

**CHALLENGE AND PROSPECTS OF SHORT DISTANCE  
RUNNERS IN THE CASE OF THREE SELECTED ADDIS  
ABABA FIRIST DIVISION ATHLETICS CLUBS**

**BY:**

**BEREHANU HABTEMARIME**

**September 2012**

**A.A**

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**A thesis submitted to the School of Graduate studies of Addis  
Ababa University in partial fulfillment of the requirement for  
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**September 2012**

**A.A**

**ADDIS ABABA UNIVERSITY FACULTY OF LIFE SCIENCE**

**SCHOOL OF GRADUATE STUDIES**

**FACULTY OF LIFE SCIENCE**

**DEPARTMENT OF SPORT SCIENCE**

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FIRST DIVISION ATHLETICS CLUBS**

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### *Abbreviations*

<b>A.A</b>	<i>Addis Ababa</i>
<b>A.A.U</b>	<i>Addis Ababa University</i>
<b>AT</b>	<i>Anaerobic Threshold</i>
<b>ATP</b>	<i>Adenosine Triphosphate</i>
<b>EAF</b>	<i>Ethiopian Athletics Federation</i>
<b>IAAF</b>	<i>International association of athletics federation</i>
<b>IOC</b>	<i>International Olympic Committee</i>
<b>NSPE</b>	<i>National Sport Policy of Ethiopia</i>

## *List of appendices*

Appendix A Questionnaire filed by coaches and athletes (English version)

Appendix B Questionnaire filed by coaches and athletes (Amharic version)

Appendix C check list for the availability of Facilities and equipments

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### **Abstract**

The main goal of this study is to study the challenges and the prospects of short distance runners in the case of three selected Addis Ababa first division athletics clubs. The researcher is interested to conduct this research on clubs because the first division clubs are the main sources of talented sprinters for the country. The general objective of the study is to assess the current status challenge of prospects of short distance runners at three Ethiopia first division Athletics clubs in Addis Ababa. The study was used both primary and secondary sources of data obtained directly from representative sample of the population under study. By using simple random sampling the researcher used 70 athletes and 9 coaches from the three selected clubs. The instrument for data gathering to investigate this problem the researcher used questionnaire, and observation. The extent to which properly trained, adequately experienced and committed coaches are assigned to train can contribute much to the achievements Ethiopian short distance running in the international games. However most of the athletic coaches who were assigned to train the short distance athletes were found to be below the requirement to train at athletics club level. The researcher recommend Have all the concerned bodies i.e. the Ethiopian athletics

federation of different levels such as zonal and Woreda athletics experts office give attention for the short distance runners in fostering them necessary sport materials, morals and provide them with the necessary training techniques.

**Key terms:**

**Intensity:** The degree of stress placed on an organism.

**Muscle Strength:** Greatest amount of force an athlete can exert at one time.

**Sprint:** A short running race where acceleration and top speed are important

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**Chapter one**

**Introduction**

**1.1 Background of the study**

Nowadays, the world is becoming one village due to the effect of globalization among the things that make the world globalized, sport takes the line share. Sport has so much effect on the world, because one of the objectives of international sport is to create friendship and good relationship among nations in the world. Sports such as football and running are the leading sports and running are the leading sport that communicates the world in the best way So, the international community have developed a positives outlook for sports individuals and governments are greatly participating in sport activates in varies occasions such as Olympic games, hence the world society has so much expectation from sport sectors. Therefore if Ethiopian competes in short distance running, she may be benefited from the area in a number of ways. Sports from long distance running, in which Ethiopian has been effective, short distance running has not been effective still now so, Ethiopia has not that much running of factors to study the factors that challenges short distance running in the area if we want Ethiopian to be benefited from the field.

So, the main goal of this study is to study the challenges and the prospects of short distance runners in the case of three selected Addis Ababa first division athletics clubs.

The need to study is that the area of short distance running has a lot of prospects for participants in the area consequently, if we want Ethiopian to be benefited from short distance runner not to be effective in the field.

So, the increase in public expectation from sport sectors great change in the sport policy, what and how sport training could be delivered, consequently, these changes will have effect in the development of sport for a country. The national sport policy of Ethiopia (NSPE, 2004) puts,

*“... Organize special training and completion forums for talent youth in various types of sports and recruit the gifted ones by working in conjunction with sports clubs and federations.”*

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The primary objective of athletics training clubs is to help athletes improve their athletes performance by developing factors of physical fitness such as strength, speed, specific power, nutrition, education and confidence. In conformity with this assertion world their countries culture

The same is true for Ethiopian short distance runners if they could be world class athletes. The ministry of youth and sport which is recently named as Ethiopian sport commission has the mission in general to work on all athletics disciplines in particular focusing on the event which the country has been well known That is sprint races, jumping and throwing events to represent Ethiopian in international competition and to share the culture of Ethiopian over the world.

## **1.2. Statement of the problem**

Examining the challenges, current status and prospects of short distance runners of athletics clubs to find out strategies used to enhance sprinters performance. Any time in the world Athletics History Ethiopia didn't registered a good result in short distance. Judah ( 208) stated that, “Since Ethiopia joined the Olympic Games in 1956 until Beijing Olympic, they collected a total of 14 gold medals, 5 silver medals and 123 bronze medals. Almost all of the medals collected in long distance running.”

Ethiopia started participating in international athletics competitions as early as early as the 1950s. it was one of the first Africa countries to take part in the Olympic when participating the 1956

Melbourne games from this past years up to this day Ethiopia is famous in the world by middle distance and long distance but through the year Ethiopia is not registered in short distance running competition.

The recent Ethiopian sport commission has the mission in General to work on all athletics disciplines in particular focusing on the events which the country has not been well known that is sprinting ( short distance running), jumping and throwing events to represent Ethiopia in International competitions. Improve the performance of fitness of short distance runners will lead them to be world class athlete that represent the country in any aspects.

The researcher is interested to conduct this research on clubs because the first division clubs are the main sources of talented sprinters for the country. Most of the time many clubs mainly give

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due emphasis to middle distance and long distance to keep previous results of the former races but also to add more track race on the international competitions. The study will focus on the current status, challenges & prospects of short distance runner in specific reference to prison police athletic club, Ethiopian commercial Bank athletics club, Defense athletics club.

### ***1.3 Research questions***

This study attempts to answer the following leading research question;

- To what extent sprinters will be interested to their training program?
- To what extent training will be offered to sprinters
- To what extent sprinters are satisfied with the services provided by the clubs
- What are the major handling factors that faces short distance runner during the course of training
- What could be sprinters future prospective at the end of their training
- What are the possible solution at least to overcome the problem

## ***1.4. Objectives of the study***

### **1.4.1. General objective**

The general objective of the study is to assess the current status challenge of prospects of short distance runners at three Ethiopia first division Athletics clubs in Addis Ababa.

### **1.4.2. The specific objectives of the study**

The following are the specific objectives of the study.

- To identify factors affecting short distance running athletes.
- *To Predict the future performance of sprinters*
- To Assess the way how the coach support and we scientific ways of giving training
- To Assess how is short distance training given the selected athletics clubs

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## ***1.5 Significance of the study***

This research would have numerous important findings to investigate the current status challenge and prospects of short distance runners with specific reference to prison athletic club, Ethiopian commercial Bank athletics club and Defense athletics club.

So the result of this study would support to improve the performance of athletes. The significance of the study includes the following;

- To Give clue for other researchers on this topic
- To offer valuable lesson to other newly established clubs.
- To indicate the major factors this affects the performance of short distance runners.

## ***1.6. Delimitation of the study***

The study is delimited to assess the current status, challenge and prospects of short distance running only on prison athletic club, Ethiopian commercial Bank athletics club and Defense athletics club because of time, money, and other constraints.

### ***1.7. Limitation of the study***

This study has got its own limitations. Among the limitations are material, time and cost. With regards to material limitation, the researcher of this research faced shortages of related books in the research area. However, he succeeded in researching and reviewing these materials. Secondly time was one factor that limited this study. And lastly, money can be taken as a limitation of the study.

### **1.8 Definition of Operational terms**

***Athletics-*** The collection of sports including track and field, cross country running, and road racing. The name is derived from the Greek Work “athlos.” meaning “contest.”

***Athletic Shape-*** How fit and athlete is for his chosen event.

***Intensity-*** The degree of stress placed on an organism.

***Muscle Strength-*** Greatest amount of force an athlete can exert at one time.

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***Recovery-*** The act of bringing an arm or leg back to the drive, Push, or stride position.

***Sprint:*** A short running race where acceleration and top speed are important.

***Starting blocks-*** Items used in sprint races where the runner puts their feet in to get a good start for the run.

### ***1.9. Organization of the study***

This thesis is organized in the following ways. It has five parts. The first is chapter one which deals with introduction. In this section, background, statement of the problem, objective significance, limitation, delimitation and organization of the study would be discussed. The second chapter will be review of literature. In this part, relevant and related literatures would be reviewed. The third part is Research Design and methodology.

Presentation and Analysis of Data is the fourth chapter. And finally, Summary, conclusion and recommendation would be given.

## ***Chapter two***

### ***Review related literature***

#### ***2.1 History of Ethiopian athletics***

Although the exact roots of Ethiopia Athletics cannot be traced accurately. It is believed that the sport was widely practiced in schools and military before 1897. The sport was limited to these parts of society only because others did not have access to equipment used for competition or was not organized in a manner that motivated progress.

But after signs that the sport was increasing in popularity in many parts of society, a need to assemble these activities under one organizing umbrella quickly arose, it was in 1949 that the Ethiopian Athletics Federation (EAF) was formal and soon became a member of the international Amateur Athletics federation (IAAF) since its inception. Much of the federations activities were carried with the help of amateurs the First executive committee was headed by colonel Getahun Teklemariam, the man officially recognized as the first president of the EAF.

This committee started a formalized program where athletes competed domestically and internationally.

One of the first major competitions on the federation's the Shaw championships, was organized in 1966 and was a competition among various divisions of the military, schools, and clubs, the first ever edition of Ethiopian championships were held in 1971.

In the late 70's a new committee, headed by chairman Tesfaye Sheferaw was formed to administer the federation the major achievement of this era were the stayed of the first Abebi Baikal marathon and the national cross country championships. Ethiopia also participated in the world cross country championships for the first time in 1984.

This executive committee was also responsible for overseeing many developmental activities of the federation. Construction of the first athletics track, education and hiring of coaches, and major improvement in working procedures were all hall marks of the early 80 any years later, the EAF now has semi-professional organizational structures it is headed by a seven-member executive committee which includes a president, vice president and an Honorary Trueborn. A

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full time General Secretary takes care of the day-to day activities of the federation which now

includes four departments' technical public relations, development activities & Administration of finance.

On a competitive side, Ethiopia started participation in international athletics competitions as early as the 1950. It was one of the first African countries to take part in the Olympics when participating the 1956 Melbourne Games. Ethiopia also become to first African country to win Olympic gold when Abebe Bikila took victory in the 1960 Rome Olympics marathon. Since then, Ethiopia has won a total of 30 Olympic medals. Le of him being gold the country's top athletes have also won 35 world championship medals and many more titles at the world indoor championships, the world cross country championships, and various medals global, continental, and regional athletics competitions.

## 2.2 List of track and field events

Track and field events are divided into three broad categories: track events, field events, and combined events. The majority of athletes tend to specialize in just one event (or event type) with the aim of perfecting their performances, although the aim of combined events athletes is to become proficient in a number of disciplines. Track events involve running on a track over specified distances and—in the case of the hurdling and steeplechase events—obstacles may be placed on the track. There are also relay races in which teams of athletes run and pass on a baton to their team member at the end of a certain distance. There are also two types of field events: jumps, and throws.

**Table 1. Official world championship track and field events**

		Track events			Field events		<u>Combined events</u>
<u>Sprints</u>	<u>Middle distance</u>	<u>Long-distance</u>	<u>Hurdles</u>	<u>Relays</u>	<u>Jumps</u>	<u>Throws</u>	<u>Pentathlon</u>
60m	800m	5000m	<u>60 m hurdles</u>	<u>4×100 m relay</u>	<u>Long jump</u>	<u>Shot put</u>	<u>Heptathlon</u>
100m	1500m	10000m	<u>100 m hurdles</u>	<u>4×400 m relay</u>	<u>Triple jump</u>	<u>Discus throw</u>	<u>Heptathlon</u>
200m	300m		<u>110 m hurdles</u>		<u>High jump</u>	<u>Hammer throw</u>	
400m			<u>400 m hurdles</u>		<u>Pole vault</u>	<u>Javelin throw</u>	
			<u>3000 m</u>				

			<u>steeplecha</u>				
			<u>se</u>				

### ***2.3. Training principles***

Training to improve an athlete's performance obeys the principles of training such as: specificity, overload, adaptation, reversibility, variation and Individual differences.

#### ***2.3.1. Specificity***

To improve the range of movement for a particular joint action, you have to perform exercises that involve that joint action. It is quite possible for an athlete to have good mobility in the shoulder mobility but it will not affect hip mobility.

In addition to developing general levels of all round mobility in an athlete, coaches need to consider the specific mobility requirements of a given event. The coach can analyze the technique of his/her event, identify which joint actions are involved and determine which need to

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be improved in terms of the range of movement. A thrower, for example, might require improvements in his/her shoulder and spine mobility.

The amount and nature of the mobility training required by each athlete will vary according to the individual athlete's event requirement and his/her individual range of movement for each joint action. It may be necessary to measure the range of movement for particular joint actions to determine the present range and future improvement.

Specificity is an important principle in strength training, where the exercise must be specific to the type of strength required, and is therefore related to the particular demands of the event. The

coach should have knowledge of the predominant types of muscular activity associated with his/her particular event, the movement pattern involved and the type of strength required. Although specificity is important, it is necessary in every schedule to include exercises of a general nature ( e.g. power clean, squat). These exercises may not relate too closely to the movement of any athletic event but they do give a balanced development and provide a strong base upon which highly specific exercise can be built.

To use heavy throwing implements or weighted belts may seem the obvious solution to the specificity problem, but it is probable that by doing so the athlete will unconsciously develop compensatory movements in his/her technique in adjusting to the new weight. Most authorities consider that in the throwing events the training implement should be kept within 15% of the competition weight.

Can we be specific in the speed of movement? Training at low velocity increases low velocity strength substantially but has little effect on high velocity strength (Coyle and Fleming, 1980).

Is there then any justification for slow velocity strength training for athletes who have to perform movements at great speed? Yes. Slow velocity training may be of value in stimulating maximum adaptation within the muscle. Muscle growth ( and increase in contractile strength) is related to the amount of tension developed within the muscle ( Goldberg, 1975). When an athlete performs high velocity strength work, the force he/she generates is relatively low and therefore fails to stimulate substantial muscular growth. If performed extensively the athlete may not be inducing

maximum adaptation with the muscles. It is important therefore for the athlete to use fast and slow movements to train the muscles.

### ***2.3.2. Overload***

When an athlete performs amiability exercise, he/she should stretch to the end of his/her range of movement. In active mobility, the end of the range of movement is known as the active end position. Improvements in mobility can only be achieved by working at or beyond the active end position.

- Passive exercises involve passing the active end position, as the external force is able to move the limbs further than the active contracting of the agonist muscles
- Kinetic (dynamic) exercises use the momentum of the movement to bounce past the active end position.

A muscle will only strengthen when forced to operate beyond its customary intensity. The load must be progressively increased in order to further adaptive responses as training develops, and the training stimulus is gradually raised. Overload can be progressed by:

- Increasing the resistance e.g. adding 5kg to the barbell
- Increasing the number of repetitions with a particular weight
- Increasing the number of sets of the exercise ( work)
- Increasing the intensity – more work in the same time, i.e. reducing the recovery periods.

### ***2.3.3. Adaptation***

The body will react to the training loads imposed by increasing its ability to cope with those loads. Adaptation occurs during the recovery period after the training session is completed.

If exercises lasting less than 10 seconds (ATP-CP energy system) are repeated with a full recovery (approximately 3 to 5 minutes) then an adaptation in which stores of ATP and CP in the muscles are increased. This means more energy is available more rapidly and increases the

maximum peak power output. If overloads are experienced for periods of up to 60 seconds, with a full recovery, it is found that glycogen stores are enhanced.

The most noticeable effect of weight training with heavy loads on fast twitch muscle fibers is larger and stronger muscles (hypertrophy). The rate of adaptation will depend on the volume, intensity and frequency of the exercise sessions. In their recent investigation Burgomaster et al. (2008) reports that:

“6 weeks of low-volume, high-intensity sprint training induced similar changes in selected whole-body and skeletal muscle adaptations as traditional high-volume, low-intensity endurance workouts undertaken for the same intervention period.” In addition to Burgomaster et al; Hawley (2008) states that: “The time of adaptation may be quicker for high-intensity sprint training when compared to low-intensity endurance training, but that over a longer period, the two training regimens elicit similar adaptations.”

### ***2.3.4 Reversibility or Detraining***

Improved ranges of movement can be achieved and maintained by regular use of mobility exercises. If an athlete ceases mobility training, his/her ranges of movement will decline over time to those maintained by his/her other physical activities.

When training ceases the training effect will also stop. It gradually reduces at approximately one third of the rate of acquisition (Jenson and Fisher, 1972). Athletes must ensure that they continue strength training throughout the competitive period, although at a much reduced volume, or newly acquired strength will be lost

#### **Detraining Risk for athletes**

The effect of a long period of inactivity on physical fitness comes from a UK case study of an Olympic rower (Godfrey et al. 2005), who took more than 20 weeks to fully recover his fitness after an eight-week lay-off. Although the athlete in question took the time off in response to the need for a physical and mental break rather than because of illness and injury, this case study has clear implications for injured athletes.

The athlete, an elite heavy weight male rower and current Olympic champion, allowed himself the luxury of eight weeks of inactivity after competing in the Sydney Olympic Games in September 2000. His fitness was assessed by means of a lab-based incremental rowing test on four separate occasions: eight weeks before the Olympics; after eight weeks of inactivity; after eight weeks of retraining; and after a further 12 weeks of training. The key findings were as follows: After eight weeks’ detraining.

- Vo<sub>2</sub> peak had decreased by 8%. After eight weeks of retraining it had increased by only 40%, returning to just below pre-Olympic values after a further 12 weeks.,
- Power at peak oxygen consumption falls from a pre-Olympic value of 546W to 435W – a reduction of 20%. After eight weeks' retraining it had increased by 15%, resuming pre-Olympic values after a 12 weeks.,
- Power at reference blood lactate concentrations declined by 27%, but returned to just below or just above pre-Olympic levels after 20 weeks' retraining.

The research recommends that training program should limit periods of complete inactivity to no more than two to three weeks. Prolonged periods of inactivity should be avoided and the training program should incorporate some form of "maintenance" training where a prolonged break is desired.

### ***2.3.5 Variation Principle***

This Principle has several meanings. After your athletes have trained hard for several days, they should train lightly to give their bodies a chance to recover. Over the course of the year use training cycles (periodization) to vary the intensity and volume of training to help your athletes achieve peak levels of fitness for competition. This principle also means that you should change the exercises or activities regularly so that you do not overstress a part of the body. Of course changing activities also maintains athlete's interest in training.

Perhaps you're thinking that the specificity principle and variation principle seem to be incompatible. The specificity principle states that the more specific the training to the demands

of the sport, the better, and the variation principle seemingly asserts the opposite-train by using a variety of activities. The incompatibility is resolved by the degree to which each principle is followed. More specific training is better, but it can become exceedingly boring. Thus some variety that involves the same muscle groups is a useful change.

### ***2.3.6 Individual Differences Principle***

Every athlete is different and responds differently to the same training activities. As discussed in chapter 5, the value of training depends in part on the athlete's maturation .Before puberty; training is less effective than after puberty. Other factors that affect how athletes respond to training include their per training condition, genetic predisposition, gender and race ,diet and sleep, environmental factors such as heat ,cold and humidity, and of course motivation. As discussed previously, it's essential to individualized as much as possible.

## **2.4 Body Types**

Success as an athlete comes from a combination of athletic ability and our body build. The three components of body build are type, size and composition. A system, developed by W.H. Sheldon (c.1940), uses the terms ectomorph, endomorph, or measomorph to describe the body type of an individual.

### **2.4.1 Endomorph**

An endomorphic individual typically has short arms and a large amount of mass on their frame. Their mass hampers their ability to compete in sports requiring high levels of agility or speed and perform sustained weight bearing aerobic activities such as running. Sports of pure strength, like power lifting, are perfect for an endomorph. They can gain weight easily and lose condition quickly if training stops.

#### ***Sports Benefits***

- Size benefits sports such as rugby where bulk is useful, provided it can be moved powerfully.
- Tend to have large lung capacity which can make than suited to sports such as rowing.
- They can increase muscles mass much more easily than ectomorphs.

### **2.4.2 Ectomorph**

A predominantly ectomorphic individual is long, slender and thin, and therefore power and strength sports are perhaps not suitable as their slight build leaves them susceptible to injuries. While they can easily get lean and hard, their lack of musculature severely limits their chances in sports requiring mass. Ectomorphs dominate endurance sport and gymnastics. They can archive low levels of body fat which can be detrimental to health and for females in endurance sports it can result in a cessation of periods and iron deficiency.

#### Sports Benefits

- Light frame makes them suited for aerobic activity like gymnastics
- Smaller body surface area also enhances their suitability for endurance activity.
- Their body is better at thermo regulation, important in endurance based sports.

### **2.4.3 Mesomorph**

A monomorphic individual excels in strength, agility, and speed. Their medium structure and height, along with their tendency to gain muscle and strength easily makes them a strong candidate for a top athlete in any sport. They can sustain low body fat levels and find it easy to lose and gain weight.

#### Sports Benefits

- Respond well to cardiovascular and resistance training
- Can sustain low body fat levels
- All muscle groups can be used to derive positive training adoption

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- Dependent on the sports' needs they can easily gain or lost weight

## ***2.5 Types of training***

They are many types of training from these, interval training, fartlek training, Tempo Runs and Hill Repeats will be discussed here.

### ***2.5.1 Interval Training***

It is a type of physical training that involves bursts of high-intensity work interspersed with periods of low-intensity work. The high-intensity periods are typically at or close to anaerobic exercise, while the recovery may involve either complete rest or activity of lower intensity.

Interval workouts are made up of a set of short, faster paced runs over fixed distances from 220yards to one mile, interceded with periods of light recovery jogging. Although there are many variations of intervals, the three types are:

- ***Repeats*** - the distance of the repeating running segment does not change (ex: four 440 yard repeats with a 220 yard recovery jog in between each)
- ***Pyramids*** – the distance of the repeating running segments peaks and then returns to the beginning distance (ex: repeating of 220 yards, 440 yards ,and up to 1 mile before returning to 440 yards and 220 yards )
- ***Ladders*** – the distance of the repeating running segments either steadily increases or decreases (ex:220 yaeds.440 ,880,up to 1760 yards or run in the reverse order of 1760 yards down to 220 yards)

Some final interval training tips:

- Interval workouts are typically run on a track due to the ease of running predefined distances.
- Pacing for interval training should be determined in short distance races or runs such as a 5K. Use your calculated pace information to design appropriate speed workouts.

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- Remember to do a recovery jog following your repeats. The distance should be half of your interval distance or more depending on whether you are a beginner or have some interval training experience.

### ***2.5.2 Fartlek's***

Sounds like an intestinal disorder, doesn't it?

Actually, fartlek is Swedish for speed play. Fartlek's are an unstructured, fun way to introduce speed training into your workout and consists of bursts of speed in the midst of a training run. There are a variety of ways in which to do fartlek's and they can be run almost anywhere.

The advantages of fartlek training include:

- Training your body to run an aerobically (meaning without oxygen)
- Preparing your legs to absorb and feel a variety of paces.
- Enhancing your awareness of your ability to maintain varying paces at different distances.

To complete a fartlek workout you need to:

- Warm up.
- Run at an easy training pace.
- Interject bursts of speed for differing distances throughout your run.
- Speed should vary as well as burst times. Bursts should be maintained from 15 seconds up to 2.5 to 3 minutes.
- Recovery time should equal two thirds of your burst time but needs to be faster than an interval recovery jog.

Some final fartlek training tips:

- Pick out a landmark and run your fartlek at a consistent pace until it is reached.

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- Choosing a landmark to mark the end of a fartlek burst should continue until the end of the training run.

### ***2.5.3 Tempo Runs***

Tempo runs are the easiest of the speed workouts to implement. No distances to keep up with and no split times to remember. Just run faster than your usual training pace and maintain a single sustained effort.

***Tempo training is useful because it:***

- Increases the body's anaerobic limit in order to maintain a faster pace over a longer period of time.
- Boosts speed as the body becomes accustomed to running at close to its upper limit.

***Steps to complete a tempo run are:***

- Complete your normal warm-up routine.
- Once you have warmed up, pick up your pace to a level you can maintain for predesigned time or distance. Your pace should be 80-85% of your maximum heart rate (if using a heart rate monitor) or your 10K race pace.
- ***Hill Repeats***

Hill repeats are basically what you believe they would be fast-paced efforts to run up hills. They are considered strength training and are typically implemented following the completion of a base/mileage-building stage. The benefits of hill repeats include:

- Combining cardiovascular training (heart) with strength training (legs).
- Running uphill lessens the impact force of each footfall which significantly reduces the risk of an overuse injury.
- Enhancing mental toughness for upcoming workouts and races in hilly terrain. Hill repeats are completed by:

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- Warming up appropriately.
- Running the hill at a 5K effort pace. Maintain a good running form and don't worry about sacrificing speed. Just keep the effort at a 5K pace.
- After reaching the top of the hill, walk to lightly jog back down the hill and repeat the process.

## ***2.6 Physical activity /exercise/ fitness***

### ***2.6.1 Definitions***

According to Caspersen and et al, (1985) in Ministry of Health of New Zealand, 2003, physical activity is any bodily movement produced by skeletal muscles that result in energy expenditure. It comprises duration, frequency, intensity, type and context. Exercise is a subset of physical activity that distinguished by being done to improve or maintain physical fitness. Exercise can be done at a variety of intensities by often means vigorous activity. It can include moderate intensity walking. Physical fitness is a state rather than a behavior. It is a multidimensional indicator of several functional capacities such as cardiovascular endurance, muscular strength or mobility, which in varying degree are a result of genetics and stage in the life span, as well as physical activity levels (Ministry of Health of New Zealand).

It still defies exact definition or measurement, partly because fitness is a multifaceted qualitative parameter that is usually specific to task involved, and the scores of many different tests available to measure fitness are not closely correlated (Karrinharju, 2005). According to Haskell and Kiernan, (1996) Fornicola (ND); Karinharju, (2005) and U.S department of health and human services (2005). Physical fitness is defined as “the ability to carry out daily tasks with rigor and alertness, without undue fatigue and with ample energy to enjoy 10 enjoy leisure time pursuits and to meet unforeseen emergencies.

### **General directions for fitness program**

Many different agencies and organizations have distributed guidelines for various types of physical activity in recent years; the general public may be confused concerning which activity guidelines to follow. The best of guidelines are well supported by scientific evidence and

endorsed by respected experts. However, as the American collage of sport medicine indicate (ACSM, 2000), physical activity prescription is both an art and a science. It is important that all people who apply physical activity guidelines understand the scientific reason for the guidelines and use them artfully with consideration for those to whom the guidelines are best applied (Carbin et.al., 2000).

According to the New Jersey fire department (2007), the fitness program is divided into the following sections: warm up, strength and muscular Endurance Exercises (weight training and calisthenics), Aerobic training exercises, and cool down.

The strength and muscular endurance exercise do not have to be done on the same day during the same exercise sessions as the aerobic program, In other words, they may be done on separate days or at different times on the same day, However, every exercise sessions should be preceded by a warm up period and followed by a cool-down period. The warm up exercises are designed not only to get a person physically and mentally ready for the muscular and /or aerobic exercise sessions, but also to help develop flexibility in various joints (ibid).

### ***2.6.2 How to develop a Training Program***

Mackenzire (1997) explains the steps involved a training program. The Process of creating a training program to help develop an individual's level of fitness comprises of six stages:

- Gather details about the individual
- Identify the fitness components to develop
- Identify appropriate tests to monitor fitness
- Conduct staffs a gap analysis
- Compare the program
- Monitor progress and adjust program

Stage 1: The first stage is to gather details about the individual: Age, Reasons for wanting to get fit, Current or recent injuries, health problems, the sports they play and how often, their dislikes

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and likes with regards tanning, and what sports facilities they have to access to sport center:  
This is not an exhaustive list.

Stage 2: The second stage is to determine which components of fitness they need to in process.  
This could depend up on what the individual wants to get fit for.

Stage3: The next stage is to identify appropriate tests that can be used to initially determine the individual's level of fitness and then to monitor progress during trainings. Identified test should be conducted and the results recorded.

Stage4: We now the individuals background, objectives and current level of fitness. We now need to conduct a gap analysis of the individual's current fitness levels (from test results at stage 3) and target fitness levels (identified at stage 2) the results of this process will assist in the design of the training program so that each component of fitness is improved to the desired level.

Stage5: The next stage is to prepare a training program using the results of the gap analysis and FITT principles

- F- frequency- how often should individual exercise?
- I- Intensity –how hard should the individual exercise?
- T- Time- how long should each session last?
- T- Type or training activity- what exercise or training activity will help achieve the individual's fitness goals?

Plan the program in four week cycles where the work load in the first three weeks increase each week (easy, medium, hard) and the fourth week comprises of active recovery and tests to monitor training progress. The aim of these cycles is to:

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Stage6: The program has now been agreed and the individuals can undertake the program. Every four weeks meet and discuss with the individual: how the detraining has gone the test results, Progress to target fitness levels, and adjustments to the training program.

### **Phases of fitness conditions**

The physical fitness training program is divided on to three phases: preparatory, conduction and maintenance. The starting phases for different ants or individuals very depending on their age, fitness levels, and previous physical activity. Young, healthy persons may be able to start with the condition phase, where those who have been exercising regularly may already be in the maintaining phase. “Persons *who have not been should start with the preparatory phase.*”stated woest, and Lombardo, 1994)

### **Preparatory Phase**

The preparatory phase helps both the conditions preparatory and muscular systems get used to exercise, preparing the body to have the condoning phase. The work load in the beginning most is moderate. Progression from a lower to as higher level of fitness should be achieved by gradual, planned increases in frequency, intensity, and time. Recovery days should be evenly distributed throughout the week, and training should progress slowly. This points leads to the conditioning phase.

### **Conditioning Phase**

To reach the desired level of fitness, trainees must increase the amount of exercises and / or the workout interest as their strength and /or endurance increases. To in prove carnivores portray endurance, for example, trainee’s mast increases the length of time they ran. They should start with the preparatory phase & gradually increase the raninning by one or two minutes week until they can ran continuously for 20 to 30 amities. At this point, they can increase the

intensity astral they reach the desired level of fitness; they should from at least three times a week and take no more than two days between works

### **Maintenance phase**

The maintenance phase systems the high level of fitness achieved in the conditioning phase. The emphases here is no long on progress none A well designed, 45- to 60 minute workout (including worm up and cool down)

At the rant intensity three times a week is enough to man tan almost any appropriate levee of physics fitness .

## **Components of physical fitness**

Physical fitness is most easily and stood by examine its components, or parts. There is wide spread agreement by oniony literatures like NSCA (2002) and karolides (1993) that the following four components are basic.

Cardio respiratory (CR) enduring the efficiently with which the body delivers oxygen and nutrients need for mascara activity and transports waste products from the cells. The best way to improve CR fitness is to portico pate regularly in a demining aerobic exercise program

Muscular fitness has two components muscular strength and musically endear. Although muscular gendarme and strength are separate fitness components, they are closely related progressively working against resistance will produce games in both of these components

Muscular strength the greatest amount of force a muscle or muscle group can exert in a smgre effort.

Muscular endurance the ability of a muscle or muscle group to perform repeated movements with sub maximal foveae for extend period of time.

Friability the ability to move the joints ( for example elbow, knee) or any group of jolts throng an ending horal range of mouton.

lean mass is an indication of fitness, and the right types if exercises will help you decreased body fat and increase or main tam muse mass (Healguortes Depart mat of us Army 1998 president conch on physical fitness & sport (ND) Body composition is often considered a component of fitness. It refers to the makeup of the body teams of learn mass (muscle, bone, vital tissue and organs) and fat mass an optional ration of fat to

## ***2.7. Developing speed***

### **Speed**

Speed is the capacity to travel or move very quickly. Like all the components of fitness, speed can be broken down into different types. It may mean the whole body moving at maximal running speed, as in the sprinter. It may involve optimal speed, such as the controlled speed in the approach run of the jumping events. Or, it may include the speed of a limb, such as the throwing arm in the shot or discus, or the take off leg in the jumps. Speed includes the following types:

- **Maximal speed**

- As fast as you can - may involve whole body or limb movement

- **Optimal speed**

- Controlled speed in the approach to a jump, making a throw or the best average speed for whatever distance you are walking or running

- **Acceleration speed**

- The rate of change in speed

- **Reaction time**

- The time between a stimulus and the first movement of the athlete. Includes the reaction to the gun in the crouch start but also to how quickly an athlete responds to something in an event

- **Speed endurance**

- The ability to continue to express either maximal or optimal speed as fatigue levels increase.

The first 'speed window' is related to the development of the nervous system and its ability to now carry messages much more quickly. This speed window does not mean that the athlete should now suddenly start doing 100m sprint repetitions. Instead there should be a development

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of reaction movements and quickly initiated movements. This can be done through a variety of speed based

Multi-directional movements and games based on activities lasting less than 4-5 seconds with adequate recovery in between. The second speed window occurs in adolescence due to the continuing development of the nervous system now having the addition of the developing energy systems. During this speed window all types of speed related work may now be carried out to the benefit of the developing athlete.

### *Development of Speed*

Speed training involves development of a skill so that the technique is performed at a faster rate. To develop speed the skill must be practiced on a regular basis at a maximum or close to maximum rate of movement. Maximal running speed, for example, is developed by runs over short distances at maximum effort. Perhaps the foundation exercise for developing maximal speed is the 'Flying 30s' which are maximal sprints over 10m, 20m, 30m or even 40 meters. The most common distance for senior athletes is 30 meters which is why the exercise is known as 'Flying 30s'. The coach marks out an acceleration zone of 30m, and a 'maximal speed zone' of 30m with a run-out for controlled deceleration of up to 30m, as shown in the diagram. The skill of moving at speed should, like all skills, be practiced before the athlete becomes fatigued. For this reason recovery times between repetitions and sets should be long enough to recover from any fatigue. In the case of this exercise which emphasizes the ATP-CP energy system there should be recoveries of 2 mins - 3 mins between repetitions and at least 5 mins - 8 mins between sets.

Because this exercise requires intense effort and concentration to achieve maximal speed, there should not be more than 3 repetitions in a set. The coach can make the Flying 30s the whole session such as 3 x 3 x Flying 30s (max) [2' and 5'-8'] or part of the session, provided it is at the beginning when the athlete is not fatigued, such as 2 x 2 Flying 30s (max) [2' and 5'] before moving on to another activity.

The athlete accelerates maximally from a standing start position so that they attempt to achieve maximal velocity before the 'maximal speed zone'. Through the maximal speed zone the athlete tries to maintain frequency, how quickly their legs are moving. The athlete should not show any acceleration in the maximal speed zone as this should have already occurred. If the coach

observes an athlete slowing on the maximal speed runs during a session he should stop the practice and move on to something more appropriate since the athlete is no longer practicing maximal speed. If the athlete is young or has a low training age, they may be capable of 'Flying 10s' where the 'maximal speed zone' is just 10 meters long. But the acceleration zone should still be 30m and the deceleration zone should still be up to 30m. They can then develop to 'Flying 20s' and for senior athletes with a high training age and a stable, uninterrupted training background, to 'Flying 30s' and even to 'Flying 40s'.

### ***Reaction Time***

When considering speed it is important to include reaction time. Reaction time is the time between a stimulus and the first movement by the athlete, such as the firing of the starter's pistol and the athlete's movement from the blocks. There are many factors both physiological and psychological which influence

reaction time and the initiation of movement. It also includes the athlete's response to what happens during a competition. How long does it take the athlete to react. Simple reaction time games can be great fun for young athletes and in the Kids' Athletics stage of athlete development these games ensure that the

First window of opportunity for speed is optimized. Reaction time for athletes of all chronological ages and training ages can be improved with practice, provided the practice situation is realistic.

### ***Power***

Power is the interaction of strength and speed, the relationship between speed of contraction and speed of movement. It relates how quickly an athlete can produce force and not merely how much force they can produce. Power lets athletes accelerate quickly and successful athletes are powerful athletes. This

quality of speed of movement and strength to increase power output should be developed, once a basis of speed and a foundation of maximum strength has been developed. Power is of obvious importance in the 'power' events of sprinting, hurdling, jumping and throwing but is still of importance in those events which emphasize endurance such as walking and distance running.

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With a clear understanding of the different types of speed the coach can devise exercises to develop and improve the athlete's speed capacities, at the right time in an individual athlete's developmental pathway and in the correct way.

Muscular strength is the ability of the body to exert force. Strength is important to every event in athletics for both males and females, provided this is functional strength. Muscle fibres within the muscles respond when subjected to weight or resistance training. This response makes the muscle more efficient and able to respond better to the central nervous system.

Strength is a very important component of fitness for all athletes but the important question is frequently asked, “Is training for strength appropriate for children and young athletes?” With a sound knowledge of growth and development and the stages of athlete development, the coach now knows that young athletes can begin learning the ‘techniques of free weight lifting’ from about the ages of 8 - 11 years when they are in the ‘skill’ window of opportunity. Then, once they are mature enough and have entered the ‘strength’ windows of opportunity, they can start ‘free weight training’ for strength gains.

### ***Types of Strength***

Muscular strength is the ability of the body to exert force and may be broken down into four types:

- **Maximum strength**
- **Power**
- **Strength endurance**
- **Reactive Strength**
- ***Maximum Strength***

This is the greatest force that a contracting muscle can produce. Maximum strength does not determine how fast a movement is made or how long the movement can be continued. It is relatively more important in events where a large resistance needs to be overcome or great forces controlled.

The relevance of maximum strength for all athletics events is often ignored.

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Maximum strength is a necessary basic quality as a foundation for power development but has little value in itself. Athletes should be strong but not be ‘weightlifters’ and their maximum strength must be evaluated in its contribution to their abilities as a powerful athlete.

### ***Power***

Power is the interaction of strength and speed, the relationship between speed of contraction and speed of movement. It relates how quickly an athlete can produce force and not merely how much force they can produce. Successful athletes are powerful athletes and this quality of strength should be developed, once a foundation of maximum strength has been developed. Power is of obvious importance in the ‘power’ events of sprinting, hurdling, jumping and

throwing but is still of importance in those events which emphasize endurance such as walking and distance running.

### ***Reactive Strength***

Reactive strength is the potential of the athlete to use the elastic properties of their muscles and tendons. When a muscle works eccentrically, that is when the muscle is creating force but the dynamic contraction results in a lengthening of the muscle, it 'stores' energy. We have seen this in the section on the 'Body in Sport and Athletics' where you can see a picture of an athlete jumping down from a box to the floor and then springing up again. The athlete moves from an eccentric action to a concentric action. This storage of energy by the muscles and tendons is similar to when you stretch a rubber or an elastic band. As you stretch the band it becomes longer and stores energy. If you release the band it very quickly, almost explosively, releases the stored energy and returns to its normal length. In athletics this process is called the 'stretch-shortening cycle', also known simply as the SSC. The stretch-shortening cycle describes the capacity of the muscles and tendons to produce high concentric forces within a very short time after an eccentric stretch. These high concentric forces are called reactive strength. Unlike maximum strength and power there are two specific mechanisms in reactive strength:

- Storage of Energy - while the muscle is stretching energy will be stored (eccentric phase)
- Reflex actions - this permits energy to be regained quickly at shortening (concentric phase).

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Reactive strength is an independent dimension of strength and will not automatically be improved by higher maximum strength or power capacity. It is often over-looked in the running and walking events but provides a vital element to performance in these, as well as in the traditional 'power' events.

### ***Strength Endurance***

This is the ability of the muscles to continue to exert force in the face of increasing fatigue. Strength endurance is simply the combination of strength and duration of movement. Performing an exercise, such as sit-ups, to exhaustion would be a test of strength endurance. This strength characteristic determines an athlete's performance where a movement is repeated over a fairly long period of time. Runs between 60 seconds and 8 minutes, for example, require a lot of

strength endurance. The ability to sprint, hurdle, throw or jump repeatedly in training or competition and maintain performance levels also requires strength endurance.

### ***Development of Strength***

Weight training and resistance training will both develop strength. If there is an increase in muscle mass as a result of training this is called hypertrophy. Muscle hypertrophy is associated more as a result of training for maximal and reactive strength rather than strength endurance. When strength training stops the principle of reversibility indicates that some strength will be lost and the muscle mass may reduce. Reduction in the muscle mass is known as atrophy. Muscle atrophy is a direct result of low, or no, activity and may be a factor in injury rehabilitation.

Maximum strength is best developed by exercises which involve a low number of repetitions and a large resistance or loading. Power is developed through fast repetitions using an appropriate loading and strength endurance is developed using a high number of repetitions with a low resistance. Reactive strength is developed by using exercises which utilize the SSC such as bounding. These methods can be combined by the coach into an overall strength program and these combinations will vary for different events.

For young athletes, we have seen in the chapter on growth and development that the strength ‘window of opportunity’ is related to the hormonal changes that occur at puberty. When the athlete reaches this level of maturity they can safely shift from ‘weight training for technique development’ to ‘weight training

for strength gains’. Testosterone is the hormone associated with the development of secondary male sexual characteristics but it is important to note that this hormone is also present in females. In females it is present in much less significant amounts than males and once puberty occurs for girls the hormone responsible for female characteristics, estrogen, becomes dominant. For girls there are effectively two strength windows. The first occurs just prior to puberty when any strength gains and nervous, or neural, adaptations achieved at this time will remain after puberty. The second window for girls occurs after puberty when further strength training for functional strength development can commence. For boys, the window of opportunity for strength occurs in the twelve to eighteen months after puberty, as testosterone levels rise and peak. Boys could do strength training before puberty but the effects would not be as effective as waiting for the testosterone levels to rise.

## ***Free Weights***

The term 'free weights' is given to weights when they are moved the path of the weights freely to move anywhere. Free weights include barbells and dumb-bells. Barbells are long bars that are held by the athlete with two hands. Dumb-bells are short bars that permit weight to be lifted either singly or in both hands. The advantages of sometimes using dumb-bells include identifying muscular imbalances. With free weights, whether using a barbell or dumb-bells, where and how the weights move is controlled 100% by the athlete. With 'machine weights', while the athlete may be able to lift very heavy weights, the path of movement of the weights is controlled by the machine.

The advantages of using free weights, rather than machine weights, include:

- Offering a greater variety of movement
- Muscular imbalances are highlighted
- Permit whole body exercises which help develop stability of the joint areas
- Producing greater power output than machine weights
- Contributing to the development of core stabilisation strength.

It is recommended that all athletes use free weights where ever possible. Machine weights may have some role to play in the initial rehabilitation after injury but, for the healthy athlete, machines do not develop functional strength. Machine weights are also expensive and require more maintenance. With free weights it is possible to improvise inexpensive, safe and appropriate equipment and environments.

## **The '3-5 Rule' for Strength Training**

3-5 Sessions per week

3-5 Exercises per session

3-5 Sets per exercise

And, for maximal strength or power:

3-5 Repetitions or Reps per Set

3-5 Minutes recovery between sets

This 'rule' is intended as a useful guide to structure successful weight training sessions but in practice it may not be possible to have the time to schedule 3-5 weight training sessions per week. Or, it may not be appropriate to the stage of development of the athlete to have 3-5 weight training sessions per week. If this

is the case, a minimum of two strength sessions per week are necessary to develop strength. Free weights permit whole body movements which develop many muscles and muscle groups at the same time. They also help the athlete to control their joints and develop postural strength. In this book we will look at two of the most important basic free weight lifts used for strength training.

- The Stiff-leg Dead lift
- The Squat

The first of these, the Stiff-leg Dead lift, helps to develop the correct feel for raising and lowering a weight while maintaining a correct body position. It also lays the foundation for more advanced lifts such as the Clean and Snatch.

In the Stiff-leg Dead lift and the Squat the technical characteristics of the trunk position are essentially the same. The athlete should start with a vertical trunk. The chest should be pushed forwards and at the same time the shoulder blades should be pulled backwards and downwards towards the hip joints.

The athlete should feel as they were trying to hold a money note between the shoulder blades. They should try to maintain this chest and shoulder position, and feeling of 'holding the note', through the whole movement of the lifts.

## ***2.8. Resources***

**Material resources:** these are the items you acquire to ensure effective and efficient administration practices in your organization. Even though sport in all countries is changing with times, but not uniformly for all. The gap in resources between wealthy and poorer countries is growing. Even once powerful nation states that strongly promoted sport have seen sport success erodes with decade. There is no question that the availability of quality facilities is necessary for proper training and where these do not exist, it becomes more difficult to excel.

Safe well designed equipment is important in prevention and although it is clearly event specific. Take time to ensure that and equipment is safe and fit for use every time you come to use it. Damaged or faulty equipment frequently are causes of injury.

Many different surfaces are encountered in athletics, some natural and other synthetic. Can cause problems. Whatever, the surface, be sure your athletes, choose the correct footwear to suit the conditions? Reduce the risk of injury by varying the surface for training when possible.

Clothing is very much as matter of personal choice, but must be chosen carefully. Nylon is often cheaper than natural fiber, but is particularly bad in hot climates and heat generating activities shoe design has advanced greatly and better, safer shoes are now available. Particular care is necessary, however, to select footwear appropriate to individual events and, especially, appropriate to the surface.

**Facility resources:** it is important to pay close attention to needs of athletes and coaches. This may sound self evident, but it is surprising how often sport administrators don't find out exactly what athletes and coaches needed and want. Listed below are some of the typical needs of coaches and athletes and coaches needed and want listed below are some of the typical needs of coaches and athletes.

Facilities needed by athletes are:

- Housing and foods close to training site
- Access to showers and transportation
- Access to appropriate educational opportunities

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- Access to social, cultural, religious, and recreational opportunities other than sport
- Access to employment
- Community support, including that of the media

Facilities needed by coaches are:

- Access to sufficient resource personal such as assistants, managers, and medical specialists.
- Access to facilities and services for all, such as teaching and weight training areas and equipment.

## 2.9. Genetics

Athletic records are broken year after year, and the limits of human performance continue to be debated. Most physiologists agree that the current limits have to do with our genetics – specifically genes that regulate our cardiovascular endurance and muscle fiber type, but some

factors are much more variable. Things like nutrition, motivation, environment and advances in equipment all allow for dramatic improvements in athletic performance.

## **Genetics and Sports Performance**

Genetics shape us in many ways including our potential to excel in sports. Training, diet, and other factors play a large role in developing our potential, but our genes may also limit performance. You may have the genetic potential for being a champion athlete, but if you live a lifestyle of overeating and no exercise you are unlikely to achieve that potential. On the other hand, someone with limited genetic potential can find ways to compensate and become a solid performer.

Genetics have a large influence over strength, muscle size and muscle fiber composition (fast or slow twitch), anaerobic threshold (AT), lung capacity, flexibility, and, to some extent, endurance.

One major limitation for endurance athletes is cardiac capacity, or the heart's ability to deliver enough oxygen (via the bloodstream) to the working skeletal muscles. This, too, is largely determined by genetics.

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The other limitation for endurance athletes is the ability of muscle tissue to effectively use oxygen and create ATP (adenosine triphosphate), the fuel that allows muscular contraction and movement. The efficiency of this process is measured by something called VO<sub>2</sub> max (maximum volume of oxygen).

## **How Genetics Influence Response to Training**

Your genes may also determine how your body responds to training, diet and other external factors. Research on aerobic endurance shows that some people respond more to training than others. So even if you have a low genetic potential for endurance, you may respond well to training and develop your potential more completely than someone with genetic 'talent' who doesn't respond to training.

Training also increases cardiac efficiency, but the extent of this increase may depend upon genetics. Genetically gifted athletes will have a much greater response to training and will have a large increase in the number of mitochondria in cells. (The mitochondria are organelles in cells that produce the ATP, so the more mitochondria a person has, and the more efficient they are.

## ***Chapter three***

### ***Research Design and methodology***

#### ***3.1. Source of Data***

The study was used both primary and secondary sources of data obtained directly from representative sample of the population under study. As far as secondary sources are concerned the researcher used them to support his arguments in intellectual manners. Therefore, secondary sources such as, books, journals, articles and already done research papers and these was used mammy in the background and in the review of related literature parts of the sources that was obtained from data collecting tools such as questionnaires, observations and interviews. So, the main part of the study was based on the primary data's obtained from the instruments. Hence, primary sources was collected from the concerned bodies of short distance running such as the

coaches, Sport commotion, and the trainers. The subject of the study was defocus on the Athletics clubs coach and Trainers. They are the top level of short distance performance club.

Leaders moreover, document and related literatures was reviewed and analyzed to support the data gathered from primary sources as well.

The study was use both primary and secondary sources of data obtained directly from representative sample of the population under study. The subject of the study was on the Athletics clubs coach and Trainers. They are the top level of short distance performance club leaders' ore over, document and related literatures will be reviewed and analyzed to support the data gathered from primary sources as well.

### ***3.2 Sampling procedure***

The study was consisted of three Ethiopian first division Athletic clubs; these clubs comprise 6 coaches of sprinters and above 80 short distance athletes. The researcher preferred to use simple random sampling. The total sample size for the questionnaire items was 70 respondents. Regarding the selection of subjects for an interview, 4 athletes from each clubs and all coaches of the selected clubs for the observation one session was selected using a lottery method from each selected clubs.

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### ***3.3. Data collection and measurement***

The instrument for data gathering to investigate this problem the researcher used questionnaire, and observation.

#### ***3.3.1. Questionnaire***

The main data gathering instrument was a questionnaire. The reason why the researcher chose this tool is that its appropriateness to collect information from a larger population. The other reason is it helps to secure relevant information without possible bias; moreover, it will help to obtain descriptive information to answer the basic questions of the study without possible confusion. The questionnaire will be employed by using close – ended /structured/ and open ended type of questions as the respondents of the study are club coaches and trainers of the clubs

the questions will be prepared in Amharic language so they can understand the contents of the questionnaire easily; then it will be translated to English to make the analysis easy.

### ***3.3.3. Observation***

Observation session will be conducted as it is a main supportive tool to gather information on about the actual field during training of 100m, 200m, 400m Men & female athletes the data will be collected by means of a check list.

### ***3.4. Methods of Data Analysis***

The data was analyzed in the following ways. The questionnaires with their response are in the form of tables. The number of respondents was out in the form of tables. The number of respondents was putted within the table and their percentages was drawn. This means that the result of the respondents was changed in to percentages for the sack of Analysis and together with the researchers observation and interviewee, analysis and interpretations was made to show the value of each responses of the concerned bodies.

The researcher with to analyze the data Based on the nature of the basic questions and the data collected through different instruments.

## ***Chapter Four***

### ***Presentation and Analysis of Data***

This chapter has two parts. The first part present the characteristics of respondents while the second part analyses the main data gathered.

#### ***4.1. The characteristics of the respondents***

The major categories of respondents involved in the study were short distance athletes and coaches of sprinters.

The researcher believes that the respondents have direct relationships with the matter under study and as a result they were considered to be relevant as main source of information for the study.

At the beginning, the questionnaires were administered to 86 respondents and 62 copies of completely filled questionnaires were returned of these copies 80 copies were administered to short distance athletes. Similarly 6 copies were administered to coaches of sprinters. In other words, totals 62 ( ) copies of the questionnaire were returned of these returned copies 57 ( ) were from the athletes copies of questionnaire were found to be sufficient to draw inferences from the study.

Table 2:- respondents background information

General background		Athletes		Coaches	
		No	%	No	%
Sex	Male	56	80	5	83.3
	Female	14	20	1	16.7
Educational background	1-4 grade	-			
	5-8 grade	5	7.1		
	9-12 grade	60	85.8	4	66.7

	Collage/ university	5	7.1	2	32.3
Working experience	1 year				
	2-3 years	17	28.33		
	3-5 years	25	41.67		
	5-7 years	11	18.33		
	Above 7 years	7	11.67		
Marital status	Single	60	85.5		
	Married	7	10	5	83.3
	Window	2	2.8	1	16.7
	Divorced	1	1.4		

Table 2 describes the general characteristics of the respondents. Regarding the sex of the respondents, the majority of them 56(80%) were male and remaining insignificant number female were 14 (20%). This reveals that the participation of female in the study of the selected clubs were very low. The table false shows that, there are no females coaches of sprinters.

Interims of educational background of the total, 60 (85%) respondents have attend grade 9-12. 5 (7.1), 5(7.1) have attended grade 5 -8 and college/university respectively.

This depicts that the majority of the athletes have attended secondary school education and the coaches.

As the work experience of the respondents, 17(28.33%) fall between 2 and 3 years. The other 25(41.67%) fall in the service category of 3-5 years. The remaining 11(18.33%) were in the service category of 5-7 years. The last 7(11.67%) have above 7 years experience. This reveals that the majority of the coaches served for many years.

With respect to marital status 60 (85.8%) of respondents were single, 7 (10%) were married, 2(2.8) were window and 1(10%) were divorced. This shows that many of the athletes were single and the majority of the coaches were married.

#### 4.2. Training programs

As indicated in table tow (2), below respondents were asked their participation time duration on training, the continuity of the training program, techniques of the training and follow up strategies. They have given a chance to select alternative choices.

**Table 3. Training duration and techniques**

No	Item		Short distance athletes	
			No	%
5	For how many times do training in a week?	4. 2 days	2	2.9 %
		5. 3 days	3	4.3%
		6. 5 days	29	41.4%
		7. 6 days	36	51.4%
6	For how many days you take rest time pek a week	8. 1 days	36	51.4%
		9. 2 days	29	41.4%
		10. 3 days	-	-
		11. 4 days	3	4.3%
		12. 5 days	2	2.9%
7	On average for one training period how much time you take.	13. 30 minute	2	29.9%
		14. 30-1 hr	28	40%
		15. 1-1:30 hr	35	50%
		16. 1:30-2 hr	5	7.1%
8	The training that you trained has a relation with short distance tactics?	Very low	8	11.5%
		Low	12	17.1%
		Medium	45	64.3%
		High	5	7.1%

To investigate the practice of training duration and techniques to short distance level four questions were raised in table two (2). To this effect, the first question asks about respondent's duration of training time per a week. Accordingly, majority of the respondents, 36(51.4%) do

training for six days in a week. The rest 29(41.4%), 3 (4.3%) and 2 (2.9%) respondents participate in a training for 5 days, 3 days, and 2 days per a week respectively.

With regard to rest time a great number of respondents, 36 (51.4%) and 29(41.4%) replied that they took one and two day rest time per a week respectively. Whereas 3(4.3%) and 2(2.9%) of the athlete replied that they took 4 day and five days rest time per week respectively.

On the training period half of the respondents' replay that they do 1-1:30% hr training in the field and 40% of the respondents replied that they do 30-1 hr training per a day. The rest 2(2.9%) and 5(7.1%) of the respondents replied that they do a 30 minute training and 1:30 hr to 2 hr training per a day.

Concerning the techniques of training the majority of the respondents (45 (64.3%) replied that the training that was given by their coaches have medium relation with a short distance running tactics. 8(11.5%), 12(17.1%) and 5 (7.1%) responded that the training given by the coaches have very low, low and high relation with short distance running tactics.

Generally, we can infer from the data and interview the majority of the respondents have participated in the training programs. However these trainings have been too short and infrequent and there have been no effective follow-up support to ensure the effective implementation of the training tactics.

### **4.3. Pocket money's**

Table 4:- Regarding the pocket money given to the athletes.

		Short distance athletes	
Do you believe the pocket money given to the athletes are enough	Strongly disagree	38	%
	Disagree	29	54.3
	Not decide	2	41.4
	Agree	1	2.9%

	Strongly agree	-	1.4%
--	----------------	---	------

As can be seen from the table 38(54.3%) and 29(41.4%) replied that the pocket money given by the first division clubs were not enough. In contrast 1(1.4%) of the respondents agreed the pocket money given to the athletes are enough. From this data we can see that the incentive is somewhat not enough in relation to the devotion of the athletes in the training.

#### ***4.4. Open ended questions on the future success of athletes***

In the open-ended questionnaire, most of the respondents replied the following opinions for the future success of the athletes.

4. The clubs must support the athletes and give trainings.
5. The clubs build their own athletics village
6. The coaches

From the above data, it can be said that the majority of the athletes replied that the clubs should focus on training the new comers and the youngsters.

Table 5. The training of the athletes

	Characteristics	Short distance athletes	
		No	%
Do you think that short distance runner joined the club to develop their skills?	Strongly disagree	5	7.1
	Disagree	2	2.9
	Not decided	3	4.3
	Agree	60	85.7
Do you believe short distance runner in the first division clubs got enough training?	Yes	52	85.7
	No	16	74.2
	Unknown	2	22.9
At what extent the training given in the clubs consider experience and age of the athletes	Always	21	30%
	Repeatedly	24	34.3

	Sometimes	20	28.6
	Next	5	7.1
At what extent the daily training given in the club keep the interest of the athletes	Very low	3	4.3
	Low	-	-
	Medium	56	80
	High	6	8.6
	Very high	5	7.1

As indicated in table 5 above 60(85.7) short distance athletes replied that they join the club to develop their short distance running skills. Were as 5(7.1%) and 2(2.9%) of the respondents. Strongly disagree and disagree respectively.

The majority of the short distance runner (4.2) replied that the training given by the clubs are enough to create a good competent short distance runner. In the contrary 16(22.9%) of the athletes responded the training was not enough.

21(30%), 24(34.35), 20 (28.6%) and 5(7.1%) of the athletes responded that the training was take the experience and age of the athletes in to consideration during the training.

Most of the respondent 56(8.0%) replied that the daily training given in the club keep the interest of the athletes. In addition 6(8.6%) and 5(7.1) of the respondents responded that the daily training was keep their interest. Whereas 3(4.3%) replied that the training not keep the interest of the athletes.

Table 6. The short Distance Runners Training tactics

	characteristics	Short distance Runners	
During the training how period how many times do an individual exercise	Very low		2.9%
	Low		5.7

	Medium		54.3
	High		21.4
	Very high		15.7
Per day how many time do you take training ?	One times	33	47.1%
	Two times	28	40%
	Three times	9	12.9%
During repletion period of for how many time take arrest	1-3 minute	51	72.8
	4-5 minute	16	22.9
	6-8 minute	3	4.3
	Above 8 minute	-	
At what extent the short distance runners do exercise to improve their skills	Very low	-	-
	Low	1	1.4
	Medium	4	5.7
	High	46	65.8
	Very ghigh	19	27.5
Do you take a training by watering fitness of famous athletes	Very low	62	33.6
	Low	5	7.1%
	Medium	3	4.3
	Very high	-	

From the above data it can be said that the majority of the athletes 38 (54.3%) repaired that do medium individual exercise where as 2 (2.9%) of the respondents responded that they do very low individual exercise or training.

47.1% of the respondents replied that they participated in one session of training per a day. 28(40%) and 9(12.9%) of the athletes and 9 (12.9%) of the respondents replied that they participated in two session and three session of training per a day respective.

Most of the respondents 51(72.8%) responded that they take 1-3 minutes rest during repeated training. The rest 16(22.9%), 23(4.3%) replied that they take 4-5 minutes & 6-8 minute rest time during repeated exercises.

The 46 (65.8%) of the athletes replied that at high extent they do exercise to improve their performance. Whereas 1 (1.4%) of the athletes respond low.

The majority of the athletes 62 (33.6%) replied the train given by the clubs were not supported by films.

Coaches response on the overall activities of the short runners

This part of the study deals with the presentation and analysis of the data collected from coaches.

Table 7:- The responses of coaches on short distance running for their facilities

	characteristics	Short distance athletes	
		No	%
Do you comes to this training club to improve their past performance	Strongly disagree		
	Disagree	2	22.2
	Agree	4	44.5
	Not decided	1	11.1
	Strongly agree	2	22.2
Do you time that trans clubs Redil sufficient service for sprinters?	Yes	1	11.1
	No	7	77.8
	I don't know	1	11.1
Do you daily training is classified based on your age and training experience	Always	6	66.7
	Frequently	1	11.1
	Sometimes	2	22.2

	Never	-	
To what extent do you think that you are interesting to improve their performance	Very low	-	
	Low	-	
	Average	3	33.3
	High	5	55.6
	Very high	1	11.1
To what extent your training program is followed by principles of individualism	Very low	-	
	Low	-	
	Average	1	11.1
	High	7	77.8
	Very high	1	11.1
Do your daily training is interesting	Always	5	55.6
	Frequently	1	11.1
	Sometimes	3	33.3
	Never	-	

From table 7, above one can see that 4(44.5%) of the coaches were join the club to improve their past performance where as 2(22.2) disagree by this idea

According to the majority responses of the coaches the clubs redil services for the sprmeters were not sufficient in contrary 1(11.1%) of the coaches replied that it was sufficient.

The majority of the respondents 6(66.7) says the daily training of the short distance sprinters were accompanied based on the age and experience of the athletes.

45

Most of the coaches 5(55.6) have highly interested to improve their performances. The rest 3(33.3) and 1(11.1) of the respondents have average and very high interest to improve their performances.

Also most of the training principles followed by the coaches were individualism for the above data the daily training programs were always interesting.

Table 8. Duration of training period and results

	Characteristics	Short distance athletes	
		No	%
How often do you exercise per day?	Ones	6	66.7
	Twice	2	22.2
	Three time	1	11.1
How many record times you had between each set of exercise?	1-3 min	2	22.2
	4-5 min	5	55.6
	6-8 min	2	22.2
	More than 8 min	-	
How often do you exercise per week	2 days	-	
	3 days	-	
	4 days	-	
	5 days	7	78.8
	6 days	2	22.2
How many rest days you have per week	1 days	2	22.2
	2 days	7	70.8
	3 days	-	
	4 days	-	
	5 days	-	
What is the average length of how's/ minutes for each main training session?	Less than 30 mm	-	
	30 min – 1 hr	1	11.1
	1 hr – 1:30 hr	8	88.9
	1:30 – 200hr	-	
	More than 2 hr	-	
To what extent your training program is short	Very law	-	
	Low	-	
	Average	7	77.8
	High	2	22.2
	Very high	-	

Regarding the daily training exercise most of the coaches 6(66.7) replied that they give training once a day in the afternoon or in the morning. The rest 2 (22.2) and 1(11.1) give a training for twice and three times respectively for their athletes.

Concerning the record time between each set of exercise the majority 5(55.6) responded that 4-5 minute. The remaining 2(22.2) and 1(11.1) of the coaches replied that they use 1-3 minute and 6-8 minute.

7(77.8) % of the coaches replied that they trained the athletes 7(77.8) responded that they take 2 days rest per a week the rest that 2(22.2) take 1 day rest per a week considered. The average length of hour/minute for each main training session all most all of the coaches with the exception of 1(11.1) replied that they use 1hr – 1:30 hrs.

7(77.8) of the coaches tries to make average extent to shorten the training program.

Table 9 Training

	Characteristics	Short distance athletes	
		No	%
Is that doing heavily exercise, over load with interest	Very low	-	11.1
	Low	6	67.7
	Average	2	22.2
	High	-	
	Very high		
The coaches correctly gurdel the trainer	Very low		
	Low	1	11.1
	Average	7	78.2
	High	1	11.1
	Very high		
Do you training program follows principles of progression	Yes	8	88.9
	No	-	
	I don't know	1	11.1

To what extent do you rate the overall your training program	7. Poor		
	8. Fair	3	33.3
	9. Good	6	67.7
	10. Excellent		

From the table above 6(67.7%) of the respondents replied that the interest of the athletes were average during the heavily exercise and over load. The remaining 2(22.2) are highly interested by heavy load exercises and 1(11.1%) of the respondents were not interested as much by heavy load exercises.

7(78.2) % of the respondents replied that the coaches correctly guarded the trainers at average devotion 2(22.2%) responded that they guided the trainers at high devotion. Whereas 1(11.1%) replied that they guided the trainers with low devotion.

Regarding the principle of progression all most all (8 or 89.9%) of the respondents replied that they follow principle of progression during the training.

Finally, concerning the overall extent of the training program 6(67.7% of the respondents replied that the training program is good. The rest 3 (33.3%) responded that the overall training program was fair.

#### ***4.5. Analysis and interpretation of observation***

During my first observation in each clubs first I show my latter which was written by A.A.U, sport science department head. 1<sup>st</sup> I go to defense sport club. Defense sport club office is located

around 5 kilo. Near the clack of national museum. The gate door was kept by a keeper, he asked me what I want and I told him what i need form their club but he didn't allow we to get inside instead he called the club administrator; he is young and looks good man. After he saw me he allowed me to get in to his office. Before I gate inside I tried to see my surrounding many athletes sit in group to listen radio and some athletes were listening the sound came out of their friend "kirare." The administrator office was narrow and sophisticated. Then he asked me what I want and I told him 1<sup>st</sup>, I want to observe two training sessions then I will come with questioners

which will be filled by coaches and athletes of short distance running. Then he gave me athletes' number and their training fine and venue. It was at the morning at A.A.U stadium. Female and male sprinters were practicing together. I wait unit they finish and went to my home.

My plan was to visit two raining sessions but because of shortage of time I only observe one training session. Then I distributed my questionnaire to athletes and coaches and then administrator collect for me at the second day.

Secondly, I go to prison police sport club. There office is located around Gerji mebrat haile, at the building named as 'alem gebre building'. The entrance door has serious security. The offices were for all prison police organization. It was not organized well because they came form around Semen hotel Area soon. The offices were not closed by anything officers seen each other. I go to the administrator he was such a caring person. I told him that I wan to see a training session and to distribute questioners for athletes and coaches. My observation in training sessions was almost the same as defense and bankoche sport clubs.

Lastly I go to Ethiopia bankoche sport club office. It is located around 4 kilo at the building of 'selasie church'. Their office is in the second floor. It is the most organized and net office forms the other two clubs and also I saw a secretary in that office. I did everything I did in the above clubs to collect my observational data.

To make the training more effective it is necessary to have appropriate infrastructures, equipments and facilities which facilitate the training program at large.

**Table 10. check list for the availability of Facilities and equipments**

\* The researcher Rate the availability of facilities in the selected clubs by putting “√” mark on the given alternative.

No	Facilities	Available	Partially Available	Not Available	Remark

1	Dormitories		√		
2	Clean toilet, shower and clean drinking water	√			
3	Recreational center		√		
4	Clinic	√			Rental
5	Sport wear	√			
6	Gymnasium		√		Rental
7.	Transportation	√			
8	Sports suits			√	
9	Designed clothing room			√	

## ***Chapter five***

### ***5. Summary, conclusion and recommendation***

#### ***5.1. Summary***

Chapter four showed the findings on respondents view about the prospects/ changes of short distance runners at three first division athletics clubs in Addis Ababa.

Seventy nine (79) respondents were involved in the study. Among these seventy (70) of them were short distance runner athletes and the rest nine (9) were the coaches in first division athletics clubs. All two groups were given questionnaires for completion percentage and tables were computed to interpret the responses.

The study should that the proportion of female athletes was significantly low in short distance running first division clubs. The predominant athletes were males. Besides the great majority of them were males trained in the first short running division clubs. The other point was that the training process of most of the sprinters was conducted by armature coaches rather than qualified coaches.

The overall rating concerning the interests of the athletes towards the further success suggest that they are not satisfied by the training techniques and the services provided by their clubs.

In all two groups, most of respondent expressed the same complains about the service forwarded by the first division clubs for the short distance runner athletes. They pointed out that the athletes live and work in hard conditions. According to them in availability of training materials, and training athletics stadium and low pocket money are among the poor conditions.

Respondents also pointed out the poor interpersonal relations of the athletes with their colleagues; among the factors that demoralize the athletes in the performance of their work. Because of these and other discouraging factors most of the athletes not achieved the expected result/score. But most of the athletes responded that the opportunity of further training constitutes a real source of moral satisfaction for them.

## *5.2 Conclusion*

Based on the preceding findings, the following conclusion can be draw.

Clear vision and common understanding about the purpose of any organization among the stake holders facilitate the implementation of any program in the organization. However, as it is shown in the findings, majority of the athletes did not got the opportunity to get adequate guidelines and regulations regarding the short distance running programs of the fist division clubs in Addis Ababa. Moreover, they did not get sufficient orientation about the program.

To this effect, most of the stakeholders did not know why short distance running is needed at national level. Therefore, it can be concluded that there was some gap between the athletes and the athletics club.

The extent to which properly trained, adequately experienced and committed coaches are assigned to train can contribute much to the achievements Ethiopian short distance running in the international games. However most of the athletic coaches who were assigned to train the short distance athletes were found to be below the requirement to train at athletics club level. Aggravating the problem, some of the coaches did not get the opportunity to train relate to the level? Thus, this may affect the competence of short distance runners who are expected to computer in the international game which consequently affect the performance and success of short distance runners' score at national level.

Although considerable efforts have been made to fulfill facilities by the clubs basic short run athletes facilities such as training cloth and school were found inadequate more over other facilities such as shower, synonyms, and training groups were not satisfactory in most clubs. This impels that athletes are not in opposition to improve their skills and performance.

### *5.3 Recommendations*

Based on the findings of the study and conclusions made, the following recommendations are suggested. These are

Have all the concerned bodies i.e. the Ethiopian athletics federation of different levels such as zonal and woreda athletics experts office give attention for the short distance runners in

fostering them necessary sport materials, morals and provide them with the necessary training techniques.

To recruit the would be short runner athletes with due emphasis no their interest and commitment besides good minima time and nurture that through proper professional training it deserves the attention of the concerned bodies.

Studies indicate that running more than 45 miles per week does not significantly increase fitness, but does increase the risk of injury. So the coaches give more focus on the factices and the fitness of the athletes.

Many runners especially short distance races prefer to compete in racing shoes racing shoes are lighter and more flexible tan training shoes. So the clubs tried to fulfill both tr

Training and race shoes for short distance runners.

In general, your training should reflect your race goal. By the same time training for shorter races involves shorter training and a faster pace.

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## **APPENDIX A**

### **ADDIS ABABA UNIVERSITY**



B. 5-8 Grade                      C. 9-12 grade

4. marital status

A. single

B. married

C. widow

D. Divorced

5. For how many months you have been trained in this Training clubs?

II. For the following items mark “ ✓ “ sign in the box that suits your response.

6. Do you come to this Training clubs to improve their past performance?

A. strongly disagree

B. Disagree

D. agree

D. agree

C. un decided

E. strongly agrees

7. Do you think that the Training clubs Rendil sufficiency service for sprinters?

A. Yes

B. No

C. I don't know

8. If your Answer for question No “ 7 “ either Noor yes please specified.

9. Do your daily Training is classified based on your age and training age

A. Always

B. frequently

C. sometimes

D. Never

10. Do your daily training interesting?

A. always

B. frequently

C. sometimes

D. nevers

11. To what extent do you think that you are interest to improve their performance?

A. very low

B. Low

C. Average

D. High

E. vary low

## II

12. To what extent you Training program is followed by principle of individualization?

A. very low

B. Low

C. Average

D. High

E. Vary high

13. How of ten do you exercise perday?

A. ones                      B. twice                      C. three time

14. How many record times you had between each set of exercise?

- A. 1-3 min
- B. 4-5 min
- C. 6-8 min
- D. more that 8 min

15. How often do you exercise per week

- A. 2 days
- B. 3 days
- C. 4 days
- D. 5 days
- E. 6 days

16. How many Rest day you have per week?

- A. 1 day
- B. 2 days
- C. 3 days
- D. 4 days
- E. 5 days

17. What is the average length of hours /mintes for each main Training session?

- A. less than 30 min
- B. 30 min – 1:00 hour
- C. 1:00 – 1:30 hours
- D. 1:30 – 2:00 hours
- E. more than 2 hours

18. To what extent your Training program is short specific

- A. very low
- B. low
- C. average
- D. High
- E. very high

III

19. Is that doing haviy Exercies, over load with interst

- A. very low
- C. average
- E. very high

B. low

D. High

20. The coaches correctly Guide the trainer?

A. very low

C. average

D. very high

B. low

D. High

21. Do your Training program follows principles of progression?

A. Yes

B. No

C. I don't know

22. To what Extent do you rate the overall your Training program?

A. poor

B. fair

C. Good

D. excellent

V

## APPENDIEX B

*አዲስ አበባ ዩኒቨርሲቲ*

# **የድህረ ምረቃ መርሃ ግብር**

## **ስፖርት ሳይንስ ትምህርት ክፍል**

ውድ አስልጣኞች እና ሰልጣኞች በአሁኑ ጊዜ በአዲስ አበባ ዩኒቨርሲቲ ለድህረ ምረቃ/ማስተርስ ሚሚያ ላይ በተመረጡ የአትሌቲክ ክለቦች ላይ ጥናታዊ ዕሁፌን በመስራት ላይ እገኛለሁ። የዚህ ቃለ መጠይቅ ዓላማ ሰዎች ለአጭር ርቀት ፍጫ ያላቸውን አመለካከትና ውጤት ለማጥናት ነው። የሚሰጡት መረጃ ለሌላ አላማ የማይውል መሆኑን አረጋግጥልዎታለሁ።

**ማሳሰቢያ:-** ስም መጻፍ አያስፈልግም

## **ለትብብርዎ በቅድሚያ አመሰግናለሁ**

### **መመሪያ**

1. ትክክለኛውን መልስ ለመምረጥ የራይት (✓) ምልክት በማድረግ ወይም በማክበብ ይግለፁ። ምርጫ ለሌላቸው ጥያቄዎች በተሰጠው ክፍት ቦታ ላይ መልሳቸውን እንዲፀፉ።
2. የሚሠጡዎቸው መልሶች በሚስጢር ስለሚያዙ ምንም ስጋት አይግባዎት።
3. አባክዎ ትክክለኛውን መልስ በታማኝነት ይመልሱ።

### **I. የሰው ህይወት ታሪክ**

1. የታ ሀ. ወንድ  ለ. ሴት
2. እድሜ
3. የትምህርት ደረጃ ሀ. ከ1-4 ክፍል  መ. ኮሌጅ ወይም ዩኒቨርሲቲ   
 ለ. ከ5-8 ክፍል  ሐ. ከ9-12 ክፍል
4. የጋብቻ ሁኔታ ሀ. ያላገባ  ለ. ያገባ ሐ. የፈታ መ.
5. በሳምንት ምን ያህል ጊዜ ትሰራለህ   
 ሀ. 2 ቀን  ለ. 3 ቀን  መ. 5 ቀን  ሠ. 6 ቀን
6. በሳምንት ውስጥ ምን ያህል የዕረፍት ጊዜ ይኖርሃል  
 ሀ. 1 ቀን  ለ. 2 ቀን  ሐ. 3 ቀን  መ. 4 ቀን ሠ. 5 ቀን
7. በአማካይ በአንድ የልምምድ ጊዜ ለስንት ደቂቃ ቆይታ ታደርጋለህ  
 ሀ. 30 ደቂቃ  ለ. 30-1 ሰዓት  ሐ. 1:00-1:30  መ. 1:30-2:00
8. የምትወስደው ስልጠና ከአጭር ርቀት ስፖርት ጋር ምን ያህል ግንኙነት አለው  
 ሀ. በጣም ዝቅተኛ  ለ. ዝቅተኛ  ሐ. መካከለኛ  መ. ከፍተኛ
9. የምትሰለጥነው ስልጠና በየጊዜው ጫናው /Intensity/ ክብደት load /frequency/ ለውጥ ታደርጋለህ  
 ሀ. አዎ  ለ. አላውቅም  ሐ. አይደለም
10. አትሌቶች የሚያገኙት የኪስ ገንዘብ በቂ ነው ብለህ ታምናለህ  
 ሀ. በጣም አልስማማም  ለ. አልስማማም  
 ሐ. አልወሰንኩም  መ. እስማማለሁ  ሠ. በጣም እስማማለሁ
11. የወደፊቱን አትሌቶች ስኬት በተመለከተ ምን ግምት ትሰጣለህ/ሽ/  
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12. አጭር ርቀት ሯጮች እዚህ ክለብ የሚመጡት ክህሎት ለማሳደግ ነው ብለህ ታስባለህ/ሽ/  
 ሀ. በጣም አልስማማም  ለ. አልስማማም   
 ሐ. አልወሰንኩም  መ. እስማማለሁ

13. አጭር ርቀት ሯጮች በዚህ ክለብ ውስጥ አስፈላጊውን አገልግሎትና ስልጠና አግኝተዋል ብለህ ታስባለህ/ሽ/

ሀ. አዎ  ለ. አይደለ  ሐ. አላ  ጆም

14. በየቀኑ የምትወስደው ሥልጠና እድሜንና ልምድን ምን ያህል ጊዜ መክከል የደረገ ስልጠና ነው

ሀ. ሁልጊዜ  ለ. በተደጋጋሚ  ሐ. አንዳንዴ  መ. በፍፁም

15. በየቀኑ የምታገኙት ስልጠና የሯጮችን ፍላጎት ምን ያህል የጠበቀ ነው

ሀ. በጣም ዝቅተኛ  ለ. ዝቅተኛ  ሐ. መካከለኛ   
መ. ከፍተኛ  ሠ. በጣም ከፍተኛ

16. የአጭር ርቀት አትሌቶች ክህሎታችሁን ለማሳደግ ምን ያህል ተነሳሽነት አላችሁ

ሀ. በጣም ዝቅተኛ  መ. ከፍተኛ

ለ. ዝቅተኛ  ሐ. መካከለኛ  ሠ. በጣም ከፍተኛ

17. በስልጠና ወቅት ምን ያህል የግል ልምምድ ታደርጋለህ/ሽ/

ሀ. በጣም ዝቅተኛ  ለ. ዝቅተኛ  ሐ. መካከለኛ   
መ. ከፍተኛ  ሠ. በጣም ከፍተኛ

18. በቀን ውስጥ ለምን ያህል ጊዜ ትሠራለህ/ሽ/

ሀ. አንድ ጊዜ  ለ. ሁለት ጊዜ  ሐ. ሶስት ጊዜ

19. በድግግሞሽ ጊዜ ምን ያህል እረፍት ጊዜ ታገኛለህ/ሽ/

ሀ. ከ1-3 ደቂቃ  ለ. ከ4-5 ደቂቃ

ሐ. ከ6-8 ደቂቃ  መ. ከ8 ደቂቃ በላይ

20. የታዋቂ አትሌቶችን ምስል በማሳየት በፊልም የተደገፈ ትምህርት አናችሁ

ታውቃለህ/ታውቂያለሽ/

ሀ. በጣም ዝቅተኛ  ለ. ዝቅተኛ  ሐ. መካከለኛ

መ. በጣም ከፍተኛ

## APPENDIX C

ADDIS ABABA UNIVERSITY

## **FACULTY OF SCIENCE**

### **DEPARTMENT OF SPORT SCIENCE**

#### **Check list for the availability of Facilities and equipments**

- \* The researcher Rate the availability of facilities in the selected clubs by putting “√” mark on the given alternative.

No	Facilities	Available	Partially Available	Not Available	Remark
1	Dormitories				
2	Clean toilet, shower and clean drinking water				
3	Recreational center				
4	Clinic				Rental
5	Sport wear				
6	Gymnasium				Rental
7.	Transportation				
8	Sports suits				
9	Designed clothing room				

### **Declaration**

I undersigned, declare that this is my original work and has not been presented for a degree in any university. All sources of the materials used for this thesis have been dully acknowledged.

Declared by

Name \_\_\_\_\_

Signature \_\_\_\_\_

confirmed by

Name \_\_\_\_\_

signature \_\_\_\_\_

This thesis has been submitted for examination by my approval as a university adviser.

Name \_\_\_\_\_

Signature \_\_\_\_\_

Date of submission \_\_\_\_\_

