

**EFFECT OF PHYSICAL FITNESS TRAINING ON SOME SELECTED SKILL
PERFORMANCE OF MALE FOOTBALL PROJECT PLAYERS AT DANGILA TOWN,
AWI ZONE, AMHARA REGIONAL STATE, ETHIOPIA**

MEd THESIS

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Effect of Physical Fitness Training on Some Selected Skill Performance of Male Football Project Players at Dangila Town, Awi Zone, Amhara Regional State, Ethiopia

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External Examiner Signature Date

DEDICATION

I would like to dedicate this thesis to my mother, w/ro Emebet Derso and my father ato Ayana Abera, as well as my sisters, brothers and friends who supported the accomplishment of my dream of receiving my master's degree. Without their tolerance, understanding, support and most of all love, the completion of this work would have been impossible. Furthermore, I could not have done this without the support of friends and Dangila football project players and coaches.

STATEMENT OF THE AUTHOR

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

This Thesis is submitted in partial fulfillment of the requirements for MSc Degree in the Haramaya University .The Thesis is deposited in the Haramaya University Library and is made available to borrowers under the rules of the Library. I solemnly declare that this Thesis has not been submitted to any other institution anywhere for the award of any academic degree, diploma or certificate.

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BIOGRAPHICAL SKETCH

The Author was born in Awi zone, Dangila woreda from his Mother Emebet Derso and his Father Ayana Abera on June 19, 1991. He attended his primary school at Afessa primary school and his high school and preparatory school at Dangila secondary and preparatory school. Then he joined Bahir Dar University, College of Natural and Computational Science in Department of Sport Science in 2010 and received a Bachelor science degree in Sport Science in 2012

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ACRONOYMS AND ABBREVIATIONS

CG	Control Group
CSA	Cross Sectional Area
EG	Experimental Group
HRR	Heart Rate Reserve
PoT	Post Test
PT	Pre Test
SPSS	Computer Statistical Package for the Social Sciences
THR	Training Heart Rate

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Effect of Physical Fitness Training on Some Selected Skill Performance of Male Football Project Players at Dangila Town, Awi Zone, Amhara Regional State, Ethiopia

ABSTRACT

The purpose of this study was to assess and investigate the effect of physical fitness training on some selected skill performance of male football project players at Dangila town, awi zone, amhara regional state, Ethiopia. For this study Quasi-Experimental research method was used. 32 male football players of Dangila town football project were taken purposively as a sample study. Experimental group (n=16) performed physical fitness training three days per week for 3-month on squat jump, Bounding speed and Illinois agility drill and control group (n=16) however, did not perform this selected fitness training, both groups undergone normal football training program. And both groups had taken pretest and posttests. So, all subjects participated in 3 selected football skill performance tests, dribbling, control speed dribbling and power shoot. The data was analyzed and compared with the help of statistical procedures in which arithmetic mean, standard deviation and paired t test was used. The level of $p \leq .05$ considered as significant level. The result showed that on dribbling test control group MD=.2500 and $P=.216$ while experimental MD= -1.6875 and $P=.000$, control speed dribbling test control MD= -.0600 and $P=.349$ and whereas experimental MD=.87875 and $P=.000$ and power shooting test control group MD=.2500 and $P=.104$ while experimental MD=-1.875and $P=.000$.Therefore, physical fitness training for twelve weeks is more effective in increasing the dribbling and shooting skills of male project football players of Dangila town. Generally, the present study concluded that physical fitness training had a significant effect on project player's football skill performance through the selected football skill tests. Hence, physical fitness training is effective and beneficial for the enhancement ofDangila male project player's football skill performance on experimental group.

Key Words-physical fitness training and skill performance

1. INTRODUCTION

1.1. Background of the Study

Among various sports in the World, football happens to be one of the most popular. It enjoys a fan base that seems to go beyond various divisions like race, language, age and gender. As a result, it can truly be called as the universal sport. As it is explained by Reilly et al. (2003) football is the only sport which attracts the entire world population.

Football was introduced to Ethiopia by foreigners who resided in Addis Ababa in 1923. According to Teshome and Muluneh, (2005) stated in grade 10 physical education text book, Armenian, Indians, Greek and Italian were communities which formed community teams and held tournaments at “Jan Hoy meda”. The sport found its way to Teferi Mekonnen and Menilik secondary schools competition that initiated the youth to choose football preferably.

Fitness in Football Performance or soccer depends upon a variety of individual skills and the interaction among different players within the team. Technical and tactical skills are considered to be predominant factors but physical capabilities must also be well developed in order to become a successful player (Haugen *et al.* 2013). Today, soccer is a highly physical demanding game in which the participants are subjected to numerous actions that require overall strength and power production, speed, agility, balance, stability, flexibility, and the adequate level of endurance (Jovanovic *et al.* 2011). Maintaining a high level of these components throughout the season is necessary for achieving consistent high quality performance, while the basis for these individual components of players is built during youth (Michalet *et al.* 2017). Aerobic capacity is an important factor which, in addition to the quality of the game itself, ultimately affects the final position of the teams in the league (Impellizzeri *et al.* 2005). Moreover, aerobic capacity has beneficial effects on parameters such as total time spent on high intensity activities during the game, number of sprints and the number of contacts with the ball during the match. High aerobic capacity also enhances recovery from high-intensity interval loads (Michal *et al.* 2017). Components of anaerobic capacity have the biggest impact on the final outcome of the match and are characterized by

repeated short high-intensity activity (Markovic et al. 2007). Training of youth football program is the base and the main source for a club and the future elite players will be equipped with the fundamental and basic components as technical, tactical, physical and psychological demands of the modern football (Lowy & Gallop 2015). Those who are involved in sports or game require high fitness level to achieve excellent skill performance of individual or team. The game of football is a sport that requires a level of physical fitness that is optimal for achieving success in a competition. Physical fitness is significant in any games, especially a game that risked aspects of physical ability as a football game. Improvement in physical fitness will help to improve the skill performance of a player or a team (Bangsbo, 2003). Individuals and team who have the maximum level of physical fitness have the advantage of achieving victory. Therefore, a good coach will establish fitness before applying skills aspects and psychological skills in designing a training program. The important of coaches requiring knowledge in the coaching process are to build up the quality of fitness level using the norms of physical fitness. Based on the facts stated above, a fitness training program has relevance to the football game approach (Berahim and Kassim, 2016). In light of the explanation on the above the purpose of the study is to investigate the effect of physical fitness training on football skill performance of male project players and the researcher believed that since projects are the source of sport men's and women's who can be shaped easily, fitness training is vital for the improvement of their skill performance based on players current level of football skill. So Dangila town football project players showed limitation on their skill performance. Due to this, the aim of the study is to evaluate the effect of physical fitness training on male project player's football skill performance.

1.2. Statement of the Problem

To become successful football player practitioner requires many attributes like agility, speed, power, coordination skill and tactical knowledge. Physical fitness training helps to develop speed, agility and power as well as skills and become more effective when giving to young players (Reilly et al. 2000&Strudick, et al. 2002). Unless problems are carefully identified and possible solutions formulated in football project, skills are not executing efficiently throughout the game and may continue without improvement and also becoming the problem of successful and efficient skill execution by football players. So, one of the great means to achieve players skill performance is through giving a great attention of fitness of trainees with incorporating in a

training program properly. Based on my observation there were lack of physical fitness in Dangila town football project players. And which is not incorporated in the training session that hinders effective execution of the skill performance of the players. When the researcher observed the team training situation trainers have given less attention for trainee's fitness and trainees yet not enough to fit to implement football skills efficiently. Because of these reasons players showed limitation on their skill performance when the researcher observed during competition and training. This really showed that there is physical fitness problem of football players of the project. So, the researcher thinks that if the coach gives great attention to physical fitness on their training session it will have influence on player's skill performance; otherwise the situation made football players continue to have poor skill performance. Due to this, the researcher was concerning to fill this gap by systematically conducting a research on the effect of physical fitness training towards the player's skill performance. The study attempted to measure the following hypotheses.

1. H₁: There is significant change between agility training and dribbling due to 12 week physical fitness training.

H₀: There is no significant change between agility training and dribbling due to 12 week physical fitness training.

2. H₁: There is significant change between speed training and dribbling due to 12 week physical fitness training.

H₀: There is no significant change between speed training and dribbling due to a12 week physical fitness training

3. H₁: There is significant change between power training and shooting due to 12 week physical fitness training.

H₀: There is no significant change between power training and shooting due to 12 week physical fitness training.

1.3. Scope of the Study

This study was conducted on Dangila town male football project players of ages ranging from 16 up to 19 years with the aim of examining effect of Physical Fitness Training on Some Selected Skill Performance of Male Football Project Players at Dangila Town and only focused on three variables of skill performance (agility, speed and power). The training time was restricted to three days (Tuesday, Thursday and Saturday) per week, 40-60 minutes per session and twelve weeks or three months.

1.4. Significance of the Study

This study will:

- Provide a proper and fertile ground for football project coaches to utilize programmed physical fitness training.
- Help players to improve physical fitness and that provides information to understand the effect of physical fitness on football.
- Draw some attentions for concerned bodies especially Dangila town football project participants, coaches, woreda sport office and other stakeholders towards the significance of fitness and fitness training programs.
- Serves as a push power and creating an opportunities for players to play attractive and efficient football skills in the project.
- Serve as a starter key for other researcher who might want further study.

1.5. Objectives of the Study

1.5.1. General Objective

The general objective of the study was to assess and investigate the effect of physical fitness training on some selected skill performance of male football project players at Dangila town.

1.5.2. Specific Objectives

The research addressed the following specific objectives:

- To identify the effect of 12 week agility fitness training on dribbling skill performance of Dangila town male football project players.
- To find out the effect of 12 week speed fitness training on dribbling skill performance of Dangila town male football project players.
- To examine the effect of 12 week power fitness training on shooting skill performance of Dangila town male football project players.

2. REVIEW OF RELATED LITERATURE

2.1. Basic Concepts of Physical Fitness

Physical fitness is a component that constitutes total fitness that is constantly being used in acting or in any order form of action. In addition, a person who is fit enough able to face challenges of emergencies that may arise in the future (AAHPERD. 1980). Physical exercise is one of the main determinants of fitness (Andersen, 2003). Physical educators also classify physical fitness as skill related (related to sport performance) which are speed, power, balance, agility, coordination and reaction time. And health related fitness (associated with disease prevention and health promotion) which includes components such as cardio-respiratory endurance, muscular strength and endurance, body composition and flexibility (Hawley, 2001).

2.2. Training Fitness

Regular training has needed for all areas of fitness. Here are some important factors to remember for an effective training program. Have a good plan. The training had directed to achieve specific goals and individualized to maximize the physical capabilities of particular players. In order to improve, the physical load needs has increased over time, as the players get fitter. By using cross training and by incorporating fitness into the training drills it will keep it interesting and maintain the motivation of the players. There is more information about training for sports, and an article about training for speed in football (Robert Wood, 2008).

2.3. Skill-Related Fitness

According to grade nine physical education text, there are six skill-related fitness components: agility, balance, coordination, speed, power, and reaction time. Skilled athletes typically excel in all six areas.

- ❖ **Agility:** - is the ability to change and control the direction and position of the body while maintaining a constant, rapid motion.

- ❖ **Speed:** - is the ability to move your body or parts of your body swiftly. Many sports rely on speed to gain advantage over your opponents. For example:-a football player out running the defense to receive a pass.
- ❖ **Power:** - is the ability to move the body parts swiftly while applying the maximum force of the muscles. Power is a combination of both speed and muscular strength. For example, full backs in football muscling their way through other players and speeding to advance the ball.

2.4. Fitness for Football

Physical fitness is one of the most important aspects of soccer performance. A skillful player will go a long way in the sport, but without the fitness part of their game, they will not be the complete player. Aerobic endurance fitness is one of the most important physical fitness attributes for soccer players. Players need to be able to maintain a high level of intensity throughout the 90-minute game. Another very important fitness component is anaerobic fitness, which means running speed and particularly repeat sprint ability. Players also need good agility, strength, power and flexibility. See more discussion on the fitness components for soccer (Robert Wood, 2008).

2.5. Fitness Training for Successful Skill Performance

Training is the base for implementing a certain skill performance so that it facilitates player's performance using programmed training sessions. Exercise training can be defined as systematic process of preparing for a certain physical goal. This goal used to be synonymous with peak performance (dolman et al.2005).

- ❖ **Frequency:-** even though frequency of the exercise program depends on a given objective it should enough to improve planned goal of the training session. According to Smith (2003), training frequency refers to the number of training session in a defined period. For example training frequency may vary between five to fourteen sessions per week depending on the sport, level of performance of athlete and stage of training cycle.

- ❖ **Duration:-** it refers to how long one exercise. It is inversely related to intensity. The more intense the activity, the shorter the time needed to produce the training effect. According to Smith (2003), duration refers to the time or amount of exercise session, this is sometimes confused with the volume of training, which quantifies training over the period of time and combines duration and frequency.

- ❖ **Intensity:** - exercise intensity is a measure of how hard is the exercise and related to the power output. The exercise intensity lies somewhere a continuum between rest and maximal oxygen up take for that activity. The intensity should vary with the type of exercise being done. Exercise to cardio respiratory development must strenuous enough to elevate the heart rate between 60 and 90 percent of the heart rate reserve (HRR). Those with low fitness levels should start exercising at lower training heart rate (THR) of about 60% of HRR. Exercise can be monitored by measuring sub maximal oxygen consumption (Daniels, 1985), heart rate (Lambert et al. 1989), the weight lifted during exercise (Sweet et al. 2004). Athletes are advised to incorporate high intensity training in to their training programs after they have developed a sufficient base (Lauresen and Jenkins 2002). If too much high intensity training is carried out the athlete at risk of developing symptoms of fatigue associated over training (Meeusen et al. 2006). Over training affects athletes performance not doing well, loss of interest and will face psychological and physical risk. Over training will increase the risk of getting injured (Noakes, 2001).

- ❖ **Rest and recovery:** - recovery is important to return back to every physiological condition to the normal condition. Factors that need to be considered during the recovery process after training session that it is important to give attention of ages and the training condition of the athletes. Bompa (1999), supported that when athletes age older than 25 years need longer recovery periods than younger athletes. Training and competing in the heat imposes more physiological stressor the athletes and requires a longer recovery periods (Noakes, 2001).

2.6. Periodization

Periodization is a systematic planning of short and long term training program by varying training loads and incorporating adequate rest and recovery. The plan serves as a template for the athlete and the coach (Smith, 2003). While it is important to have a plan should not be rigid, but rather should be modifiable based on the symptoms of the players (Lambert and Borresen, 2006). High intensity training designed to develop qualities linked to performance, as the season progresses. This approach to training reduces the risk of over training, while the athlete is more likely to peak at the predictable time usually coinciding with important competition (Hellard et al. 1999).

An advantage of periodization is that it provides a structure for controlling the stress and recovery for inducing training adaptation (Smith, 2003).

The training program must consist of a variety of elements, including cardio respiratory (aerobic) fitness, general strength, anaerobic fitness (power), speed, neuromuscular skills development, flexibility, and mental preparation. The emphasis placed upon each of these elements must vary during the training year, but will also depend on the athlete's event and level of experience and maturity. Generally, basic preparation for all events should focus on general strength and aerobic fitness. Training cycles usually last about 3 weeks, with a week of lower-intensity recovery before starting the next cycle. Skills acquisition should not be emphasized during a high-intensity training cycle, but should be reserved for periods of lower volume and intensity.

2.7. Factors Influencing Fitness

According to Sharkey; (1990) there are factors influencing fitness. These are:

- ❖ **Heredity:** -You could inherit many factors that contribute to aerobic fitness, including the maximal capacity of the respiratory and cardiovascular systems, a larger heart, more red blood cells and hemoglobin and a high percentage of slow oxidative and fast oxidative- glycolytic muscle fibers. Mitochondria, the energy producing units of muscle and other cells, are inherited from the maternal side. Recent evidence indicates that the capacity of muscle to respond to training may

also be inherited. Other inherited factors such as physique and body composition will also influence fitness and the potential to perform at a high level.

- ❖ **Training:** - Training improves the function and capacity of the respiratory and cardiovascular systems and boosts blood volume, but the most important changes takes place in the muscle fibers that are used in the training. Aerobic training improves muscles ability to produce energy aerobically and shifts metabolism from carbohydrate to fat, which may produce the single most important health effect of exercise. Burning fat reduces fat storage, blood fat levels, and cardiovascular risk. It also improves insulin sensitivity and reduces the risk of some cancers. Of course, training enhances the ability to perform, but the improvement is limited to the exercise used in training.

2.8. Fundamental Skills in Football

2.8.1. Dribbling

Of all basic soccer skills, dribbling is probably the most fundamental. Dribbling involves keeping the ball moving between the player's feet by kicking it from one foot to the other. Soccer players can dribble completely in place or can move slightly with the ball, focusing on keeping it under their feet entirely.

By keeping the ball under the feet, athletes protect it from defenders and prevent the ball from being stolen easily. Dribbling keeps the ball in motion and allows athletes to pass it if necessary in order to stay on offense. Dribbling is also the basis of other basic soccer skills.

To be successful at dribbling, there are a few tips all soccer players should know. Athletes should work on dribbling with different parts of the feet in order to beat defenders. Instead of always dribbling with the instep, players should practice dribbling with the outside of the foot and the inside heel area. This, along with increasing speed, will help players beat defenders. (<http://www.esoccerdrills.com/youth-soccer/basic-skills.html>)

2.8.2. Shooting

Shooting a soccer ball for a goal takes concentration and much practice to be effective and accurate, but all soccer players can master this youth soccer skill with a few tips. To shoot the ball, players should plant their weak foot next to the ball. The foot should be pointing in the general direction that the ball will be kicked, but it does not have to be perfectly aligned, as the kicking foot will do the aiming. When practicing basic soccer skills, athletes should practice good form. For shooting, athletes should let the strong leg swing back and forward toward the ball, making contact with the inside of the foot. The player's foot should be pointed down so that they can aim. Aiming is difficult because it happens with the toe. If the big toe points to the right, the ball will go to the right, or vice-versa. (<http://www.esoccerdrills.com/youth-soccer/basic-skills.html>)

2.9. General Principles of effective training

Training is preparation, instruction, education and prerequisite for sport performance (Wondemu and Damen, 2004:41). Define training as a complex, long and continuous educational process, with the aim of specific means to contribute the achievement of maximum sport performance by a player on the Sais of balanced development of his/her personality and further explains training as a systematic process of repetitive exercise and acclimatization .the major objective of training is to improve performance. The body has the ability to respond the physiological and environmental stressors adapt to them. This adaptation occurs over time and with practice and often leads to improved performance. Training progress are designed to challenge athletes physically, mentally in the pursuit of improving their exercise capacity and efficiency.

According to lib.Oup.com.au /.../student 20 book, how does training affect performance; principle of training is to improve performance. The body has the ability to respond physiological and environmental stressors and to adapt them .This adaptation occurs over time with practice and often leads to performance.

The principle of training is essentially the rules of laws that under pin a training program if this rules are not followed then any training under taken will become absolute and worthless. There are many principles of training that the coach and the players should include in the design of an effective training program.

3. MATERIALS AND METHODS

Research methodology is the philosophy or the general principle which guide our research. It is the overall approach to studying our topic and includes issues we need to think about such as the constraints, dilemmas, and ethical choices within our research (Catherine, 2007).

3.1. Description of the Study Area

The study was conducted for three months at Dangila town, Awi Zone, Amhara regional state, Ethiopia. Dangila is located at elevation of 2137 meters above sea level, and with latitude of $11^{\circ} 16' N$ $36^{\circ} 50' E$ and longitude of $11. 26^{\circ} N$ $36. 833^{\circ} E$. The town is located 476 km from North West direction of Addis Ababa and 78 km from Bahir Dar, which is found between Fagita lecoma woreda and south Achefer woreda. According to 2005 census the total population of the town is 26704 of whom 12916 male and 13788 are women.

3.2. Experimental Materials

Medical check list, marking cones, different measuring meters, chalk for marking the floor, stop watch, whistle, paper, pen and ball were used for this study.

3.3. Sources of Data

To do this study, the researcher used both experimental and control groups pretest and posttest result as primary data sources to get adequate amount of information regarding to the effect of physical fitness training on players' football skill performance.

3.4. Design of the Study

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Kothari, 2004). Depending upon the nature and appropriateness of the pretest and posttest data, the research approach designed in this study was quasi experimental method, for the study the researcher given **12 weeks** physical fitness training with a session of **three days per a week** and **40- 60minutes** per day for experimental groups.

3.5. Population and Sampling Techniques

The total number of the players in the Dangila town football project is 32. The size of the sample should be neither excessively large nor too small. It should be optimum. An optimum sample is the one which fulfills the requirements of efficiency, representativeness and reliability (Kothari, 2004). For this reason the researcher selected 16 players as experimental group and 16 players as control group by using census sampling technique.

3.6. Inclusion and Exclusion Criteria

The criteria taken in the study was intended to include the subjects who fulfilled the physical activity readiness question and to exclude those who did not fulfilled the physical activity readiness question. Accordingly, all the subjects fulfilled the physical activity readiness question and are included in this study.

3.7. Data Collection Instrument

In order to attain the objective of the research regarding to the effect of physical fitness training on selected dependent variables, quantitative data was used through the appropriate football skill test measures. The researcher used **pretest and posttest** of the experimental and control groups to collect the data on football skill performance of dribbling test (points within 45 seconds), control speed dribbling test (seconds) and power shoot test (points out of ten).

3.8. Data Collection Procedures

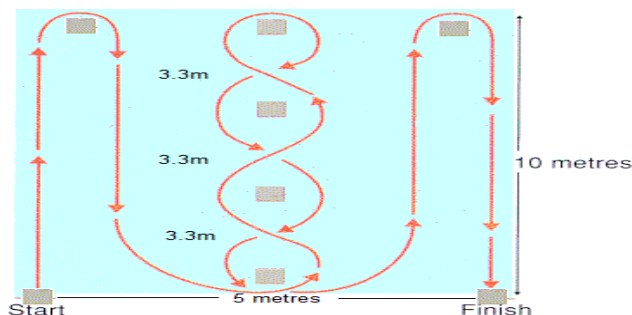
At the start of the study the researcher asked permission from coaching staffs and given clear information for trainees about the study and divided players into experimental and control groups and also gathered information about players name, age and weight. The researcher prepared three months training program for three days per week, 40-60 minute per day with moderate to high intensity for experimental group. And collected players pretest result before the beginning of 12 weeks physical fitness training and posttest result after 12 weeks fitness training from both experimental and control groups and recorded the result by using record sheet.

3.9. Training Procedures

Experimental groups had engaged through training activities of physical fitness in addition to the normal training using **Illinois agility drill, Bounding speed and squat jump**. A training program was three times in a week and 40-60minutes session for three months. The training program was based on recommendations of intensity and volume from (Davies, 2005) using progressive set, repetitions and distance of exercise. Therefore, the researcher had prepared three month training plan to be implemented by the coach for players in addition to the normal training plan. However, players were undergone the normal training program that are prepared by the coach. Polymeric had only performed three times per week to allow for sufficient recovery between workouts as recommended by researchers (Adams et al., 1992). Training volume ranged from, 3 –5 sets, 5 –15 repetitions with a minimum of 90 and a maximum of 220 ground contacts per session. Finally, all players had taken a posttest then differentiate the effect of training on players' pretest and posttest results with the football skills performance.

3.9.1. Agility (Illinois Agility) Drill

The Illinois agility drill had typically utilized objectively test an athlete's speed, agility, and change of direction. However, to find the drill to be extremely effective in training for soccer performance and recommend keeping the total number of repetitions low and provide ample rest between attempts. When undertaking specific agility training, the drills should preferably mimic the movements and demands of your position on the soccer field, e.g. central defenders tend to undertake more sideways and backwards running. In addition, drills had carried out at full speed to simulate game situations. Concentrate on deceleration, change of direction and acceleration to make these movements as efficient and automatic as possible (<https://www.google.com.et/search> Soccer Agility Drill).



Adopted from: Dragijsky, 2017 agility classification of training

Figure 1: Illinois Agility Training Drill

Tips for completing the Illinois Agility drill

You should aim to get to your feet as quickly as possible to reduce time lost in getting to your feet. Practice this movement.

- Run as quickly as you can between straight points, saving time for the weaving element. This is a dynamic drill and takes less than 20 seconds, so do not conserve energy. Give it everything you have from start to finish.
- Make sure you touch or put your foot over the lines at the top end of the course and stay well clear of the cones when weaving.
- Do not slow down before the end timing gates; continue to sprint through the gates.

Typical agility session could consist of 3-5 sets of 10 repetitions in total and you should take ample rest between set. To perform soccer agility drills and skill work after the warm up before moving into more enervating, fitness drills.

3.9.2. Bounding Speed Dribbling

The purpose of this exercise is to increase the players' dribbling and control speed ability. Become more powerful this is plyometric which help to improve your explosive power. The basic motion your explosive power relates directly to your sprinting speed (Davies, 2005).

To run faster your need is similar to rhythm bounds except that the lead knee drives vigorously to waist level. The athlete tries to achieve both height and distance. Do two sets of 8–12 bounds, or 30-50 yards (Chu, 1998).



Adopted from: Davies, 2005 Total Soccer Fitness

Figure 2: Speed Bounding Training Drill

Tips for completing the Bounding drill

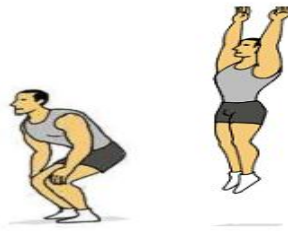
- Jog into the start of the drill forward momentum.
- After a few, feet forcefully push off with the left foot and bring the leg forward.
- At the same time, drive your right arm forward. Repeat with other leg and arm.

This exercise is an exaggerated running motion focusing on foot push-off and airtime.

Do two sets of 8–12 bounds, or 30–50 yards. You should take ample rest between sets.

3.9.3. Squat Jump

The objective of squat jump is to increase the body power which gives the football players the ability to take off faster and move quicker. It is polymeric movement where both feet leave the ground at the same time. So to take your basic squat to the next level, add a jump! Start in the beginning squat position. Lower yourself about half way and then jump up in the air before landing on your feet standing. You can swing your arms for momentum if you like (Davies, 2005).



Adopted from: Davies, 2005 Total Soccer Fitness

Figure 2: Squat Jump Training Exercise

How to perform the squat jump

This exercise is an advanced dynamic power movement that is done only after a complete warm up. (www.popsugar.com/fitness/How-Do-Jump-Squats-994573)

- Stand with feet shoulder-width apart, trunk flexed forward slightly with back straight in a neutral position.
- Arms should be in the “ready” position with elbows flexed at approximately 90°.
- Lower body where thighs are parallel to the ground.
- Explode vertically and drive arms up.
- Land on both feet and repeat.
- Prior to takeoff extend the ankles to their maximum range (Full plantar flexion) to ensure proper mechanics.

Squat Jump Technique

To perform jump squats, stand with your feet hip-width apart and with your hands either clasped behind your back or interlocked and held behind your head. Push your hips back and bend your knees to lower into a full squat. Once your thighs are parallel to the floor, explode into a maximum-height vertical jump.

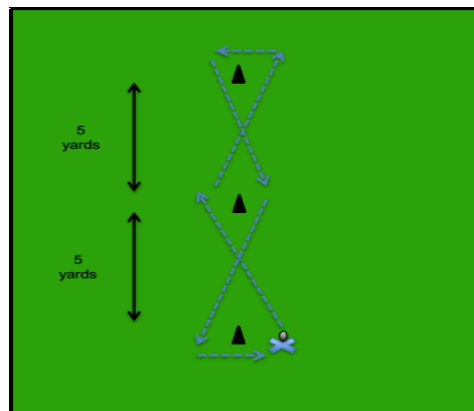
Land in the same spot with your feet at hip-width apart and absorb the impact by pushing your hips back and bending your knees. After you stand back up, immediately lower into a squat to go into the next repetition (Dr. Squat, 2004).

Sets and Repetitions

It is important to begin by performing jump squats at a low volume and then progressively increase the sets and repetitions as your muscles, bones and soft tissues get stronger and adapt to the stress of landing. When you are starting out, do three sets of six repetitions of jump squats. Beginners should have less than 40 contacts per workout, which means less than 40 times landing from a jump. After a few weeks of consistent training, you can increase your workout volume to three sets of 8 or 10 repetitions. Rest at least one minute in between sets (Henkin, 2004).

3.10. Testing Procedure

3.10.1. Dribbling Test



Adopted from: Heinrichs & Ellis, 2013

Figure 4: - dribbling test

- **Purpose:** - This test is designed to measure the ability to dribble in tight spaces, with speed and agility.

- **Equipment and Field Organization:** - 1 ball, 3 cones, stopwatch and tape measure
-10yard line marked with three cones, each 5 yards apart.

- **Instructions:** - The player starts on one side of the first cone.

- Player must dribble around each cone without touching the cone, using preferred foot and trying to use both the inside and outside of his foot; he may also use the sole of his foot

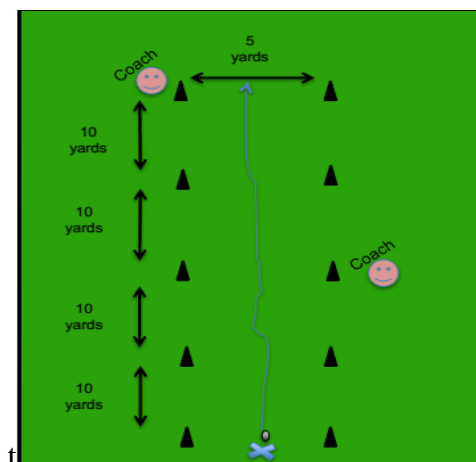
- **Scoring:** - The player has 45 seconds to score as many points as possible.

- Each time the player passes a cone, he scores full of 4 points.

-1 point is taken away for every cone touched.

- The player's total score is recorded

3.10.2. Control Speed Dribbling Test



Adopted from: Heinrichs& Ellis

Figure 5: Controlled Speed Dribbling Test

- **Purpose:** - This test is designed to measure the ability to dribble at speed and in control at open space.

➤ **Equipment and Field Organization:**-1 ball,10 cones, stopwatch and tape measure

- 4 consecutive 5 x 10 yard grids

- Long 5 x 40 yard channel

➤ **Instructions:** - The player starts on one end of the channel.

-Time starts when the player starts the dribble.

- The player must take a minimum of four touches in each 5 x 10 yard grid.

- The total time is recorded once both the player and the ball cross the finish line.

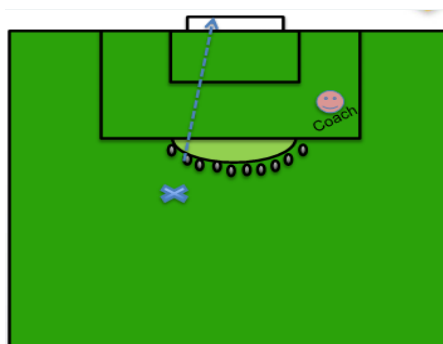
- The player takes the test three times.

➤ **Scoring:** - Player must dribble using preferred foot from one end to the other, taking a minimum of 4 touches in each grid and finish within 8.0-8.5 seconds to successfully accomplish this test.

- Each player will be given 3 attempts.

- The player's lowest time on a successful 8.0-8.5 seconds or less dribble is recorded.

3.10.3. Power Shooting Test



Adopted from: Heinrichs and Ellis, 2013

Figures 6: - Power Shooting Test

- **Purpose:** - This test is designed to measure the ability to shoot with power and accuracy with the instep of preferred foot.
- **Equipment and Field Organization:** - 1 goal, 10 balls, stopwatch and tape measure
- The shooting area is 15 yard /13.72m line from the goal
- 10 balls set up at the top of 22 yard line from goal
- **Instructions:** - Player must touch and shoot a moving ball before it crosses the 15 yard line.
- The shot must be taken with the instep.
- The player shoots 10 balls consecutively with his preferred instep.
- **Scoring:** - The player scores a point for each shoot with the instep that crosses the goal line in the air between the posts, below the crossbar, and without a bend on the ball.
 - Shoot must be with power and not bending to be considered successful.
 - Player must complete all 10 shots within 45 seconds.
 - The player's maximum score out of 10 attempts is recorded.

3.11. Method of Data Analysis

After the players were tested on the selected football skills prior and immediately after the treatment, the data obtained from the pretest and posttest of players' result the researcher analyzed the quantitative data using SPSS version-20; the result presented as a mean and standard deviation and examined whether there will have significant difference between the pretest and posttest results of control and experimental groups by using paired t- test. The level of significance would be set at .05.

3.12. Data Quality Control

To ensure the data quality, all the test procedures, collection of data and handling information carried out in accordance with standard protocols and measurements. The researcher used assistances to collect data in order to avoid errors; training was given for them on how to use data collecting instruments and measurements during data collection.

The investigator tried to create awareness for the subjects about the objectives of the study, the tests and recommend preconditions while the tests administered. To ensure the reliability and validity of the result the pretest was administered two days before the treatment is begun and the posttest taken place two days after their treatment. In addition to the above points the data was recorded and inserted in to the software twice with different individuals.

3.13. Ethical Consideration

The study dealt with the ethical issues related to the investigation. It was protected the privacy of the research participants and made guarantee for any risk harm due to participation and gave confidentiality of the information that was given to the study.

Subjects of this study were participated purely in voluntarily based activities. Therefore the study conducted based on the university rules, codes of conduct and policies concerning research ethics.

4. RESULTS AND DISCUSSION

After collecting the reliable data through experimental method such as pretest and posttest of each variable, the researcher tabulated, analyzed and interpreted it. Tabulation is a way of arranging the same data in some kind of concise and logical order (Dawson, 2007). The researcher had conducted the task of drawing inferences after analyzing the collected data. Unless this has been done very carefully, misleading conclusions may be drawn and the whole purpose of doing research may reduce the quality. It is only through interpretation that the researcher can expose relations and processes that underlie his findings. Interpretation refers to the task of drawing inferences from the collected facts after analytical study (Ibid, 2007). The tests were based on Heinrichs& Ellis (2013), football skill test.

This chapter reveals results and interpretation of the research under taken. The data was analyzed by using table and descriptive statements using SPSS version- 20.

4.1. Personal Profile of the Subject

To conduct this study, valuable data was collected from the target groups of this study. The target groups of the study were Dangila town male football project players. The players were asked to indicate their personal profile. Therefore, in this section the data obtained from respondents regarding their personal profile were presented in the following table.

Table 1:- personal profile of the group

Groups	N.	Sex	Age		Weight		Playing experience	
			M	SD	M	SD	M	SD
EG	16	Male	16.8750	.80623	51.9125	1.32960	2.5625	.51235
CG	16	Male	17.1875	.91059	51.6750	1.68780	2.3750	.50000

M=mean score, SD=standard deviation, N= number of participants, CG= control group

EG=experimental group, PT=pretest, POT=post test

As shown in table 1 above, descriptive characteristics of 32 study participants from Dangila male football project players' mean age (EG=16.8750, CG= 17.1875) and playing experience(EG=2.5625, CG=2.3750) are provided.

4.2. Results of the Study

4.2.1. Comparison of Dribbling Measure of the Groups

Table 2:- Descriptive statistics for dribbling measures of the groups

Test	Group	M	N	SD
Dribbling	CG-PT	15.4375	16	1.15289
	CG-POT	15.1875	16	1.32759
	EG-PT	15.0625	16	1.80624
	EG-POT	16.7500	16	1.61245

M=mean score, SD=standard deviation, N= number of participants, CG= control group,

EG=experimental group, PT=pretest, POT=post test

The descriptive statistics in table 2 above shows that the pretest score of control group (those who didn't take fitness training for 12 week) was found to be mean score of 15.4375 with a standard deviation of 1.15289. In the same manner the average posttest score of control group was found to be 15.1875 with standard deviations of 1.32759. From the data we can see that the scores in the pretest and posttest for control groups were very close. One can see that there was still a difference. However, we cannot determine here if this difference was statically significant.

It is also clear in this table that the descriptive statistics results of pretest and posttest of experimental group after 12 week training program were compared the level of dribbling skill performance. Accordingly, the outcome was the mean score of pretest 15.0625 and SD=1.80624. On the other hand, the mean score of posttest was found to be 16.7500 with SD =1.61245. This implies that, there was mean difference between the pretest and posttests, yet it is impossible to tell here if the differences are statistically significant. Hence a paired sample t-test comparing the pretest and posttest scores of the groups and which was computed to examine whether this

number show statistical difference between dribbling skill performance levels of the football players within groups the t- test results presented in the table which follows.

Table 3: - paired sample t-test results of dribbling measure of groups

Paired Samples Test				P-value
Test	Group	Paired Differences		
		MD	SD	
Dribbling	CG-PT-PoT	.2500	.77460	.216
	EG-PT-PoT	-1.68750	.94648	.00

Level of confidence is .05

MD=mean difference, SD=standard deviation, CG=control group, EG=experimental group, PT=pretest, POT=posttest, P=significance level

Table 3 above displays the test of significant difference between the pretest and posttest of the control group. According to the data presented therein, there was no significant difference between the pretest and posttest of control group because MD= .2500 and p= .216 which is greater than .05 implying that the pretest and posttest of the control group was about the same level. In the other word dribbling skill performance level of the group within pretest and posttest did not show any difference which indicates that comparison at the experimental groups could be possible. Thus, one can understand that dribbling skill performances of players were displayed in the t-test at the same level.

Table 3 above also displays the statistical test for the variance of the experimental group in the pretest and posttest showed a statistically significant difference (MD = -1.68750, p= .00;so $p < .05$). This indicates that the group members who had 12 week physical fitness training programmed (experimental group) were significantly outperformed better than the control group who had participated in their general football training without 12 week fitness program as presented in the former table (2). That is the mean score of pretest was 15.0625 and posttest was

16.7500. There is of course a huge gap between these two figures. The mean difference as can be seen in table 3 above is -1.68750 implying that there existed this difference between the dribbling skills performance levels of the experimental group pretest and posttest. So, the posttest had high mean score than the pretest.

The implication therefore was the programmed physical fitness training exercise the one has better skill performance level of the players dribbling in football. The same happened in this study that players who engaged in programmed physical fitness training showed a significant change in dribbling than those players without fitness training program.

4.2.2. Comparison of Control Speed Dribbling Measures of the Groups

Table 4: - Descriptive statics for control speed dribbling measures of the groups

Test	Group	M	N	SD
Speed dribbling	CG-PT	13.050	16	1.03737
	CG-POT	13.1050	16	1.07330
	EG-PT	11.6850	16	1.02568
	EG-POT	10.8062	16	0.92771

M =mean score, SD=standard deviation, N=number of participants, CG= control group, EG=experimental group, PT=pretest, POT=post test

The descriptive statistics in the above table 4 shows that the pretest score of control group (those who didn't take fitness training for 12 week) was found to be mean score of 13.050 with a standard deviation of 1.03737. In the same manner the average posttest score of control group was found to be a mean score of 13.1050 with standard deviations of 1.07330. From the data we can see that the scores in the pretest and posttest for control groups were very close. One can see that there was still a difference. However, we cannot determine here if this difference was statically significant.

As also shown in the above table 4 the descriptive statistics results of posttest and pretest of experimental group after 12 week training program were compared the level of speed dribbling skill performance of football players. Accordingly, the outcome was the mean score of posttest 10.8062 and $SD = 0.92771$. On the other hand, the mean score of pretest was found to be 11.6850 with $SD = 1.02568$. This implies that, there was mean difference between the posttest and pretest, yet it is impossible to tell here if the differences are statistically significant. Hence, a paired sample t-test comparing the pretest and posttest scores of the experimental group and which was computed to examine whether this number shows statistical difference between speed training speed dribbling skill performance levels of the project football players within pretest and posttest of groups the t- test results presented in the table which follows.

Table 5:- Paired sample t-test results of control speed dribbling measure of the groups

Paired Samples Test				P-value
Test	Group	Paired Differences		
		MD	SD	
Speed dribbling	CG-PT- POT	-.06000	.24811	.349
	EG-PT – POT	.87875	.73426	.000

Level of confidence is .05

MD=mean difference, SD=standard deviation, CG= control group, EG=experimental group, PT=pretest, P=significance level

Table 5 above displays the test of significant difference between the pretest and posttest of control group. According to the data presented in the table above, there was no significant difference between the pretest and posttest of the control group because $MD = -.06000$ and $p = .349$ so, $p > .05$. This implies that the pretest and posttest of the control group was about the same level. In the other words control speed dribbling skill performance level of the group within pretest and posttest did not show any difference which indicates that comparison at the

experimental groups could be possible. Thus, one can understand that the control speed dribbling skill performances of players were displayed in the t-test at the same level.

From this table the statistical test for the variance of the experimental group in the posttest and pretest are displayed. According to the data presented there, the posttest and pretest of controlled speed dribbling skill performance level of the group showed statistically significant difference $MD=.87875$, $p=.000$. So $p<.05$ which indicates that the experimental group members who had 12 week physical fitness training program were significantly outperformed than the control group who had participated in their regular training without 12 week fitness training program. In the previous table (4) it has been seen that the mean score of the experimental group posttest was 10.8062 and pretest was 11.6850. There was of course a huge gap between these two figures. The mean difference as can be seen in the above table (5) is $.87875$ implying that there existed a difference between the controlled speed dribbling skills performance levels of the experimental group pretest and posttest. So, the posttest had a low mean score than the pretest since which was measured in seconds. The implication therefore was that the programmed physical fitness training exercise is the one which had a better skill performance level of the players controlled speed dribbling in football. The same happened in this study, players who engaged in a programmed physical fitness training showed a significant change in controlled speed dribbling than those players without a fitness training program.

4.2.3. Comparison of Power Shooting of Measures the Groups

Table 6: - Descriptive statics of power shooting test measures of the groups

Test	Group	M	N	SD
Power shooting	CG-PT	4.0625	16	.92871
	CG-POT	3.8125	16	.98107
	EG-PT	4.1875	16	.91059
	EG-POT	6.0625	16	.99791

M=mean score, SD=standard deviation, N= number of participants, CG= control group

EG=experimental group, PT=pretest and POT=post test

The descriptive statistics in table 6 above showed that the pretest score of control group (those who didn't take fitness training for 12 week) was found to be mean score of 4.0625 with a standard deviation of .92871. In the same manner the average post score of control group was found to be a mean score of 3.8125 with standard deviations of .98107. From the data we can see that the scores in the pretest and posttest for control groups were very close. One can see that there was still a difference. However, we cannot determine here if this difference was statically significant. Thus, a paired sample t- test was computed to inspect whether the pretest and posttest had statistically significant difference or not in the control group.

As shown in table 6 above the descriptive statistics results of pretest and posttest of experimental group after 12 week training program were compared the level of power shooting skill performance of football players. Accordingly, the outcome was the mean score of pretest 4.1875 and SD =.91059. On the other hand, the mean score of posttest was found to be 6.0625 and SD = .99791. This implies that, there was mean difference between the pretest and posttest, yet it is impossible to tell here if the differences are statistically significant. Hence a paired sample t-test comparing the pretest and posttest scores of the experimental group and which was computed to examine whether this number show statistical difference between power shoot skill performance

levels of the football players within pretest and posttest of experimental group the t- test results presented in table 7.

Table 7: - Paired sample t-test results of power shooting for the groups

Paired Samples Test				P-value
Test	Group	Paired Differences		
		MD	SD	
Power shooting	CG-PT-POT	.25000	.57735	.104
	EG-PT-POT	-1.87500	.61914	.000

Level of confidence is .05

MD=mean difference, SD=standard deviation, CG= control group, EG=experimental group, PT=pretest, POT=posttest, and P=significance level.

Table 7 above displays the test of significant difference between the pretest and posttest of control group. According to the data presented in the table above, there was no significant difference between the pretest and posttest of control group because the MD= .2500 and $p = .104$. So, $p > .05$ this implies that the pretest and posttest of the control group was about the same level. In other words power shooting skill performance level of the group within pretest and posttest did not show any difference. Thus, one can understand that power shooting skill performances of project football players were displayed in the t-test at the same level.

Table 7 above also displays the statistical test for the variance of the experimental group in the pretest and posttest. According to the data presented in the above table, the pretest and posttest of power shooting skill performance level of the group showed a statistically significant difference MD= -1.87500, $p = .000$. So $p < .05$ which indicates that the group members who had 12 week physical fitness training program (experimental group) were significantly outperformed than the control group who had participated in their regular training without 12 week fitness training program. It has seen in table 6 that the mean score for experimental group of pretest and posttest

were 4.1875 and 6.0625 respectively. There was of course a huge gap between these two figures. The mean difference as can be seen in the above table is -1.87500 implying that there existed this much difference between the power shooting skills performance levels of the experimental group pretest and posttest. So, the posttest had high mean score than the pretest. The implication therefore was the programmed physical fitness training exercise is the one that had better skill performance level of the players' power shooting in football. The same happened in this study, the players who are engaged programmed physical fitness training showed significant change in power shooting than those players without fitness training program.

4.3. Discussions

The present study investigated on the effect of physical fitness training on project football player's skill performance of Dangila male football project players. Subjects participated throughout the treatment period and cooperated for the success of collection of necessary data. Both groups performed activities of normal daily living and agreed not to change or increase their current exercise habits during the course of the study. The experimental group participated in a 12week training program performing the selected physical fitness exercises designed to the players, while the control group did not participated in these selected physical fitness exercises. The subjects of experimental and control groups were to instruct not to start any programs during the 12week period and only perform their daily living and regular football training. Prior to the study, procedures and guidelines had presented orally and Subjects were agreeing to participate.

Training is essentially a preparation of an individual's athlete so that he can withstand competition stress when he encounters and perform to maximum effectiveness. A high level of football skill demand is required to match play, which involves dribbling, shooting and others. To implement the given tactics of the game and it is basic that a good ground of fitness. Physical fitness training helps to develop skills performance as well as fitness and it is more effective when given to young players (Bell & Rhodes, 1975). So that many previous investigators showed (Kraemer & Gotshak, 2000 cited in Belet N., 2015) "evaluating skill based on sport specific test between pretest and posttest training are vital in planning and developing a training programs". Modern football requires the players to have high quality physical fitness has become one of the main pillars in training plan either daily, weekly, seasonally and annually.

Players' skills significantly increased in the world in recent years and years ago, we found that their physical fitness quality have grown in a remarkable way (Farouk & Saleh, 2004) physical fitness training helps to develop speed, agility and power as well as skills and become more effective when giving to young players (Reilly et al. 2000 & Strudick et al. 2002).

The finding of the study showed that in the case of agility training for dribbling, experimental group was improved their own football skill performance. But in control group it is observed that in dribbling test the pretest score of control group was found the mean score of 15.4375 with SD of 1.15289. Similarly, the average posttest score of control group was found the mean score of 15.1875 with standard deviation of 1.32759. From this data the mean score in the pretest and posttest for the group were very close and there was no significant difference in general training and dribbling on control group because $MD=.2500$, and $p=.216$ which is greater than .05.

The experimental group descriptive statistics results of the pretest and posttest were also considered as follows. The group had three days per a week for 12 week physical agility training and pretest-posttest was compared for the level of dribbling skill performance. Accordingly, it was found that the mean score of pretest was 15.0625, $SD= 1.80624$; while the mean score of posttest was found to be 16.7500 with a $SD = 1.61245$. One can understand that these numbers are different and the posttest had high mean score than pretest of dribbling test the skill performance levels of experimental group showed statistically significant difference. Subsequently, it can be shown that, $MD=-1.68750$, and $p=.00$ which indicated that p is less than .05 and hence the group members who had a 12 week agility training significantly outperformed. Therefore, we have enough evidence to reject the null hypothesis there is no significant difference between agility training and dribbling due to 12 week physical fitness training since, the subjects in the experimental group show significant improvement than control groups. Thus, a 12 week physical fitness training program can play a better role in dribbling performance. The same happen in this study that the Dangila male football project players who were engaged in physical fitness training program (experimental group) excelled significantly but control groups.

The result of this study is in agreement with the study conducted by (-Zoran et al..(2013) on the effects of a 12 week conditioning program involving speed and agility training, and its effect on agility with the ball performance in young soccer players showed significant improvement. And

similarly other study was conducted by (-Haghighi et al., -. (2012). Their result showed the time of dribbling test improved significantly after agility training ($P < .05$). This study also reported that the skill of dribbling had a significant improvement due to agility training on soccer players. In harmony of this study, the present finding significantly improved dribbling ability of male football players due to agility training.

Speed training has a major impact on the development of skill performance characteristics of youth football players (Pearson & Gehisen, 1998). And the ability to execute skills quickly can make you appear to be a faster player (Davies, 2005). Results of the study showed a significant difference in experimental groups for speed dribbling skill performance ($p < .05$). As it can be seen in the above table 4 the pretest mean score of control group is 13.050, posttest mean score is 13.1050 and p value is .349 which implies that it didn't show significant difference.

The experimental group pretest mean score = 11.6850, posttest mean score = 10.8062, and $p = .000$ implies that speed dribbling mean score in seconds reduced significantly. Therefore we can conclude that we have enough evidence to accept the stated hypothesis there is significant difference between speed training and dribbling skill performance due to a 12 week physical fitness training since the subjects in the experimental group show significant improvement than control groups. Thus, a 12 week physical fitness training program is a better in speed dribbling performance. The same happen in this study that the project football players who were engaged in physical fitness training program (experimental group) excelled significantly but control groups.

The result of this study is in agreement with the study conducted by (Abrham, 2015) on effect of physical fitness training in the development of technical abilities on football players. The purpose of the study was to find out the effect of fitness training on selected skill performances among football players. To achieve the purpose of the study, 45 male football players from Debremarkos University and Debremarkos city clubs were selected as subjects purposively and their ages ranged from 20 to 26 years. The subjects ($N=45$) were purposively assigned to experimental group. Pretest was conducted for all the subjects on selected skill performances. This initial test scores formed as pretest scores of the subjects.

The group was exposed to physical fitness training. The duration of experimental period was 6 weeks. After the experimental treatment, all the 45 subjects were tested on their skill performance variables. This final test scores formed as post test scores of the subjects. In all cases level of significance was .05 fixed to test hypotheses and used paired t-test. The training had positive impact on dribbling among the football players. In the case of speed dribbling the students were improving their own football skill performance. It is observed that in speed dribbling test the pretest score of experimental groups mean was found that 10.13 the posttest mean is 9.76 and the mean difference is .37 with the value of p is .001 which mean it is less than .05, so he conclude that there is an improvement in speed dribbling after 6 week Speed training.

Similarly Haghghi (2012) reported that speed directly affects the skill of dribbling. Therefore, speed training had positive effect on speed dribbling. And other researcher Farouk & Saleh (2014), results using cross training program lead to the development of speed. Finally they conclude that there is clear improvement rate between experimental and control group in speed dribbling in favor of experimental group. This study also reported that the skill of speed dribbling had a significant improvement due to speed training on soccer players.

And according to Dollars & Soderman (2007), made conclusions from their follow up study they showed that players with good physical fitness had better dribbling technique during the match. The setting of today's football requires faster and faster players that would be unpredictable & inclusive for the opponent. Speed as a basic motor ability is very important in the execution of technical elements in the football (Milenkovic, 2011). In harmony of this study, the present finding significantly improved speed dribbling ability of male football players due to 12 week speed training.

According to Hahighi (2012) professional soccer player perform a large number of explosive bursts like shooting and explosive leg power is mandatory for footballers and also, players who had low physical fitness adversely affect his skill performance level. If players' performance is not dramatically approaching the idea, the technical performance regardless of the extent of its ease is a waste of time and effort (CorvanDermeer and Roy Ress 19997). This study was carried out to investigate the effects of power training on football player skill performance.

Results of the study showed that there was a significant difference of experimental groups for power shooting skill performance ($p < .05$). As it can be seen in the above table 6 which stated that the pretest mean score of control group = 4.0625, posttest mean score = 3.8125, and in the above table 7 mean difference = .2500 and p value = .104 which implies that it didn't show significant difference. But the experimental group pretest mean score = 4.1875, posttest mean score = 6.0625 and in the above table 7 mean difference = -1.87500 and p value = .000 which implies that power shooting mean score in points increase significantly. Therefore we can conclude that we have enough evidence to reject the hypothesis there is no significant difference between power training and shooting due to a 12 week physical fitness training since the subjects in the experimental group show significant improvement than control groups. Thus, a 12 week physical fitness training program is a better in power shooting performance. The same happen in this study the project football players who were engaged in physical fitness training program (experimental group) excelled significantly but control groups. .

This study is in close similarity with the study conducted by Memarzadeh et al. (2014) who concluded that in plyometric training, explosive leg power improved and at the same time shooting accuracy improved. And similarly, Moorth (2004) suggested that after a plyometric training exercise shooting accuracy has improved. This study also reported that the skill of power shooting had a significant improvement due to power training on soccer players. In harmony of this study, the present finding significantly improved power shooting ability of male football players due to 12 week power training.

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Summary

The purpose of this study was to find out the effects of physical fitness training on football skill performance of Dangila town male football project players. To achieve the purpose of the study, 32 players were selected purposively as a subject.

The study was focused on quasi-experimental study within 12 weeks physical fitness training. Training was done 3 times per week for 40- 60 minutes per session. The selected football skill performance variables dribbling control speed dribbling and power shooting tests were taken from the participants at pre and post training programs. Before the training program, the pretest was taken for each variable. At the end of the training program the post test was taken from the participants. Paired sample T-test was used to find out the significant difference ($p \leq .05$) between the post training result and pre training result of each variable. In all cases, .05 level of confidence was fixed to test the significance, which was considered as appropriate. The result obtained in this study showed significant improvements in selected football skill performance parameters in the participants of the study after analyzing the pre-post mean difference of each variable. The study finally showed that the experimental players had performed the selected physical fitness training had significantly greater than the control groups, which did not included programmed physical fitness training. Therefore, physical fitness training had a significant effect on football players to play the game effectively and efficiently.

The present study had shown the major investigation of players after they did three month training program on agility, speed and power of experimental groups without adding this to the control group.

As presented in the above table two and three, dribbling test of experimental group had 15.0625 results of mean for pretest and 16.7500 for posttest. However, control players mean had 15.4375 for pretest and 15.1875 for posttest of the physical fitness qualities result. Experimental and control players of pretest and posttest difference of mean value were 1.68750, .2500 and P-Value of the pretest and posttest of the groups were .00, .216 respectively. Therefore, the experimental players had better mean results as compare to the control players.

That means physical fitness agility training drill has significantly enhanced players' current level of dribbling skill performance in tight space with obstacle.

Based on the above table four and five, the control speed dribbling test of experimental players had 11.6850 results of mean for pretest and posttest 10.8062 however, control players' had 13.050 pretest and 13.1050 posttest recorded and the level of significance was set at .05. Experimental and control players of pre and post test score difference of mean value were .87875, -.06000 and P-Value of pretest and posttest were .000, .349 respectively. Therefore, the experimental players had a high level of skill than control players. That means physical fitness drills have developed the players football skill performance.

According to the above table six and seven, the power shooting test for experimental group had 4.1875 results of mean for pretest and 6.0625 for posttest. However, control players had 4.0625 pretest and 3.8125 posttest recorded and the level of significance was set at .05. Experimental and control players of pretest and posttest score of mean difference value were 1.87500, .2500 and P-Value of pretest- posttest were .000 and .104 respectively. Therefore, the experimental players had a high level of skill than control players. That means physical fitness drills have developed the players football skill performance.

5. 2. Conclusions

Training of project football players has its own advantage on improving different skills like dribbling and shooting of Dangila town male football project players. The study indicated that through programmed physical fitness training players have showed significant difference ($p < .05$) on selected football skills.

Based on the results obtained from this study, the researcher has deduced the following conclusions.

- Physical fitness training was found effective in significantly improving football skill performance of experimental group players.
- There was no significant improvement observed on control groups.

➤ At the end of the study period the speed dribbling skill of the players in relation to time showed reduction when compared posttest to pretest. Therefore, it is possible to conclude that fitness training improved the speed dribbling skill project football players.

➤ The program also improved shooting skill of the project football players.

Generally, the present study concluded that physical fitness training had a significant effect on project player's football skill performance through the selected football skill tests. Hence, physical fitness training is effective and beneficial for the enhancement of Dangila male project player's football skill performance on experimental group and all the alternative hypotheses drawn by the researcher are proven to be true and they are accepted while those hypotheses drawn as null are in contradiction with the results of the experiment and they are rejected by the research!

5.3. Recommendations

Appropriate training is very essential for the development of project players' football skill performance. Therefore in light of the finding and conclusion of the study, the following recommendations or suggestions were forwarded as a solution to improve the player's skill performance.

➤ The coach should give emphases to a physical fitness training program to the male football project players and take actions to improve players' better skill performance enhancement.

➤ The trainer must be familiar with the basic principles and process of training, so that they can evaluate training program and determine their adequacy in maintaining player's football skill improvement.

➤ Similar researches are very important for further investigation and doing research on other ball games

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7. APPENDICES

Appendix- A

Health history and physical readiness questionnaire of the participants

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

I. Players information

Name: _____ Date of Birth____/____/____

Age: _____ weight_____ Address: _____ phone no: _____

Emergency Contact: _____

Address _____ phone no _____

II. Personal health status

Please answer the following questions by ticking 'X' on the given space on the table. And please give a description for your answer if necessary.

Personal Health Status

1 Have you ever had any broken or fractured bones or dislocated?

A yes

B no

2 Have you ever had discomfort pain tightness' or pressure in your chest?

A yes

B no

3 Have you ever had an injury to a bone, muscle ligament, or tendon that cased you to miss practice?

A yes

B no

4 Have you ever had a stress fracture?

A yes

B no

5 Do you have a bone muscle or joint injury that bothers you?

A yes

B no

6 Do you have groin pain?

A yes

B no

Appendix-B

Participant Information Sheet and Informed Consent Form

Dear players I am being conducted a research on the Effect of physical fitness Training on some selected skill performance of male football players of Dangila town football project players. It's my honor to take the chance with your due attention to explain about the procedures that will be used in the study and being selected as the study participant.

1. Purpose/ Aim of the study:

The findings of this study can be used by players as well as the community to design holistic training program which is appropriate to improve the football skill performance on dribbling and shooting. Furthermore, the aim of this study will be to fulfill the requirement for master's degree in teaching physical education for the researcher and will be submitted to sport science department as partial fulfillment of Masters of Education in Teaching Physical Education.

2. Procedure and duration:

There will be selected football skill tests that will be conducted in this study before and at the end of the physical fitness training program. There are three football skill tests. Days prior to the tests, during agility, speed & power training sessions you may be asked to refrain yourself from the participation in physical exercise out of this program. Player's participation in the study will not exceed 60 minutes per session and 3 days per week for 3 months training.

3. Risks and benefits:

The risks of this research study are small. While testing and during training session you may experience numbness, muscle soreness, muscle cramp, muscle strain fatigue and any injury. If any unexpected physical injury occurs, appropriate first aid will be provided, if it is severe, the researcher will be covering every cost to recover. There may be no personal benefit for participating in this study. The session will consists of the warm up, stretching, Illinois' agility drill, bounding speed, squat jump and the cool-down.

4. Confidentiality:

The information and data obtained from you will be kept confidential. The information will be used only for the sake of the research and it will not be personalized. The data will be reported and presented without reference to the individual identity.

5. Rights:

Your participation in this research study is voluntary. You may discontinue from the training program at any time from the study if you choose to do so and this will not label you for any loss of benefits which you otherwise are entitled.

6. Contact address:

If there are any questions or enquires any time about the study or the procedures, please contact:
Workineh Ayana0918498489

Shemelis Mekonnen(PhD)..... 0913893850

Asimerom Tekle (PhD)0911666787

If any problem and complain can be address to Haramaya University sport academy postgraduate research committee.

Appendix - C

Table 8:- Description of the Three month fitness Training Schedule/protocol

This training Schedule/ protocol is designed for three months, and based on the principles of frequency, intensity, type and principle of rest and recovery it would be a three days per week, one day split(rest day) in between exercise session with 40-60 minutes of each.

Training frequency

Frequency refers to the number of training sessions per a specific period of time such as week and month or year following any form of fitness training, the body goes through a Process of rebuild to replenish its energy reserves consumed by the exercise.

Exercise intensity

Exercise intensity refers to how hard the body is working during physical activity. Exercise intensity is described as low, moderate, or vigorous.

The ranges of exercise intensity

- ❖ Low(light) is about 40-54%MaxHR
- ❖ Moderate is 55-69%
- ❖ High (Vigorous) is $\geq 70\%$

For moderate intensity physical activity, a person's THR should be 50-70 per cent of their maximum heart rate. The maximum heart rate is based on a person's age. An estimate of a person's maximum heart rate can be calculated as 220 beats per minute minus your age (American College of Cardiology).

Month 1 training schedule (October 2019)

Days	Types of exercise	Week 1-4				Intensity
		Duration 40min	Set	Repetiti on	Rest b/n activitie s	
Tuesda y	Warming up exercises: like jogging, synchronized hands, legs and arms, stretching exercises	10min	-	-	2min	40-54%
	Main part	6min	3	7	2min	
	Illinois agility	6min	2		2min	
	Bounding speed	6min	3	6	1min	
	Squat jump					
Cooling down	5min	-	-	-		
Thursd ay	Warming up exercises: like jogging, synchronized hands, legs and arms, stretching exercises	10min	-	-	2min	
	Main part	6min	3	7	2min	
	Illinois agility	6min	2		2min	
	Bounding speed	6min	3	6	1min	
	Squat jump					
Cooling down	5min	-	-			
Saturd ay	Warming up exercises: like jogging, synchronized hands, legs and arms, stretching exercises	10min	-	-	2min	
	Main part	6min	3	7	2min	
	Illinois agility	6min	2		2min	
	Bounding speed	6min	3	6	1min	
	Squat jump					
Cooling down	5min	-	-	-		

Month 2 training schedule (November 2019)

Days	Types of exercise	Week 5-8				Intensity
		Duration 50min	Set	Repetiti on	Rest b/n activitie s	
Tuesda y	Warming up exercises: like jogging, synchronized hands, legs and arms, stretching exercises	10min	-	-	2min	55-69%
	Main part	9min	4	7	2min	
	Illinois agility	9min	2		2min	
	Bounding speed	9min	3	8	1min	
	Squat jump					
Cooling down	6min	-	-	-		
Thursd ay	Warming up exercises: like jogging, synchronized hands, legs and arms, stretching exercises	10min	-	-	2min	
	Main part	9min	4	7	2min	
	Illinois agility	9min	2		2min	
	Bounding speed	9min	3	8	1min	
	Squat jump					
Cooling down	6min	-	-	-		
Saturd ay	Warming up exercises: like jogging, synchronized hands, legs and arms, stretching exercises	10min	-	-	2min	
	Main part	9min	4	7	2min	
	Illinois agility	9min	2		2min	
	Bounding speed	9min	3	8	1min	
	Squat jump					
Cooling down	6min	-	-	-		

Month 3 training schedule (December 2019)

Days	Types of exercise	Week 9-12				Intensity
		Duration 60min	Set	Repetiti on	Rest b/n activitie s	
Tuesda y	Warming up exercises: like jogging, synchronized hands, legs and arms, stretching exercises	10min	-	-	2min	≥ 70%
	Main part	12min	5	7	2min	
	Illinois agility	12min	2		2min	
	Bounding speed	12min	3	10	1min	
	Squat jump					
Cooling down	7min	-	-	-		
Thursd ay	Warming up exercises: like jogging, synchronized hands, legs and arms, stretching exercises	10min	-	-	2min	
	Main part	12min	5	7	2min	
	Illinois agility	12min	2		2min	
	Bounding speed	12min	3	10	1min	
	Squat jump					
Cooling down	7min	-	-	-		
Saturd ay	Warming up exercises: like jogging, synchronized hands, legs and arms, stretching exercises	10min	-	-	2min	
	Main part	12min	5	7	2min	
	Illinois agility	12min	2		2min	
	Bounding speed	12min	3	10	1min	
	Squat jump					
Cooling down	7min	-	-	-		

Appendix-D**Table 9: - Raw Data Record Sheet for Experimental Group**

Name	Age	Weight	Experience	Variables					
				Dribbling (points)		Control Speed dribbling (seconds)		power shot(points)	
				Test		Test		Test	
				PT	POT	PT	POT	PT	POT
A	16	50	2	18	20	11	9	6	8
B	17	51.8	3	16	17	10.21	10.12	4	5
C	16	51	2	17	17	11.15	9.53	5	6
D	16	50.3	2	14	16	13.42	12.32	5	7
E	17	53.3	3	13	14	11.36	10.43	4	6
F	18	53.4	3	13	16	11.55	9.45	3	5
G	18	52.5	3	18	20	12.21	10.23	4	6
H	16	50.6	2	14	16	11.38	10.15	3	5
I	17	52.2	3	16	18	10.46	10.09	4	6
J	17	51.7	3	15	17	11.40	19.43	3	5
K	17	53.1	3	13	15	10.27	10.16	5	6
L	16	50.9	2	14	17	12.52	10.38	4	7
M	18	54.7	3	17	17	13.00	11.03	4	6
N	16	51	2	14	15	13.48	12.29	5	8
O	18	51.1	3	13	16	10.51	9.34	5	6
P	17	52.8	2	16	17	12.59	11.28	3	5

Appendix - E**Table10:- Raw Data Record Sheet for Control Group**

Name	Age	Weight	Experience	Variables					
				Dribbling (points)		Speed dribbling (seconds)		power shot(points)	
				Test		Test		Test	
				PT	POT	PT	POT	PT	POT
A1	17	51.2	3	16	16	11.31	11.32	3	3
B1	18	53.1	3	15	16	12.25	12.26	4	3
C1	16	49.9	2	15	15	11.55	11.56	3	3
D1	16	51.4	2	16	16	14.46	14.51	4	4
E1	17	49.3	3	17	16	13.25	14.23	5	4
F1	17	50.3	2	17	16	13.28	13.28	4	4
G1	17	53.8	2	16	14	13.54	13.55	3	3
H1	18	49.4	3	15	15	12.08	12.09	6	6
I1	16	50.1	2	17	17	14.22	14.23	3	2
J1	16	50.7	2	13	13	12.42	12.38	5	5
K1	17	51.5	2	16	17	12.53	12.48	5	4
L1	18	52.2	3	15	15	14.47	14.43	4	4
M1	19	54.8	3	14	13	12.23	12.31	3	4
N1	18	53.7	2	16	16	14.47	14.45	4	4
O1	18	52.3	2	15	15	13.15	13.16	4	3
kP1	17	53.1	2	14	13	13.51	13.44	5	5

Appendix-F

Table 11: - Paired Samples Test of dribbling for EG and CG

	Paired Differences					t	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
EG For pre-post test result	-1.68750E0	.94648	.23662	-2.19185	-1.18315E0	-7.132E0	15	.000
CG For pre-post test result	.25000	.77460	.19365	1.62753E-1	.66275	1.291E0	15	.216

Table 12: -Paired Samples Test of speed dribbling for EG and CG

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
EG For pre-post test result	.87875	.73426	.18357	.48749	1.27001	4.787	15	.000
CG For pre-post test result	-.06000	.24811	.06203	-.19221	.07221	-.967	15	.349

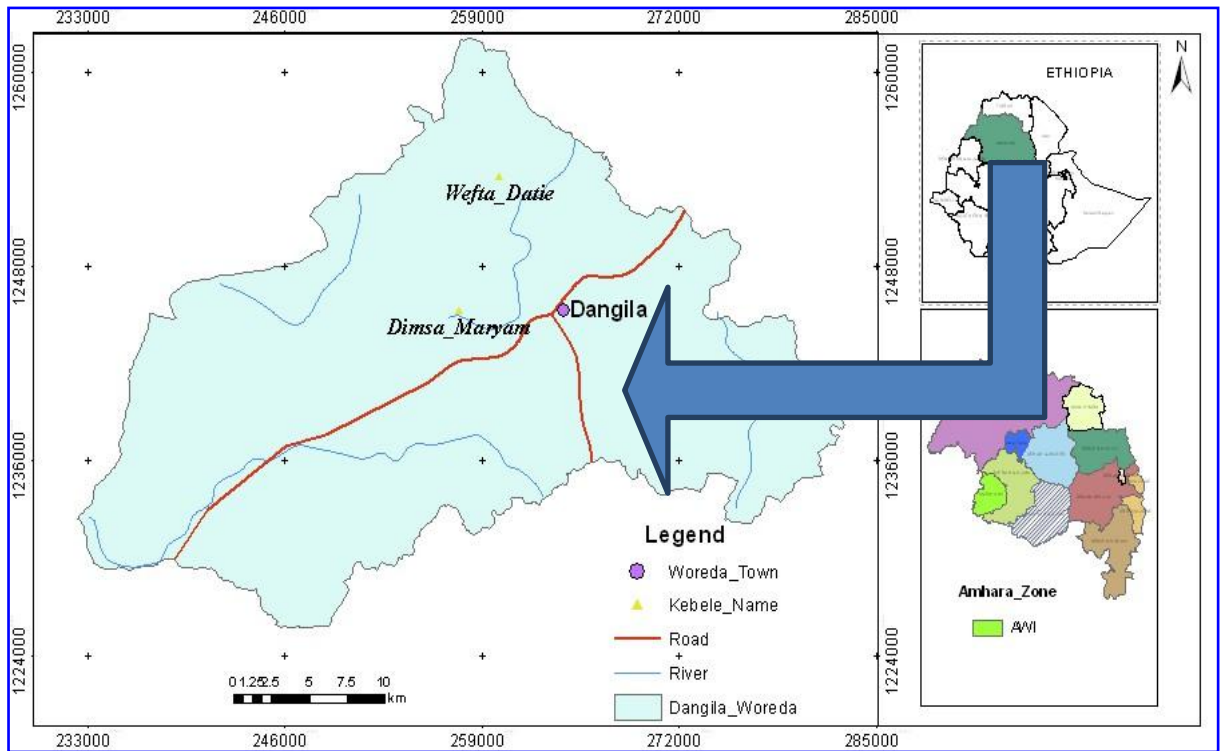
Table 13: - paired Samples Test of power shoot for EG and CG

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
EG For pre-post result test	-1.87500	.61914	.15478	-2.20492	-1.54508	-12.114	15	.000
CG For pre-post result test	.25000	.57735	.14434	-.05765	.55765	1.732	15	.104

Appendix-G

Map of the Study Site

←



Source: Adopted and modified from EMA (1987)