and implementation of activities are adapted to the level of the students.
- All respondents believed that the inclusion and participation of students with disabilities in PE practical sessions are not successful.
- All respondents replied that type and severity of disability was the major hindering factor for students with disability.
- Most teachers perceived the assessment criteria in the curriculum is not adequate and appropriate for assessing students with disability.
- Most teachers did not managed to assess students with disabilities in the same manner as students without a disability.
- Most teachers did not motivate the student with disabilities in the same way as those without disabilities.
- In all schools there are no sufficient instructional materials for PE practical classes.
- Students with a disability did not get individual home and school programs.
- All respondents believed that students with disability can benefit from participating in inclusive PE practical sessions.
- Physical education teachers want to take part in-service training regarding disability programs but more that 95 % did not participate in any training.
- Cultural influences are one of the inhibiting factors for students with disability in physical education activity.
- Most school societies discouraged students with disability from participating in physical education practical sessions.
- Stakeholders are not playing their role in relation to maximizing awareness about disability, and participation of students with disability.

## 5.2 Conclusion

Based on the major findings the following conclusions are forwarded:

In all selected schools, the participation of students with disability were very limited.

The main cause of their limited participation can be teachers' limitation of adapting instructions, and implementing the activities. In addition with this inclusion and participation of students with disabilities in PE practical sessions are not successful in the study area. The data reviled that type and severity of disability was the major hindering factor for students with disability. Collected data revealed that teachers perceived the assessment criteria in the curriculum is adequate and appropriate for assessing students with disability, and teachers did not managed to assess students with disabilities in the same manner as students without a disability. These all variables are directly related with the perception of physical education teachers and students to the participation of students with disability in inclusive physical education activity.

The major challenges that are hindering the participation of students with disability were negative perception, teachers poor student management, lack of training for physical education teachers, shortage of materials, cultural influence and lack of stakeholders participation to maximize the participation of students with disability. Physical education teachers have negative perception towards the participation of those students in physical education practical classes. Moreover, students with disability also have negative perception towards their own participation in physical education practical class.

The data gathered trough multi tools indicated that teachers and students' perception have a great impact on participation of students' with disability in inclusive physical education practical classes. As the data revealed the perception of physical education teachers and students to participation of students with disability have a vital role for better performance. When physical education teachers have better perception he/she will improve his knowledge to adapt the instruction, to manage the assessment, to use appropriate ways of motivation. As well as, the effect of students without disability perception to the participation of students with disability can be visible on their collaborative works in different forms, social acceptance, ways of communication (both formal and informal) and the like.

## 5.3 Recommendations

Based on the major findings and conclusion draw, the following suggestions are presented:

- ✓ Physical education teacher should understand the situations of students with disability, well planned and develop their knowledge of how to adapt the physical education activities to suit to inclusive education.
- ✓ Physical education teachers should encourage students with disability to take part in its activities and should be continuously support technically.
- ✓ Physical education teachers should administered practical assessments for students with disability parallel with theoretical exams.
- ✓ Physical education teachers should be the prime mover to facilitate various panels, discussions and workshops regarding disability awareness program with the school society and other stakeholders.
- ✓ Physical education teachers should work with the stakeholders to improve the application of curriculum (both grade $9^{th}$ and $10^{th}$) to amend its' designed for inclusive education, assessment of students with disabilities.
- ✓ The school should have concerns on the students with disabilities, also should facilitate workshops for physical education teachers and other stakeholders for better application of inclusion education.
- ✓ Students with disability should be active and the first responsible to enhance their participation in inclusive physical education practical sessions, they have also a huge role to make their relationship better with the peers and school society.

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# Appendix A: Questionnaires for PE Teachers

**Addis Ababa University**

**College of Education and Behavioral Studies**

**Department of Science and Mathematics Education**

**Dear Teachers,**

At the moment, I am conducting a MED thesis research for fulfilling second degree of physical Education under the title: "the participation and challenges of students with disability in participating the practical classes of physical education in selected secondary schools of North Wollo Zone" The objective of these questionnaires is to assess the participation and challenges of students with disability in participating the practical classes of physical education in selected secondary schools of North Wollo Zone. Hence, the questionnaire will aim to assess the expected perceptions and experiences of the physical education (PE) teacher in relation to the presence of students with disabilities in their regular classes' are. Thus, please read each statement below very sensibly and specify your right moods. Since the success of the study highly relays on your honesty of rating these items, you are kindhearted entreated to respond accordingly. The data you provided would be kept confidential and never disclosed to any third party. Consequently, you are kindly requested to provide the required information, where it appropriates.

Your support is impressively valued!
Kassahun

Part one. Teachers' Background Information

## I. Personal Data

a) Age: ----------

b) Gender: ----------

## II. Professional Data

a) School name ----------

b) Time of experience in school physical education: ----------

## III. Teachers' perception on Working with Students with Disabilities

A. Further experiences with students with disabilities A) Yes B) No

B. What are the types of disability presented by your students?

A) Visual B ) hearing ( C) mental ( D) physical

C. I participated in courses in physical education adapted for people with disabilities?

A) Yes B) No

Part two: Items related to Teachers' perception on Teaching with disabled students' participation in PE classes. Each item is to be responded by selecting the most appropriated response from the five likert scale alternatives very high= 5, high =4, moderate = 3, low = 2, and very low = 1. Please respond by putting an (*x)* against the response you think most appropriate in one box for each item

| No | Items to be evaluated | Scales | | | | |
|---|---|---|---|---|---|---|
| | | 5 | 4 | 3 | 2 | 1 |
| 1 | In your school, students' with disabilities are participating in physical education practical class in regular physical education programs, with or without accommodations (adaptations). | | | | | |
| 2 | In your school, students' with disabilities are participating in physical education practical class in specially designed developmental adapted physical education (DAPE), a special educational instructional service. | | | | | |
| 3 | Your beliefs towards the importance of inclusion (PE teachers teaching students with disabilities in PE practical sessions) | | | | | |
| 4 | Your interest to include students with disability and students without disabilities in your PE practical sessions. | | | | | |
| 5 | Your knowledge about how to include, adapt and/or modified activities to students with disability in a regular physical education practical class. | | | | | |
| 6 | Students without disability collaboratively work with students with disabilities in various group forms in PE practical sessions | | | | | |
| 7 | As a Secondary school PE teacher, you were positively disposed to inclusion as an educational philosophy. | | | | | |
| 8 | In PE everyday practical class, when necessary, you adapt (make changes) on the instructions, organization and implementation of activities at the level of the students. | | | | | |
| 9 | The extent of your outcomes with respect to achieving successful inclusion and participation of students with disabilities in PE practical sessions. | | | | | |
| 10 | You encountered challenges while attempting to establish inclusive practice in their practical classes. | | | | | |
| 11 | You were motivate the student with disabilities in the same way as those without disabilities. | | | | | |
| 12 | You think students with disabilities can get 'Physical improvement' benefit from participating in PE practical sessions with the peers. | | | | | |
| 13 | You think students with disabilities can get 'Mental improvements in confidence and well-being' benefit from | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | participating in PE practical sessions with the peers. | | | | | |
| 14 | You think students with disabilities can get 'Behavioral improvements in attention relationship and academics' benefit from participating in PE practical sessions with the peers. | | | | | |
| 15 | Behind important considerations, your do not (Never) categorized students as those with or without disabilities. | | | | | |
| 16 | You often analyzed the individual differences associated with problems in the psychomotor domain than their disability. | | | | | |
| 17 | Your perception towards the importance of participation of students with disabilities in PE activities. | | | | | |
| 18 | To enhance participation of students with disabilities using inclusive education what is your self-evaluation regarding 'Your professional preparation' | | | | | |
| 19 | To enhance participation of students with disabilities using inclusive education what is your self-evaluation regarding 'Your perceived competence' | | | | | |
| 20 | To enhance participation of students with disabilities using inclusive education what is your self-evaluation regarding 'Your previous teaching experiences regarding inclusive education.' | | | | | |
| 21 | There are sufficient instructional materials for PE practical class to teach students with disabilities through inclusion. | | | | | |
| 22 | Supports and services offered by the school are sufficient for PE teachers to teach/participate students with disabilities (physician, psychologist, speech therapist, assistants). | | | | | |
| 23 | Your frequency of contact with students with disabilities | | | | | |
| 24 | The extent you took part disability awareness programs | | | | | |
| 25 | You took part empathy training | | | | | |
| 26 | You want to participate in-service trainings/workshops/seminars to increase my knowledge about the teaching methods and pedagogies about inclusive education. | | | | | |
| 27 | You get sufficient in-service training/workshop about inclusion and participation of students with disabilities in PE practical class. | | | | | |
| 28 | Type of the disabilities of students is an inhibiting factor to you to improve participation of students with disabilities using inclusive. | | | | | |
| 29 | Severity of the disabilities of students is an inhibiting factor to PE teachers to deliver inclusion and to promote participation of students with disabilities. | | | | | |
| 30 | The extent of individual SCHOOL- education programs to improve your participation in PE practical sessions. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 31 | Students with a disability are socially accepted by the peers (students without disabilities). | | | | | |
| 32 | You managed to assess students with disabilities in the same manner as students without a disability. | | | | | |
| 33 | As a PE teacher, you perceived the assessment criteria in the curriculum is adequate and appropriate for assessing students with disability. | | | | | |

## Appendix B: Questionnaires for Students with Disability

**Addis Ababa University**

**College of Education and Behavioral Studies**

**Department of Science and Mathematics Education**

**Dear Students,**

At the moment, I am conducting a MED thesis research for fulfilling second degree of physical Education under the title: "the participation and challenges of students with disability in participating the practical classes of physical education in selected secondary schools of North Wollo Zone" The objective of these questionnaires is to assess the participation and challenges of students with disability in participating the practical classes of physical education in selected secondary schools of North Wollo Zone. Hence, the questionnaire aims to assess your expected perceptions in relation to your presence in your regular classes. Thus, please read each statement below very sensibly and specify your right moods. Since the success of the study highly relays on your honesty of rating these items, you are kindhearted entreated to respond accordingly. The data you provided would be kept confidential and never disclosed to any third party. Consequently, you are kindly requested to provide the required information, where it appropriates.

Your support is impressively value

Kassahun

I. Students' Background Information

1. Name of the school ----------
2. Grade ----------
3. Sex-----
4. Age- ----------

**Part two:** Items related to school related factors on your participation. Each item is to be responded by selecting the most appropriated response from the five likert scale alternatives very high= 5, high =4, moderate = 3, low = 2, and very low = 1. Please respond by putting an (*x)* against the response you think most appropriate in one box for each item:

Disable students' perception on learning PE activities

| No | Items to be evaluated | Scales | | | | |
|---|---|---|---|---|---|---|
| | | 5 | 4 | 3 | 2 | 1 |
| 1 | In your school, students' with disabilities are participating in physical education practical class in regular physical education programs, with or without accommodations (adaptations). | | | | | |
| 2 | In your school, students' with disabilities are participating in physical education practical class in specially designed developmental adapted physical education (DAPE), a special educational instructional service. | | | | | |
| 3 | Your beliefs towards the importance of inclusion (PE teachers teaching students with disabilities in PE practical sessions) | | | | | |
| 4 | Your interest to participate with students without disabilities in your PE practical sessions. | | | | | |
| 5 | Students without disability collaboratively work with students with disabilities in various group forms in PE practical sessions | | | | | |
| 6 | In PE everyday practical class, when necessary, you PE teacher adapt (make changes) on the instructions, organization and implementation of activities at the level of the students. | | | | | |
| 7 | Your evaluation towards achieving successful inclusion and participation of students with disabilities in PE practical sessions. | | | | | |
| 8 | You face various challenges while attempting to participate in inclusive practice in PE practical classes. | | | | | |
| 9 | Your PE teacher were motivate the student with disabilities in the same way as those without disabilities. | | | | | |
| 10 | You think students with disabilities can get 'physical improvement' benefit from participating in PE practical sessions with the peers. | | | | | |
| 11 | You think students with disabilities can get 'Mental improvements in confidence and well-being' benefit from participating in PE practical sessions with the peers. | | | | | |
| 12 | You think students with disabilities can get 'Behavioral improvements in attention relationship and academics' benefit from participating in PE practical sessions with the peers. | | | | | |
| 13 | Behind important considerations, your PE teachers do not (Never) categorized students as those with or without disabilities. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 14 | Your perception towards the importance of participation of students without disabilities in PE activities. | | | | | |
| 15 | There are sufficient instructional materials for PE practical class to teach students with disabilities through inclusion. | | | | | |
| 16 | Supports and services offered by the school are sufficient for PE teachers and students with disabilities (e.g. physician, psychologist, speech therapist, assistants). | | | | | |
| 17 | You have frequent contact with students without disabilities | | | | | |
| 18 | You took part disability awareness programs | | | | | |
| 19 | You took part empathy training | | | | | |
| 20 | Type of the disabilities of students is an inhibiting factor to you to improve your participation in PE practical class. | | | | | |
| 21 | Severity of the disabilities of students is an inhibiting factor to you to improve your participation in PE practical class. | | | | | |
| 22 | The extent of individual HOME- education programs delivered to improve your participation in PE practical sessions. | | | | | |
| 23 | The extent of individual SCHOOL- education programs delivered to improve your participation in PE practical sessions. | | | | | |
| 24 | Students with a disability are socially accepted by the peers (students without disabilities). | | | | | |
| 25 | Your PE teacher managed to assess students with disabilities in the same manner as students without a disability. | | | | | |
| 26 | You have sense of belonging in PE practical classes. | | | | | |
| 27 | You have feeling of being socially included in the fellowship of the PE classes. | | | | | |
| 28 | You experience distinguishing by social exclusion in PE practical classes. | | | | | |
| 29 | You have missed a sense of adaptation to the activities of PE practical classes. | | | | | |
| 30 | Your PE teacher ever told you your competences are insufficient to allow them be a part of practical activities. | | | | | |
| 31 | You tried to ensure to have participation/role in physical education practical sessions. | | | | | |

# Appendix C: Interview Questions

**Addis Ababa University**

**College of Education and Behavioral Studies**

**Department of Science and Mathematics Education**

At the moment, I am conducting a MED thesis research for fulfilling second degree of physical Education under the title: "the participation and challenges of students with disability in participating the practical classes of physical education in selected secondary schools of North Wollo Zone" The objective of these questionnaires is to assess the participation and challenges of students with disability in participating the practical classes of physical education in selected secondary schools of North Wollo Zone. Thus, your participation is vital to achieve the objective of the study.

Thank you for your participation!

Kasahun

- **Background Information**

1. Name of the school ----------
2. Status----------
3. Experience/Grade level ----------
4. Sex ----------
5. Age ----------

**Interview Questions**

1. Do you think Cultural influences are one of the inhibiting factor for students with disability in PE activity?

   1.1 If you do, how? ----------
2. Do you think the school society encourage and support students with disability to participate in inclusive PE practical sessions?
3. Do you think stakeholders are playing their role in relation to maximizing awareness about disability, inclusive PE, and participation of students with disability?
4. Do the school allocate budget to enhance the participation of students with disability in multidirectional ways?

   4.1 If allocated budget how much? ----------

   4.2 If not why? ----------

5. Do you think the schools of the society understand the limitations, opportunities and capabilities of students with disability?
6. What are the major perception gaps commonly visible in your school society?
   6.1 The school society (teachers, directors, students, etc…) commonly referred the disability or the person? What is your judgment?
7. Do you think PE teachers have methodological and pedagogical quality to implement inclusive PE practical classes?
8. Do you think the PE curriculum (both grade $9^{th}$ and $10^{th}$) is properly designed for inclusive education, assessment of students with disabilities?
9. Do you think students with disability are evaluating both theoretically and practically in school PE (like students without disability)?
10. Do you think students with disability are actively participating in PE practical classes?

# Appendix D: Observation Checklist

**Addis Ababa University**

**College of Education and Behavioral Studies**

**Department of Science and Mathematics Education**

**Observation Days----------**

**Location (School) ----------**

**Time begin ----------**

**Time end ----------**

**Grade level ----------**

**Subject ----------**

| No | Activities to be observed | Observed Schools | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Kone | | Chet | | Woldia Millennium | | Lalibela | |
| | | Yes | No | Yes | No | Yes | No | Yes | No |
| 1 | The PE teacher asked/encouraged students' with disabilities to involve in regular physical education programs. | | √ | | √ | √ | | | √ |
| 2 | The PE teachers' include developmental adapted physical education (DAPE), a special educational instructional service in his daily and annual plan. | | √ | | √ | √ | | | √ |
| 3 | Students with disabilities attempted to involve in to PE practical activities | | √ | | √ | √ | | | √ |
| 4 | Students with and without disabilities work collaboratively in various forms in PE practical sessions. | | √ | | √ | | √ | | √ |
| 5 | The PE teacher present adapted instructions, and/or organization and implementation of activities to suit for students. | | √ | | √ | √ | | | √ |
| 6 | The PE teacher motivated the student with disabilities in the same way as those without disabilities. | | √ | | √ | | √ | | √ |
| 7 | There are sufficient instructional materials that | | √ | | √ | | √ | | √ |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | can advance the participation of students with disabilities. | | | | | | | | |
| 8 | Students with a disability are communicating with peers (students without disabilities). | √ | | | √ | √ | | | √ |
| 9 | The PE teacher managed assessments of students with disabilities in the same manner as students without a disability. | | √ | | √ | | √ | | √ |
| 10 | The school director, vice director or any other principal tried to support the PE teacher for inclusive education | | √ | | √ | | √ | | √ |

# Declaration

The researcher here by declares that the thesis on the title, "the participation and challenges of students with disability in participating the practical classes of physical education, is his original work and that all sources that have been referred to and quoted have been dully indicated and accepted with complete references.

**Declared By**

Name of the Candidate: Kassahun Berihun

Signature ……

Date ……

Name of Advisor: Mekibib Alemu (PhD)

Signature ……

Date ….....