COMPARISON OF SKILL RELATED PHYSICAL FITNES

COMPONENTS BETWEEN RURAL AND URBAN SECONDARY SCHOOL FEMALE STUDENTS IN HADIYA ZONE INSNNP REGIONAL STATE, ETHIOPIA

MSc THESIS

MELKAMU TSEGAYE HABIB

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Comparison of Skill Related Physical Fitness Components between Rural and Urban Secondary School Students in Hadiya Zone in SNNP Regional State, Ethiopia

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Melkamu Tsegaye Habib

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HARAMAYA UNIVERSIY

HARAMAYA UNIVERSITY

POSTGRADUATE PROGRAM DIRECTORATE

I hereby certify that I have read and evaluated this thesis entitled comparison of skill related physical fitness components between rural and urban secondary schools female students in Hadiya Zone SNNP Region Ethiopia. I recommend that it can be submitted as fulfilling the thesis requirements.

Wegene Waltenegus (PhD) _____ _____

Major Advisor Signature Date

Abinet Ayalew (PhD) _____ _____

Co-Advisor Signature Date

As a member of the board of examiners of the MSc. Thesis open Defense Examination. I certify that I have read and evaluated the Thesis prepared by **Melkamu Tsegaye Habib** and examined the candidate. I recommend that the thesis be accepted as fulfilling the Thesis requirements for the degree of Master of Science, in Sport Medicine

_____ _____ _____

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DEDICATION

This thesis is dedicated to my family and my friend Mihratu Temesgan for their constant physical, emotional, and financial support throughout my educational career and life.

STATEMENTS OF THE AUTHOR

By My signature below, I declare and affirm that this Thesis is my own work.

I have followed all ethical and technical principles of scholarship in the preparation, data collection, data analysis and compilation of this Thesis. Any scholarly matter that is included in the Thesis has been given recognition through citation.

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Name _____ Signature _____

Date_____

School/Department_____

Program: Sport Medicine

BIOGRAPHICAL SKETCH

The Author was born in Jun 8, 1974 in SNNP Regional State Hadiya Zone, Lemmo Woreda. He started his elementary education at Belessa and Ambecho Gode primary school from 1981 to 1989 E.C and he attended his secondary education from 1990 to1994 at Hawassa Adissketema highschcool.

Then joined Hawassa Teachers Education College in 1995 in Health and Physical Education, after completion of college education and two year experience, joined Haramaya University in 1999 and graduated with Bachelor of Education in Health and Physical Education in 2003.

Up on completion of Bachelor of Education in health and physical education, joined in teaching health and physical education and he was employed as a physical education teacher in Adams Thermal Academy Hosanna Secondary and Preparatory School. After five years of service, joined Haramaya University, Department of Sport Science for perusing MSc in Sport Medicine in 2008

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ACRONYMS AND ABBREVIATIONS

AAHPER	American Alliance for Health, Physical Education and Recreation
ACSM	American collage of sport medicine
NASPE	National Association for Sport and Physical education
RFSR	Rural Female Student Response
SD	Standard Division
SEM	Standard error of mean
SNNNP	South Nation Nationality People Region
TRA	Teacher response alternative
UFSR	Urban Female Student Response
US	United State

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ABSTRACT

Physical fitness refers to the physiological capacity of the individual to perform the normal task of daily living without tiredness and fatigue Skill related physical fitness refers to an individual's athletics ability in sport such as tennis and encompass skill related attributes like dynamic balance, power, speed and agility. In the present study, an attempt has been made to compare skill related physical fitness components namely agility, speed, coordination and power between female students belong to rural and urban set-ups. The study is purposely carried out on 60 secondary school female students of the study; 30 of rural secondary school female students were selected using purposive sampling techniques, whereas the rest of 30secondary school female students were also purposely selected from urban secondary school female students from Hetto vs. Geja secondary school in Hadiya zone SNNP Region Ethiopian. In performing four of components of skill related physical fitness at age ranging from 16to19years only. The data was collected by use of measurements of questioners, interview, observation and fitness tests by application to tests running, weight lifting, Zigzag run and playing table tennis. The data are analyzed and compared with the help of statistical procedures in which arithmetic mean, standard deviation (S.D) standard error of mean, and t-test were employed and level of significance was observed at 0.5 Rural secondary school female students were found to be superior in power, speed, agility and urban female secondary school students on the other hand, were found behavior and superior in tasks like coordination. Rural life style is more active in nature than urban. Life in rural areas which produced high level of physical and physiological functioning than urban that develops physical fitness of rural secondary school students A lot could be done to improve the skill related physical fitness level of female students in the urban school because the urban students cannot live active life in nature.

Key words*:* skill related physical fitness, coordination speed, power and agility

1. INTRODUCTION

This chapter deals with the background of the study, statement of the problem, objective of the study, significance of the study, delimitation of the study.

1.1 Background of the study

Concept of physical fitness is as old as humankind .The ancient people were mainly dependent upon their individual strength, vigor and vitality for physical survival (IBI-STD-2.0, 2014). Throughout the history of mankind physical fitness has been considered an essential element of everyday life (Deuster, 2013).

This involved mastery of some basic skill like strength, speed, endurance, agility for running, jumping, climbing and other skills employed in hunting for their livings (Mondal et al,. 2016).

Therefore, fitness is a key to enjoy that modern living has taken in all the exercise out of our lives and so in order to get fit and have to put it back again, regular exercise is necessary to develop and maintain an optional level of health, performance and appearance. It makes feel good, both physically and mentally (Chen et al, 2018).

Regular physical exercise enhance the function of the joints; good; increase physical working capacity by increasing Agility fitness, muscle power and endurance and decreases the risk of serious disease that could lead to early disability and health (Mondal et al ,.2016) .

Physical fitness is the biggest potentially of human being. It cannot be bought. It can only be achieved through day to day physical activity proper growth and maintenance of good health (Shashidhar et al, .2015).

Physical fitness refers to the organic capacity of the individual to perform the normal task of daily living without undue tiredness and fatigue having reserve to perform the normal task of daily living wit out undue tiredness or fatigue having reserve of strength and energy available to meet satisfactory and emergency demands suddenly placed up on him (Deuster, 2013).

Physical fitness is a states well-being that comprises skill related and health related components (Chen et al., 2018). Skill related physical fitness refers to an individual's athletics ability in sport such as tennis and encompass skill related attributes like dynamic balance, power, speed and agility (Jones, 2014).

At the present time, different actions were taken by athletes around the world to enhance their performance. It includes nutritional, pharmacological, physiological, psychological and mechanical aids. Among these, training programs are most important for the athletes due to their long term effect (Jones, 2014).

The physical fitness contribute positively to maintaining a healthy weight, building and healthy bone density, and muscle strength, joint mobility, promoting physiological well-being, reducing surgical risks, and strengthening the immune system and exercise reduces levels of cortisol, which causes many health problems (Deuster, 2013).

Both physical and mental frequent and regular physical exercise has been shown to help prevent or treat serious and life –threatening chronic conditions such as high blood pressure heart disease, as well as to improve healthy life (Deuster, 2013).

The American college of sport medicine, known as ACSM, describes aerobic exercise as any activity that uses large muscle groups, can be maintained continuously, and is rhythmic in nature Anaerobic activity may large and small muscle groups and differs from aerobic activity in that it involves short bursts of strenuous exertion, followed by periods (Regis et al., 2016).

Same is the case with games and sports in rural and urban settings. Sareen,(2015) conducted a study to find out the comparison on cardio vascular fitness between rural and urban students and revealed that students with rural background performed better than that of their counterparts in urban area. We notice that there is a lot of difference in the interest of children. Like we observe that in rural areas children are indulging in minor, indigenous activities and field games like football, kabaddi, kohekohe, hockey, wrestling, athletics (Dragijsky et al., 2017). Whereas, in urban we find children playing basketball, swimming, badminton, tennis, squashes, golf etc. The main cause of difference is the availability of facilities and financial support of parents (Dragijsky et al., 2017) .

Wellness is seen as the vehicle by which one's potential to live and work effectively and to make a significant contribution to society could be expanded (Fahey et al., 2013). Chaudhary (2017) studied the difference in physical fitness of urban and rural students studying in class IX and X and found that rural students were better in physical fitness than urban students American Heart Association (2014).

Physical fitness is the ability of the body systems to work together efficiently to allow people to be healthy and effectively perform activities of daily living (Alricsson, 2013).

The amount of physical fitness ranges is form low to high (Alricsson, 2013). On the other hand, skill-related fitness is divided into six components: agility, balance, coordination, power, reaction time, and speed (Shashidhar et al., 2015).

Physical fitness may be defined as a physiological state of well-being that provide the foundation for the tasks of daily living, a degree of protection against hypo kinetic disease, and a basis for participation Physical fitness is deterioration in adult across all genders, ages and racial/ethnic groups (Ichinohe et al., 2014). .Physical fitness includes nonperformance components of physical fitness that relate to biological system that are influenced by one's level of habitual physical activity (Deuster, 2013) .

The urban people with the growth of cities has come a great transformation in the living habits of society. The city is the hub of much social life, and it influences its standards. Intellectual growth and habits, moral codes and conditions, behavior patterns and cultural conditions resolve around it (Regis et al, .2016).

New communities, new group, new ethnic relations and a multitude of classes make of the city an intricate and complex unit of modern society. Hence physical fitness of school students is major factor to be considered. Therefore, School physical education programmers should include multi furious activities appropriate to each age group. (Regis et al, .2016)

1.2 Statement of the Problem

Ethiopia is a country with long history of many sports. However, there was no satisfactory achievement on many sports like football, volleyball, basketball, athletics (Dragijsky et al., 2017).Due to the lack of skill related physical fitness which includes speed, agility, coordination, power, and others, which limit the performance of the athletes (Dragijsky et al., 2017).

Fitness in human body what tuning is to engine? it enables us to perform up to our potential. Fitness can be described as a condition that helps ability to perform daily tasks vigorously and alertly, with energy left over enjoying leisure time activities and meeting emergency demands. It is the ability to continue, and is a major basis for good health and wellbeing (Deuster, 2013).

Therefore, this research aimed to provide basic fitness information to help filling this gap.

1. What is the status of skill related physical fitness in their daily life of rural and urban female student in secondary schools?
2. What are the major factors that affect skill related physical fitness of rural and urban secondary school female students?
3. What are the significant different between rural and urban student on skill related physical fitness components?

1.3. Delimitations of the Study

The study was delimited to Geja and Hetto secondary school female student in Hadiya zone the age 16-19 years group only

The study was delimited to selected skill related physical fitness and levels; such as coordination, speed, power and agility only.

The data was collected from 60 (30 rural and 30 urban) female students in Geja and Hetto secondary school in Hadiya zone.

1.4. Significance of the Study

The main aim of this study is to analyze skill related physical fitness between urban and rural female students of Geja and Hetto schools with the following intended significance.

The study was expected to contribute in the identification of students skill related physical fitness level of urban and rural secondary school female students in Hadiya zone in SNNP region, Ethiopia.

It is intended to create awareness towards the problem among sport sciencesteachers in general and students in particularity

To stimulate the interest of individuals conduct research on the same issues for further investigation.

1.5. Objective of the Study

1. 5.1 General Objective

The main objective of this study is to investigate skill related physical fitness levels of Rural and Urban secondary school Female Students in Hadiya zone SNNP Region, Ethiopia

1.5.2 Specific Objective

- To examine the level of skill related physical fitness in rural and urban secondary school female students.
- To identify factors that affect skill related physical fitness in rural and urban secondary school students.
- To describe skill related physical fitness components of rural and urban secondary school students.

2. REVIEW OF RELATED LITERATURES

2.1. Physical Activity and Health

Physical activity of moderate intensity has been recommended for health and well-being since the time of Hippocrates (460–370 BC). The Greek physician Hippocrates, the `father of medicine`, advised that "Eating alone does not keep a man well; he must also identify that physical activity is a major modifiable risk factor in the reduction of mortality and morbidity of many chronic diseases (Shashidhar & Madialagan, 2015).

The World Health Organization (WHO) has defined health as "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity" (Schriver et al., 2016).

Since the 1970´s, regarding the benefits of physical activity, the health benefits of regular physical activity (aerobic exercise) have been affirmed and summarized in reports from governmental and non-governmental organizations (Sate Vevike B, 2014). (Deuster, 2013) have also concluded that regular physical activity is associated with important health benefits.

U.S. Surgeons' General Report summarized the following about the current consensus regarding the health benefits of physical activity. The National College of Health Risk Behavior Survey reported that 35% of American college students are overweight (Lowry et al., 2015). This is not surprising considering that more than two thirds of American adult population are classified as overweight (Flegal et al., 2012), making weight gains America's leading health problem (Mokdad et al., 2014).

2.2. Use of physical fitness

The Governor's Council on Physical Fitness and Nutrition believes that regular physical activity is one of the most important things people can do for their lives. It can help to:

- ✓ Control weight
- ✓ Reduce the risk of cardiovascular disease

- ✓ Improve ability of coordination
- ✓ Contribute to productivity in the classroom and worksite
- ✓ Reduce the risk of injuries
- ✓ Reduce the risk for some cancers
- ✓ Improve bone and muscle power
- ✓ Contribute to mental health and mood

2.3. The definitions of physical fitness

Physical fitness refers to a set of attributes that related to the ability to perform physical activity (Chen et al., 2018). Chen et al., 2018 also define Physical fitness as the ability of the body systems to work together efficiently to allow people to be healthy and effectively to perform activities of daily living.

According to Chen et al., 2018,steted thatphysical fitness can be classified into health-related and skill-related fitness. Health-related fitness consists of five components: cardio respiratory endurance, muscular endurance, muscle strength, flexibility, and body composition and is determined by a combination of regular activity and genetically inherited ability. The amount of physical fitness ranges from low to high. The recommended duration of physical activities capable of building cardiovascular fitness is 20-60 minutes of active aerobic activity. Activity could be either intermittent or continuous if the amount of exercise is the same, and last at least 10 minutes (Walt, 2013).

On the other hand, skill-related fitness is divided into six components: agility, balance, coordination, power, reaction time, and speed. In terms of prevention of diseases, the main emphasis of any fitness programs should be placed on the health-related fitness as skill-related fitness is crucial for success in sports and athletics, and it also contributes to wellness (Shashidhar & Madialagan, 2015).

2.4. Health-Related Fitness & Skill-Related Fitness

2.4.1. Health-related fitness

Similar study by Chen et al., (2018) explains health-related fitness as the portion of physical fitness which is directed toward the prevention of or rehabilitation from disease as well as the development of a high level of function capacity for the necessary and discretionary tasks of life.

In adults, relationship among physical activity, health related fitness, and health are fairly well established. Low levels of physical activity and cardio-respiratory fitness are both associated with higher risk of all cause and disease specific mortality (Thune et al., 2016).

Physical fitness is the ability to perform daily activities willingly and actively. Physical fitness includes not only components of sports but those of health as well as regular physical activity prevents or limits weight gain, and gain in body mass index (BMI) (Kyle et al., 2014).

According to Chen et al., 2018, the health-related physical fitness has four components: cardio respiratory endurance, muscular strength and endurance, muscular flexibility, and body composition.

Cardio respiratory endurance: the ability of the heart, lungs, and blood vessels to supply oxygen to the cells to meet the demands of prolonged physical activity (also referred to as aerobic exercise), muscular strength and endurance: the ability of the muscles to generate, muscular flexibility: the achievable range of motion at a joint or group of joints without causing injury, body composition: body composition: the amount of lean body mass and adipose tissue (fat mass) in the human body.

2.4.2. Skill-related fitness

Skill related physical consists of those components of physical fitness that have a relationship with enhances performance in sports and motor skills (Shashidhar et al, 2015).

Similar study by Madialagan et al (2015) explains that skill related components of fitness are considered to agility, balance, coordination, power, speed and reaction time.

Speed and reaction time, by some experts, is thought that other abilities such as visual tracking should be included. It is assumed that people who possess skill-related fitness will be more likely to engage in regular activity and for this reason will have enhanced health related fitness and a lower risk of hypo kinetic are assessed with performance measures (Shashidhar et al,. 2015).

2.4.2.1. Agility

A skill – related component of physical fitness that related to the ability to rapidly change the position of entire body in space with speed and accuracy (From surgeon General's Report on physical Activity and Health (Dragijsky et al., 2017).

Similar conduct by (Dragijsky et al., 2017) agility was assessed using 10 meter shuttle test mark two line 10 meters a part using making tape or cones.

Similar conduct by (Dragijsky et al., 2017) explains that the agility test is a commonly used test of agility in sports in case of change position and direction. The length of the course is 10 meters and the width (distance between the start and finish and the two turning points). Another four cones are placed down the center an equal distance a part. Subjects should lie on their front (head to the start line) and hands by their shoulders. On the "go" command the stopwatch is started and athlete pets up as quickly as possible and runs around the course in the direction indicated. Without knocking the cones over to the finish line at which the timing is stopped. Agility is typically measured using a shuttle or Zigzag run. Test of agility are common as screening tests among sports teams.

2.4.2.2. Balance

A skill-related component of physical fitness that relates to the maintenance of equilibrium while stationary or moving (Dragijsky et al., 2017).

Similar conduct by Dragijsky et al (2017) balance is typically measured using balance beam or test that requires holding a stationary position offer changing body positions. Balance is generally considered to be of two types, static and dynamic.

2.4.2.3. Coordination

A skill-related component of physical fitness that relates to the ability to use the senses, such as, sight and hearing, together with body parts in performing motor tasks smoothly and accurately (Sate Vevike B, 2014).

Similar conduct by (Sate Vevike B, 2014) coordination is typically assessed using measures of hand – eye – or foot-eye coordination such as juggling a ball or hitting on object. There are, however, many different types of coordination and total assessment of coordination would require many different tests.

2.4.2.4. Power

A skill-related component of physical fitness that relates to the ability to the rate at which one can perform work (Jones, 2014). Power is considered to be a combination of strength and speed. It has also been defined as the ability to exert muscle force (Jones, 2014). For this reason, some consider it to be a combination of skill and health – related physical fitness. Examples of power include putting the short and vertical jumping. There are, however, many different types of power and total assessment would require many different tests. In strength training, it is important to ensure that all movements are carried through their full range of motion to satisfy the good thumb rule; " stretch what you strengthen and strengthen what you stretch "(Scott, 2014).

Power of muscle is the ability to perform repeated contractions against a sub-maximal resistance (Anderson et al., 2015). The ability of the muscle to exert a sub-maximal force against resistance repeatedly or to sustain muscular contraction continuously over time is characterized by activities of long duration but low intensity (Robbins et al., 2013).Corbin et al. (2013) define muscular endurance as the maximum number of repetitions or muscle contractions one can perform against a given resistance.

2.4.2.5. Speed

A skill – related component of physical fitness that relates to the ability to perform a movement within a short period time (Dragijsky et al., 2017) .

Speed is the ability to perform a movement quickly. It is the time takes us to respond to a stimulus. Dragijsky et al., (2017) states that speed is basically how fast the participants can move partial of their body or the whole of their body, and is measured in meters per second.

Therefore, speed is the rate of movement and often refers to the ability to move rapidly and it is an important factor in all explosive sports and activates that require sudden changes in space (Jones, 2014).

To measure the speed capacity of the student through the distance of 50 meter run with two stop watches, two instructors with score care and pen should be needed. This test was administered by two subjects at a time both subjects took position behind the starting line. The starter used the commands ready. The time keeper recorded time taken by the subjects to a cross finishing line from the starting line time was recorded nearest to the one 10^{th} a second (Jones, 2014).

There are many different types of speed such as running speed, swimming speed, speed of hand or foot movement to name but a few, among athletes a 40 yard dash is often to measure speed (Dragijsky et al., 2017).

There are a wide variety of laboratory measures of speed that are highly specific to different body parts and different human movement activities.

2.4.2.6. Reaction time

A skill related component of physical fitness that relates to the time elapsed between stimulation and the beginning of the reaction to it (Lash et al., 2014).

Comment: An example of reaction time is moving your foot from the accelerator to the brake pedal when reacting to a situation that requires a person to stop a car. This example illustrates the fact that in many cases, the total response time is the more important variable (Lash et al., 2014). Total response time include stimulus to beginning of movement (reaction time) the end of movement (movement time).

Like other measures of skill-related physical fitness there are many different types of reaction time and total assessment of reaction time would require many different rests. Like speed, reaction time is considered to be a component of fitness that is greatly influenced by heredity (Lash et al., 2014).

(Lash et al., 2014) stated that skill-related physical fitness is portion of physical fitness which is directed toward optimizing athletic performance. Skill-related physical fitness is

less related to good health and more related to ability to learn sport and other kinds of physical skill (Lash et al., 2014). Skill-related physical fitness is needed for success in athletics and lifetime sport and activities. Fitness components are important for success in skillful activities and athletic events; encompasses agility, balance, coordination, power, reaction time, and speed (Dragijsky et al., 2017). Skill-related physical fitness components are the following.

Agility: the ability to quickly and accurately change the direction of the movement of the entire body in space. In game such as tennis, agility is important to reach the ball in time (Shashidhar & Madialagan, 2015).

Balance: the ability to maintain equilibrium while moving or stationary. Activities such as gymnastics, ballet, and skiing require balance.

Coordination: the ability to combine the senses with different body parts to perform activities smoothly and accurately. Activities such as catching a baseball or kicking a football require the hands and eyes or foot and eyes to work together.(Sate Vevike B, 2014).

Power: the ability to transfer energy into force at a fast applies speed and strength to produce a muscular movement. Almost all sport requires power to perform well. Reaction time: the amount of time it takes to respond and react to a stimulus. Activities such as returning a serve in tennis or badminton require fast reaction times.(Jones, 2014)

Speed: the ability to move quickly from one point to another. Actives such as the 100 or 200 meter sprint in track or running the baseball require speed.(Jones, 2014)

2.5 Agility and balance in volleyball game

No ways volleyball competition requires from the players like agility, coordination, speed, strength and balance (Sate Vevike B, 2014).

Important skills in volley ball are speed and jumping coordination and balance helps in many specific actives like movement, receiving, setting and blocking. Nowadays, players need to have a high muscular force and good fitness and the actions in volley ball are fast and intense the athletes must be agile and well physical prepared (Dragijsky et al., 2017).

In volley ball game we usually meet many types of speed, most encountered is the speed of reaction according to (Dragijsky et al., 2017) with many dynamic combination of both active and passive that requires great intensity effort alternated with loss intensity in other phases.

As many scientists confirm the role of coaches in the development of athletes' performance is very important, the increase indices of speed, strength, coordination and balance can contributes to the performance in sport (Mondal et al., 2016).

. The selection in sport is very important, and testing the main motor skills, physique and muscular strength adolescents can tell if the child is eligible for performance (Profile, 2013) .

Agility skill is defined in many ways mostly the sound like the quick movement of the body in response to a stimulus or the ability to rapidly change the movement direction "or" the ability to start and stop quickly (Dragijsky et al., 2017). Motor skills that affect the agility are balance, coordination, explosive strength and flexibility (Regis et al., 2016) .

When we speak about agility in volley ball we refer not only to the cognitive components that are involved in different tasks (like the start in spiriting, running in Zig-Zag) that are more different than the more complex and un predictable tasks in sport games, like blocking an attack in volley ball or reacting in receiving a spire in volley ball, (Regis et al., 2016).

Agility movement involves perceptual like decision making and anticipation in all processes in sport games (Regis et al., 2016). Speed and agility involves moving the body very quickly, as fast as possible, but in agility skill we add the attribute of changing direction that is very important in sport games (Regis et al., 2016).

Defining the balance skill, scientist described the static balance as “the ability to keep a good base and a steady position with less moves” and the dynamic balance as “the ability to execute a movement while keeping an stable position of the body” (Shashidhar & Madialagan, 2015).

Also balance is formed from a large and complex group of factors like “information from sensory system (visual system, tomato sensory system and vestibular), strength and a range of joint morons” (Lash et al., 2014) . That helps protect sportive from injuries and execute complex and specific action.

Many specialists from sport science demonstrated that most frequent injuries are produced in sports as volley ball, football and basketball, and this kind of injuries appear mostly at knee and ankle (Regis et al., 2016).

Deficiencies in training balance for stability and strength can result in bad execution of actions like changing direction of moves, landing from a jump or contacts with the adversary will result at ligaments or articular joints (Guta, 2017).

Balance skill and agility are motor qualities that are more easily learned and developed at young ages with specific training and during the appropriate age levels (Dragijsky et al., 2017).

Motor response can be influenced by many balance training, many scientist say that a superior balance level at sportive with experience can improve the decision making and motor responses are saying that a better level of balance is resulting from many trainings and influence the ability of proprioceptive and visual (Regis et al., 2016).

In the process of balance measuring we need to be careful with the time spend on effective evaluation and is important not to rush a testing balance and be patient with a time long enough as to receive an eligible result, but be careful not to spend much time so that the fatigue would influence negatively our tests (Lash et al., 2014) .

We should also consider using test for static equilibrium position (Dragijsky et al., 2017). Also testing the dynamic balance has been investigated using some specific devices, generating free motion and instability done on the force plat form. Scientists were able to

investigate the cop excursion in the frequency domain, and to see the involvement of short or long loops in balance executions (Alricsson, 2013).

2.6. Trends in Physical Activity over the Lifespan

There is substantial evidence of a decline in physical activity over the lifespan. A number of international tracking studies have identified adolescence, typically between 13-18 years, as the period of greatest decline in physical activity in both males and females over the lifespan (Chen et al., 2018).

However, as there is a lack of data on physical activity levels of children less than 10 years old, trends within childhood are unclear. It is possible that substantial declines in physical activity in childhood may also be apparent (Chen et al., 2018).

While female adolescents are generally less active than males, most notably inactive in vigorous and strengthening activities (Alricsson, 2013), the differences in rate of decline between genders is unclear.

2.7. Age-Appropriate Activities

As educators and parents consider how to help children develop the five health-related fitness components, it is important to consider the age-appropriateness of activities. Obviously, one would not expect a young child in the first or second grade to participate in the same type of muscular strength and endurance training as a senior in high school (Alricsson, 2013).

It is necessary to develop exercise prescriptions for both the elementary, middle grades, and secondary levels. The goal of the prescriptions is to increase the activity level of all students to at least 60 minutes per day by suggesting activities which students can engage in outside of the classroom (Deuster, 2013).

Within this prescription, detailed instructions must be given for activities that are age appropriate for the development of each health-related fitness component; students can chart the time spent engaged in the various activities for their math classes and write about their exercise in their language arts classes (Chen et al., 2018).

It is important to consider that fitness activities need to be made fun for children or they was not want to participate. For most individuals, giving a direct command to go out and run two laps was not an interesting activity in which to participate. The 15 minute fun circuit includes stations for jump rope, jumping over a hoop, jumping jacks, and mountain climbers (Deuster, 2013).

Adding music to the fun circuit makes the activity even more appealing. The family fun walk is an activity that can take place at home. With the family, students are encouraged to take a brisk 20- minute walk throughout the neighborhood. The same directions would apply with the exception that the students are rollerblading instead of jogging. jumping rope is another cardiovascular activity that older students can enjoy (Shashidhar & Madialagan, 2015).

Creating task cards and routines as well as setting the activity to music is an excellent way to engage students in a cardiovascular workout. It is also important to consider that basic activities such as jogging, walking, swimming, and aerobic dance are also considered excellent activities for people of all ages that promote cardiovascular endurance. There are many activities that students of all ages can engage in without ever entering a weight room facility (Dragijsky et al., 2017).

For elementary age children, activities like tug-of-war, push-up routines, and the use of a stability ball can all assist in the development of muscular strength and endurance. It is crucial for educators and parents to understand that teaching proper technique as well having proper supervision are key elements in a successful weight lifting program (Chen et al., 2018).

2.8. The Development of Fitness Test Battery for Youth

In the early 1950s, physical fitness testing indicated that European children had higher levels of fitness than American children (Deuster, 2013). This led the United .States former President Eisenhower to establish what has become the President‘s Council on Physical Fitness and Sport. American Alliance for Health, Physical Education, Recreation (AAHPER Youth Fitness Test (2014) was designed to evaluate the fitness

levels of the American children (Profile, 2013)

It includes performance related tests that measured strength, endurance, running, agility, and jumping ability (Dragijsky et al., 2017). American Alliance for Health, Physical Education, Recreation(AAHPER Youth Fitness Test (2014) was designed to evaluate the fitness levels of the American children (Morrow et al., 2013); it includes performance related tests that measured strength, endurance, running, agility, and jumping ability (Safrit, 1014).

During the 1970s physical education professionals and researchers became more interested in health-related fitness (Chen et al., 2018).

Because the AAHPER Youth Fitness test items included a 50 yard dash and a standing long jump that were not evaluate the fitness levels of the American children (Deuster, 2013). it includes performance related tests that measured strength, endurance, running, agility, and jumping became more interested in health-related fitness (Dragijsky et al., 2017).

The AAHPER Youth Fitness test items included a 50-yard dash and a standing long jump that were not considered health-related fitness items, however, the 600-yard run is not a good measure of aerobic capacity (Mondal et al., 2016).

The health-related fitness test components include more health-related items such as cardio respiratory fitness, body composition, musculoskeletal fitness, which has a strong relationship with overall health (Chen et al., 2018) .

The test uses the norm-reference standard, it just compares with other children and youth rather than to tell the level the children ought to achieve for health. The test use Criterion referenced standard, it tells children must achieve all minimum level of its items to be considered fit. It compares with the standard, or criterion.

The development of fitness tests in school systems in European countries occurred twenty years after the development of the American model. The Belgium and the Netherlands published their test batteries in the 1960s; other countries followed their lead. A more coordinated effort began in 1978, when upon the initiative of the Council of Europe

Committee for the Development of Sport, aims and concepts of a Euro fit test battery were formulated. Between 1980 and 1982, the evaluation and choice of both motor fitness and endurance fitness tests were carried out, and as a result of their international effect, in 1983 a provisional and in 1988 a final Euro fit handbook was published in French and English. The test items cover strength, power, speed, flexibility, balance, endurance, as well as body composition measured with height, weight and skin fold thickness (Alricsson, 2013).

Euro fittest are aimed at measuring abilities rather than skills, but development of the Euro fittest battery is an important step in Europe. However, it is only a first step. Although the Euro fit handbook allows people to use these tests, it still needs to construct norm-referenced or criterion-referenced scales in the future (Shashidhar & Madialagan, 2015).

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3. METHODS AND MATERIALS

This chapter describes the way in which the research was designed and conduct in the selected sample Hetto and Geja high schools female students in Hadiya zone, SNNPR, Ethiopia. It includes research design, research study area, population of the study, sample size and sampling techniques, source of data, procedure of data collection, instrument of data collection and method of data analysis.

3.1. Description of the study area

The research was conducted in South Nation Nationality People Regional state (SNNPR) in Hadiya zone, Hetto and Geja high schools (Urban .vs. Rural) respectively

MishaWoreda is one of the eleven Woreda in Hadiya Zone, SNNPR.

TheWoreda shares bounders with LimuWoreda, GibeWoreda in East, and gurage Zone in South and Gibe River and Oromiy Region in West. The Woreda is astronomically located between 7, 15'N and 7 25'N Latitudes and between 37 32'E and 37 46'N Longitudes. In terms of administration, Misha Woreda is sub divided 49 rural and 3 urban Keble's. Its main town, Hossana town, is located at about 262kms South West of Addis Ababa, and 178kms North West from Hawassa (the capital of the region) and 32kms from zonal Hossana to the south (DWARDO, 2013) peg 32.

3.2. Research Design

The approach enable the researcher to identify , describe and define the status in order to have a clear picture about the trend and existing nature of Hetto and Geja (rural vs urban) secondary schools female students.

a descriptive survey design was employed in the study. Since this is a survey study, across sectional research design was used to collect vast information and opinions from a large number of respondents. Both qualitative and quantitative data were used to get original data for describe population too large to observe directly.

For these study 60 young female students with age of 16-19 years old was selected from Hetto and Geja secondary schools and 4 sport science teachers in Hadiya zone SNNP Ethiopia

3.3. Population of the study

The researcher has conducted total population of 60secondary school female students. That means, 30 urban female students, 30 rural female students, 4 sport science teachers from grade 10 both Hetto and Geja high schools were conducted in this study.

3.4. Sampling size and sampling techniques

The researcher was conducted in grade 10Hetto and Geja high schools female students used with purposive sampling techniques. There are 10 Woreda and two sub city with 78 secondary schools in Hadiya zone in 2010 E.C. criteria for this urban rural secondary schools are the distance from the capital city of Hadiya zone for instance Geja are 45km from hosanna city from this 11are urban and 67are rural secondary schools.

The target populations of the study was 60 students 30 urban and30 rural secondary school female students and 4 sport science teacher those purposely selected from Hadiya zone secondary schools.

The sampling secondary schools of Hadiya zone are Geja and Hetto secondary schools are selected randomly for its case to obtain information. Were purposive sampling techniques would be employed.

3.5. Source of Data

Primary data was collected from subjects through questionnaires, interviews, observation and fitness test. Accordingly, firsthand information was collected from rural and urban female students and Sport science teachers, principals. Furthermore, information was gathered from different sources, i.e. reviewing relevant books, journals, documents, internet, newspaper and the like. These reinforce the study and increase its relevance.

3.6. Pilot Study

Pilot test of the questionnaire was made to check the reliability of the questionnaire on randomly selected secondary school students out of Geja and Hetto Schools which were excluded from the current study. Accordingly, the pilot test was conducted on 20 female students and the Cronbach alpha reliability coefficient of the pilot study was 0.89. This show the items were valid on reliable. Based on their valuable comments and suggestions necessary adjustments were made as far as the clarity of language, ideas and contents of questionnaires concerned.

3.7. Procedure of Data Collection

The following procedures were taken to assess the comparison of skill related physical fitness components between rural and urban secondary school students in Hadiya zone in SNNP region, Ethiopia.

Relevant literatures were assessed and reviewed from hard and soft copies to get adequate information with the issue under the consideration. Basic research questions was formulated which help to show the direction of the study .The questionnaires were administrated for female students, sport sciences teachers selected from high schools .

First –Relevant literatures were assessed and reviewed from hard and soft copies to get adequate information with the issue under consideration.

Second- basic research question were formulated which helped to show the direction of the study.

Third-Appropriate data gathering tools were prepared and the necessary questions had been set and the questionnaire was administered for female students, sport science teachers selected from each high school members. The necessary correction and amendment were made on prepared questioners based on the questioners was translated to Amharic to make smooth communication .and to make it easier for understanding.

Finally the questioner was conducted for 60 students, 4 sport science teachers and 2 principals from each high school.

3.8Instrument of Data Collection

The instrument used for data collection to conduct this research were questionnaires and interviewer, observation, physical fitness test: In addition to these different participatory approaches were used to ensure the appropriateness of the data.

3.8.1 Questionnaire

Questionnaires were used as the major instrument of to collect sufficient information from the data source of the study. Questionnaires were prepared for two groups of respondents. Questionnaires for both groups of respondents were designed in order to elicit their view concerning factors that affect in performance of skill related physical fitness. The questionnaires were both close and open ended items. The questionnaires were prepared for players in Amharic language finally translated to English language.

3.8.2. Interview

Interview was another instrument used together information from Geja and Hetto School principals, physical education teacher. In addition to questionnaire, interview was administered, to four physical education teacher and two school principals in rural and urban School.

The main reasons that the researcher wants to consider respondents for female student's participation rather than males.

3.8.3 Observation

The validity of school facilities and materials such as cones, medicine balls, table tennis, running track and other equipment's were observed by using check list in order to make sure the validity and reliability of the data in the research.

3.9. Method of Data Analysis

Both qualitative and quantitative data analysis methods were employed in order to answer the researcher questions and to achieve the objectives of the study .Therefore, the data that was collected through close ended questions were analyzed quantitatively. Accordingly, the table, frequency counts and percentages of responses were used to analyze the data

3.10. Tools to Be Use

The physical fitness battery includes a skill related physical fitness test used to measure agility, coordination, speed and power. All tests were administered during the school day.

Detailed descriptions of each fitness test are described given below:

1. Power dimple
2. Speed 50 Meter Dash run
3. Coordination table tines
4. Agility zigzag Run

Source: -Adopted from journal of exercise science and physiotherapy, 3(2): pp 157-159, 2015.

3.11. Statistical Procedure

The values of mean, standard deviations, SEM, T-test Was apply to find out significance of differences between the scores of the selected varies all this fore fitness testes.

3.12. Ethical Considerations

This study was dealt with the ethical issues related to the investigation. Making guarantees and confidentiality on the information that was being given to the study, and risk of harm due to participation. All actions based on the school rules, code of conduct and policies concerning to research ethics. The protocol was approved by the school guide lines, and written consent was given and informs the concerned bodies and participants.

4. RESULTS AND DISCUTIONS

On this chapter below discuses about the analysis of the questionnaires, fitness test interview, observation. The discussions include rural and urban female students and sport science teachers and principals in the same selected high-school in Hadiya zone. SNNPR Regional State, Ethiopia.

4.1 **Student's Profile**

Table 1: Table of student's profile

	Variables	Frequency	Percent
	Urban female student	30	100
	Rural female student	30	100
Age	16 years	25	41.67
	17-18 years	28	46.67
	19 years and above	7	11.66
	Total	60	100
weight	42-51kg	35	58.3
	52-63kg	23	38.3
	63kg and above	2	3.4
	Total	60	100
Height	1.40m-1.50m	31	51.67
	1.51m-1.70m	26	43.3
	1.71m and above	3	5
	Total	60	100

Based on this student profile 30(100%) of the respondents are urban female student, and the remaining 30(100%) of the students response is rural female students. Regarding to the age of the respondents there are 25(41.7%) respondents response 16 years, 28 (46.67%) of the Respondents are b/n 17-18 year, and 7(11.66%) of the student response are 19 years and above. Regarding to the weight of the respondents there are 35(58.3%)

respondents response 42-51 kg, 23(38.3%)of the respondents are 52-63 kg and 2(3.4%) of the student response are 63 kg and above. Regarding to the height of the respondents there are 31(51.67%) respondents response 1.40m-1.50m,26(43.3%)of the respondents are 1.51m-1.70m and 3(5%) of the student response are 1.71m and above. Regarding to the marital status 60(100%) of the respondent it have no married it is single, finally, the educational level of the respondents are 60(100%)of the respondents high-school, that means grade 10 female students from Geja and Hetto secondary schools.

Table 2: The response of the respondents regarding to develop skill related physical fitness.

NO	Item		Rural students		Urban students	
			Frequency	Percent	Frequency	Percent
1	Are you ready to improve your skill related physical fitness?	Yes	28	93.3	30	100
		No	2	6.7	-	-
		Total	30	100.0	30	100
2	If yes when you do exercise to improve skill related physical fitness?	In the morning	18	60	9	30
		In the afternoon	7	25	17	56.7
		In the evening	3	10	4	13.3
3	Physical fitness important for your house work?	Yes	28	93.3	30	100
		No	2	6.7	-	-
		Total	30	100	30	100
4	For how much time do skill related physical fitness?	for 40 minutes	16	53.3	24	80
		for 60 minutes	11	36.7	1	3.3
		for 80 minute	3	10	5	16.7
		Total	30	100.0	30	100.0

Regarding to table 2 the response of students are you ready to improve skill related physical fitness 28(93.3%) of the rural female students response 'yes' to ready to improve skill related physical fitness but the remaining no ready to improve physical fitness. But on the same question the response of the urban female students is 30(100%) response is 'yes 'ready to improve skill related physical fitness. On other hand, the rural students asked about when you do exercise to improve skill related physical fitness 18(60%) were stated that in the morning do skill related physical fitness,7(25%) were stated that in the afternoon do skill related physical fitness but the remaining 3(10%) were stated that evening and afternoon doing skill related physical fitness. Also, the urban students asked about when you do exercise to improve skill related physical fitness 9(30%) were stated that in the morning do skill related physical fitness,17(56.7%) were stated that in the afternoon do skill related physical fitness but the remaining 4(13.3%) were stated that evening and afternoon doing skill related physical fitness. On other hand, the rural students asked about skill related physical fitness important for house work 28(93.3%) were stated yes but the remaining were stated that no.

Moreover, the rural students asked about for how much times do skill related physical fitness 16(53.3%) were stated for 40 minutes, 11(36.7%) were stated that for 80 minutes and the remaining were stated that did the skill related physical fitness for 90 minutes. In addition to, the urban students asked about for how much times do skill related physical fitness 24(80%) were stated for 40 minutes, 1(3.3%) were stated that for 80 minutes and the remaining were stated that did the skill related physical fitness for 90 minutes

Table 3 : The response of the respondents regarding to the case that can reduce their skill related physical performance ,about the problem that affect the skill related physical fitness of students and knowledge about the skill related physical fitness

NO	Item		Rural students		Urban students	
			Frequency	Percent	Frequency	Percent
1	If you go to school use transportation services?	Yes	6	20	21	70.0
		No	24	80	9	30.0
		Total	30	100.0	30	100
2	Are you having skill related physical fitness?	Strong agree	11	36.7	7	23.3
		Agree	16	53.3	20	66.7
		Dis agree	3	10	3	10
		Total	30	100	30	100
3	For what case the students can reduce their skill related physical performance?	Smoking	2	6.7	3	10
		Drinking	3	10	2	6.7
		Chewing	3	10	3	10
		All	22	73.3	22	73.3
		Total	30	100	30	100
4	What type of problems that affect skill related physical fitness?	Environment	4	13.3	4	13.3
		Nutrition	6	20	8	26.7
		Facility	8	26.7	2	6.7
		All	12	40	16	53.3
		Total	30	100	30	100

Regarding to table 3 above the response of students If go to school use transportation services 6(20%) of the rural female students response ‘yes’ to use transportation services but the remaining not use transportation services. But on the same question the response of the urban female students is 21(70%) responsive ‘yes ‘use transportation services and the remaining were not use transportation services. On the same table 3, the response of the respondents regarding are you having skill related physical fitness 11(36.7%) of the rural female students response is replay strongly agree, 16(53.3%) were stated that agree and the remaining 3(10%) of the respondents of students is disagree.

But on this question the response of urban female students from the given alternatives 7(23.3%) of the respondents replay strongly agree, 20(66.7%) were stated that agree and the remaining 3(10%) of the respondents replay disagree.

According to table 3 the response of respondent regarding to what case the rural students can reduce their skill related physical performance , from the given alternative 2(6.7%) of the students response is smoking is the cause for reducing skill related physical fitness of the students, 3(10%) of the students are say drinking is the cause factors to reduce the performance of the student skill related physical fitness,3(10%) of the respondents say that the cause factor to reduce performance of the students are chewing chat , finally from the given alternative 22(73.3%) of the respondents agree with all the alternative is the enormous cause to reduce the performance of students skill related physical fitness.

But on this question the response of urban female students from the given alternatives 3(10%) of the urban female students response is smoking is the cause for reducing skill related physical fitness of the students, 2(6.7%)of the students are say drinking is the cause factor to reduce the performance of the student skill related physical fitness , 3(10%) of the respondents say that the cause factors to reduce performance of the students are chewing chat, finally from the given alternative 22(73.3%) of the respondents agree with all the alternative is the enormous cause to reduce the performance of students skill related physical fitness.

On the same table 3 the response of rural respondents regarding to what type of problems that affect the skill related physical fitness of the students from the given alternative 4(13.3%) of the respondents say environment is the factors that affect the problems of skill related physical fitness of the students,6(20%) of the students response is nutrition , 8(26.7%) of the student response is facility and the remaining 12(40%) of the respondents say that the problems that affect the skill related physical fitness of the students are all stated in the alternative that means , environment, nutrition, and facility are the huge problem that affect the skill related physical fitness of the students. But on this questions of the response of urban female students from the given alternatives ,4(13.3%) is response that affect the skill related physical fitness in environment, 8(26.7%) of the student response is nutrition,2(6.7%)is response that affect the skill

related physical fitness in facility and the remaining 16(53.3%) of the respondents say that the problems that affect the skill related physical fitness of the students are stated in the alternative that means, environment, nutrition and facility are the huge problem that affect the skill related physical fitness of the students.

Table 4 : The response of the respondents regarding to the time when doing the exercise , is perform regular exercise to develop skill related physical fitness, and what types of exercise to develop skill related physical fitness

NO	Item		Rural students		Urban students	
			Frequency	Percent	Frequency	Percent
1	Have you knowledge towards the benefit of skill related physical fitness?	Yes	22	73.4	29	96.7
		No	8	26.8	1	3.3
		Total	30	100.0	30	100
2	If your answer is yes what benefits you get?	It prevents the accumulation of fat	3	13.6	5	16.7
		It improves speed	7	31.81	1	3.3
		It increases coordination	2	9	2	6.7
		Other	10	45.45	21	72.41
3	Are students performing regular exercise to develop skill related physical fitness?	Yes	13	43.3	9	30.0
		Some times	17	56.7	19	63.3
		No	-	-	2	6.7
		Total	30	100	30	100
4	By what kind of job help your family?	By serving	6	20	20	66.7
		By agricultural work	4	13.3	-	-
		By fetch water	2	6.7	5	16.7
		Other	18	60	5	16.7
		Total	30	100	30	100

Regarding to table 4 the response of the respondents about the knowledge towards the benefit of skill related physical fitness from the given alternative 22(73.4%) of rural students respondents is replay ‘yes’ that they have knowledge towards the benefit of skill related physical fitness and the remaining students response for the above question from the given alternative 8(26.6%) of the respondents say ’no’ that they have knowledge concerning the benefit of skill related physical fitness. But on this question of the response of urban female students from the given alternatives 29(96.7%) is replay ‘yes’ that they have knowledge towards the benefit of skill related physical fitness remaining students response for the above question from the given alternative 1(3.3%) of the respondents say ’no’ that they have knowledge concerning the benefit of skill related physical fitness.

If yes above knowledge towards the benefit of skill related physical fitness, of rural female students 3(13.6%) were stated that It prevents the accumulation of fat, 7(31.81%) were stated that It improves speed, 2(9%) were stated that It increase coordination and the remaining stated other from the result. Also, if yes above knowledge towards the benefit of skill related physical fitness, of urban female students 5(16.7%) were stated that It prevents the accumulation of fat, 1(3.3%) were stated that It improves speed, 2(6.7%) were stated that It increase coordination and the remaining stated other from the result.

According to table 4 above table the rural students response of the respondent regarding to in table above if your question is ‘yes’ when to do the regular exercise to develop skill related physical fitness from the given option 13(43.3%) the response of the students are replay yes, 17(56.7%) of the respondent say sometimes that they perform regular exercise and the remaining student reply no. But on this question the response of urban female students from the students from the given alternatives 9(30%) the response of the students are replay yes, 19(63.3%) of the respondent say sometimes that they perform regular exercise and the remaining student reply no

As table above the response of the respondent of rural female students by what kind of job help your family, then form the alternative 6(20%) of the response of the student were

stated that by serving, 4(13.3%) were stated that by agricultural work , 2(6.7%) were stated that by fetch water and the remaining were stated that other.

However, As table above the response of the respondent urban female students by what kind of job help your family, then form the alternative 20(66.7%) of the response of the student were stated that by serving, 5(16.7%) were stated that by fetch water and the remaining were stated that other.

Table 5 : The response of the respondents regarding to do have get advisor concerning their skill related physical fitness.

NO	Item		Rural students		Urban students	
			Frequency	Percent	Frequency	Percent
1	Are you getting advice from your teachers about skill related physical fitness?	Yes	25	83.3	27	90
		No	5	16.7	3	10
		Total	30	100	30	100
2	The land high and low affects the skill related physical fitness?	Yes	27	90.0	25	83.3
		No	3	10	5	16.7
		Total	30	100	30	100
3	Your home far from your school?	Yes	11	36.7	7	23.3
		Not more far	13	43.3	19	63.3
		Very far	6	20.0	4	13.3
		Total	30	100	30	100

According to table 5 the rural students response of respondent regarding are you get advice from teachers about your skill related physical fitness, 25(83.3%) were stated that yes and the remaining students were stated that no. this indicates that the majority of students were got support from teachers about their skill related physical fitness. But in this question the response of urban female students from the given alternatives 27(90%) of the respondents were stated that yes this means they got support from their teachers about skill related physical fitness and the remaining were stated that no.

Also, According to table 5 the rural students response of respondent regarding The land high and low affect the skill related physical fitness, 27(90%) were stated that yes and the remaining students were stated that no. this indicates that the majority of students were The land high and low affect the skill related physical fitness. But in this question the response of urban female students from the given alternatives 25(83.3%) of the respondents were stated that yes this means they the land high and low affect the skill related physical fitness and the remaining were stated that no.

Moreover, from above table the rural students response of respondent regarding Your home far from your school, 11(36.7%) were stated that yes, 13(43.3) were stated that not more far from their home and the remaining students were stated that very far from their home. this indicates that the majority of students were their home no more far from their school. But in this question the response of urban female students from the given alternatives 7(23.3%) of the respondents were stated that yes, 19(63.3%) were stated that not more far from their home and the remaining were stated that very far the result shows.

4.2 Teachers Profile

Table 6: Table of teacher's profile

		Frequency	Percent
Sex	M	3	75
	F	1	25
	Total	4	100
Age	24-27 years	2	50
	30 and above years	2	50
	Total	4	100
Total years of experience teaching	From 4-9 years	2	50
	Above 10 years	2	50
	total	4	100
Marital status	Single	1	25
	Married	3	75
	Total	4	100
Educational status	Degree	2	50
	Master's degree	2	50
	Total	4	100

According to this teachers profile table 4.2 3(75%) of the respondents are male and 1(25%) of the respondent are female regarding to the age of the respondents 2(50%) 0f the teachers are 22-23 years, and the remaining 2(50%) of the teacher is 24-27 years and above .while regarding to total years of experience in teaching 2(50%) of the respondents from 4-9 years' experience in teaching, and the remaining 2(50%) of the respondents above 10 years' experience. Regarding to the marital status 1(25%) of the respondent is have no married it is single then, 3(75%) of the respondents are married. Finally the educational level of the respondents 2(50%) of the respondents are educated person that

means graduated from university level 1st degree and the remaining 2(50%) graduated from university level 2nd degree.

Table 7: The response of the respondents regarding to the interest of the subject, the time taken to develop physical fitness

Item		Frequency	Percent
Do you have interest to develop skill related physical fitness?	Yes	4	100
	No	-	-
	Total	4	100
For how long do the exercises to perform skill related physical fitness in per day?	40 minutes	2	50
	60minutes	1	25
	80 minutes	1	25
	Total	4	100
Are you physically fit?	Strongly agree	2	50
	Agree	2	50
	Disagree	-	-
	Total	4	100

According to table above the response of the respondents regarding to the interest to develop skill related physical fitness 4(100%) of the response ‘yes’ they have interest to develop skill related physical fitness.

Regarding the response of teachers for how long do the exercises to perform skill related physical fitness in per day,2(50%) of the response say ‘yes’ to develop physical skill related fitness the time taken is only 40, minutes in per day ,1(25%)of the response replay ‘yes’ to perform skill related physical fitness the time taken is only 60 minutes, but the remaining 2(50%) of the respondents replay ‘yes’ to perform skill related physical fitness the time taken is only 80 minutes.

On the same table above the response of the respondents regarding are you physical fit then from the given alternatives 2(50%)of the teacher response is replay agree that they fit in physical fitness and the reaming 2(50%) of the respondents of teacher is agree.

Table 8 **:** the response of the respondents regarding to the case that can reduce their skill related physical performance about the problems that affect the skill related physical fitness of students and knowledge about the skill related physical fitness all are

Item		Frequency	Percent
For what case the students can reduce their skill related physical performance?	Smoking	-	-
	Drinking alcohol	-	-
	Chewing chat	-	-
	All	4	100
	Total	4	100
What types of problems that affect the skill related physical fitness of your students?	Environmental	-	-
	Nutrition	-	-
	Facility	-	-
	All	4	100
	Total	4	100
Are you measure skill related physical fitness of your students?	Yes	2	50
	No	2	50
	Total	4	100

According table the response of respondent regarding to what case the rural students can reduce their skill related physical performance, from the given alternative 4(100%) of the teachers response is agree with all the alternative is the enormous case to reduce the performance of students skill related physical fitness.

On the same table the response of the respondents regarding to what type of problems that affect the skill related physical fitness of the students from the given alternative

4(100%) of the respondents say that problems that affect the skill related physical fitness of the students are all stated in the alternative that means, environment, nutrition, and facility are the huge problems that affect the skill related physical fitness of the students.

Regarding to table above the response of the respondents about that are you measure skill related physical fitness of students from the alternative 2(50%) is replay 'yes' that they have knowledge to measure of skill related physical fitness and remaining were stated that no.

Table 9 **:** the response of the respondents regarding to the case that can reduce their skill related physical performance about the problems that affect the skill related physical fitness of students and knowledge about the skill related physical fitness all are

Item		Frequency	Percent
Are you encouraging your students towards developing skill related physical fitness?	Yes	4	100
	No	-	-
	Total	100	100
Are you advising students regarding to developing skill related physical fitness?	Yes	4	100
	No	-	-
	Total	4	100
If your answer is 'yes' what types of advice to gives for students?	About their health status of the student	1	25
	About their benefit of skill related physical fitness	1	25
	About their mechanisms of developing skill related physical fitness	1	25
	All	1	25
	Total	4	100

According to above table the response of the respondent regarding are you encouraging students towards developing skill related physical fitness, from the given alternatives

4(100%) of the teachers response are replay ’yes’ that they encouraging the students towards developing skill related physical fitness.

Regarding to above table the response of the respondent regarding to the advice of students to develop skill related physical fitness from the given alternative 4(100%) of the teacher response is reply ‘yes’ that they have advise students regarding to developing skill related physical fitness.

On the same above table that income if your answer is ‘yes’ what type of advice to be given for students, from the given alternative, 1(25%) were stated that about their health status of the student, 1(25%) were stated that about their benefit of skill related physical fitness, 1(25%) were stated that about their mechanisms of developing skill related physical fitness 1(25%) of the teachers respondents all the alternative which is state in the table is the advice that give for students from the teacher. Then the teacher gives for student about their mechanisms of developing skill related physical fitness.

4.3 Table of Fitness Test

Table 10: Selected variables and their criterion measures

No.	Variable	Criterion measures
1	Power	Dample
2	coordination	Table tens
3	Speed	50 meter dash
4	Agility	zigzag run

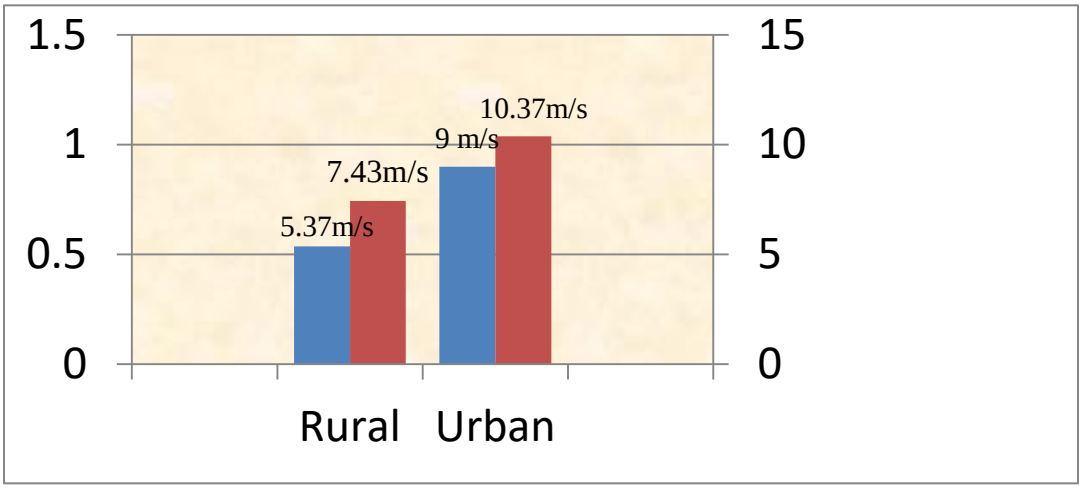
Table 11 Mean and standard deviation of selected qualities of rural female students

No	**Variable**	**Units**	**Mean**	**S .D**
1	Power	No-of lifting	11.30	1.343
2	Coordination	No-of score	1.89	0.832
3	Speed	Seconds	5.37	1.189
4	Agility	Seconds	7.43	1.278

Table 12 Mean and standard deviation of selected qualities of urban female students

No	Variable	Unit	Mean	S.D
1	Power	No-of lifting	7.37	1.81
2	Coordination	No-of lifting	1.82	0.809
3	Speed	Second	9.00	2.244
4	Agility	Second	10.37	1.245

Figure 1 Fitness test of urban and rural female students

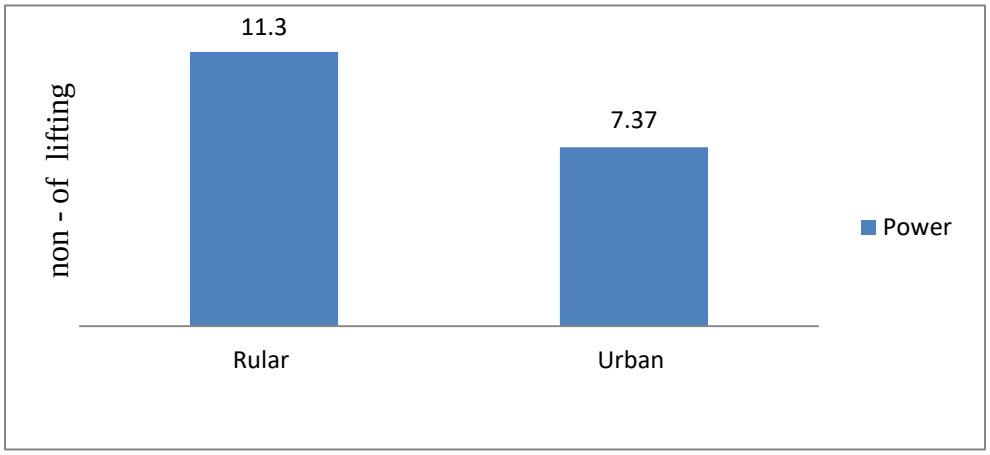


The perusal of Figure 1 indicates that the mean values for agility variable for urban female students were recorded as 10.37±0.227 A significantly power of urban female students (at t < 0.05) was observed better than their rural counterparts in the Figure1.While, the perusal of Figure 1 indicates that the mean values for agility variable for rural female students was recorded as 7.43±0.233 A significantly power of urban female students (at t < 0.05) was observed better than their rural counterparts in the Figure 1.

The perusal of Figure 1 indicates that the mean values for speed variable for urban female students were recorded as 5.37±0.217A significantly power of rural female students (at t< 0.05) was observed better than their urban counter parts the Figure 1. Moreover, the perusal of Figure 1 indicates that the mean values for speed variable for urban female students were recorded as 9±0.410A significantly power of rural female students (at t< 0.05) was observed better than their urban counter parts the Figure 1.

The perusal of Figure 2indicates that the mean values for power variable for rural students was recorded as 11.30±0.245 A significantly power of rural female students (at p < 0.05) was observed better than their urban counterparts in the Figure 2.

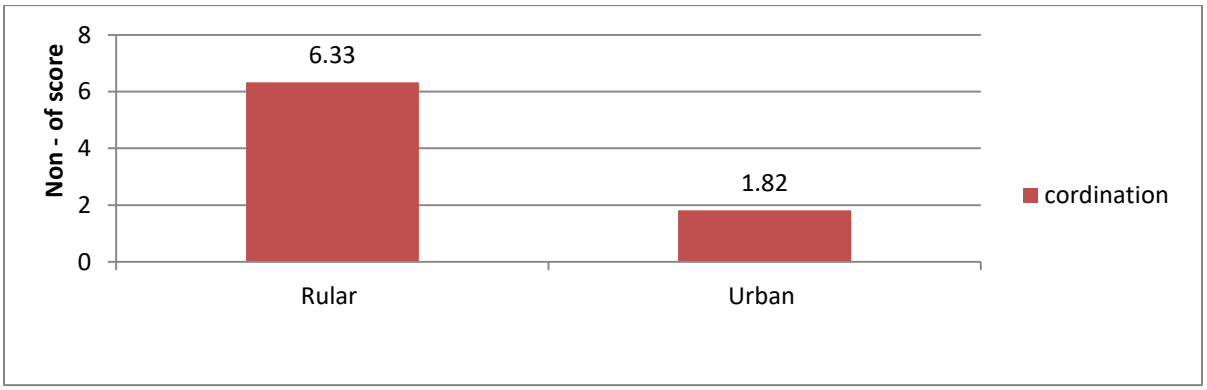
Figure 2 Power in rural and urban female students



The perusal of Figure 2 indicates that the mean value for power variable for urban students was recorded as 7.30±0.330. A significantly power of rural female students (at t< 0.05) was observed better than their urban counter parts the Figure 2.

The perusal of Figure 2 indicates that the mean value for power variable for rural students was recorded as 6.33± 0.599. A significantly power of rural female students (at p < 0.05) was observed better than their urban counterparts in the Figure 2.

Figure 3 Fitness of coordination in rural and urban female students



The perusal of Figure 3 indicates that the mean value for coordination variable for urban students was recorded as 1.82 ±0. 0.196. A significantly coordination of rural female students (at t< 0.05) was observed better than their urban counter parts the Figure 3.

4.4. Result and Analysis of Interview

The purpose of the study was comparison of skill related physical fitness components between urban and rural female students in SNNP Region, Hadiya zone secondary schools.

The researcher used interviews with sport science teachers and urban and rural selected secondary school principals were participated in interviews.

To this effect the researcher had been presented their ideas as follows; during the interviews of the urban and rural secondary schools principals and sport science teachers with in the study area lots of issues were a raised, the main points had been that for rural students' shortage of transportation and hardness of life, equipment and materials in the school. But all this partially full filed in urban area. In both schools and their environment there had been poor relationship for female students and teachers. They also reviewed that lack of cooperation within concerned bodies. The interest of female students and sport science teachers for skill related physical fitness exercise.

1.2. Student with observation check list

Does the teacher use different material and teaching aids? During the observation time most of the teachers were not used additional materials as long as the subject teachers meet her students always used nothing except whistle and some closes for zigzag run.

Do female students are interested to participate in skill related physical fitness lesson?

It is not easily observable to understand female students' interest but sometimes female's students when they are coming to the field to late and also ask permission to not participate in the exercise.

Does the teacher motivate female students in skill related physical exercise? Some teachers try to motivation during skill related physical fitness practices session for female students but the rest were not interested to motivate the students to participate.

Does the teacher wear appropriate close?

Not all teachers wear appropriate close that is why some students also get in to field with trouser careless.

Does the playing field (materials) skill relate physical fitness exercises are well constructed? The school compound of urban school had a ball games field and some horizontal bars and rural school also have football field and volleyball court.

Does the teacher give feedback for female students while they work? At the researcher observed sometimes teachers give feedback at the end of the practical class but majority of urban and rural female students who get such feedback were females.

Does the teacher show the skill related physical fitness exercise well? Sport science teachers need to be as a role model but sometimes with the practical part it seems to be less. So the researcher observed there were no good demonstration was taken by sport science teachers in Geja and Hetto High School in Hadiya zone.

Does the teacher use tutorial class only for female students? Majority of the teachers use tutorial class for all of the students. Even if it needs to be given also for females this could also not early shown in the Geja and Hetto High School compound, except with other subject teachers.

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter is devoted to the presentation of summary, conclusion and recommendations forwarded on the basis of the finding presented in the previous chapter.

5.1 Summary

The general purpose of study was to identify comparison of skill related physical fitness components of rural and urban secondary school female students in Hadiya zone in SNNP, Ethiopia.

More specifically the study intends to attain the following objectives:

- To measure the skill related physical fitness quality in rural vs. urban secondary school female students.
- To find out the methods of developing skill related physical fitness quality
- To examine the quality of skill related physical fitness components in rural and urban secondary school students.
- To identify factors that affect the quality of skill related physical fitness in rural and urban secondary school students.
- To find out the significant different between in rural and urban student skill related fitness component.
- To find out the static power, speed, coordination and agility between urban and rural female student.

In general the study attempt to give answers for the following research questions:

- Is there a difference among the static power, coordination, and speed, agility in rural and urban female students?
- What factor mostly affects skill related physical fitness?
- Is there significant difference between the comparisons of skill related physical fitness components of rural and urban secondary school female students?
- Is there similarity between the comparison of skill related physical fitness components of rural and urban secondary school female students.

The data collected through questionnaire and fitness tests, from 60 rural and urban female students who were selected through purposely sampling techniques.

- Which analyzed by descriptive statics such as means, standard deviation, consequently, through interpretation and discussion of the result were made in the previous chapter, the following major finding were obtained:-
- The finding of present study indicates that the mean and standard deviation value of skill related physical fitness of rural female students are record as variable wise, power 11.30 and 1.343, coordination 6.33 and 3.284 respectively, speed 5.37 and 1.189, agility 7.43 and 1.278 respectively and the mean and standard deviation values of skill related physical fitness of urban female students are recorded as variable wise, power 7.37 and 1.810, coordination1.82 and 0.809 respectively, speed 9 and 2.244, agility 10.37 and 1.245 respectively.
- The result of the student indicated that the mean and standard deviation values for power variable for rural and urban students were recorded as 11.30, 1.343 and 7.37, 1.810, respectively. It shows that rural students have performed significantly better than their urban counterparts.
- The study clearly shows that the mean and standard deviation value on the speed variable of the rural and urban female students were recorded as 5.37, 1.189 and 9, 2.244, respectively. Therefore the rural students have performed significantly better than their urban counterparts.
- The result of the study shows that the mean and standard deviation value on the agility variable for rural and urban female students were recorded as 7.43, 1.278 and 10.37, 1.245, respectively. Therefore the urban students have performed slightly better than their rural counterparts.
- The result of the study shows that the mean and standard deviation value on the coordination variable for rural and urban female students were recorded as 6.33, 3.284 and 1.82, 0.809, respectively. Therefore the rural students have performed slightly better than their rural counterparts
- The result of the study shows that most students have knowledge and concepts about the contribution of skill related components physical fitness in daily activity.
- 100% of the teachers' response is proper way to teach sport science in the school.

- ❖ Lastly the problems that affect the skill related components physical fitness of the students are environment, nutrition and facility.

5.3Conclusions

Based on the major summery of the study, to identify the difference between skill related physical fitness of urban and rural female students of Hetto and Geja secondary school the following points are stated as conclusions.

Urban female students are superior to rural female students in coordination. Whereas rural female students are also superior to urban female students in speed, power and Agility This shawies that daily activities produces physical fitness improvements urban life is less active in nature that decreased the students fitness.

5.4. Recommendations

- ➢ The following suggestions and recommendations are made on the basis of the research finding and conclusions.
- ➢ The finding of this study revealed the previous findings of skill related physical fitness components in rural and urban students. Urban life style which revealed in activity and rural life style where students are forced to travel in every day activity. If can be recommended that the physical activity of urban students should be a concern for school in particular and the policy makers in general.
- ➢ Rural life style is more active in nature than urban. The life in rural areas which produced high level of physical and physiological functioning in residents. A lot could be done to improve the skill related physical fitness levels of female students in the urban school.
- ➢ The great problems that affect skill related physical fitness teachers and students are environment, Nutrition, and Facility.
- ➢ While my recommendation to perform skill related physical fitness urban female students must do speed, power and coordination exercise for a long period of time in per day and rural female students also do agility exercise for a long period of time in per day.

As much as possible to develop your skill related physical fitness do daily activity either physical exercises that means the individual's perform physical activity by using of training principles or physical activity that means every daily life activity because when you develop your skill related physical fitness you are effective in any sports and every daily activity, such as in football, basketball, athletics, and indigenous activities etc.

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7 APPENDICES

APPENDIX –A

Questionnaires for Students

This questionnaire is filed by students. dear respondent; the objectives of this questionnaire is together information on the comparison of skill related physical fitness rural and urban secondary school female students in Hadiya Zone SNNP Region, Ethiopia.

This it is initiated to obtain necessary data from you as a vital source of information and to point out the malty of skill related physical fitness components of rural and urban secondary school female students with possible solution and recommendation. You are kindly requested to be honest and frank in your response as this will have direct bearing on the success of the research.

Directions

- Please indicate your response by circling ‘’O’’ according to the instruction provided there. For
- Dear respondent upon completing this question naïve. You are kindly requested to return it to the researcher.
- writer your name is not necessary;

Thank you in advance for your cooperation! Personal detail

1. Age A/16 years …. B/ 16 – 18 years C/ 19 years and above
2. Weight ……
3. Height …....

Circling your correct choice respond by’’ 0’’ mark

1. Do you have interest to develop your skill related physical fitness?
   A/ yes B/ no
2. If your answer is’’ yes’’ for item No, 1 when you perform skill related physical fitness activity?
   A/ in the morning
   B/ in the afternoon C/ in the evening

3. For how long do the excise to perform the skill related physical fitness?

   A/ 40 minutes

   B/ 60 minutes

   C/ 80 minutes

4. Are you having skill related physical fitness?

   A/ strongly Agree

   B/ Agree

   C/ Disagree

5. For what case the students can reduce their skill related physical performance?

A. Smoking

B. Drinking alcohol

C. Chewing chat

D. All of the above

6. What type of problems that affect the skill related physical fitness of the students?

A. Environment

B. Nutrition

C. Facility

D. All

7. Have you knowledge concerning the benefit of skill related physical fitness?

A. Yes

B. No

8. If your answer is “Yes” for item No. 7 what is benefit of it?

A. It prevents the accumulation of fat

B. It improves speed

C. It increase coordination ability

D. All of them are the benefit of skill related physical fitness.

9. Are the students performing regular exercise to develop their skill related physical fitness?

A. Yes

B. No

10. If your answer is “Yes” for item No, 9 what type of exercise to develop their skill related physical fitness?

A. Speed exercise

B. Power exercise

C. Coordination exercise

D. All

11. Have you get advice from your teacher concerning your skill related physical fitness?

A. Yes

B. No

12. If your answer is “yes” for item No 11 what kind of advice to be get from a teacher?

A. About the skill related physical fitness status

B. About the Mechanisms to develop skill related physical fitness

C. About the use of skill related physical fitness

D. All of the above

13. By what mechanisms the students avoid the feel pain at their chest when they perform skill related physical activity

A. By performance different skill related physical activities.

B. By taking rest

C. By asking a physical education teachers

D. All

14. What type of exercise do you want to fit your skill related physical fitness?

A. Power experience

B. Speed experience

C. Zigzag ran

D. Weight lifting

15. To increase the participation of students in skill related physical fitness what to be done the experts

A. Explain the benefit of skill related physical fitness
B. To provide the sport center in the school
C. To make students psychologically ready

APPENDIX- B

Questionnaires for Teacher

This questionnaire is filed by teachers. dear respondent ; the objectives of this questionnaire is together information on the comparison of skill related physical fitness components of rural and urban secondary school female students in Hadiya Zone SNNP. Regional stat, Ethiopia

This it is initiated to obtain necessary data from you as a vital source of information and to point out the quality of skill related physical fitness in rural and urban secondary school female students with possible solution and recommendation. You are kindly requested to be honest and frank in your response as this will have direct bearing on the success of the research.

Directions

- Please indicate your response by circling "O" according to the instruction provided there. For open ended question (5) write your short response.
- Dear respondent upon completing this questionnaire. You are kindly requested to return it to the researcher.
- writer your name is not necessary;

Thank you in advance for your cooperation! Personal detail

1. Sex A/ male…… B/ Female……..
2. Age A/ below 24….. B/ 24-27……..
   C/ 27-30…… D/ 30 and above
3. Marital status A/ Single…… B/ Married C/ divorced…….
4. Educational status A/ College level 10+2…….
   B/ University level 1st degree …… 2nd degree……
5. Teacher experience in teaching A/ 3-4 years ……
   B/ 4-6 years …… C/ 6 Years and above ……

Circle your answer choice respond by "O"

1. Do you have interest to develop your students skill related physical fitness?

A. Yes B. No

2. For how long do the excise to perform the skill related physical fitness?

   A/ 30 minutes

   B/ 40 minutes

   C/ 60 minutes

3. For what case the students can reduce their skill related physical performance?

A. Smoking

B. Chewing chat

C. Drinking alcohol

D. All of the above

4. You are physical fit?

   A/ strongly Agree

   B/ Agree

   C/ Disagree

5. What type of problems that affect the skill related physical fitness of the students?

A. Environment

B. Nutrition

C. Facility

D. All

6. Are you evaluated skill related physical fitness of the students?

A. Yes

B. No

7. Are you encouraging your students towards developing skill related physical fitness?

A. Yes

B. No

8. Are you advice students regarding to develop skill related physical fitness?

A. Yes

B. No

9. If your answer is “Yes” for item No, 8 what type of advice to give for students?

   A. About their skill status of the students
   B. About their benefits of skill related physical fitness
   C. About their Mechanisms of developing skill related physical fitness.
   D. All of the above

10. What type of exercise is the most importance to develop skill related physical fitness?

A. Power exercise

B. Coordination exercise

C. Agility exercise

D. All

11. Is your method of teaching physical education in the school depending on the following way? 60% practical, 40% theoretical.

A. Yes

B. No

12. If your answer is “yes” for item No 11 is sufficient materials during practical class? What are there?

A. Filed

B. Gym/indoor

C. Ball

D. Other

13. Is your school proper way to teach physical education?

A. Yes

B. No

14. Are you describing the goals of the physical education?

A. Yes

B. No

15. Are you discuss on the selected factors that influencing the natural and conduct of physical education in your school?

A. Yes

B. No

Appendix – C

Interview for teachers and females students

Dear Teachers and school principals, as if known that physical fitness activity are given in high school as one grade 10 physical education topics.

The purpose of this study is to compare the skill related physical fitness components between urban and rural high school female students in Hadiya zone SNNP Region, Ethiopia. The role of sport science teachers is an important to determine the participation of students as well as attitudinal changes of them.

Taking this I kindly request you to honestly respond to these interviews.

Thanks for your honest cooperation.

Instruction indicates your response on blank space by giving comments.

Age _____ sex_____

Qualification_____

Service year_____

1. Do you think that participation of female students towards skill related physical fitness exercise in and out of school can change the interest of female of students in skill related physical fitness? If yes, explain it. If no why?

   _____

   _____

   _____

2. How the schools as well as in their environment promote and facilitate the equipment for teachers and students?

   _____

   _____

   _____

3. How support/facilitates would you recommended to be given for school students to attract students to be skill related physical fitness exercise?

   _____

   _____

4. Do you enforce female students in skill related physical fitness exercise and engage them as good?

   _____

   _____

   _____

5. What should be the role of family, environment nutrition to motivate their children to encourage in skill related physical fitness?

   _____

   _____

   _____

Appendix – D

Observation Checklist for study

Name of school _____ Date of observation _____ .Grade _____ _____ Section _____

Topic _____

Sex _____ Age _____

Educational background

Qualification: a) Diploma_____b) Degree_____ c) masters _____ _____ d) students _____

Put checklist (√) in the column which tells the observation check list is to get additional information on the students, area.

No	Items	Yes	No	Some time
1	Does the teacher use different materials and teaching aids?		✓	
2	Do female students are interested to participate in skill related physical fitness lesson?			✓
3	Does the teacher motivate female students in skill related physical fitness exercise?			✓
4	Does the teachers wear appropriate close?			✓
5	Does the playing field and materials for skill related physical fitness exercise are well constructed?		✓	
6	Do the teachers give feedback for female students while they work?			✓
7	Does the teacher show the skill related physical fitness exercise well?			✓
8	Do the teachers use tutorial class only for female students?		✓	

APPENDIX -E

Figure 4:Overview of agility test in Hetto(urban) female students

Figure 5: Overview of coordination test in Hetto (urban) female students

Figure 6: Overview of speed test in Hetto (urban) female students

Figure 7: Over view of power test in Hetto (urban) female students

Figure 8: Overview of agility test in Geja (rural) female students

Figure 9:Overview of coordination test in Geja (rural) female students

Figure 10: Overview of speed test in Geja (rural) female students

Figure 11 : Overview of power test in Geja (rural) female students

APPENDIX -E

Appendix 1: Comparative analysis of speed between rural and urban female students

No	Group	Number	Mean	S .D	SEM	't' value
1	Rural female students	30	5.37	1.189	.217	0.000
2	Urban female students	30	9.00	2.244	.410	

Appendix 2: Comparative analysis of agility between rural and urban female students

No	Group	Number	Mean	S .D	SEM	't' value
1	Rural female students	30	7.43	1.278	.233	0.000
2	Urban female students	30	10.37	1.245	.227	

Appendix 3: Comparative analysis of power between rural and urban female students

No	Group	Number	Mean	S .D	SEM	't' value
1	Rural female students	30	11.30	1.343	.245	0.000
2	Urban female students	30	7.37	1.810	.330	

Appendix 4: Comparative analysis of coordination between rural and urban female students

No	Group	Number	Mean	S .D	SEM	't' value
1	Rural female students	30	6.33	3.284	0.599	0.000
2	Urban female students	30	1.82	0.809	0.196	

Appendix F

FIGURE 12Location of the Study Area

Source: http://www.ethiomappingagancy.com