INVESTIGATING THE LEVEL OF PHYSICAL FITNESS OF FOFA TOWN MALE YOUTH FOOTBALL PLAYERS IN YEM SPECIAL WOREDA, SNNPR, ETHIOPIA

MEd THESIS

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Investigating the Level of Physical Fitness of Fofa Town Male Youth Football Players in Yem Special Woreda, SNNPR, Ethiopia

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As research Advisor, I here by certify that we have read and evaluated this Thesis prepared by Mamuye Kassaye Woldesenbet "Investigating the Level of Physical Fitness of Fofa Town Male Youth Football Players in Yem Special Woreda, SNNPR, Ethiopia" I recommend that it can be submitted as fulfillment of the Thesis requirements.

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DEDICATION

I dedicate this Thesis manuscript to parents and all other members of any family for their dedication in the success of my life.

STATEMENT OF THE AUTHOR

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ACRONYMS AND ABBRIVATIONS

MHR	Maximum Heart Rate
MSFT	Multistage Fitness Test.
SD	Standard Deviation
SNNPR	Southern Nation Nationality and People Regional state
VOMax	Maximum Volume of Oxygen Consumption
Yo-YoIR1	Yo-Yo Intsesrmittent Recovery test

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Investigating the Level of Physical Fitness of Fofa Town Male Youth Football Players in Yem Special Woreda, SNNPR, Ethiopia

ABSTRACT

The purpose of the study was to investigate the Level of Physical Fitness of Fofa Town Male Youth Football Players the subjects *were selected from Yem special Woreda youth football players using whole sampling technique methods. whole sampling techniques methods from 24 male players were selected as the subjected for this study. whole sampling techniques design was used in order to collect data from subjects quantitative research approach was employed in order to bring a quantitative data and the data collected were analyzed and interpreted by using descriptive statistics. The results of this study showed that* Male Youth Football Players in Yem Special Woreda *in agility test, endurance in 300 yard shuttle test, and speed in 30 meter acceleration test was average, below average and poor level when we compare with the norm. On the bases of the findings of this study recommend that, it is useful to prepare and keeping them to maintain their performances. It is advised to coaches to include the physical fitness programs in their schedules during the training session to enhance their fitness level at the standardized level. To make the training program more effective the sport office of Yem special Woreda should provide training for coaches to develop the competency level and to achieve the objectives of the youth football players.*

Key Words: Physical fitness, Youth, Football players .

1. INTRODUCTION

This chapter deals with Background of the study, Statement of the problem, Scope of the study, Significance of the study and Objective of the study.

1.1. Background of the Study

Football refers a number of sports that involves the varying degrees kicking a ball with the foot to score a goal. The most popular of these sports world wide is association football more commonly known as football or soccer. At high levels of play, the demands of football require a player to be exceptionally fit both aerobically and an aerobically (Kim, 2001).

Football is a multi-dimensional sport requiring constant changes in activity. Football is essentially simple game based on intelligent interposing. For youth players skills, techniques and good movement are most easily grasped in a simple form. However the program of youth football training should be capable of producing players who are beneficial to the main club. This can be achieved through a well-organized and structured youth football development program. The common aspect of the game is the necessity of teamwork to complement individual skills. Since soccer is a physical contact sport and lots of movements and skills are involved. A high level of physical demand is required for match play, which involves kicking, short sprinting, throwing, catching, trapping etc. The activities of the game include short sprinting as well as casual recovery movements. As the players have to cover a big area in the ground during attack and defense therefore, the game demands for aerobic as well as anaerobic fitness (Reilly, 1996; Reilly et al., 2000a).

1.2. Statement of the problem

This research thesis was entitled as the investigation the level physical fitness Fofa town male youth football player in Yem special woreda. The purpose of this study was design to investigating the level of physical fitness variables in Fofa town Yem special woreda. Investigation of youth football players in the required and number quality was the version of strong football players. As show in the back ground section, youth football players training was the most important time in which players acquires different skills and knowledge. The male football players in Yem special woreda computational game may would be the inspiration for the majority of youths but it was the pleasure and satisfaction from playing that makes the game so

attractive. It was clear that youth football was a sport with enormous growth potential. Physical fitness is the most important factor for the progress in the general life as well as, field of sports if the citizens of the country want to improve in any field may be sports or general life.

Physical fitness is essential; therefore it is the responsibility of every country to promote physical fitness of its citizens because physical fitness is the basic requirements for the tasks to be under taken by an individual in his life (Gulshan, 2013). Testing endurance, speed and agility for athletes can help provide the coach determine the current level of athlete's physical fitness. The evaluation of these tests could help the coaches to decide the current level of athlete's physical fitness, while it is not clear as to what extent this assessment may influence the current status of the athletes. It is possible that these assessments may become a useful tool to a coach in determining the current status of the athletes.

Now, according to developments of footballers in international arena and its increasing growth among teens and young, it is require looking at this issue profoundly for identifying and removing possible obstacles using the scientific method (Bangsbo, 1992). The importance of this issue as well as the factors for evaluation and selection of players have confirmed by the sport experts (Reeves et al., 1991). On the other hand, because no study has been performed on the physiological factors of teen football players of the study area, and because of football progression toward professional levels, it is essential to study the physiological characteristics of teenage football players for providing valuable information. Using these, views of the physical condition of young players will be more cleared. Such studies can be designed with providing better training programs to help these age groups. It can also prepare athletes to achieve a maximum level of performance and further pursue their goals and taking steps towards the professional levels of football. Furthermore, via this way and accurate planning, it can also make a bright future for our football. Since, the physiological as well as physical characteristics are important considerations in the performance of the players (Bell, and Rhodes, 1998).

The purpose of this study was to investigate the level of physical fitness variables of Fofa town male youth football players of Yem special woreda. Coaches should evaluate each player by utilizing the results of a number of tests which help to decide the current level of player's

physical fitness and compare with the international norm and also the result of the study would give clear idea about physical fitness level of male youth football players.

Therefore, the researcher was attempting to answer the following research questions:

1. What is the current physical fitness level of Fofa town male youth football players of Yem special woreda?
2. Is there any difference between the levels of physical fitness football players compare with standard norms?
3. What are the methods to improve the level of physical fitness of Fofa town male youth football players?

1.3. Scope of the study

The scope of study was including likely focus in the level of physical fitness in Fofa town male football players in Yem special woreda. The study covers on Fofa town male football players.

1.4. Significance of the study

This researcher was investigating the level of physical fitness variables would contribute to the society in the following ways:-

1. The study was determining the current physical fitness level of Fofa town male youth football players of Yem special woreda.
2. The findings of this study would provide a better understanding about the level of physical fitness of male youth football players in Yem special woreda.
3. This study was providing a base to the athletes who participate in Football in Yem special.
4. It was helpful as a reference for concern research thesis in the future.

1.5. Objective of the study

1.5.1. General objective

The general objective of this research thesis was design to investigate the level physical fitness variables Fofa town male youth football player in Yem Special woreda.

1.5.2. Specific objective

The specific objectives of the study will be to:

1. To identify the current physical fitness level of Fofa town male youth football players of Yem special woreda.

2. To assess the level of physical fitness variables of Yem special woreda Football players with standard norms.

3. To identify the methods to improve the level of physical fitness in Fofa town male youth football players in Yem special woreda.

2. REVIEW OF RELATED LITERATURE

The review of literature's relate to this study was make the following sub headings concepts of football, comparison of select physical fitness variables, elements of training and fitness, physical fitness for youth football player, aerobic and anaerobic football players youth involvement in sport training.

2.1. Concept of Football

Football is the most popular sport in the world. Attendances at provincial and national competitions can range from 30,000 to 80,000. It is played between two teams on a grass field. Teams are comprised of 11 players, a goalkeeper, defenders, midfielders and forwards. The exact positioning of each player may vary depending on the tactics employed by team management. Matches are comprised of two 45minute periods, and officiated by a referee, assisted by two sideline officials and one fourth umpires. Each team is permitted 3 up to 6 substitutions during the course of a game. The players can use any part of their bodies to hit (play) the ball, except their hands or arms. Players generally use their feet and heads as they kick, dribble, and pass the ball toward the goal. The objective of the game is to score goal more than the opposition and concede as few scores as possible. A team is awarded a goal when the ball crosses the goal end-line between the goal posts and under the crossbar (Stephens, 2004).

The physiological demands of any sport are determined in large part by the activity patterns of the game. Football is characterized by irregular changes of pace and anaerobic efforts superimposed on a backdrop of light to moderate aerobic activity. Players must be able to execute a number of skills within an environment of explosive speed and intense physical contact. In addition, they must possess high levels of upper and lower body strength in order to compete for and maintain possession of the ball. Optimal performance requires that players develop specific fitness attributes that will enable them to cope with the physiological demands and maintain their technical standard throughout the course of a game (P.Stephen, 2004).

The fitness requirements of most team sports vary according to player position and the overall tactical plan. The distance covered during the game may also vary according to a player’s position on the team. Elite players in many team sports tend to have a higher level of fitness and greater technical ability than sub-elite players (P.Stephen, 2004).

The challenging energy demands of football emerge from requirements to perform a number of high intensity activities, such as jumping, tackling, accelerating, decelerating and getting off the ground (Bangsbo & Michelson, 2002). The other skills of the game such as kicking and dribbling also need to be considered when determining total physical requirements for football (Reilly, 1997). For instance, the oxygen demand for dribbling the ball is greater than the demands imposed by running normally, while the energy demands of running backwards are lower than running with the ball (Kami, 2003). Therefore, the demands of unpredictable multiple movement patterns in football combine to generate to movement challenge and regularly change the demands on energy production and muscle action. Football requires a number of physiological qualities to be performed at the highest intensity and skill execution with an exceptionally high standard of technical ability, as well as a tactical understanding of the game. Physical qualities include aerobic and anaerobic endurance, agility, and sprinting ability, jumping and kicking power (Reilly, 1997).

2.2. Comparison of Level Physical Fitness Variable

The relationship between speed, agility and anaerobic power of U-14-16 year's elite footballers. Twenty elite soccer players from the adolescent's football league in Tehran to assess the anaerobic power of the subjects, sergeant vertical jump, to measure the speed,10 m sprint test and to assess the agility, 9x4 m tests used. The results showed that there were significant relationships between the speed and anaerobic power, speed and agility and anaerobic power and agility of U-14-16 year's elite football players (Chaleh et al., 2012).

The evaluation of whether the players in different positional roles have a different physical and physiologic profile. Physiologic measurements were taken of 270 soccer players during the precompetitive period of 2005/06 and the precompetitive period of 2006/07. According to the positional roles, players were categorized as defenders (n = 80), midfielders (n = 80), attackers (n = 80), and goalkeepers (n = 30). Analysis of variance s was use to determinate differences between team positions. Goalkeepers are the tallest and the heaviest players in the team. They are also the slowest players in the team when sprinting ability over 10 and 20 meters is required. Attackers were the quickest players in the team when looking at sprint values over 5, 10, and 20 meters. There were statistically significant differences between attacker and defenders when measuring vertical jump height by squat jump. Goalkeepers were able to perform better on explosive power tests (squat jump and countermovement jump) than players in the field.

Midfielders had statistically significant superior values of relative oxygen consumption, maximal heart rate, maximal running speed, and blood lactate than defenders and attackers. Defenders had more body fat than attackers and midfielders. It is obvious that players in different positions have different physical and physiologic profiles (Sporis, G et al., 2009).

The different training methods have been commonly used to improve physical fitness and related standards of performance of athletes. High level of health and fitness are very vital aspect for sports men performance fitness emphasizes on the state in which an individual has sufficient energy to avoid fatigue and give best in his event. Sports training are long, continuous, and systematic Process or Physical and Mental hard work, to attend high level of performance in competitions at various levels by making the best use of the principles derived from the sports sciences (Singh Hardayal, 1993).

The relationship between popular endurance field tests and physical match performance in elite male youth soccer players. Eighteen young male soccer players were randomly chosen among a population of elite-level soccer players. Players were observed during international championship games of the corresponding age categories and randomly submitted to the level of the Yo-Yo intermittent recovery test (Yo-Yo IR1), the Multistage Fitness Test (MSFT), and the Hoff test on separate occasions. Players covered 6,087 ± 582 m of which 15% (930 ± 362 m) were performed as a high-intensity activity. During the first and second halves, players attained 86.8 ± 6.5 and 85.8 ± 5.8% of maximum heart rate with peak HRs of 100 ± 2 and 99.4 ± 3.2% of MHR, respectively. Players' Yo-Yo IR1 and MSFT performance were significantly related to a number of match physical activities. However, the Hoff test was only significantly related with sprint distance. The Yo-Yo IR1 showed a very large association with MSFT performance. The results of this study showed that the Yo-Yo IR1 and MSFT may be regarded as valuable tests to assess match fitness and subsequently guide training prescription in youth soccer players. The very strong relationship between Yo-Yo IR1 and MSFT suggests their use according to the period of the season and the aerobic fitness level of the players. Because of the association of the Yo-Yo IR1 and MSFT with match physical performances, these tests should be considered in talent selection and development of players (Castanets et al., 2010).

2.3. Physical demands in football

Each playing position is characterized by its own activity profile and different tactical requirements in relation to the movement of the ball. Central defenders cover less total distance

and high-intensity running, while attackers complete more sprints and a greater portion of high-intensity activity when their own team is in possession of the ball than midfielders and defenders (Mohr M, et al., 2003): Rampinini E, et al., (2007)

Professional football is a difficult sport in which various activities such as fast sprints, shooting, hitting and tackles are done in soccer (Kargarfard, and Keshavarz, 2005). Based on various research results, physical and physiological characteristics of soccer players are required to such a high level of anaerobic power, aerobic capacity, speed, muscular strength, agility and flexibility (Chaleh, 2007; Mina Sian, 1997; Arnason et al., 2004; Bangsbo et al., 1991). The assessment and determination oftheanthropometric and physiological characteristics are essential to a successful achievement of a soccer team not only during a game, but also along the whole sportive season, and such information can and must be used by the coach to change the player's function or even the tactical formation of the whole team with the purpose to maximize the performance, once each positioning presents specific features (Shepard, 1999).

2.4. Physical Fitness for Youth Football Players

The development of young football players has taken on increasing importance. To produce first team players, in addition to working on technical and tactical abilities, the developmental process must also work on a number of other attributes. These include habits and pass-times, mental skills and physical fitness Physical fitness in particular received much attention in recent years. Physical fitness is composed of several aspects. These aspects are illustrated in Figure 1. Good levels in each of these aspects will allow a player to complete the activities and game skills needed throughout a match. This makes fitness training an important part of every player's training schedule. Although the various aspects of fitness can be improved through appropriate training, research has suggested that there may be optimal periods within a player's growth and development when it is best to build upon them. It is possible that if these attributes are not put under sufficient stress during these 'windows of opportunity' a player may not realize his or her full performance potential (Reilly et al., 2001).

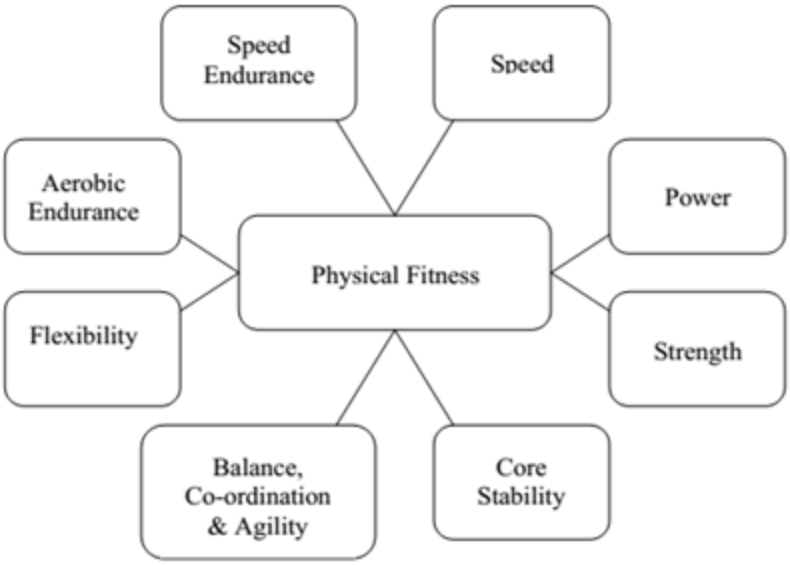


Figure 1: Range of fitness parameters for football

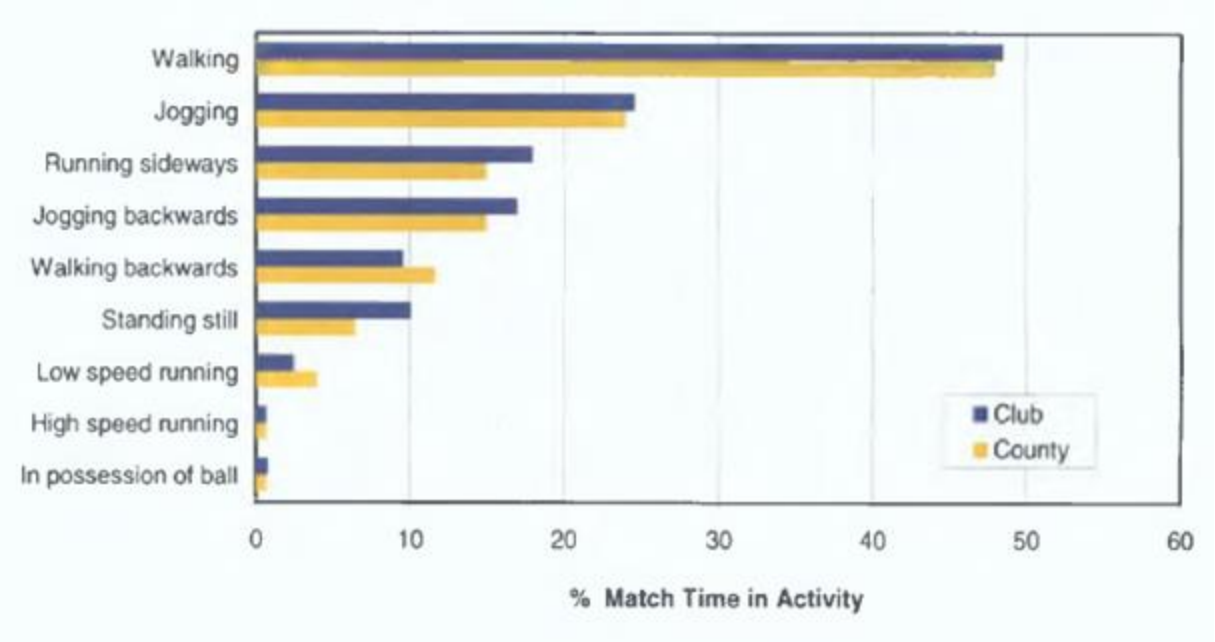
Source: physical fitness/ modified on 19 December, 2020

Anthropometric Characteristics

Anthropometric characteristics of players may vary with positional and/or tactical role assigned by the coach Knowledge of a player physical characteristics are commonly used in team selection and tactical roles. The tallest players on the squad are usually positioned in midfield In contrast; smaller more agile players are assigned wide positions where acceleration and agility are important for optimal performance. Body mass and body composition may influence a number of performance parameters Excessive body fat impedes mobility and agility and adds to energy costs of exercise. Excess fat also impedes the efficiency of heat dissipation during exercise (Patrick Stephens, 2004).

Energy System

Football is characterized by irregular changes of pace and anaerobic efforts superimposed on a backdrop of light to moderate aerobic activity. The movement patterns during a game are complex and involve activities such as walking, jogging, running sideways, jogging backwards, walking backwards, low speed running, and high speed running and moving at speed while in possession of the ball. The percent of total match time devoted to these movement patterns varies considerably (Stephens, 2004)



Source: Anaerobic power across adolescence in football players, vol. 12(4), pp: 342-347

Figure 2. The percent of movement patterns and energy systems during football game

Speed

Only 1.7% of active playing time involves sprinting. This accounts for 3.7% of the total distance covered during a match. The average sprint distance is 10.5-16.5 meters, and only 20% of sprints performed in football are greater than 20m (Stephens, 2004).Sprinting constitutes a multidimensional and complex motor skill, being probably the most significant physical element of performance in modern soccer.

Muscular Endurance

Endurance is acquired by repetitive exercise against a constant level of resistance. Light resistance exercises repeated many times produces endurance. However, muscle exercise for endurance affects muscle bulk only slightly and does not increase muscle strength. For that reason, it is necessary to combine endurance and strength exercises in a coordinated program. Increases in strength and endurance are accompanied by physiological changes, that is, increased muscle size (hypertrophy), biochemical alterations, and adaptations in the nervous system. A muscle shortens while lifting, and lengthens while lowering, a constant load. The tension developed over the range of motion depends upon the length of the muscle, the angle of the pull of the muscle on the skeleton, and the speed of the shortening (Stephens, 2004).

Muscular strength and endurance are developed by practicing the overload principle. Strength, endurance, and hypertrophy of a muscle will increase head to his knee. Only when that muscle performs for given periods of time at its maximal capacity to work against resistance and loads that are above those normally encountered (Stephens, 2004). Due to the extensive amount of tackling and upper body grappling that occurs in tackles, it has long been thought that training and measuring upper body strength-endurance would be of benefit to football league players (Meir, 1993).

Agility

Players must be able to move backwards, sideways and forwards while constantly changing direction. Agility refers to the ability to change body direction and position rapidly and can involve whole body change of direction in the horizontal plane, whole body change of direction in the vertical plane (jumping) and, rapid movement of body parts. Stationary and dynamic agility refer to the ability to rapidly change direction from a stationary or moving position respectively (Stephens, 2004).The ability to rapidly change the velocity and direction of whole body center of mass is a fundamental locomotors skill in most sports (Reilly et al., 2000).

Speed

Speed refers to a person's ability to move fast or to cover a distance in a short period of time.
When speed combined with strength it provides power. Running a fast-break in basketball, moving a racquet fast through the hitting zone to hit a ball harder in racquet games, sprinting in short spring running and fast reaction in football needs speed. Speed can be improved by increasing a player's power by using training like counter movement jumps and loaded squat jumps are effective for improving speed (Cronin and Hansen, 2005)

2.5. Physical preparation for football

According to(John, Michael and Helen 2000:33) physical fitness is defined as the ability to cope effectively with the stress of everyday life.(Dewitt J. 2001:79) describes that many people associated fitness with the ability to run for a long time (aerobic fitness); football players actually have a few more requirements.

However, when we are thinking about fitness a player to perform the techniques and tactics of football for long duration, it is important to have good fitness. Furthermore, (U.S. football Coaching Manual 2010:12) recognizes that; football is a physically demanding sport

characterized by explosive activities such as tackling, turning and jumping in addition to high intensity running and sprints over relatively short distances. According to statistic, top-class football players make approximately 1100 changes in exercise intensity and cover a distance of roughly 6.5 miles during a match. Fitness training can help a player endure the physical demands of football and maintain high technical ability and decision-making quality throughout a match. Every football player, regardless of standard of play, can benefit from a fitness training program based on football/soccer-specific exercises. For this reason, it is important for youth coaches to understand basic fitness principles and their appropriate applications. It is even more important for coaches of players under the age of 14 to realize that match fitness can be achieved in regular training sessions and games, provided training is structured in an economical manner.

As indicated in (U.S. Soccer Coaching Manual 2010:12), (Bangsbo J 2002) provides the following insight on fitness training for youth: There is evidence to suggest that training of youth players does not need to be focused on improving physical performance. Often young players get sufficient physical training by regular drills and games. In a Danish study, 132 young players from football clubs, in which fitness training was not performed with players under 15 years of age, were tested using a football specific endurance test.

For boys younger than 15 years there was a pronounced increase in performance with age despite the fact that they did not perform any specific fitness training. Furthermore, results of 18 year old players were as high as those of the senior league players. It appears that a player can reach a top-class level as senior player without performing specific fitness training during the younger years. The time saved by excluding fitness training should be spent on training to improve technical skills, as the players greatly benefit from this type of training when they become seniors. When training young players one should be aware that there is a large difference in individual maturation within a given age group. The adolescent growth spurt may start as early as the age of ten or may not start until the age of sixteen. On average, girls mature about two years earlier than boys. As maturation status can have a profound effect on physical performance, care should be taken not to underestimate genuine football talents due to physical immaturity in comparison to other players in the same age group. Another important aspect of youth training is the amount and intensity of training. The coach should carefully observe how the individual players respond to the training, as young players can easily “over trained.”

Training for young players, prior to and during early puberty, should not be focused on the physical aspect, but should mainly emphasize technical training. Children are very sensitive to the physical and psychological stresses imposed by a demanding training and competition schedule. They are especially susceptible to injury or burn-out during growth spurts and puberty. Youth coaches must take into consideration the positive effects of adequate rest periods during training, alternating hard and light practices through the season and allowing days off and time away from football/soccer to recuperate and rekindle passion for the game. Psychological Preparation: when the coach plans the training session for psychological preparation he/she considers the development of both the mental and cognitive skill.

Moreover, (FIFA Coaching Manual, 2004:1) explains that mental training is aimed at improving mental attitudes, but also at aiding the improvement of performance related elements through techniques that utilize the qualities and resources of our brain. The development and improvement of mental attitudes can start as early as the pre-training/development stage with youngsters. By giving the players specific rules and instructions during training sessions, it is possible to stimulate the development of their mental approach. However, cognitive skill knows how to read the game, having good all-round vision, being able to see more quickly and make the right choice of move more rapidly are all signs of a good tactical awareness that sets the great players apart from the rest. Furthermore, in the same manual cognitive skills are defined as the instructive tendencies that allow a motivated and committed player to assess situation through a process of knowledge acquisition (attention/ concentration/ perception/ anticipation). Therefore, it encompasses everything that the player's intelligence allows him/her to understand so that he/she can exploit a given situation or action in the best possible manner.

2.6. Aerobic fitness for football players

According to (Special Olympics Football Coaching Guide 2004:19), Football requires running for extended periods of time; therefore, your players must be able to produce energy aerobically. Aerobic fitness is important for three primary reasons. Although football players need to be aerobically fit, they do not need to be distance runners. Be balanced in your approach to fitness. Set standards, yet do not place fitness ahead of the ultimate goal of developing good football players and a good football team. A fit, skilled team is much more powerful than a fit, unskilled team. Following are benefits of aerobic fitness:

1. Creates good cardiovascular capacity and strengthens muscles and tendons.
2. Allows players to run at a steady pace without incurring oxygen debt, getting really tired and unable to recover.
3. Allows your players to recover quickly from short sprints, making them more effective in the game.

Aerobic fitness is best developed during preseason training. However, if your schedule cannot be extended to include fitness in the preseason, you can integrate fitness exercises and activities into your weekly training sessions. This can be achieved through steady pace runs, ball skill drills or fitness circuits.

2.7. Anaerobic Fitness for Football Players

According to (Special Olympics Football Coaching Guide 2004:20), Football demands both aerobic and anaerobic capacity. During games, football players must be able to sprint hard, recover quickly and then sprint hard again. Anaerobic training starts once your athletes have developed basic aerobic fitness, because recovery capacity is developed by increasing aerobic fitness. In football, the demand for anaerobic speed is relatively short. The important point here is the ability of the player to recover quickly from multiple speed bursts.

According to (Special Olympics Football Coaching Guide 2004:21), Strength training is important for football players. The basic elements of speed, mobility and endurance are all functions of muscular strength. According to the President's Council on Physical Fitness and Sports, improvements in absolute muscular endurance, motor ability and athletic abilities are directly associated with an individual's muscular strength.

Strength training for football usually has two purposes:

1. Improving overall strength
2. Developing muscle balance and preventing athlete injury.

Football running requires significant anaerobic energy which is directly related to muscle strength. Therefore, a muscle with greater strength can respond better to race challenges without incurring extreme fatigue and requiring a longer recovery period. Basically, strength training improves an athlete's ability to run fast and produce anaerobic energy. Football players need to be able to run fast, sometimes very fast.

2.9. Youth Involvement in Sport Training

Youth participate in youth sports training for a variety of reasons and have multiple reasons for involvement. For example, the largest study of its type conducted to date identified the reasons children report for participating in sport training (Seefeldt, Ewing, and Walk 1992). These reasons included: To have fun, to do something they are good at, to learn new skills or improve their skills and to play as part of a team. Children who feel competent about their technical, tactical and physical abilities have been found to move often participate and persist in sport training whereas children who do not have that sense of competence are more likely to not become involved or to discontinue involvement (Weiss and Ferrer Caja 2002). In another study children cited dislike of their coach and not enough fun as significant motives for discontinuing. These studies, then, certainly emphasize the important role coaching leadership provides in the sport training attrition process. The football coaches should plan and use time properly, provides appropriate and sufficient training materials and organizes practical training based on the level of tasks to assure the active participation of youth trainees during practical trainings.

3. MATERIALS AND METHODS

This chapter deal with description of study area, study design, research approach, study population, sample size and sampling techniques, inclusive criteria, exclusive criteria, data collecting instrument, procedure of data collection, methods of data analysis, ethical consideration and pilot test.

3.1. Description of Study Area

Yem special woreda is one of the woreda among four woreda found in Southern Nations, Nationalities and People's Regional States (SNNPRS). It is located at 243 kilometers south west from Addis Ababa. Yem Special Woreda is situated in the north western apex of the region and is located between 7o 57´ N to 8o02´ N latitude and 37o 40´ E to 37o61´ E longitude. It is bordered by Hadiya and Gurage Administrative Zones of SNNPR to the east and south, and by Jimma zone (in Oromiya Region) to the north and west. Based on the 2007 Census conducted by the Central Statistical Agency of Ethiopia, The total population of the woreda are 94,801 thousand which is 0.62 % of the region. With an area of 647.90 square kilometers, Yem has a population density of 124.54, The area is divided into three agro ecological zones, namely, "Dega" (highlands with altitude of 2300-2500 meter above sea level) which is central parts, "Woyina Dega" (moist warm land with an altitude of 1500-2300 meter above sea level) covers the central apex and western part, and "Kola" (with altitude less than 1500meter above sea level) and found in eastern zone of the woreda. The area coverage in terms of agro ecological zone shows that the dega covers 49.3 % while the woyina dega and kola part shares 26.9 and 23.8 percent, respectively. Temperature is inversely related with altitude, with mean annual temperature between 20-30 ºC in the low lands (kola), 16ºC-20ºC in the temperate (woyina dega) and 12 ºC - 16 ºC in the highlands (dega) areas of the woreda. The landscape varies considerably from one part of the woreda to another, but is mostly hilly. The topography of the Special Woreda is characterized by rolling mountains. **Source**: Google

3.2. Study Design

This study was design to investigate the current physical fitness level of Yem special woreda Fofa town male youth football players level in quasi experimental design. The whole sample population of the study is 24 players of Fofa town male youth football team, thus, to attain the goal Whole sampling design was used in order to collect data from target population. In order to

attain objectives of the study, the researcher use primary source of data and valuable information was gathering from the Fofa town male youth football players. The primary data was taken through a physical fitness test and it was analyze quantitatively- Endurance (300 yard shuttle test), speed (30meter acceleration test), and agility (Illinois agility run test) data collection includes anthropometric and physical fitness parameters.

3.3. Study of population

The study populations would be Yem special woreda Fofa town male football players who are training in Fofa town players are use as the target population of this study. The total population of Fofa town football players is 24 male football players were taken.

3.4. Sample size and Sampling Techniques

As Kothari, (2004:58) stated that, the size of population must be kept in view for this also limits the sample size. Sampling error decreases with the increase in the size of the sample, and it happens to be of a smaller magnitude in case of homogeneous population. Add that a purposive sampling technique helps to pick cases likely to achieve in depth understanding. Accordingly 24 male players were took from youth (U-17) football player by using whole sampling size was used to draw samples from the Fofa town male football player team and they was participated to collect the necessary data. The age limit of the subjects is under 16- 17 years.

3.5. Inclusive Criteria (optional)

The researcher was study the level of physical fitness of male youth players who fulfill the format of Yem special woreda organize. These male youth football player include in criteria. The fundamental sport skills players who have optimal agility, speed, and endurance and being is the criteria's that need to be the subject include in the study through coaches follow up and players give loyal data.

3.6. Method and Procedure of Data Collection

3.6.1. Method of Data Collection

The researcher was used quantitative data collection method to collect data from the appropriate physical fitness components tests such as endurance, speed and agility. From the beginning, the ordered sets of questions are filled by the trainers to know the status of participants. Next, the researcher was test physical fitness test on the outlined variables, then the researcher want to

continuous investigating the level of physical fitness tests. After 3 month of intervention, a fitness test was given and at the end of the trainings tests was made. The fitness test was including 300 yard shuttle test, 30 meter acceleration test and Illinois agility test. The data was recorded by the researcher and assistants collaboratively. A careful familiarization phase was undertaken with each participant before the start of the study so that learning effects should be minimized.

3.6.2. Procedures of data collection

Before the test is administered the necessary information would be give to the subject including material, test types, measuring instrument and administration of test. The necessary work was completed before starting the test, beside training session; times of test would be administer with the help of the teachers and explain to the subjects by the researcher firmly. Any doubts of the subjects raises are clarify before taking the test, but no special training is give to the subjects. According to (Brain Mackenzie, 2005), each test have purpose, equipment require, procedure and scoring technique.

3.7. Data collecting instrument

The data collection includes physical fitness parameters:- physical fitness tests have three test batteries (300 yard Shuttle run,30 Meter Acceleration run and Illinois agility run. The researcher was collected all the data from the male youth football players through those test batteries and the data was obtain through physical fitness test and it was analyze quantitatively.

Table 1. Physical fitness variables, test and their parameters

Variables	Test	Parameter
Endurance	300 yard shuttle run test(22.8m)	in second
Speed	30 Meter Acceleration Test	in second
Agility	Illinois agility run test	in second

3.8. Physical fitness parameters

3.8.1. 300 yard shuttle run test

Purpose: the test is to monitor the player's intermediate anaerobic power.

Required resources: Two cones placed 25 yards (22.8m) apart, stop watch and assistant. Procedures: The players start at one cone. The assistant gives the command to `Go`-The players perform 12 shuttle runs between the two cones-At each turns the players is to touch.

3.8.2. 30 meter Acceleration test

Purpose: - the test is to monitor the development of the player ability of effectively and efficiently accelerate from a standing start or from starting blocks to maximum speed. Required resources 400m track-with a 30m marked section on the starting, stop watch and assistant. Procedures: The test times of would be comprise of 3x30m runs from a standing start or from starting blocks and with a full recovery between each run. The assistant should record the time for the players to complete the 30m.

Purpose: the Illinois agility run test is to monitor the development of the players speed and agility.

Required resources: Flat surface-400 meter track, 8 cones and stop watch.

Procedures: The Illinois Agility run test is conducted as follow-The player's lies face down on the floor at the start point on the assistant`s command the players jumps to his feet and negotiates the course around the cones to the finish.-The assistant records the total time taken from their command to the player completing the course.

3.9. Method of Data analysis

The collect of data would be checked at the end of each data collection day for their completeness and consistency. The data collection would be analyzed by using descriptive statistics (mean ± standard deviation). Descriptive analysis is the method for describing the characteristics of the sample and major study variables would be display in the form of mean, standard deviation, percentage and diagrammatic representation such as table, column and chart. The results of data would be collected through 300 yard shuttle run test, Illinois Agility Run Test and Acceleration run test correlate.

3.10. Ethical consideration

The conducting of research requires the rules and research ethics of Haramaya University. The researcher was explaining the purpose of the study to the participants in order to get permission. The researcher thesis was informing to the participants that the information they provide was only use for the study purpose.

4. RESULTS AND DISCUSSIONS

First, before the main analysis results the data of the players in order to provide a description of the sample from which data was collected the means, and standard deviations are described. Second, investigate the current selected physical fitness variables of Yem special woreda male youth football players compare with standard norms in the form of mean, standard deviation and percentage.

4.1. Comparison of Selected Physical Fitness Variable of Players With Normative Data

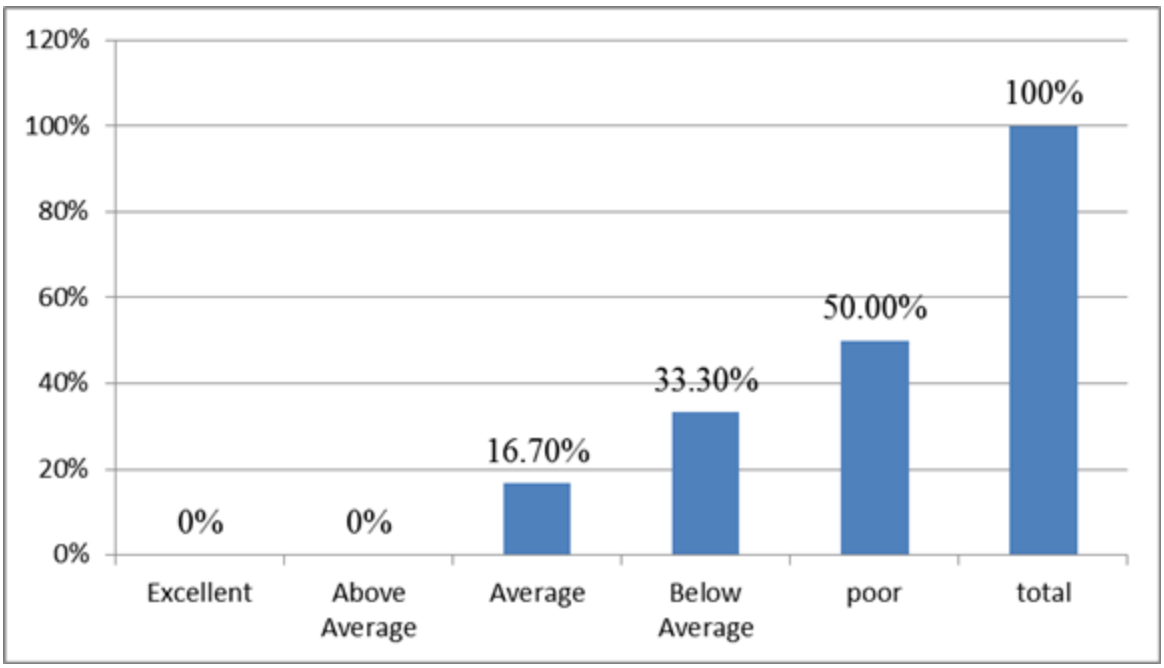
Table 2. Comparison of 300 yard shuttle run test values with players normative data

Activity	Description			
		Number	Percentage	Mean ± SD
300 yard shuttle run test (22.8m)	Excellent	-	-	71.71 ± 10.16
	Above Average	-	-	
	Average	4	16.7%	
	Below Average	8	33.3%	
	Poor	12	50%	
Total		24	100%	

***Source**: primary data*

The finding of table 2 indicates that the mean ± standard deviation values for endurance variable for 300 yard shuttle run test of male football players accordingly to thetest are average comparable with normative data recorded as poor 71.71 ± 10.16. And establishing a comparison between the results obtained from 300 yard shuttle run test of male football players with normative data using the percentage, it was observed that 4(16.7%) of male players are in the scale of average, 8(33.3%) are in scale of below average, 12(50%) are in scale of poor, . This discovered that when comparing the values of male youth football players obtained with the reference values provided by the normative data, the current level of the player's on300 yard shuttle run test.

Figure 3. Graphical representation of 300 yard shuttle runs test values



Source: primary data

Table 3. Comparison of 30 meter acceleration test values with players' normative data

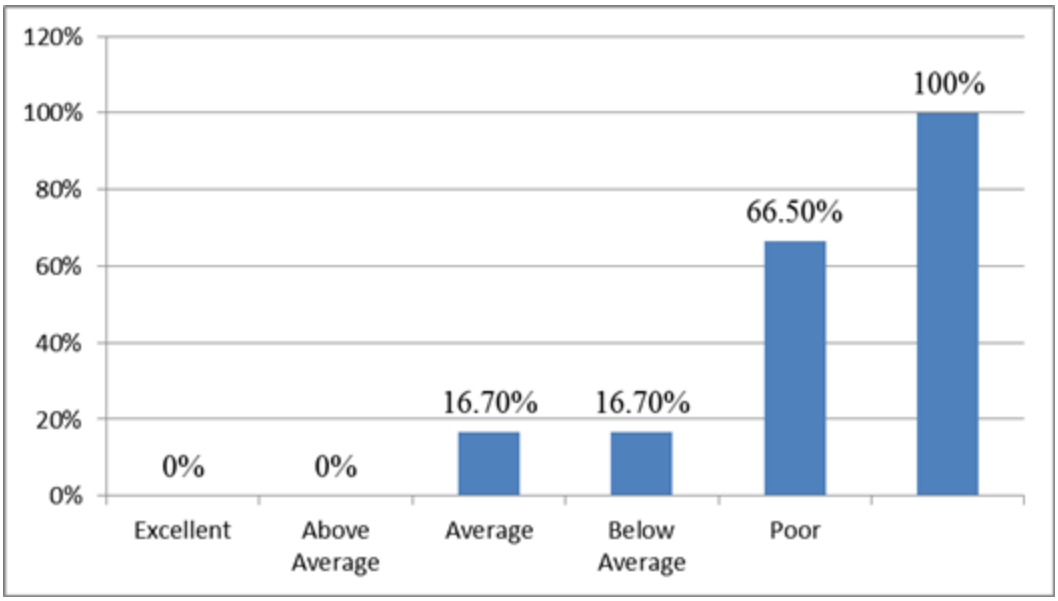
Activity	Description			
30 meter acceleration test		Number	Percentage	Mean ± SD
	Excellent	-	-	0.47 ± 0.03
	Above Average	-	-	
	Average	4	16.7%	
	Below Average	4	16.7%	
	Poor	16	66.5%	
Total		24	100%	

Source: primary data

The finding of table 3 indicates that the mean ± standard deviation values for speed variable for 30 meter acceleration test of male football players were recorded as 0.47 ± 0.03. An establishing a comparison between the results obtained from 30 meter acceleration test of male youth football players with normative data using the percentage, it was observed that 4(16.7%)

of male players are in the scale of average, 4(16.7%) are in scale of below average, 16(66.5%) are in scale of poor. This discovered that when comparing the values of male youth football players obtained with the reference values provided by the normative data, the current level of the players' on 30 meter acceleration test are average and comparable with normative data

Figure 4. Graphical representation of 30 meter acceleration test values



Source: primary data

Table 4. Comparison of Illinois agility run test values with players normative data

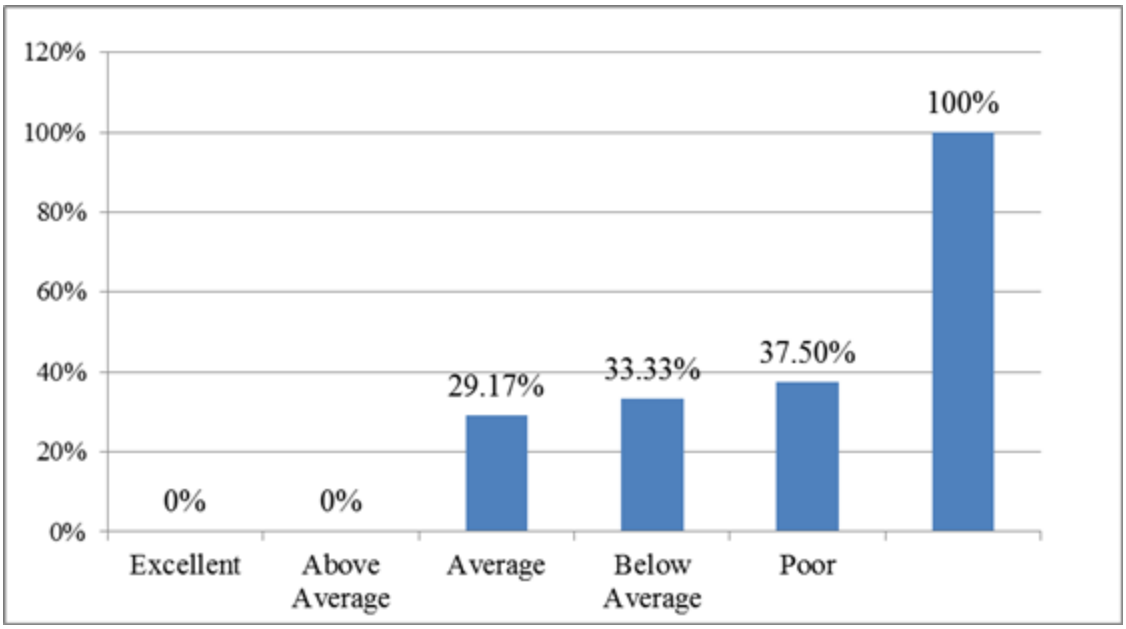
Activity	Description			
Illinois agility run test		Number	Percentage	Mean ± SD
	Excellent	-	-	17.41 ± 0.53
	Above Average	-	-	
	Average	7	29.17%	
	Below Average	8	33.33%	
	Poor	9	37.5%	
Total		24	100%	

Source: primary data

The finding of table 4 indicates that the mean ± standard deviation values for agility variable for Illinois agility run test of male football players were recorded as 17.41 ± 0.53. And establishing a

comparison between the results obtained from Illinois agility run test of male football players with normative data using the percentage, it was observed that 7(29.17%) of male players are in the scale of average, 8(33.33%) are in scale of below average, 9(37.5%) are in scale of poor. This discovered that when comparing the values of male football players obtained with the reference values provided by the normative data, the current level of the players on Illinois agility run test accordingly to below average are above comparable with normative data.

Figure 5. Graphical representation of Illinois agility runs test values



Source: primary data

Table 5. Pearson correlation table of 300 yard shuttle run test, 30m meter Accelerationrun test and Illinois agility run tests

Pearson correlation	Illinois agility run test	30m Acceleration run test
300 yard shuttle run test(25 yard or 22.8m)	0.485	0.658
Sig.(1-kaild)	0.008	0.00
30m Acceleration run test	0.412	1
Sig.(1-kaild)	0.0123	1

Source: Pearson correlation.

The table :- 5 show that the Pearson correlation index obtained on 300 yard shuttle run test and 30m acceleration run test is r = 0.658. It is positive with significant or p value = 0.00which is less than α= 0.01 implies that 300 yard shuttle run test and speed were significantly related to current physical fitness level of male youth football players of Yem special woreda. Also the Pearson correlation index obtained on 300 yard shuttle run test and Illinois is r= 0.485. It is positive with significant or p value = 0.008 which is less than α= 0.01 implies that 300 yard shuttle run test and Illinois were significantly related to current physical fitness level of male youth football players of Yem special woreda.

Finally, the Pearson correlation index obtained on 30m acceleration run test is r= 0.412. It is positive with significant or p value = 0.023 which is less than α 0.05 implies that 30m acceleration run test and Illinois were significantly related current physical fitness variables.

4.2. DISCUSSION ON FINDINGS

The aim of present study was to investigation the selected physical fitness variables endurance, speed and agility of male youth football players of Yem special woreda. For administrating the physical fitness test administered to 24 male youth football players were selected.The results of this study showed that Investigating the Level of Physical Fitness of Fofa Town Male Youth Football Players in Yem Special Woreda the in Illinois agility run test, 300 yard shuttle test, and 30 meter acceleration those of male youth football players was average, below average and poor level to comparing with the values obtained with the reference values provided by the normative data. The finding of this investigation suggested the current agility level of male youth football players were mostly below the average level to comparing with the values obtained with the reference values provided by the normative data. The findings of this study are in agreement with other study. Djevalikian, 1993, Webb and Lander, 1983 and Young *et al.*, 2002(As cited in Sheppard, & Young, 2005) stated that the results of concentric strength measures appear to be poor predictors of agility.

The finding of this investigation suggested the current speed level of male youth football players were mostly below the average level to comparing with the values obtained with the reference values provided by the normative data. The findings of this study are in agreement with other study, Guner *et al.*, (2005) comparison analysis showed that the Under 21 age group has higher running velocities (speed) than members of the Under 17 age group. The finding showed that

running velocities (speed) were increased and heart rates were decreased over this period. Nikolaïdis, (2011) the increase of speed across adolescence (from Under 13 to Under 19) in football players was lower. Negrete and Brophy (2000) *(*As cited in Sheppard& Young, 2005) stated that the variability of running speed and technique in the sprint tasks could account for the weaker relationship with strength qualities.The findings of this research indicated that the speed and agility level of the players were below the average level of normative data. Though, Sporis, *et al., 2010,* conclude that speed and agility were two relatively independent qualities, the agility can affect sprinting performance which could lead us to the conclusion that these abilities are linked together, and dependable on one another. Young, *et al.,* (1996) agility is often represented in the same context with speed. Parnou, *et al.,* (2005) studied national football team players and concluded that there is a positive relationship between agility with 10 m speed running. Buttifant*et al.,* (1999) research was conducted on Australian football players. However, it should be considered that the nature of agility movements is very close to the speed. In fact, agility is one of components of the velocity which is done based on tension-shortening cycle for rapid increase in power and the power-time curve transfer to the left and up sides (Gaeini and Rajabi, 2004). So a relation between these two factors can be expecting. Because the nature of the agility and anaerobic power (speed) is based on the fast and explosive movements and the agility and anaerobic capacity can increase over the age of 25 years, and the study subjects were in this age duration, so the relationship between agility and anaerobic power (speed) could be expected.Chaleh*et al.,* (2012) the relationship between speed and agility in 14 to 16 years old football players, it can be expected to low level.The finding of the current study suggested that 83.3% of Yem woreda male youth football player's endurance Illinois agility test and 30m acceleration were average, below average and poor level currently when compared with the values obtained with the reference values provided by the normative data. This study is in agreement with other study, Malina*et al.,* (2007) players in the lowest skill perform poorest in the sprint and endurance shuttle run. The present result is in agreement with other study. According to (Nikolaidis, 2010b) the studies have shown that muscular endurance in adolescent soccer players compared to adult soccer players, adolescent players had lower values of muscular endurance.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. SUMMARY

The main objective of this study was to investigate the selected physical fitness variables endurance, speed and agility of male youth football players of Yem special woreda. In order to achieve the objective of the study; the following research questions were raised.

- What was the current physical fitness level of male youth football players of Yem special woreda?
- Was there any difference between selected physical fitness of players compare with international norms?

In order to answer these questions, a comparative study method was employed. The required data were collected from 24 youth football players. The available proportional sampling technique (whole sample) was used to select the samples. The relevant data to the study was gathered through different test batteries of 300 yard shuttle run test 30 meter acceleration test and Illinois agility run test were employed as data gathering tool in the study.

With respect to this the specific objective of the current study was investigated the current physical fitness level of male youth football players and compare the difference between the players physical fitness with standard norms. Descriptive statistics were used to compare the endurance, speed and agility of youth football players in order to provide information to the coaches to develop the standard of the player's fitness level for the future

The data were organized, analyzed and interpreted by qualitative methods by using descriptive statistics (mean. standard deviations, percentage) to compare the player physical fitness variables with bivariate correlation and normative data

Based on the analysis and interpretation of data, the major findings obtained are summarized as follow:

1. The study has showed that, the current endurance, speed and agility level of Yem special Woreda Fofa town male youth football players was average, below average and poor level comparing with the value obtained with the reference values provide by normative data.

2. The study revealed that, there is difference between Yem special Woreda Fofa town male youth football players and standardized norm on endurance, speed and agility test to comparing with the average value obtained with the reference values provide by the normative data

5.2. CONCLUSION

Based on the findings of this study, the following conclusions were made;

- The results of the assessed data from the concerned respondents indicate that; based on comparisons with normative data, the current physical fitness level ofYem special Woreda Fofa town male youth football players are average, below average and poor on endurance, speed and agility tests when comparing with the values obtained with the reference values provided by the normative data. However, the overall selected physical fitness variables level of Yem special Woreda Fofa town male youth football players is not in a good condition in endurance, speed and agility.

- The results of the assessed data from the concerned respondents indicate that; based on comparisons with normative data. The results of the study reveals that there is difference between Yem special Woreda Fofa town male youth football players and standardized norm on endurance, speed and agility test to comparing with the average values obtained with the reference value provide by the normative data.

5.3. RECOMMENDATIONS

Based on the conclusions derived from the findings of the analyzed data, the following recommendations are forwarded.

- It is useful to prepare fitness training for Fofa town male youth football players in the different age level of football players for improving their physical fitness and keeping them to maintain their performances.

- The coaches should consider individual differences and level of trainees while they provide tasks for training sessions.

- It is advised to coaches to include the physical fitness programs in their schedules during the training session to enhance their fitness level at the standardized level.

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7. APPENDIXES

APPENDIX-AHealth history and physical readiness Questionnaires

This questionnaire is design to obtain information on the health status and physical readiness of the subjects participating for the research study. The information will be kept strictly confidential.

For students: - please read the following questions carefully and indicate your correct response to each question by encircling it on the choice letter given.

1. Do you have a recent physical injury such as bone, muscles; joint etc. will be aggravated by physical exercise? A. yes B. No

2. DO you have suffered with heart problem before? A. yes B. No

3. Have you ever suffered from shortness of breath at rest with mild exercise?

A. yes B. No

4. Are you taking any prescription medicines? A. yes B. No

If your response is yes, name them below

Name of Drug Dosage ----------

5. Identify any medical problem that you had before.

A. cardiovascular B. Neuron muscular C. None

6. Identify any physical problems you had before.

A. Leg bone broken C. back bone dislocation

B. head skull broken D. Arm bone broken E. None

7. Is there any history of coronary heart disease within your family?

A. yes B. No

8. Do you currently participate in an exercise program regularly (at least 2 times per week)? If your response is no explain your reason below why should not participate.

I hereby state I will read, understand and answer honestly the question above .I also state that I wish to participate in the physical exercise program.

Client's Full name_____ Trainers Full name_____

Client's signature_____ Trainers signature_____ Date_____

APPENDEX-B Consent to participate voluntarily in this research study Yem special woreda

Researcher's Name: -Mamuye Kassaye

Major-Advisior: - Shamelis Mekonnen (PhD) and Co-Advisior: - Wegene Waltnegus (PhD)

Thesis title: - Investigating the level of physical fitness of male youth football player in Fofa town Yem special woreda (SNNPR).

You will ask to participate in this research study as describe below. All this like research study carried out are governed by the regulations for research on human beings. These regulations require that the researcher should obtain assign agreement (consent) from you to participate in this research project.

The researcher will explain to you in detail the purpose of the project, the procedures to be use the potential benefits and the possible risks of participation in this study. You can ask the researcher any questions that you may have about the study, and expect to receive after discussion, if you agree to participate in the study, please sign this form in the presence of researcher. You discontinue at any time from the study if loose to do so.

1. Purpose and procedures

The purpose of this research project is to investigate the level of physical fitness of male youth football player of Yem special woreda. The subject to be involved in this study will be 24 male trainees and participation on this study will require you to perform a certain test to measure the physical fitness variables.

2. Risk and the safeguards

The risks of this research study are small. While administering the tests and during training session you may experience localize muscle fatigue. You might feel some muscle soreness and fatigue during and after the cessation of the component of fitness tests and training but we do not expect any unusual risks as a direct result of this study.

3. Confidentiality

The information obtain about you would be kept in confidence, although you are free to release it to you own physician. The information was used only for scientific purposes without identifying you as an individual.

4. Contact address

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I certify that I would have read and fully understand the above project. I willingly consent to participate.

Signature of subject_____

Name_____

Parent's signature_____

Name_____

Address_____ Date_____

Certify that I would have explain fully to the above subject the nature, the purpose, the potential benefits and possible risks involved in this research study.

APPENDIX – CDescription of the training schedule

In sport training it needs well designed and prepared plan. The purpose of training plan is to identify the work to be carried out to achieve agreed objectives and to be effective in the training program outcomes. Sport fitness training plans are the strategies for achieving peak performance. In sport training plan goals and objectives was specified. Participant's fitness level is assessing specific to the select fitness component need to develop; it will be well adjust to the participant's fitness level and the weather condition. Training plan can be a short term or it can be a long term plan. Basically, some fitness component needs short term training and the need to train for a long period of time. Due to this reason, the researcher was concentrate on a short term training plan (three month). One of the most important rules of training for results comes back to the principle of Arnolds book (Arnold's encyclopedia of body building) state that, the intensity of the work out and the frequency of the training session play an important in stimulating muscle growth and performance improvement.

Change comes from exercise, exercises are physical stressors. Training too often or with too much intensity and not allowing proper rest between sessions could cause either an over use injury or load to over training. Both of which can significantly limit a client ability to achieve fitness goal. https.//www.acefitness.org/blog

Planning the session and the training weeks based on the above mentioned reasons and others the researchers will use the training principles so, this training session is designed for three months and based on the principle of frequency, intensity, and principle of rest and recovery. It would be three days per week and 60 minute of tach training days.

The training session will starts with warming up exercises and it will continue up to the cool down exercises. The frequency of exercise is fine balance between providing just enough stress for the body to adapt and allowing enough time for healing and adaptation to occur a program that works every body part every session should be completed 3 days per week with a day's rest between sessions. So, this study will be appled for three days of a week and for a lot of 12 weeks (3 months). Source: www.cardiosmart.org(American college of cardiology) and http://m.betterhealth.vic.gov.au2lbhcarticles.nsf(mskpagelexercise intensity?)

Exercise intensity

Exercise intensity refers to how hard the body is working during physical activity. The heart rate, breathing, temperature and perspiration all measure your level of exercise intensity. Exercise

intensity is described as low, moderate or vigorous. For maximum health benefits, the goal is to work hard, but not too hard described as moderate intensity by Australia's physical activity and Sedentary Behavior Guideline. Source: www.cardiosmart.org (American college of cardiology) and htt: llm.betterhealth.vic.gov.au2lbhcarticles.nsf (mskpagel exercise intensity)

Measuring exercise intensity

There are various ways to measure exercise intensity to make sure the body is getting the most out of every workout. One coach may need to experiment to find out which method of measuring exercise suits best. There are three different measuring methods include:

v Target Heart Rate Method

V Taking Test Method And

V Exercise Rating Scale

Measuring exercise intensity using target heart rate. The human body has an in-build system to measure its exercise intensity the heart. Your heart rate will increase in proportion to the intensity of your exercise. You can track and guide your exercise intensity by Calculating Your Target Heart Rate | THRl range.

The ranges of exercise intensity

Low (light) is about 40%-54% MHR

Moderate is 55%-69%

High (vigorous) is > 70%

For moderate intensity physical activity a person's THR should be 50 to 70 percent of their maximum heart rate. Maximum rate is based on a person age. An estimate of a person's maximum heart rate can be calculated as 220 beats per minute (bpm) minus your age. Because it is an estimate, use it with caution. Keep your heart rate at the lower end of your recommended range if you are just starting regular exercise.

Gradually increase the intensity of your workouts as your fitness improves. Also, your heart should stay in the lower ranges during warm-up and cool down periods. Using heart rate monitors is an easy way to keep track of heart rate while you are exercising, or you can take your pulse. Source: www.cardiosmart.org (American college of cardiology) and http: llm.betterhealth.vic.gov.au2lbhcarticles.nsf (mskpagelexercise intensity).

Measuring heart rate by taking pulse

Taking your pulse at regular intervals lets you know whether you are exercising within your target heart rate range. Some tips include;

Ø Take your pulse before you warm up.

Ø Take your pulse again when you have been exercising for about 5-10 minutes

Ø Continue taking your pulse at regular intervals

The radial pulse is located on your inner wrist .To measure it, you should

Ø Put the first three fingers of one hand against the inner wrist of the other hand just below the thumb.

Ø Highly press your fingers into the hollow next to the tendon on the thumb side your artery lies just beneath the skin.

Ø Using a watch with a second hand, count your pulse for 15 seconds. Multiply this figure by four to get your beats per minute. (For example, 31 pulse beats over 15 seconds equal a Pulse rate of 124 beats per minute).you can also take your pulse by pressing your fingers lightly against one of your carotid arteries, located on either side of the windpipe

Factors known to influence heart rate it's not just exercise that affects your heart rate. Your beats per minute could be raised by a number of internal and external factors including

Ø Hot weather Caffeine intake

Ø Hormone fluctuations

Ø Stress or anxiety

Ø Cigarette smoking

Ø Medication

Source: www.cardiosmart.org (American college of cardiology) and nhttp: llm.betterhealth.vic.gov.au2lbhcarticles.nsf (mskpagelexercise intensity). So, the researchers will use the above mentioned mechanism to measure the exercise intensity of the exercise session. But result can be fluctuated due to the above mentioned influenced factors. The main objective of this general training schedule will be to improve the level of physical fitness of male youth football players of Yem special woreda. In connection with this the training schedule is mentioned below

Table 1. First month schedule (October, 2020)

Days	Types of exercise	Duration **60 min**	Reps/rest	intensity
Monday	**General warming up**: walking, jogging, running on the spot with rotating activities and stationed general and specific stretching activity	5 min		Moderate /55-69% MHR|
	300 yard shuttle run	9 min	3rep/3min rest	
	Half laps	6 min	2rep/2min rest	
	super weave	10 min	2rep/2min rest	
	funnel run	10min	2rep/2min rest	
	zigzag running	9 min	3rep/3minrest	
	Compass run	6 min	3rep/3min rest	
	Cooldown-walking,breathing, stretching exercise	5 min		
Wednesday	**Warming up**-General and specific warm up exercise walking, jogging, running and stretching activity.	15 min		Moderate \55-69%/MHR
	Compass run	12 min	3rep/3rest	
	nine cone zigzag drill	9 min	3rep/2min rest	
	8 cone each Jumping on the spot and with movement.	9 min	3 rep/3min rest	
	Cool down breathing, stretching exercise	15 min		
Friday	**Warning up**- specific warm up exercise, jogging, running and general and specific stretching activity.	15 min		Moderate intensity | 55-69% MHR
	Super weave	9 min	3rep/3min rest	
	shuttle run	10 min	2rep /2min rest	
	nine cone zigzag drill	10 min	2rep/2min rest	
	funnel run	6 min	2rep/2min rest	
	Cool dawn-Cool down breathing, stretching exercise	10 minute		

Table 2. Second month schedule (November, 2020)

Days	Types of exercise	Duration **60 min**	Reps/rest	Intensity
Monday	**General warming up**: walking, jogging, running on the spot with rotating activities and stationed general and specific stretching activity	15 min		Moderate /55-69% MHR|
	Super weave	15 min	3rep/3min rest	
	walking lunges	6 min	3rep/3min rest	
	knee to chest	4 min	2rep/2min rest	
	super weave	4 min	3rep/3min rest	
	funnel run	2 min	3rep/3min rest	
	dribble across a square	4 min	2rep/2min rest	
	Cool down breathing, stretching exercise	10 min		
Wednesday	**Warming up**-General and specific warm up exercise walking, jogging, running and stretching activity.	10 min		Moderate \55-69%/MHR
	dribble across a square	15 min	3rep/3min rest	
	nine cone zigzag drill	10 min	2rep/2min rest	
	8 cone each Jumping on the spot and with movement.	15 min	3 rep/3min rest	
	Cool down breathing, stretching exercise	10 min		
Friday	**Warning up**- specific warm up exercise, jogging, running and general and specific stretching activity.	15 min	3rep/min rest	Moderate intensity | 55-69% MHR
	Multi-stage shuttle run	15 min	3rep/3min rest	
	Super weave	10 min	2rep /2min rest	
	nine cone zigzag drill,	10 min	2rep/2min rest	
	Cool dawn -walking, jogging, breathing, stretching exercise	10 minute		

Table 3. Third Month Training Schedule (December 2020)

Days	Types of exercise	Duration **60 min**	Reps/rest	Intensity
Monday	**General warming up**: walking, jogging, running on the spot with rotating activities and stationed general and specific stretching activity	15 min		Moderate /55-69% MHR|
	Compass run	6 min	2rep/2min rest	
	300 yard shuttle run	9 min	3rep/3min rest	
	walking lunges	8 min	2rep/2min rest	
	super weave	4 min	2rep/2min rest	
	funnel run	4 min	2rep/2min rest	
	dribble across a square	4 min	2rep/2min rest	
	Cool down breathing, stretching exercise	10 min		
Wednesday	**Warming up**-General and specific warm up exercise walking, jogging, running and stretching activity.	10 min		Moderate \55-69%/MHR
	Super weave	15 min	3 rep/3min rest	
	nine cone zigzag drill	10 min	2rep/2min rest	
	8 cone each Jumping on the spot and with mov't.	15 min	3 rep/3min rest	
	Cool down breathing, stretching exercise	10 min		
Friday	**Warning up**- specific warm up exercise, jogging, running and general and specific stretching activity.	15 min	3rep/min rest	Moderate | 55-69% MHR
	shuttle run	8 min	2rep /2min rest	
	nine cone zigzag drill,	15 min	3rep/3min rest	
	Half laps	4min	2rep/2min rests	
	Squat jump nine cone	8 min	2rep/2min rest	
	Cool-down- breathing, stretching exercise	10minute		

APPENDIX-D Normative or Standard data for male the age from 16-19

Table 4. Normative or Standard data for male the age from 16-19

No.	Physical Fitness Components test	Excellent	Above Average	Average	Below Average	Poor
1	300 yard shuttles test(sec)	<50 sec	50-56 sec	57-63 sec	64-70 sec	>70 sec
2	30meter Aceleration test(sec)	<40 sec	4.0-4.2 sec	4.3-4.4 sec	4.5-4.6 sec	>46 sec
3	Illinois agility test(sec)	<15.2 sec	15.2-16.1 sec	16.2-18.1 sec	18.2-18.3 sec	>18 sec

Source: Davis B.et al; physical Education and the study of sport: 2000

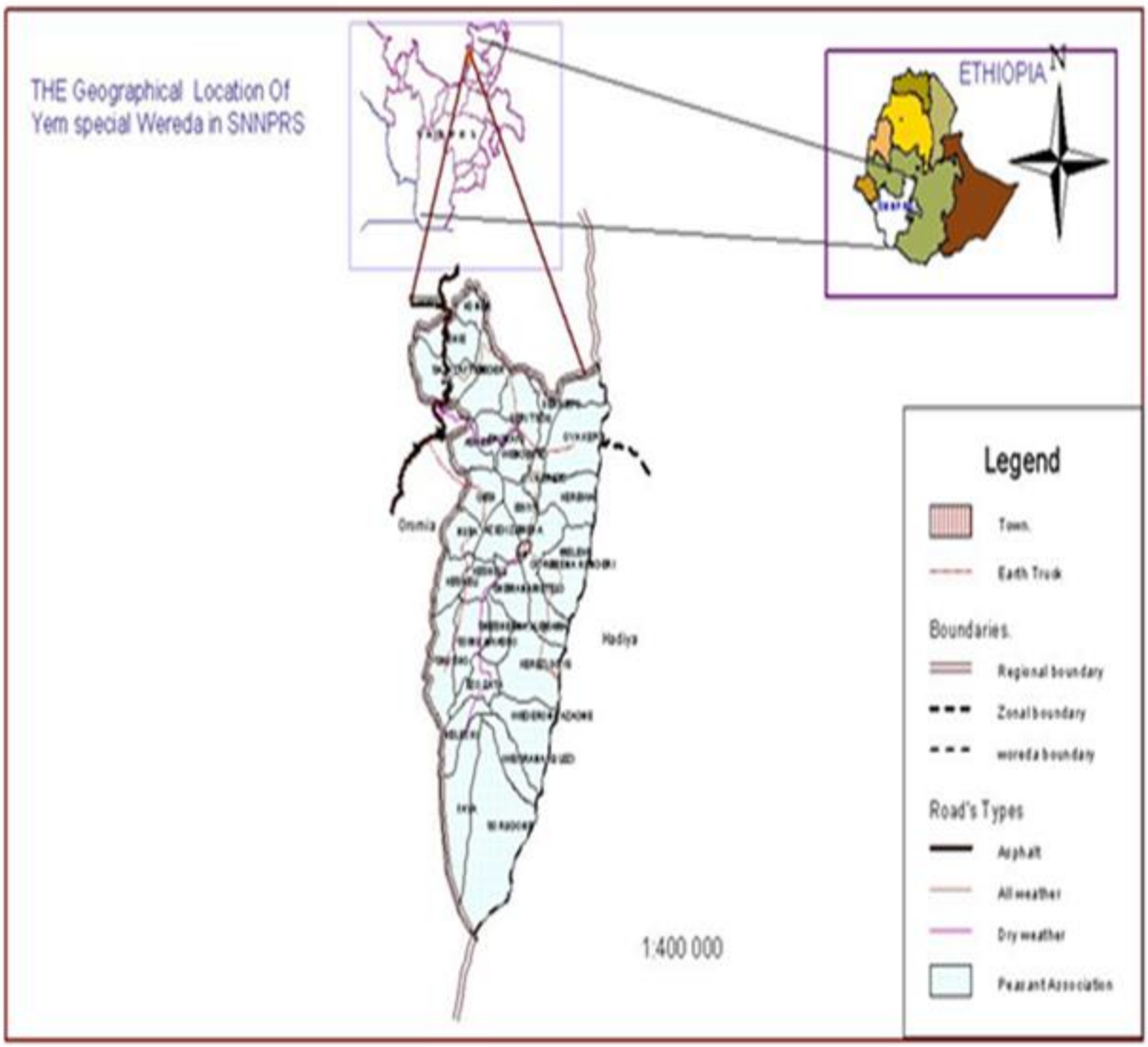
APPENDIX- E Yem special Woreda male football players selected physical fitness data

Table 5.Yem Special Woreda male football players selected physical fitness parameter data

Physical fitness parameters						
N^{o}	Name	Sex	Age	Speed	Endurance300 yard shuttle test	Illinois agility run
1	P1	M	16	4.76	75	18.17
2	P2	M	16	4.76	70	17.87
3	P3	M	17	4.61	66	17.63
4	P4	M	16	5.02	86	18.27
5	P5	M	16	5.13	88	18.06
6	P6	M	16	5.04	76	17.63
7	P7	M	17	4.71	65	18.06
8	P8	M	17	4.78	69	18.4
9	P9	M	16	4.47	71	18
10	P10	M	16	4.67	78	17.7
11	P11	M	16	4.48	66	17.87
12	P12	M	17	4.38	66	17.87
13	P13	M	17	4.96	75	17.83
14	P14	M	16	4.92	64	17.23
15	P15	M	17	4.81	61	18.07
16	P16	M	17	5.2	58	16.93
17	P17	M	16	4.83	65	17.67
18	p18	M	16	4.56	76	17.83
19	P19	M	17	4.3	57	16.6
20	P20	M	17	4.58	57	16.53
21	P21	M	15	5.27	98	18.73
22	P22	M	16	5.2	78	17.7
23	P23	M	16	4.96	77	17.7
24	P24	M	16	4.86	79	17.57

APPENDIX-F Map of Study Cite

Figure-1 Map of the study area Yem special woreda



Source: Google