Factors That Affect the Performance of Long Distance Athletes: With Specific Reference to Sebeta Town Sport Club

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This is to certify that the thesis submitted by Tilahun Asrat, entitled: *Factors That Affect The Performance Of Long Distance Athletes: With Specific Reference To Sebeta Town Sport Club* and submitted in partial fulfillment of the requirements of the degree of master of science in sport science complies with the regulation of the university and meets the accepted standards with respect to originality and quality.

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Abstract

The purpose of this study was to examine factors that affect the performance of long distance athletes: with specific reference to Sebeta town Sport club. For this purpose, the researcher reviewed the available literatures for theoretical, conceptual and empirical framework. The research design was descriptive survey and research method was both qualitative and quantitative approaches of organizing and analyzing the data supported by mean, standard deviation, graphs and tables. In this study trainees', coaches, administrative bodies and club organizers were participated and the total population were 42. In this research 35 trainees 2 coaches, 3 administrative bodies and 2 club organizers were selected using census sampling technique. The researcher used both primary and secondary sources of data to accomplish this study. Data gathering tools were questionnaire, interview, observation and document analysis. The data that collected through these multi-tools were analyzed both qualitatively and quantitatively. The data collected through structured questionnaires were also analyzed in SPSS version 20.0 (mean and standard division). The major findings obtained from the multi method tools were: long distance running training practice environment needs critical attention, and the club has clear organization structure. The study concluded that the major factors affecting athletes' performance were lack of training kits, facilities and equipment, lack of latest technological devices, coaches' lack using training principles, and trainees' nonscientific nutritional approach. The researcher recommended that training practice and application of training principles should be improved, coaches should give more time and space for training and practicing skills, standard facilities and equipment should be provided.

Key Words: Performance, Sport, Athlete, Training principles, Training practice.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Athletics is an exclusive collection of sporting events that involves competitive events like walking, running, jumping, and throwing. The most common types of athletics competition are track and field, road running, cross country running and race walking. Track-and-field athletics are the oldest forms of organized sport, having developed out of the most basic human activities such as running, walking, jumping, and throwing. Athletics have become the most truly international of sports, with nearly every country in the world engaging in some form of competition. Most nations send teams of men and women to the quadrennial Olympic Games and to the official World Championships of track and field. There also are several continental and intercontinental championship meets held, including the European, Commonwealth, African, Pan-American, and Asian.

Within the broad title of athletics come as many as two dozen distinct events. These events, generally held outdoors, make up a meet. The outdoor running events are held on a 400-metre or 440-yard oval track, and field events (jumping and throwing) are held either inside the track's perimeter or in adjacent areas.

In many parts of the world, notably the United States, Canada, and Europe, the sport moves indoors during the winter; because of limited space, some events are modified and several are eliminated altogether.

Also within the general scope of track-and-field athletics come separate but related competitions that are not contested on the track. Cross-country running competition is carried out on various types of countryside and parkland. Marathons and races of other long distances are run on roads, and the long-distance race walks are contested on measured road courses. The rules followed by all organized competitions are established and enforced by the International Association of Athletics Federation (IAAF) and its member body from each nation. The IAAF also ratifies all world records.

Abera (2013) noted that, unlike other sports, athletics does not need expensive equipment to starting which makes simple and one of the most commonly competed sports in the world. In other words, athletics is one of the purest of all sports, relying solely on the strengths of the human machine or human body rather than sophisticated technological implements to improve performance. In line with this view, (Brain, 2013) contend, that "Games played in a country can tell us a lot, how people in the particular country live with sport".

Unsurprisingly, when observed about sport and Ethiopia, relatively few but world finest distance runners just come to our mind. Hence, the New York Times called Ethiopia is the "running Mecca," due to its historical successes in the athletics program, it took 5th place in the world ranking late alone during the Olympic champion at Beijing Olympic 2008, International Olympic committee (IOC), (2010), noted on (Abera, 2013). The result shown, justifiably come to an agreement that Ethiopia has some of the best middle and long distance runners in the world.

Randall L. Wilber and Yannis P. Pitsiladis (2012) stated that "Among the Kalenjin and Arsi tribes that traditionally produce the best runners in Kenya and Ethiopia, respectively, it is common for schoolchildren to begin distance running at an early age, both as a sporting activity and as the primary method of transport to and from school. Although this early aerobic training does not appear to ultimately result in a higher VO2max in adult Kenyan and Ethiopian runners than in non–East African elite distance runners, it cannot be ignored as a potential factor contributing to their success."

However, identifying Kenyan and Ethiopian dominance in long distance running only is not the warranty for the future success and opportunities of Sebeta town athletics club that works in.

Few studies have been conducted about the challenges of long distance running in Ethiopia and they had their own limitations. Even though our athletes have achieved marvelous in both national and international level, the problems of long distance runners have not been researched thoroughly. In this regard this research supposed to provide relevant assessment on the major factors that hinder long distance runners' performance in the case of Sebeta town athletics club.

1.2 Statement of the Problem

Running involves the conversion of muscular forces translocated through complex movement patterns that utilize all the major muscle joints in the body. High running performance is reliant on skill and precise timing in which all movements have purpose and function.

Long distance running performance may directly and/or indirectly affected by multidirectional situations. Whether distance running performance is great, it is directly influenced by changes in utilizing oxygen, carbohydrate and fat, and the density of muscle mitochondria. Factors of affecting VO2max include muscle capillary density, hemoglobin mass (Hbmass), stroke volume, aerobic enzyme activity, muscle fiber type composition, and so on (Coyle, 1999).

It is important to figure out the potential of some particular place in terms of athletes' development and success towards the contribution of the country. Regarding this the researcher lives in Sebeta town since 2000 E.C. and observed the poor performance of the long distance runners in Sebeta athletics club. So it was necessary to investigate what were the possible challenges and factors which affect performance of long distance athletes' effectiveness in Sebeta town athletics club. Assessing factors which affect athletes' performance was important to identify the domains that help the development of athletes' best performance in the case of Sebeta town.

1.3 Research Questions

This study sought to answer the following research questions:

1. Is there conducive long-distance athletes' coaching practice environment in Sbeta sport Club?
2. How Sebeta Athletics Club is structured and organized?
3. Do coaches follow appropriate procedural training principles in training program?
4. How is the nutrition before, during, and after training and competition?
5. How facilities and equipment are fulfilling to Sebeta Athletics club?

1.3 Objective of the study

1.3.1 General Objective

The general objective of the study was to examine factors that affect the performance of long distance athletes of Sebeta town athletics club.

1.3.2 Specific objectives

- ☞ To examine long-distance athletes' coaching practice environment in Sbeta Athletics Club.
- ☞ To assess the structural organization of Sebeta Athletics Club.
- ☞ To investigate the coaches procedural training principles in training program.
- ☞ To assess nutrition of long distance trainees' before, during, and after training and competition.
- ☞ To evaluate facilities and equipment that are provided by Sebeta Athletics club.

1.4 Significance of the Study

The main focus of this study was to examine the major factors affecting long distance running performance in the case of Sebeta town athletes. Thus, the outcomes of the study are, therefore, expected to stimulate the stakeholders to improve the athletics club status and will improve the athletes' performance at the end. Thus, at its completion, the study will play a significant role to provide some value for the coach to minimize the major effects as possible and to deliver the training at his/her best skill to improve long distance athletes' performance. It will also have importance for administrative bodies to improve the quality of the coaches 'financial problems, and quality of sport facilities for athletes. Finally it will also use as a spring board for other researchers who are interested to investigate Sebeta Town Athletics Club by far.

1.5 Delimitations

It was the wish of the researcher if undertook extensive study on the whole issue of athletic all over the country's athletics club. However, due to various constraints the researcher delimited this study on the assessment of the major factors that affect long distance running in the case of Sebeta town Athletics Club and also delimited on some specific research questions and factors in order to make deep investigation on selected factors, and also delimited only on male athletes.

1.6. Limitation of the Study

In the investigation process the researcher encountered a lot of problems such as: difficulty in accessing information from respondents, it was difficult to get information from its respondents more especially from high level administrative and organizers of the club. It was solved by arranging time that is convenient for those higher club's administrative. The other potential limitation of the study was time constraints. This was due to the bureaucratic system of the organizations. Therefore, willingness and verbal approval of high officials of the stakeholder organizations was needed before any research could be conducted for interviews purpose. This affected the time in which this research has supposed to be finished in the time provided.

1.7. Definition of the terms

- **Athletes:** are persons who train for performance increment under the supervision of coaches in specific event.
- **Coach:** to train intensively by detailed instruction, frequency demonstration and repeated Practice for foot boiler.
- **Coaching:** is often used to cover a wide range of activities and usually to help someone proper for something.
- **Training:** it is a conditional exercise and program related with the objective to train.
- **Training principles:** A general law that used to apply during implementing different types of training.
- **Long distance athletes:** Athletes those who participate on distance which included 3000m, 5000m, 10000m, half marathon & marathon.

1.8 Organization of the Thesis

This research has organized in five chapters. Chapter one introduce the entire thesis, and it covered the background of the study, statement of the research problem, the objectives of the study, the significance of the study, the scope and limitation of the study. Chapter two is devoted to presenting a review of the literature related to conceptual issues. Chapter three covered the methodological approach, which will be employed and the method use to collect data for the research. Chapter four covered analysis of the data gathered and provided a solid interpretation to these data. The final chapter encompasses the findings of this study, the conclusion and recommendations.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1 Athlete Development

2.1.1 Athlete Development Long Term Approach

As understanding of the researcher it is obvious that young children have special needs in sport and should follow programmers which are specific to their needs. As coaches, we are also aware that any individual who has just commenced athletics has different needs from and capabilities for training than someone who has been doing it for long. This is true no matter what age an athlete starts being involved in athletics and emphasizes the importance of coaches knowing the "***training age***" as well as developmental age of each athletes they coach (Thompson, 2009).

Athletics is recognized as being a "late specialization" sport. This is because most athletes achieve their best performances generally between 24 to 34 years of age. Talking a long term approach to athlete development and training benefits all athletes, whatever their age or level of competition. The main concept of athlete development involves taking a long term approach to athlete development and training. This long term approach is designed to help individuals of all ages and abilities to optimize their development and reach their potential. As you begin to understand the background to this long term approach, you will understand why it is recommended by the IAAF for all coaches and athletes. Effective coaches choose a long term approach as it helps them to improve their athletes year after year, possibly until after the age of 40, the time when the body's biological clock causes performance to decrease. Even then, it will help athletes to get the best form what they have (Ibid, 2009).

In its simplest form, athlete development relates the structure and nature of training at any time to where an individual athlete is on their developmental pathway. This means that individuals are, "***doing the right things at the right time"*** for their long term, not necessarily immediate, development (Ibid, 2009). 10

The long term athlete development approach is an organized approach toward achieving the optimal training, competition and recovery throughout an athlete's career.

Sports scientists have reported that there are critical periods in the life of a young person in which the effects of training can be maximized. They have also concluded that it can take anything from eight to twelve years of training for a talented athlete to achieve elite status. This has led to the development of athletic models, which identify appropriate training aims at each stage of the athlete's physical development (Mackenzie B, 2006).

2.1.2 Stages of athlete development

Stage of athlete's development is the main issue on the progress of athlete's performance. According to (*Thompson ,2009*), Providing a uniform athlete development pathway within a **"late specialization"** sport like athletics means that we can recognize a five-stage athlete development model. The progressive nature of this five stage model guides athletes from the kids Athletics stage, Multi- Event Group Development, Specialization stage through to the performance stage.

Stage 1- The Kids Athletics Stage

This stage is bounded in between 5/7-11/12 optimal biological age and 0-2/4 training age range and is the first stage for athletes in the IAAF development pathway reflecting the well-established IAAF Kids Athletics training and competition programs designed for young children *(Ibid, 2009*).

The Kids Athletics developmental stage should be a structured fun introduction to athletics like activities with an emphasis on developing basic fitness and foundation movement skill. It emphasizes such skills as the ABCs of movement: Agility, Balance, Coordination and speed. The ABCs of athletics walking, running, jumping and throwing and the movement skills related to body awareness and to hand –eye and foot-eye coordination *(Ibid, 2009*).

All these foundation skills and movements add together to provide a vocabulary of movement which are referred to as "physical literacy". To develop this basic physical literacy, there should be participation in as many plays, or play like, games and movement 11 patterns as possible. The

annual plan should have no per iodization structure but there should be a well-planned programme of basic conditioning with proper fitness and skill progressions that are monitored regularly. Competition can take place at any time but training is not structured for or specific to competition *(Ibid, 2009*).

Stage 2 – The multi – Events stage

This second stage of development is bounded in between 11/12-13/14 year's optimal biological age and 2-4 years training age where all individuals learn how to train and develop their athletic skills. For young athletes this means participating in and learning all the events of athletics, along with basic technical competition and tactical skills. Although the focus is on training, competition can be used to test and refine skills at any time of the year. In this stage, training can begin to be placed in a per iodized way but because of the need to build a "solid base" the training year should only have one macro cycle, making it a "single per iodized" year *(Ibid, 2009*).

Stage 3- The Event Group Development Stage

The third stage is the event group development stage and sometimes referred to as the stage for "building the engine". This stage is bounded in between 14/15-16/17 year's optimal biological age and 5-7 years training age range *(Ibid, 2009*).

During this stage there is an emphasis on greater individualization of fitness and technical training. For young athletes, this is the time to begin to focus on an event group rather than all events. But they are a runner and walker rather than an 800m athlete a thrower rather than a javelin thrower a jumper rather than a triple jumper. As athletes enter this stage, some enjoy doing all events equally and may choose the combined events event group. The emphasis in this stage is still on training which is predominantly high in volume and low in intensity and the time commitment to training will increase for both athletes and Coach *(Ibid, 2009*).

There are now specific targets for each competition undertaken with a view to learning basic tactics and mental preparation. The reason that many athletes reach a performance plateau 12 during the later stages of their careers is primarily due to an over emphasis on competition

instead of training during this stage, which makes it a significant period in their athletic development.

The training year may be either a single or double per iodization structure but the longer the single per iodization is maintained, the better the athlete's foundation for the future. Planned training and competition modeling is introduced toward the end of this stage. Programming becomes more structured with defined taper and peak periods, which requires ongoing evaluation and modification, introduction of event specific training begins at this time.

During this stage, over the course of 4 weeks to 10 months depending on the program, other sports are reduced to 1 or 2. Training should approach a total time of 12 hours per week towards the end of the stage, involving 4-7 sessions of physical training and activity. 3-5 of these sessions should be in athletics event specific areas (Ibid, 2009).

Stage 4- The Specialization Stage

This stage is bounded in between 16/17-18/19 year's optimal biological age and 7-9 years training age range and is referred to as a '*fine turning of the engine*'. There is a continued emphasis on physical conditioning, maintaining high volume training but now with increasing intensity at appropriate time of the year. The athlete now will tend to focus on an event or a small number of events. Individual strengths and weaknesses are now more clearly identified and action can be taken to improve these (Ibid, 2009).

There is a gradual shift towards performing techniques and tactics in a variety of competitive conditions during training which increasingly model competitive environments. The coach will focus on optimizing preparation both physically and mentally. The training year again is a single or a double per iodized plan and for the first time, competition will influence the structure of the annual plan.

The number of athletics sessions per week will increase to 5-9 as participation in other sports declines to 2 or less sessions per week. The practice to competition ratio is 90/10 and length of the athletics session can be anywhere from 8 weeks to 10 months. The number of 13 competition opportunities in the season becomes event specific and dependent up on the type of per

iodization. If single per iodization is used the number of competitions should be 10-15. If double per iodization is used the number would be 12-18 (Ibid, 2009).

Stage 5 – The Performance Stage

The final stage of preparation and participation in athletics is the performance stage that starts at the optimal biological age of 18/19 years and above & training age of above 10 years and lasts until the individual retires from actively competing.

The emphasis now is on further specialization, and where possible appropriate, performance enhancement. All of the athlete's physical, technical, tactical and mental capacities should now be fully established with the focus shifting to the optimization of performance, at whatever level. All athletes can be trained to peak for specific competitions and major events; whether these competitions be the Olympics, a regional competition or a local meeting or event, with each aspect of training individualized. An individual's annual plan may show either single, double or multiple per iodization, depending on the events being trained for and taking in to account the athletes" personal needs and circumstances (Ibid, 2009).

To sum up, *Thompson 2009* while strength on the importance of each developmental phases states that even if an athlete misses the optimum biological ages for each development stage indicated for the five stages of the IAAF athlete's development pathway, the way should still apply. No matter what the athlete's age, following the stages of the athlete development pathway permits the progressive introduction to and development in athletics. For instance a 14-years old athlete with the biological of 16 years (early mature) and 3 years training age should be placed in the multi-event stage regardless of the biological age.

2.2 Factors that affecting athletics performance

2.2.1 Athletic Talent

Talent generally is considered an exceptional natural ability to attain goals (Moon, 2003), therefore, logically, athletic talent ought to be exceptional natural ability of an individual to perform a sports-related task or activity. Yet, how does one determine athletic ability and how should this concept be measured? We have yet to determine an exact science in discovering or

developing athletic talent. "It may be caused partly by disagreements about the definition of athletic talent, which continues to be a point of discussion among scholars (Abbott et al, 2004; Howe et al, 1998). One way to begin to define talent is to seek evidence of its existence.

Researchers argue that athletic talent identification and development must recognize the multidimensional and dynamic nature of sport talent (Bailey et al, 2006, Baxter-Jones et al., 1994; Edwards, 1994; Helsen et al., 2000; Nieuwenhuis et al., 2002). As Abbott et al 2004 maintained we should be examining physical (biometric), performance (motor), and psychological factors depending on whether we are trying to identify current performance ability or future performance.

According to Howe et al, 1998 noted people are often vague when referring to talent and maintained that we should be more specific regarding what form talent takes and how it might select athletes.

In an e sort to begin defining talent, Howe et al. provided properties of talent:

- Genetic or innate factors exist.
- Advance indicators of talent can exist at an early stage.
- Evidence of talent potential can be used as a predictor of achievement.
- Talent is limited to a small part of the population, and
- Talents are reasonably domain-specific. These properties are helpful, but are not all inclusive of this complex concept.

As Helsen et al, 2000 applauded Howe et al. attempt to define talent, noting that the definition may assist researchers; however, these authors could only support three out of the five properties. Howe and his colleagues could not and evidence that talent could predict neither excellence nor that talent was domain-specific. Additionally, Helsen et al. noted the lack of evidence to support excellence predictability and domain specificity is particularly problematic because these factors are the main tools used to identify and select talented youth. Despite the flaws revealed by both Howe’s and Helsen’s research teams, their work examining the elements of athletic talent is crucial to moving toward a more getting and universal definition.

Similarities between the identification and development of athletic talent and that of gifted children are rarely compared. Interestingly, however, they share analogous processes. The purpose of this review is to investigate the progress of research regarding athletic talent identification and development, including current issues, and provide suggestions for future research. Key roadblocks to the identification of athletic talent include attempting to identify talent at an early age, use of flawed athletic talent identification models, and lack of education of coaches, parents, and teachers regarding how to properly identify athletic talent.

2.2.2 Elements in Talent Identification

The most common and obvious way to identify athletic talent is to examine physical ability, but current research cautions against dimensional approach. As Simonton, 2001 notes that the idea that talent is a complex topic, stating that multiple components contribute to the development of talent in any domain. As Abbott et al, 2004 study denoted the importance of psychological skills in talent identification and development.

The authors claimed their approach to athletic talent identification and development acknowledges the difference between performance and potential: (a) Main emphasis should be placed on potential to develop rather than immediate performance; (b) one's potential to develop rests on psycho-behavioral components; (c) in order to develop in a sport, essential fundamental movement skills must be present in their vocabulary (psychomotor); and (d) talent identification and talent development processes should be combined. Seemingly, it is difficult to include one aspect of the approach without addressing the others. "Is new approach may prove to be useful to those who are interested in talent identification and development.

2.2.3 Talent Development Environmental Factors in Athletics

Talent development environment taxonomic classification that summarizes a range of the environmental factors is one of the most important theoretical advances. Talent development environmental factors: such as sport culture, sporting policies, socioeconomic status, education, and birthplaces were discussed in this section. Luck/chance, an interesting environmental factor, was not considered in this study as little implications can be drawn from it (Gagne, 2003). It should be noted that some factors can influence participants at a more macro level (e.g., culture

and policy) as compared to other factors (e.g., birthplace and education), having more overarching and systematical impacts on the talent development process (Gagne, 2003; Martindale et al, 2007).

2.2.4 Maximal Oxygen Uptake

It has been postulated that the Kenyan and Ethiopian distance runners develop a high maximal oxygen uptake (VO2max) as a result of extensive walking and running from an early age, which ultimately contributes to exceptional endurance-running performance later in life. Onywera et al1 reported that 86% of Kenyan international- level runners used running (vs. walking or vehicle transport) as their main method of travel to school when they were children In comparison, only23% of nonathletic Kenyan control subjects indicated that they had run to school as children. Similar results were seen in Ethiopia, where 68% of elite marathon runners reported that they had used running (vs. walking or vehicle transport) as their primary method of travel to school when they were children, compared with 24% of Ethiopian nonathletic control subjects. The elite Ethiopian marathon group, 73% indicated that the average total distance run to and from school was between 5 and 20 km. However, it is not clear whether this type of robust running background at an early age has an effect on VO2max that distinguishes the running performance of Kenyan and Ethiopian athletes.

2.2.5 Living and Training at Altitude

A shared characteristic of the Kenyan and Ethiopian distance runners is the fact that most of them were born and raised at an elevation of approximately 2000 to 2500m in eastern Africa. About 75% of Kenya's best runners come from just 1 of the country's 40 tribes, the Kalenjin, who comprise approximately 10% of the total Kenyan population.30 Furthermore, many of Kenya's best run Kenyan and Ethiopian Distance Runners come from a sub tribe of the Kalenjin known as the Nandi, who comprise only about 3% of the total Kenyan population.30 The Kalenjin have lived for centuries on the western rim of the Great Rift Valley, which is the distinct geological formation running through Kenya in a north–south direction that separates the western third of Kenya from the rest of the country. The Kalenjin home land is an area of rolling green hills located in the Great Rift region at an elevation ranging from 1830 to 2450 m. A similar altitude-based geographical residence is seen among the Ethiopian runners, who come

primarily from the Arsi tribal region and secondarily from the Shewa tribal region. Both the Arsis and Shewas have lived for centuries in the highlands of the Great Rift Valley, which extends northward from Kenya into southern and central Ethiopia. The capital city of Addis Ababa serves as a major training site for Ethiopia's elite runners and is located at approximately 2355 m. In addition, Ethiopian runners take advantage of the nearby Entoto Hills to train at elevations of approximately 3000 m. Elite Kenyan runners living and training in the area of the Great Rift Valley employ a traditional approach to altitude training—they "live high" and "train high" using natural, terrestrial altitude. It appears that they have the innate ability to train at relatively high intensity (defined as anaerobic threshold velocity to VO2max velocity) despite the physiological strain and limitations imposed on humans during exercise in hypoxia. Indeed, some researchers have suggested that one of the primary factors for the Kenyans' success in distance running is their ability to train on a consistent basis at running velocities at race pace, or faster, even at altitude.

2.2.6 Motivation to Achieve Economic Success

Although advanced in many areas of its society, Kenya still reports an unemployment rate of approximately 40%, and about half of the Kenyan population lives below the World Health Organization (WHO) poverty line. Similarly, 39% of Ethiopian citizens live below the WHO poverty line and their unemployment rate is approximately 35%. Success in distance running provides an athlete the means to advance to the top of Kenyan and Ethiopian society, which serves as a significant motivational factor. Onyweraet reported that among Kenya's elite distance runners, 33% indicated that economic success was the primary reason they trained and competed. This was markedly higher than other potential motivational factors including "Olympic glory," which only 14% of the Kenyan elite runners listed as the main reason they ran. Being a successful runner in Kenya and Ethiopia can translate into economic and social advancement for the athlete for the rest of his or her life and can have a similar positive effect on the runner's immediate and extended family. Fueling this motivation for economic and social success is the great "tradition of excellence" that links today's outstanding Kenyan and Ethiopian distance runners to their legendary predecessors. In Kenya, this tradition of excellence began with the gold-medal performance (1500 m) of Kip Keino in the 1968 Mexico City Olympics and continued with Olympic and/or World Champions Henry Rono, Peter Rono, Paul Tergat, and

David Rudisha. Many of these great champions were initially trained and developed into international-caliber runners at Saint Patrick's High School (Figure 5), located in the village of Iten (~2450 m) in the Great Rift region, under the guidance and coaching of Brother Colm O'Connell. Saint Patrick's continues to serve as Kenya's "running factory," where the most-promising young runners are exposed daily to the tradition of Kenyan running excellence and accompanying high expectations. A similar tradition of excellence is seen in Ethiopia. It began withthe gold-medal marathon performance of AbebeBikilain the 1960 Rome Olympics and continued with Olympic and/or World Champions MamoWolde, MirutsYifter, Haile Gebr Selassie, andKenenisaBekele. Addis Ababa's MeskelSquare is often referred to as Ethiopia's "field of dreams," where dozens of the country's most promising runners have come for years to train in pursuit of running excellence. This motivation for economic success nurtured by a strong tradition of excellence should not be discounted as an important factor behind the success of the Kenyan and Ethiopian distance runners. As Haile Gebre Selassie has stated, We have so much inspiration. We want to be like Bikila, Wolde, Yifter. They gave us a reason to dream and hope. They are our role models. We see in them something that sparks our imagination and encourages us to change our lives for the better.

2.3 Nutrition Considerations Athletes

Nutrition plays a significant role in the performance of athletes. In 2009, a comprehensive review of nutrition and athletic performance was published by three governing organizations related to the field of nutrition. Their position on nutrition and athletic performance is stated as follows: "It is the position of the Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine that physical activity, athletic performance, and recovery from exercise are enhanced by optimal nutrition. These organizations recommend appropriate selection of foods and fluids, timing of intake, and supplement choices for optimal health and exercise performance." (Rodriguez N., DiMarco N., Langley S., 2009).

2.3.1 Energy

Adequate energy intake is essential for maximizing performance. Without adequate calorie consumption, the body will use lean muscle tissue for energy during exercise resulting in poor performance, a greater recovery period will ensue, and are diction in strength over time will

occur. Not only will performance be compromised without proper energy intake but the athlete would be at risk for nutrient deficiencies that could lead to osteoporosis, anemia and stunted growth. Many factors influence energy expenditure making it difficult to establish individual energy needs. Age, gender, heredity, body size, the amount of fat free mass (FFM) and type, duration and frequency of exercise all directly influence energy expenditure (Donahoo W., Levine J., Melanson E., 2004). In general, males have higher energy needs than females; additionally, energy needs are greatest in adolescence, decrease with age and increase as greater muscle mass increases. The Dietary Guidelines for Americans (2010) and the Institute of Medicine, have established Dietary Reference Intakes (DRI) for different age, gender and physical activity using Estimated Energy Requirements (EER) equations.

2.3.2 Carbohydrates

Carbohydrates are the most efficient source of energy for the body and are the only source of energy available for anaerobic activity. For this reason, inadequate intakes of carbohydrates will greatly impede sport performance. Additionally, carbohydrates spare muscle tissue, are the primary energy source for the nervous system and help improve and maintain intestinal health (Rosenbloom, C. 2000). The Dietary Reference Intake (DRI) for carbohydrate consumption among adolescent males (ages 14-18 years old) is 100 grams per day (DGA, 2010). The DRI is established as the minimum amount of carbohydrates needed to supply the brain adequate energy to function appropriately. This DRI does not take into consideration the carbohydrates needed to maintain blood glucose during exercise or the need to maintain adequate skeletal muscle glycogen (PetrieH., Stover E., Horswill C., 2004). The more physically active the athlete is, the more carbohydrates that athlete needs to consume. Additionally, the amount of carbohydrates required is dependent on the athlete's total energy expenditure, gender, type of sport and the environmental condition in which the athlete is competing (Rodriguez N., Di Marco N., Langley S., 2009). The recommended intake of carbohydrates for athletes ranges from 6 to 10 g/kg/day (Rodriguez N., Di Marco N., Langley S., 2009). In general, athletes competing in endurance activities have higher carbohydrate needs than athletes competing in strength activities. It is recommended that an athlete consume no less than 50% of their calories as carbohydrates (Rodriguez N., Di Marco N., Langley S., 2009)

2.3.4 Protein

Protein supports the growth, maintenance and repair of body tissues, particularly muscle. Protein makes up enzymes that are needed to facilitate chemical reactions with in the body. Protein helps maintain fluid balance, transport nutrients and helps defend the body against disease (Rosenbloom, 2000). For the athlete, protein plays an essential role for muscle growth and recovery following intense training (Phillips S., Moore D., Tang J., 2007). The DRI for protein for 14 to 18 year old males is 0.73 g/kg/day and the Acceptable Macronutrient Distribution Range (AMDR) for protein is 10-35% of total calories (DGA, 2010). Adequate energy intake is essential to maximize utilization of protein specifically for muscle growth and repair (Rosenbloom, 2000).Both endurance and strength exercises influence the protein needs of an athlete. For the endurance athlete, an increase in protein oxidation during exercise provides the basis for an increased protein need. The recommended protein intake for endurance athletes range from 1.2 to 1.4 g/kg/day. For athletes participating in strength an resistance exercises, adequate protein is essential to support muscle growth and repair. The recommended protein intake for strength athletes range from 1.2 to 1.7 g/kg/day (Phillips S., Moore D., Tang J., 2007).Extensive research has unveiled differences in absorption rates of specific proteins, whey and casein and their relation to sport performance, namely muscle anabolism (Boirie, 1997 & Dangin, 2001). These proteins are both derived from milk but have distinct differences in digestion and absorption. Whey protein is considered a “fast” protein. Whey is a soluble protein that is emptied from the stomach rapidly resulting in large increase in plasma amino acids over a short duration (Boirie, 1997). Whey proteins therefore ideal for stimulating rapid protein synthesis and is most effective when consumed directly before and after a workout (Dangin, 2001). Casein protein is relatively insoluble and clots in the stomach, significantly delaying gastric emptying. Casein is considered a “slow” protein (Boirie, 1997). A continual supply of amino acids are released over time as a result of this delayed gastric emptying creating Dietary protein requirements are increased with exercise and

2.3.5 Fat

Fat provides energy to the body, serves as an abundant energy reserve and protects and insulates internal organs. Fat is a structural component of cell membranes, a precursor to the hormones testosterone and estrogen and is the carrier of fat soluble vitamins A, D, and E

(Rosenbloom, C. 2000). The Acceptable Macronutrient Distribution Range (AMDR) for fat is 20% to 35% of calorie intake (IOM, 2002). Despite the overwhelming evidence of the quintessential role carbohydrates have on exercise performance, researchers have delved into a concept that consuming a high fat, low carbohydrate diet could improve performance to a greater extent. Unlike glycogen, the body has an essentially unlimited storage of energy in the form of lipids (Berning and Steen, 59-72, 2006). Additionally, as the duration of exercise increases, the reliance on lipid energy also increases. The theory is that a high fat diet could improve muscle lipid metabolism during exercise thus sparing muscle glycogen and vastly improving endurance performance (Berning and Steen, pp.59-72, 2006). For example, Vogt and colleagues (2003) found that cycling work output and half-marathon run time were consistent when subjects consumed a high fat diet with a significantly greater contribution of lipids for energy compared to a high carbohydrate diet (Vogt, 2003). 10FatFat provides energy to the body, serves as an abundant energy reserve and protects and insulates internal organs. Fat is a structural component of cell membranes, a precursor to the hormones testosterone and estrogen and is the carrier of fat soluble vitamins A, D, and E (Rosenbloom, C. 2000). The Acceptable Macronutrient Distribution Range (AMDR) for fat is 20% to 35% of calorie intake (IOM, 2002). Despite the overwhelming evidence of the quintessential role carbohydrates have on exercise performance, researchers have delved into a concept that consuming a high fat, low carbohydrate diet could improve performance to a greater extent. Unlike glycogen, the body has an essentially unlimited storage of energy in the form of lipids (Berning and Steen, 59-72, 2006). Additionally, as the duration of exercise increases, the reliance on lipid energy also increases. The theory is that a high fat diet could improve muscle lipid metabolism during exercise thus sparing muscle glycogen and vastly improving endurance performance (Berning and Steen, pp.59-72, 2006). For example, Vogt and colleagues (2003) found that cycling work output and half-marathon run time were consistent when subjects consumed a high fat diet with a significantly greater contribution of lipids for energy compared to a high carbohydrate diet (Vogt, 2003). Another study demonstrated that a 2-week high fat diet significantly improved moderate intensity exercise to exhaustion when compared to a 2-week high carbohydrate diet. Moreover, subjects on the high fat diet demonstrated a significant sparing effect of muscle glycogen during exercise (Lambert, 1994). In contrast, Helge et al., (1996) concluded that consuming a high fat diet is unfavorable to endurance exercise performance. Over the course of seven weeks, time to exhaustion was 36%

greater in subjects consuming a high carbohydrate diet compared to those consuming a high fat diet. Additionally, when subjects consuming a high fat diet were introduced to a high carbohydrate diet, time to exhaustion improved 15% in just one week (Helge, 1996). Langfort et al., (1997) measured the effects of a low carbohydrate, high fat diet on anaerobic exercise. Mean power output and muscle glycogen stores were significantly lower in the low carbohydrate, high fat diet. An in-depth and critical review of the research on a high fat diet compared to a high carbohydrate diet concluded that there is insufficient evidence supporting any benefit a high fat diet could have on sport performance (Jeukendrup, 2003). By virtue of a reduction in muscle and liver glycogen, a high fat, low carbohydrate can be detrimental to performance and should not be warranted (Jeukendrup, 2003). Additionally, the health risks associated with athletes consuming a high fat diet are unknown and additional research should be conducted (Jeukendrup, 2003).

2.3.6 Hydration

During physical activity the body generates heat and responds by sweating to maintain temperature homeostasis. The sweat evaporates and through this physiological process provides a method to maintain temperature homeostasis during physical activity. The water that is lost through sweat needs to be replaced and this makes hydration critical to the athlete's performance and health. Dehydration is defined as a water deficit that is greater than 2% of body weight (Sawka M., et al., (2007). Dehydration reduces both aerobic and anaerobic performance as well as cognitive performance (Rodriguez N. DiMarco N., Langley S., 2009). 12There are many factors that are involved when calculating an athlete's fluid needs. The environment the athlete is in, the type of clothing the athlete is wearing and the duration and intensity of exercise all influence the rate of sweat lost. In addition, body weight, metabolism and genetics also influence the rate at which an athlete will sweat. In fact, sweat rates can range from 0.3 to 2.4 liters/hour (Sawka M., et al., 2007). The high variability of fluid needs make it difficult to determine a general recommendation of how much fluid the adolescent athlete needs.

According to the American College of Sports Medicine, the best way athletes can monitor hydration status is through urine and/or body weight measurements. First morning urine specific gravity (USG) of less than or equal to 1.020 is considered dehydration. Obtaining a base-line body weight representing dehydration can be done simply by multiple morning body weights.

Changes in body weight can reflect water loss through sweat and can be used to calculate fluid replacement needs (Sawka M., et al., (2007).

Prior to exercise, an athlete should consume fluid in the amount of approximately 5 to 7 mol/kg body weight at least four hours before exercise (Sawka M., et al., 2007). Hydrating during exercise is critical to the athlete and, as discussed above, specific recommendations are difficult to generate (Sawka M., et al., 2007). Godek and colleagues (2005) attempted to determine the sweat rate of American football players during exercise. The average sweat rate of sixty-two summer training male football athletes was 2.14 L/hr. The average intake of fluid was 1.42 L/hr. resulting in a 1.58 pound decrease in body mass per hour of activity.

Researchers concluded that football athletes have a high sweat rate, particularly during practices in the summer, m13essential to replace what is lost to reduce risk of dehydration and loss in performance (Godek S., Bartolozzi A., Godek J., 2005). After exercise, the athlete should consume between 16 to 24 ounces of fluid for every one pound of body weight lost during exercise (Rosenbloom, 2000). Adolescent athletes may not be consuming adequate amounts of fluids to compensate for what they lose through exercise. Horswill (2005) compared fluid consumption of adolescent athletes with adult athletes in similar exercise conditions. The adult group consumed significantly more fluid compared to that of the adolescent group.

2.4 Before, During and After Exercise

2.4.1 Before Exercise

It is well established that glycogen stores are directly correlated with the intensity and work output of exercise. Endogenous glycogen storage is limited and is most directly affected by the athlete's nutritional status therefore making the timing of nutrition prior to exercise crucial to performance. Traditionally, carbohydrate intake has been at the forefront of research in the realm of improving glycogen storage prior to exercise. However, more recent research is beginning to surface supporting the consumption of protein and amino acids along with carbohydrates prior to exercise to further maximize sport performance (Kerksick 2008). Kavouras et al., (2004) compared the effects of a high carbohydrate versus a low carbohydrate diet on a 45 minute cycling workout (Kavouras, 2004). The study included it on the first three days, participants

consumed a diet consisting of 50% carbohydrates, 25% fat and 15% protein. The next three days, half the cyclists consumed a high carbohydrate diet with at least 600 grams of carbohydrates and 46 grams of fat per day while the other half consumed a low carbohydrate diet with 100 grams of carbohydrates and 245 grams of fat per day. On the seventh day, cyclists performed a 45 minute intense cycling exercise at 82% VO2max. Muscle glycogen levels were significantly (45%) higher in the high carbohydrate group. Additionally, serum glucose during and after exercise was significantly higher in the high carbohydrate group (Kavouras, 2004).Bussau et al., (2002) studied the effects of a three day carbohydrate load on muscle glycogen levels (Bussau, 2002). Researchers had eight endurance trained male athletes consume a high carbohydrate (10 g/kg/d) diet for three days while abstaining from physical activity. Muscle biopsies on the first and third day were taken and glycogen stores were recorded. Glycogen levels nearly doubled, increasing from 95 to 180 mmol/kg. Researchers concluded that a high carbohydrate diet paired with physical inactivity greatly increases glycogen storage over three days (Bussau, 2002). Researchers at the University of Texas investigated the effects a pre-exercise meal had on muscle glycogen utilization, blood substrates and respiratory exchange ratio (Coyle, 1985). The design consisted of seven male endurance cyclists who completed a cycling test in a fasting and a fed state. The fasting state consisted of a 16-hour fast, prior to exercise. The fed state consisted of a breakfast meal four hours prior to exercise providing 2.0 g/kg carbohydrate and 0.3 g/kg protein. The fed state produced a 42% elevation in muscle glycogen at the start of exercise compared to the fasting state. 15During the fed state, cyclists also had a 45% greater rate of carbohydrate oxidation. (Coyle, 1985) A recent review summarized the research on pre-exercise carbohydrate consumption on exercise performance (Ormsbee, 2014). A total of nineteen research articles were reviewed of which nine showed an increase in performance, nine showed no increase or decrease in performance and one showed a decrease in performance. The authors concluded that, after reviewing the literature, consuming a meal abundant in carbohydrates prior to exercise appears to benefit performance (Ormsbee, 2014). The effects of adding protein to carbohydrates prior to exercise on sport performance has been more recently examined. Tipton et al., (2001) studied the effectiveness of consuming amino acids and carbohydrates on protein synthesis before and after resistance exercise. This study consisted of six subjects, three male and three female. On different occasions, each subject consumed an amino acid and carbohydrate completing a one-repetition maximum leg press and leg extension. Researchers concluded that

the consumption of the amino acid and carbohydrate solution before resistance exercise has a greater impact on muscle protein synthesis than when consumed after (Tipton K., 2001).

Candow D. et al., (2006) compared the effects of consuming soy versus whey protein with carbohydrates before and after exercise over an eight week resistance training (Candow, 2006). The study consisted of twenty-seven young adults, both male and female, who consumed either a whey and carbohydrate solution, soy and carbohydrate solution or a carbohydrate placebo solution before and after resistance 16 exercise. Both the whey and soy groups showed a significant increase in lean muscle mass and strength compared to that of the placebo group. There were no significant differences between the whey and soy groups.

These findings suggest that consuming protein and carbohydrates together prior to exercise can significantly improve muscle protein synthesis (Candow, 2006). Coburn et al., (2006) examined the effects of supplementing with whey protein and leucine on performance before and after exercise (Coburn, 2006). The study consisted of thirty-three men who consumed either 20 g of whey and 6.2 g of leucine, 26.2 grams of maltodextrin (placebo) or nothing (control), thirty minutes before and immediately after resistance training for eight weeks.

Subjects who consumed the whey and leucine had a significantly greater impact on strength compared to that of the placebo and control. Strength in this group was 34% greater than the placebo at the end of the eight weeks (Coburn, 2006). Based on the most recent research, the Into national Society of Sports Nutrition recommends consuming 600-1000 grams of carbohydrates daily or 8-10 g/kg/d to maintain maximal storage of glycogen (Kerksick C., 2008).

2.4.2. During exercise

In regards to nutrient timing, it is optimal to consume 1-2 g/kg carbohydrate and 0.15-0.25 g/kg protein, 3-4 hours before exercise (Kerksick C. It is well known that consuming carbohydrates during exercise maintains blood glucose and carbohydrate oxidation, thus directly improving the muscles capacity to do work efficiently (Tarnopolsky 2005). The body can utilize exogenous sources of 17carbohydrates at a rate of 1.0-1.1 g/min., roughly 60-66 grams of carbohydrates every hour (Jeukendrup, 2000). This rate is limited by the intestinal absorption capacity, consuming carbohydrates at a higher rate can cause gastrointestinal distress whereas consuming

less could risk hindering performance (Jeukendrup, 2005). Therefore, nutrient timing during exercise is critical for maintaining and improving performance.

Febbraio M. et al., (2000) analyzed the effect of ingesting carbohydrates before, during or both on exercise metabolism and performance (Febbraio, 2000). The study consisted of seven endurance-trained males who were given a controlled, high carbohydrate (71% of calories) diet 24 hours before a cycling exercise test. The test consisted of 2-hours cycling at 63% of the subjects peak power output, followed by a time trial. Subjects received a total of four supplement regiments, each separated by at least a week duration: a placebo 30 minutes before and during cycling, a placebo 30 minutes before and 2 g/kg of carbohydrates during, 2 g/kg of carbohydrates 30 minutes before and a placebo during, or 2 g/kg of carbohydrates before and during. Carbohydrate consumption before exercise was associated with high plasma glucose levels before the exercise. During the first 80 minutes of exercise, plasma glucose levels declined among all groups similarly. After the 80 minutes, the groups consuming carbohydrates during exercise maintained their blood glucose and those receiving a placebo continued to decline. The groups that received the carbohydrate during exercise had significantly better time trial performance compared to those who did not. A compelling conclusion of this study was that the consumption of carbohydrates before exercise improves performance only when carbohydrate consumption is maintained throughout exercise (Febbraio, 2000). 18Another study analyzed the effects of consuming carbohydrates during a cycling exercise test (McConell, 1999). Subjects cycled at 70% VO2max until volitional fatigue and received either a carbohydrate solution or a placebo before and every fifteen minutes during exercise. Subjects consuming the carbohydrate solution were able to cycle forty-seven minutes longer than compared to the placebo (McConell, 1999). A similar study examined the effects of consuming carbohydrates on performance during high-intensity intermittent shuttle running (Patterson, 2007). Seven, trained male subjects completed five intermittent variable speed running followed by a run to exhaustion. Subjects consumed either a carbohydrate gel or a placebo before the exercise and every 15 minutes during exercise. Blood glucose levels and the run time to exhaustion were both significantly higher in the carbohydrate group. Researchers concluded that consuming carbohydrates both before and during exercise, improved performance (Patterson, 2007).

Widrick J., et al., (1993) studied carbohydrate consumption during exercise and its effects on muscle glycogen and performance (Widrick, 1993). Endurance trained subjects were required to cycle for 70 kilometers. The subjects were under four different conditions: high muscle glycogen with carbohydrates administered during exercise, high muscle glycogen without carbohydrates administered during exercise, low muscle, 2008).

2.4.3. After Exercise

Net muscle protein balance is the difference between muscle protein uptake and muscle protein breakdown. Exercise has a positive influence on both muscle protein breakdown and, to a lesser extent, muscle protein uptake resulting in a negative muscle protein balance (Phillips, 1999, Pitkanen, 2003 & Tipton, 2013). Striving for a positive net muscle protein balance is essential for promoting muscle hypertrophy and reducing fatigue and soreness that can occur as a result of exercise (Kerksick, 2008). Proper timing of nutrition, specifically amino acids from protein, greatly influences the uptake of muscle protein thus resulting in a more positive net protein balance (Tipton, 2013 &Borsheim, 2001). Borsheim E., et al (2001) analyzed the effects that consuming essential amino acids had on blood essential amino acid levels and muscle protein balance (Borsheim, 2001). Subjects consumed 6 grams of essential amino acids one and two hours after exercise. Both blood essential amino acids and muscle protein balance increased significantly with the consumption of the supplement.

Researchers concluded that there 21is a dose-dependent effect of essential amino acids on muscle protein uptake (Borsheim, 2001). Another study involving six untrained objects measured the relationship between resistance exercise and hyper aminoacidemia and their effect on skeletal muscle (Biolo, 1997). Hyper aminoacidemia is a condition in which there is excess amounts of amino acids in the bloodstream. Subjects first went through a rest study in which they received infusions of amino acids without exercise. One to four weeks after the rest study, subjects received an exercise study that consisted of infusions of amino acids directly after exercise. Muscle protein synthesis in the exercise group increased by 291% compared to 141% in the rest group. Furthermore, amino acid transport was 30-100% higher in the exercise group when compared to the rest group. It was concluded that improvement in muscle protein uptake is related to exogenous amino acids is further amplified when consumed directly after exercise

(Biolo, 1997). Additional research has demonstrated that adding carbohydrates with protein after exercise can further stimulate muscle protein uptake.

After exercise, muscles are highly sensitive to insulin (Holloszy J., 2005). Therefore, increasing insulin secretion by way of consuming carbohydrates with protein can further improve protein uptake into the muscle cells. Moreover, the addition on of carbohydrates improves muscle glycogen re-synthesis (Tarnopolsky, 2005 &Kerksick, 2008). For example, Tipton K., et al (1999) found that when subjects consumed 13.4 g of essential amino acids along with 35 grams of sucrose after exercise, net nitrogen balance changed from -495 mol/mol to 416 mol/mol within 10 minutes of consumption. Researchers concluded that consuming protein along with carbohydrates is an adequate form of metabolism (Tipton, 1999). Consuming protein, specifically essential amino acids, immediately after exercise has been shown to improve muscle.Protein uptake thus increasing the overall net muscle protein balance. Though the ideal time of consumption and amount of amino acids has yet to be determined, the International Society of Sports Nutrition recommends consuming 6-20 grams of essential amino acids along with 30-40 grams of carbohydrates within three hours after exercise (Kerksick, 2008).

2.5 Training principles

Training can be viewed as a very powerful stimulus which evokes a response in the body and it allow the athlete the best chance of achieving their performance goal. For this to become a reality the athlete must develop on all level, but principally there needs to be a profound physiological and physical development in order for this occur (Gordon, 2009).

As illustrated in (Robinson, 2010) for maximizing the performance of players the coach should designing and implementing the following training principles component;

Principles of specificity: the training need to be specific to the activity being undertaken.

Principles of progression: increasing the volume of exercises places added stress on the body and must be done progressively. Increases in volume should not be large enough to cause injury, but just enough to challenge the mind and body.

Principles of overload: the performer needs to over load the body in order to improve performance.

Principles of reversibility: ceasing the exercise can have reversing effects.

Principles of variety: the coach should ensure that the training program includes a variety of training method in order to maintain the motivational level of the performers.

CHAPTER THREE: RESEARCHDESIGN AND METHODS

3.1 Research Design

The research design of this study was descriptive survey. Because the researcher believed that it allowed identifying and describing the current state of the problem. The research method was both qualitative and quantitative approaches of organizing and analyzing the data supported by mean, standard deviation, graphs and tables.

3.2 Population and Sampling Size

Currently in Sebeta town athletics Club there are 35 trainees in long distance categories, 2 trainers, 3 administrative bodies and 2 club organizers. Thus, the total population of the study was 42. Since, the researcher was able to handle all the participants, all club members were selected using census sampling technique.

3.3 Sources of Data

The researcher used both primary and secondary sources to seek answer the basic questions of the study.

3.3.1 Primary Sources of Data

To accomplish this study with adequate data primary sources of data were vital. The researcher collected primary data through interview and questionnaires from athletes, coaches, administrative bodies, club organizers, as well as, by observing the actual long distance training.

3.3.2 Secondary Sources of Data

The researcher collected secondary data from administrative committee minutes, long distance athletes and coaches' profiles and other records, competition result records, training schedules, budget and training management related records.

3.4 Data Collection Instruments

To conduct this study adequate data were necessary. In order to gather adequate information questionnaires, interview, observation and document analysis were administered.

3.4.1 Questionnaires

There were collected specific data collection using instrument questionnaire via Likert method and rating scale of structured questionnaire. Therefore, close ended questionnaires were organized for long distance trainees.

3.4.2 Interview

Interview as a research instrument, were employed to draw ideas in relation to the basic questions of the study. The main reason for selecting this tool was to have adequate explanation about the current state of the problem. Therefore, structured interview were administered for long distance trainers/Coaches, administrative bodies, and Club organizers.

3.4.3 Observation

In order to get adequate information for this study, observation was another instrument that used to obtain data in relation to what approach of trainings were delivering, how the trainers apply training principles, training volume and intensity, trainees flow on training, whether the club has strategic and annual plan. Therefore, this tool was supported by checklist.

3.4.4 Document Analysis

Document analysis was also utilized to collect relevant information from annual and session plan, club minutes, coach and player's profile, and documents which are related to the history of the club and athletes. The researcher supposed that athletes' full information and training progress which was recorded in the club and it helped to identify some major factors that hinder long distance running. Since, the trainer/coaches have direct impact on the delivery of training and trainees/athletes' development, this tool allowed to identify the trainers' quality, experience and related qualifications.

3.5 Method of Data Analysis

Data that obtained through multi tools key into SPSS version 20.0 software, label, coded and record. Then, several sets of statistical analyses were performed: mean point value, standard deviation supported by graphs and tables. The data that gained through questionnaire, interview, observation and document analysis were narrated and analyze thematically in line with the objectives both qualitatively and quantitatively. These mixed analysis technique allowed the researcher to describe the current state of the problem adequately. Data has been reported as mean ± standard deviation.

3.6 Validity and Reliability

3.6.1 Reliability

Reliability refers to a measure of the degree to which research instruments yield consistent results (Mugenda and Mugenda 2003). In this study, reliability ascertained by pre-testing the questionnaire with a selected sample of employees from the company that the concern of the study. Thus,32 questionnaires were distributed to non-participants and most of the questionnaires

were collected back, but 4 questionnaires were not returned from respondents and this showed there is possibility of margin of error and this error might calculated by the reliability analysis of Cronbach's Alpha. Therefore, in actual study the researcher took care to avoid this situation.

3.6.2 Validity

The accuracy of data collected largely depended on the data collection instruments in terms of validity. Validity as noted by Robinson (2002) is the degree to which result obtained from the analysis of the data actually represents the phenomenon under study. Validity was ascertained by having all the objective questions included in the questionnaire. It is valid as proofed by regression equation.

3.6.3. Variables

3.6.3.1 Dependent Variables

- The performance of athletes

3.6.3..2 Independent Variables

Factors affect the performance of athletes (independent variables) were: quality of coaches, training plan, method of training, coaching environment, trainees' motivation, sport facilities, and nutrition of athletes.

3.7. Ethical considerations

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

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

identifications at any point in the process. They were also acquainted with that in case they give their names the anonymity issue will be taken into account so that their identity shall not be uncovered.

In the case of the respondents interviewed, the researcher told the all interviewee that they can refuse to tape-recorder their sound to be recorded. It is recorded only after request if the respondents agreed.

In case of document analysis the researcher first get permission from the Sebeta Town Sport Club Organizers hierarchically to access needed records and profiles. Then, the club record officer allowed the researcher to access documents based on the permission from the club head managers.

CHAPTER FOUR: FINDINGS, RESULTS AND DISUSSIONS

This chapter describes the result and interpretation of the research undertaken. Therefore, the data which were collected from questionnaires, interview and observation check list were analyzed by using table and descriptive statements.

4.1. Analysis of the Personal Profile of Respondents

4.1.1. Demographic characteristics of Athletes and Trainers

Participant athletes were requested to provide information on their demographic and personal profile. The detail of the analysis is given in table-1 below.

Table 4.1: Description of athletes, trainers, administrative bodies and organizers of the club Characteristics

Characteristics		Participants							
		Athletes		Trainers		Administrative bodies		Organizers of the club	
		No.	%	No.	%	No.	%	No.	%
Sex	Male	35	100	2	100	3	100	2	100
Age in year	18-22	11	31.43	-	-	-	-	-	-
	23-27	21	60	-	-	-	-	-	-
	28-32	3	8.57	-	-	1	33.33	-	-
	33-37	-	-	1	50	-	-	1	50
	38 and above	-	-	1	50	2	66.67	1	50
Training(coaching) experience in years	1-2	8	22.86	1	50	-	-	-	-
	3-4	23	65.71	-	-	2	66.67	1	50
	5-6	4	11.43	-	-	1	33.33	-	-
	7-8	-	-	-	-	-	-	-	-

	9 and above	-	-	1	50	-	-	1	50
Educational level	Up to High School Completed	15	42.86	-	-	-	-	-	-
	Certificate	1	2.86	-	-	-	-	-	-
	Diploma	16	45.71	-	-	-	-	-	-
	Degree	3	8.57	2	100 (1^{st} level license)	2	66.67	1	50
	MA & above	-	-	-	-	1	33.33	1	50
Marital status	Single	26	74.29	-	-	-	-	-	-
	Married	9	25.71	2	100	3	100	2	100
	Divorced	-	-	-	-	-	-	-	-
	Widowed	-	-	-	-	-	-	-	-

Table 4.1 above illustrated that among the total 35 long distance trainees, all are males. About 11 (31.43 %) are in the age of 18 – 22 years, 21 (60 %) are in 23 – 27 years, and 3 (8.57 %) are in the age of 28 – 32 years. Regarding with trainees' experience (in the club), 8 (22.86 %) have 1 – 2 years, 23 (65.71 %) have 3 – 4 years, and 4 (11.43 %) have 5 – 6 years of experience. It indicates that most of the trainees' have more than 3 years of experience in the club.

The table also shown that 15 (42.86 %) of long distance trainees educational status were up to high school completed, 1 (2.86 %) certificate, 16 (45.71 %) diploma, and 3 (8.57 %) first degree completed. Thus most of the respondents are diploma completed. Respondents marital status are predominantly single 26 (74.29 %), and the rest 9 (25.71 %) are married. Here, neither divorced nor widowed respondents are participated.

The table also revealed that both coaches/trainers are males and 1 (50 %) is between 33 -37years old and the other 1 (50 %) is 38 years old or above. 1 (50 %) of trainer has 1 – 2 years of coaching experience and the other 1 (50 %) has more than 9 years of experience. It implies that there are well experienced trainers in the coaching staff. As well as, both coaches are first degree completed and 1^{st} level athletics coaching licensed by Ethiopian Athletics Federation (EAF). And similarly, both coaches are married.

The table also illustrated that all 3 (100 %) administrative bodies and 2 (100 %) organizers of the club are males. Among those, 1 (33.33 %) of administrative is between 28 – 32 years old, and the rest 2 (66.67 %) are 38 years old or above; among organizers of the club 1 (50 %) is between 33 – 37 years old and 1 (50 %) is 38 years old or above. Moreover, 2 (66.67 %) administrative bodies and 1 (50 %) club organizers have 3 – 4 years, 1 (33.33 %) administrative has 5 – 6 years and 1 organizer has more than 9 years of experience in athletics clubs leadership. Their educational background reveals that 2 (66.67 %) administrative bodies and 1 (50 %) organizers of the club are first degree completed and 1 (33.33 %) administrative and 1 (50 %) organizer are second degree (masters) completed.

It implies that administrative bodies and organizers of the club are well educated. As well as, all administrative bodies 3 (100 %) and organizers of the club 2 (100 %) are married.

4.2 Analysis of long-distance training practice environment

Here, the data collected from four higher order themes of training/coaching practice environment with lower order themes. Those are, first direction/emphasis: it encompasses outcomes and the bigger picture; second, social context: includes group environment and coach-athlete relationship; third, Management and organization: includes program management and session content; fourth, Implementation: encompasses working with athletes, delivery and intervention skills. For each theme direct evaluations were developed as listed in the table below.

Table 4.2 Descriptive analysis of long distance running training practice environment in Sebeta Athletics Club

In regard of long distance running training practice environment in Sebeta sport Club	**5**	**4**	**3**	**2**	**1**	**Mean**	**SD**
Coaching/training practice environment:							
Emphasizes development and investing for the future over results	-	9 (25.8)	12 (34.2)	14 (40)	-	2.857	0.797
Is guided by a clear ‘big picture’ of athlete progression along the athletes’ pathway.	2 (5.7)	14 (40)	11 (31.4)	8 (22.9)	-	3.285	0.880
Involved balanced expectations.	3 (8.6)	5 (14.2)	8 (22.9	16 (45.7)	3 (8.6)	2.685	1.089
Develops positive coach-athlete relationships	1	6	17	7 (20)	4	2.8	0.950

where athletes have input and ownership and coaches are enthusiastic, interested, approachable and fun.	(2.9)	(17.1)	(48.6)		(11.4)		
Involves planning for sessions, blocks of sessions, and the season and beyond.	9 (25.7	9 (25.7)	14 (40)	2 (5.7)	1 (2.9)	3.657	1.012
Is flexible and adaptable to meet long distance athletes' needs with challenging environments and rate of progression.	-	6 (17.1)	9 (25.7	14 (40)	6 (17.1)	2.428	0.964
Provides more time and space for performing and learning	1 (2.9)	3 (8.6)	18 (51.4	9 (25.7	4 (11.4)	2.914	0.806
Emphasizing development and progression of high quality skills and knowledge	3 (8.6)	7 (20)	15 (42.9)	5 (14.2)	5 (14.2)	2.942	1.119
Involves well developed interactive instructional techniques such as explanation, demonstration, discussion, observation, positive constructive feedback and reflection	2 (5.7)	6 (17.1)	9 (25.7)	13 (37.1)	5 (14.3)	2.628	1.097

Table 4.2 illustrated that the mean values of the evaluation of the coaching practice environment ranges from 2.428 to 3.657 and the actual mean values of only two items are above the average mean (m=3.00) but in most cases respondents evaluation mean values are below the actual mean (m=3.00).

As indicated in table 4.2, respondents evaluated that training/coaching practice environment in Sebeta Athletics Club emphasizes development and investing for the future over results is below average (m = 2.857 ± 0.797). For this item 9 (25.8 %) replied high, 12 (34.2 %) replied moderate, and 14 (40 %) replied low. Accordingly, respondents' rated (m = 3.285 ± 0.88) regard to coaching practice is guided by a clear 'big picture' of athlete progression along the athletes' path way. In this case, 2 (5.7 %) replied very high, 14 (40%) replied high, 11 (31.4 %) replied moderate, and 8 (22.9 %) replied low. However, athletes evaluated that balanced expectation involved in the club is below average (m = 2.685 ± 1.089). Only 3 (8.6 %) and 5 (14.2 %) replied very high and high respectively. Were as, 8 (22.9 %) evaluated as moderate, 16 (45.7 %) low and 3 (8.6 %) very low.

On the other hand, respondents' also requested to evaluate whether training/coaching practice environment developing positive coach-athlete relationship in their club and they rate below average (m = 2.8 ± 0.95). In this case, only 1 (2.9 %), and 6 (17.1 %) rated very high and high respectively. While, 17 (48.6 %) rated average, 7 (20 %) rated low and 4 (11.4 %) rated very low. Respondents also evaluated the clubs planning for session, blocks of sessions and beyond the season, and they rated above average (m = 3.657 ± 1.012). Most of the respondents evaluated

9 (25.7 %) very high, 9 (25.7 %) high and 14 (40 %) moderate, whereas, only 2 (5.7 %) rated low and 1 (2.9 %) rated very low. It implies that the club has appropriate plan for long distance athletes training/coaching.

The table shown, below actual mean value (m = 2.428 ± 0.964) for flexibility and adaptability of training/coaching to meet long distance athletes' needs with challenging environments and rate of progression. Foe this item, only 42.8 % rated above average, while most respondents 57.2 % rated it was below average. Moreover, time and space provided for performing and learning is evaluated below average (m = 2.914 ± 0.806). Respondents rated 1 (2.9 %) very high, 3 (8.6 %) high, 18 (51.4 %) moderate, 9 (25.7 %) low and 4 (11.4 %) very low. It implies that coaching practice was not provided adequate time and space for performing and learning.

Table 4.2 also illustrated that coaching practice moderately emphasizing development and progression of high quality skills and knowledge (m = 2.942 ± 1.119). In this item, most of the respondents 73.5 % rated moderate and above, while 28.4 % rated below average.

As illustrated in the table above, respondents also requested to evaluate whether coaching practice involves well developed interactive instructional techniques such as explanation, demonstration, discussion, observation, positive constructive feedback and reflection and they rated below actual mean (2.628 ± 1.097). For this item only 2 (5.7 %), and 6 (17.1 %) rated very high and high respectively. Whereas, 9 (25.7 %) rated moderate, 13 (37.1 %) rated low and 5 (14.3 %) rated very low.

According to the respond of trainees in the above table out of 8 questions 7 of them replied below actual mean this indicates that training practice environment in Sebeta Athletics Club is not conducive.

4.3 Analysis on the organizational structure of the club

Table 4.3: Description of Players on the organizational structure of the club

In Regard of organizational structure of the club	**5**	**4**	**3**	**2**	**1**	**Mean**	**SD**
The club has clear organizational structure	-	16 (45.7)	19 (54.3)	-	-	3.457	0.498
The organizational structure of the club is functional	-	7 (20)	15 (42.9)	13 (37.1)	-	2.828	0.736
The club administrative bodies have properly administering and organizing the club	-	11 (31.4)	2 (5.7)	10 (28.6)	12 (34.3)	2.342	1.240
The club has clear strategic and annual plan	8(22.8)	15(42.9)	12(34.3)	-	-	3.885	0.747

The organization of the club objectively working on facilitating convenient for coaches and athletes	-	15 (42.9)	3 (8.6)	6 (17.1)	11 (31.4)	2.628	1.311
The club organization is working with stakeholders to create the opportunity for athletes participation in various competitions	6 (17.1)	17 (48.6)	3 (8.6)	9 (25.7)	-	3.571	1.049
The club has clear records and archives of long distance runners profile, contract, participation, trophies, progress and status.	-	8 (22.8)	3 (8.6)	14 (40)	10 (28.6)	2.257	1.104
The club has clear athletes' evaluation/selection criteria while long distance trainees' are joining the club.	11 (31.4)	3 (8.6)	14 (40)	7 (20)	-	3.514	1.130
The club adequately afford athletes monthly salary.	13 (37.1)	8 (22.9)	13 (37.1)	1 (2.9)	-	3.942	0.924
Long distance athletes are satisfied by the amount of money that the club paid to them.	-	9 (25.7)	3 (8.6)	6 (17.1)	17 (48.6)	2.114	1.259

The data from the above table 4.3 reveals that surveyed long distance athletes evaluated the organizational structure of Sebeta Athletics club from the mean value of m = 2.114 to m = 3.942 and the actual mean values of the items are in half of the cases are above the average and half below average mean (m=3.00). Among the respondents 16 (45.7 %) evaluated high and 19 (54.3 %) evaluated moderate for the club organizational structure. Moreover, all (100 %) respondents believed that Sebeta Athletics club has clear organizational structure (m = 3.457 ± 0.498). However, the functionality of the club's organizational structure was evaluated below average (m = 2.828 ± 0.736). At this item, only 7 (20 %) rated high and 15 (42.9 %) moderate and 13 (37.1 %) rated low. Likewise, the club administrative bodies and organizers leadership rated below average (m = 2.342 ± 1.240). On this regard, only 37.1 % respondents rated moderate and above, while, most of respondents 62.9 % rated low and very low. It implies that administrative bodies and organizers of the club were not potentially playing their part adequately.

On the other hand, the table also shows respondents believed that the club has clear strategic and annual plan (m = 3.885 ± 0.747). Surveyed long distance trainees' evaluated that 8 (22.8 %) very high, 15 (42.9 %) high, and 12 (34.3 %) moderate. However, the organization of the club objectively working for coaches and athletes success was rated below actual mean value (m = 2.628 ± 1.311). Most of the respondents 48.5 % rated low and very low, whereas, 42.9 % high and 8.6 % rated moderate.

Respondents were asked about how much they are satisfied about the club's organization work with stakeholders to create the opportunity for athletes' participation in various competitionsand they rated above the actual mean value (3.571 ± 1.049). On this item 65.7 % of respondents rated very high and high, 8.6 % moderate and 25.7 % low. It implies that most of the respondents believed that the club organization is working with stakeholders at optimal level.

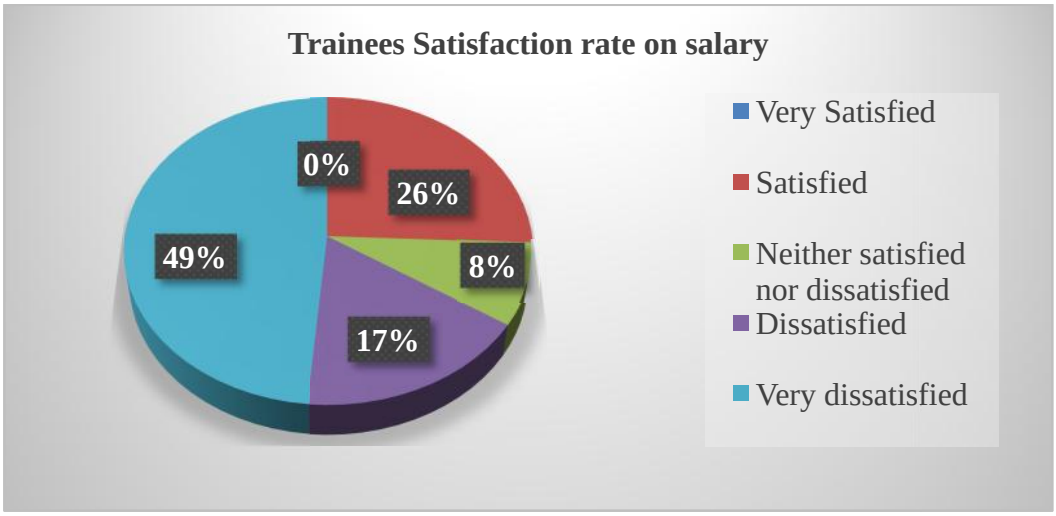
The data on the table also illustrated that the club recording and archive method is evaluated below the actual mean value (m = 2.257 ± 1.104) and most of the respondents (68.6 %) replied that the club recording and archives of long distance runners profile, contract, participation, trophies, progress and status was poor and very poor. While, 8.6 % replied average and 22.85 % replied high. It implies that the club has poor documentation culture. In addition, surveyed trainees' also evaluated the club evaluation/selection criteria while athletes are joining the club and they rated m = 3.514 ± 1.130. Among the respondents 39 % of respondents strongly believed that the club has clear criteria to select new trainees, while, 20 % rated below average. It implies that the club used set of criteria to select new long distance running trainees.

Table 4.3 above also illustrated that the club has strong finance to afford athletes monthly salary and other expenses (m = 3.942 ± 0.924) and most of the respondents 13 (37.1 %) and 8 (22.9 %) strongly agree and agreed respectively, whereas, 13 (37.1 %) are neutral and 1 (2.9 %) disagreed. It implies that most of long distance athletes believed that the club has strong finance to cover all the expenses of the trainees. However, long distance running trainees' were dissatisfied on the amount of their monthly salary that the club paid to them (m = 2.114 ± 1.259). On this item, only 25.7 % of respondents replied satisfied and 8.6 neutral, whereas, 17.1 % replied dissatisfied and 48.6 % strongly dissatisfied.

Accordingly, long distance running trainees' satisfaction on monthly salary and other beneficial packages may have its own effect on their motivation and performance progress by far. Chart 1 below, show that the proportion of very satisfied, satisfied, neutral, dissatisfied and very dissatisfied.

As illustrated in the above table about half questions replied below the actual mean, it indicates the club structural organization is not well structured.

Chart 4.1. Long distance training satisfaction rate on salary



As shown in the above chart, no one was very satisfied on monthly salary. Whereas, 26 % were satisfied, and 8 % neither satisfied nor dissatisfied. However, 17 % were dissatisfied and near to half of long distance trainees' 49 % were very dissatisfied. To sum up this point, according to the data gathered via document analysis the club was paying them monthly in the range of 1500 ETB to 3500 ETB, 66 % of trainees' were dissatisfied. This shows most of the athletes are not satisfied by the payments.

4.4 Analysis on long distance training method and implementation

Table 4.4 Descriptive data of long distance running coaches training method

In Regard of training program (Session) of the club	**5**	**4**	**3**	**2**	**1**	**Mean**	**SD**
The club hired/employed qualified long distance running coaches	14 (40)	8 (22.9)	13 (37.1)	-	-	4.028	0.877
Coaches always targeted on trainees athletic development and progress for future success	8 (22.9)	2 (5.7)	19 (54.3)	1 (2.9)	5 (14.2)	3.2	1.237
The coaches developed training plan/ appropriately	4 (11.4)	19 (54.3)	12 (34.3)	-	-	3.771	0.636
The coaches implement the designed plan during each training program	2(5.7)	13(37.1)	8(22.9)	11(31.4)	1(2.9)	3.114	1.007
The coaches delivered the training	11	2 (5.7)	16	6 (17.1)	-	3.514	1.105

program based on the training principles	(31.4)		(45.7)				
The coaches demonstrated each activity/drill during training program	14 (40)	5 (14.3)	16 (45.7)	-	-	3.942	0.924
The coaches motivates and encourages trainees throughout the training program.	1 (2.9)	14 (40)	3 (8.6)	12 (34.2)	5 (14.3)	2.828	1.182
The coaches are always arrived early and run the training program based on the training plan	11 (31.4)	17 (48.6)	2 (5.7)	5 (14.3)	-	3.971	0.970
The coaches used scientific method	3 (8.6)	4 (11.4)	17 (48.6)	4 (11.4)	7 (20)	2.771	1.148
The coaches are always able to managed and evaluate each trainee progress.	8 (22.8)	3 (8.6)	17 (48.6)	1 (2.9)	6 (17.1)	3.171	1.298
The coaches managed risks and injuries of the trainees' during and after training and competition.	6 (17.1)	15 (42.9)	5 (14.3)	9 (25.7)	-	3.514	1.052

On table 4.4 above, the very high mean value was recorded on the evaluation of qualification of the coaches (m= 4.028 ± 0.887). Most 62.9 % long-distance trainees' believed that the club hired/employed qualified coaches among which 40 % strongly agreed and 22.9 % agreed on this point. It implies that the trainees' strongly agreed that both the coaches are qualified. Moreover, surveyed trainees' evaluated coaches' target/focus on trainees athletic development and progress for future success was relatively moderate (m = 3.2 ± 1.237). Among the respondents 8 (22.9 %), 2 (5.7 %), and 19 (54.3 %) rated very high, high and moderate respectively, while, only 6 (17.1 %) rated below the actual mean value. It implies that coaches focused on trainees' athletic development and progress for future success.

The table also illustrated that, respondents evaluation on the level of coaches annual, monthly, and weekly training program/plan was above average (m = 3.77 ± 0.636) and 4 (11.4 %), 19 (54.3 %), and 12 (34.3 %) replied very good, good and average. It implies that coaches has well developed training plan for each timeframe. As well as, respondents evaluated that above average the coaches implemented the designed plan each training session (m = 3.114 ± 1.007) and 42.8 % rated above average, 22.9 rated on average and 34.3 % rated below average. Evaluation of participants on whether coaches design and delivery of training program was based

on training principles leveled above the average (m = 3.514 ± 1.105) and 11 (31.4 %) respondents replied very good, 2 (5.7 %) good, 16 (45.7 %) average, and 6 (17.1 %) replied low. It implies that coaches are using training principles to during planning and delivery of the plan. Respondents also rated that the coaches demonstrated each activity/drill during training program (m = 3.942 ± 0.924). Most (54.3 %) of the respondents replied very high and high collectively, and 45.7 replied it was average.

The table also revealed that, coaches motivation and encouragement rate was below average (m = 2.828 ± 1.182). Among the respondent 2.9 % replied very high, 40 % high, and 34.2 % average while, 34.2 low and 14.3 replied very low. It implies that more than half of the respondents believed that coaches motivation and encouragement to trainees was not satisfactory. The evaluation also revealed that the coaches are always arrived early and prepared the training program based on the training plan (m = 3.971 ± 0.970). Here, 11 (31.4 %) replied very good and 17 (48.6 %) good, whereas, only 2 (5.7 %) rated average and 5 (14.3 %) below average.

Surveyed long-distance running trainees' evolution on scientific training methods and technological advances were below average (m = 2.771 ± 1.148). Only 3 (8.6 %) and 4 (11.4 %) respondents replied very high and high respectively. Whereas, 17 (48.6 %) replied average, 4 (11.4 %) low and 7 (20 %) very low. Hence, 31.4 % of respondents were dissatisfied with coaches' scientific training method and the use of technological advances. Coaches management and evaluation skill also evaluated at relatively average level (m = 3.171 ± 1.298). On this item, respondents' rated 8 (22.8 %) very high, 3 (8.6 %) high, 17 (48.6 %) average, 1 (2.9 %) low and 6 (17.1 %) very low. It implies that, even though, respondents' rated this item above the actual mean value 20 % of long distance trainees' are rated below average; it means those athletes' are dissatisfied. As the data on the table shown, the respondents also evaluated assessment and management of risks and injuries during and after training and/or competition; and rated at the mean of (m = 3.514 ± 1.052). Here, 6 (17.1 %) replied there are very high risk and injury assessment and management, 15 (42.9 %) replied high, and 5 (14.3 %) replied average; while 9 (25.7 %) replied low. It implies that most of the trainees' (74.3 %) believed that there are risk and injury assessment and management during and after training and competition in Sebeta Athletics club.

The table above showed that long distance running training method and implementation related issues evaluation mean values was range from m = 2.771 to m = 4.028 and most of the mean values in this regard was above the actual mean value (m= 3.0), but in some cases the rate was below the actual mean value (m = 3.0). It implies training method at the club is held in a good manner.

4.5 Analysis on Nutritional approach of long distance runners

Table 4.5 Descriptive data of long distance runners' on the club nutritional usage

In regard of nutrition of the club	5	4	3	2	1	Mean	SD
The club has dish menu for each athletes what to eat/drink before, during and after training or game	4 (11.4)	18 (51.4)	9 (25.7)	3 (8.6)	1 (2.9)	3.6	0.9
Long distance runners' encouraged to take favorable food/drink before, during and after training	9 (25.7)	12 (34.3)	10 (28.6)	4 (11.4)	-	3.742	0.966
Runners' have awareness about nutrition usage before, during and after training or competition	10 (28.6)	12 (34.3)	11 (31.4)	2 (5.7)	-	3.857	0.898
The club always cheek/control runners' food/dish type and eating habit every day	6 (17.1)	12 (34.3)	12 (34.3)	2 (5.7)	3 (8.6)	3.457	1.104
The club employed professional nutritionist for the sake of long distance runners' performance.	-	-	-	-	35 (100)	1.00	0.00

Table 4.5 illustrated that, long distance athletes' nutritional approach was evaluated and all the items mean value ranges from m = 1.0 to m = 3.857, and except one item all are above the actual mean value (m = 3.0). The club has dish menu for each athletes what to eat/drink before, during and after training or game were evaluated by respondents and its mean was above average (3.6 ± 0.9). Surveyed long distance trainees' replied that 4 (11.4 %) very good, 18 (51.4 %) good, 9 (25.7 %) average, 3 (8.6 %) poor, and 1 (2.9 %) very poor. It implies that most of the trainees' have good nutritional menu.

Accordingly, they also rated the mean value of 3.742 ± 0.966 for encouragement to take favorable food/drink before, during and after training. Most of the participants (60 %) believed that they encouraged to take favorable drink/food. Whereas, 11.4 % believed they are not encouraged to take anything. Moreover, respondents also evaluated that long distance trainees'

have awareness about nutrition usage before, during and after training and/or competition were above average (m= 3.857 ± 0.898). Hence, 10 (28.6 %) replied very high, 12 (34.3 %) high, 11 (31.4 %) average and 2 (5.7 %) low awareness about nutritional approaches.

The above table also showed that, respondents rated above average (m = 3.457 ± 1.104) for the club always cheek up/control over trainees' food/dish type and eating habit. Thus, 6 (17.1 %) replied very highly controlled, 12 (34.3 %) highly controlled, 12 (34.3 %) averagely controlled, 5 (14.3 %) replied not controlled. Lastly, surveyed trainees' were requested if the club employed professional nutritionist for the club but all 35 (100 %) replied that the club does not employed such a professional.

It indicates that the club is guiding and managing the trainees' nutritional approach by nonprofessionals.

4.6 Analysis on the availability of equipment and facilities

Table 4.6 Responses by long distance runners' regarding the availability of equipment and facility

In Regard of availability of equipment and facility of the club	**5**	**4**	**3**	**2**	**1**	**Mean**	**SD**
The club has adequate running/training field area and running track	3 (8.6)	11 (31.4)	13 (37.1)	3 (8.6)	5 (14.3)	3.114	1.140
The training field area and track is comfortable/suitable for all training programs	2 (5.7)	10(28.6)	7 (20)	10 (28.6)	6 (17.1)	2.771	1.197
Training equipment have adequate for each training program	1 (2.9)	11 (31.4)	8 (22.9)	13 (37.1)	2 (5.7)	2.885	1.007
The club have sufficient facilities, training kits and sports wear	-	6 (17.1)	8 (22.9)	14 (40)	7 (20)	2.371	0.988
The club has standard (well-equipped) gymnasium for indoor training	-	3 (8.5)	8 (22.9)	15 (42.9)	9 (25.7)	2.142	0.898
Available facilities and equipment are up to dated (modernized) and supportive	-	3 (8.6)	11 (31.4)	13 (37.1)	8 (22.9)	2.257	0.905

The club is committed to afford all facilities and equipment for the sake of long distance runners performance enhancement	2 (5.7)	8 (22.9)	9 (25.7)	14 (40)	2 (5.7)	2.828	1.027

As shown in table 4.6 above, the mean value of the evaluation of availability of equipment and facility in Sebeta Athletics club ranges from m = 2.142 to m = 3.685, and most of the items evaluation mean value is below the actual mean (m = 3.0). Respondents evaluated that the club has adequate running field area and running track (m = 3.114 ± 1.14). Among which, 3 (8.6 %) replied very high, 11 (31.4 %) high, 13 (37.1 %) average, 3 (8.6 %) low and 5 (14.3 %) very low. Moreover, respondents evaluated that the training field area and track comfort ability for all training programs were below the average (m= 2.771 ± 1.197). Among the respondents 45.7 % believed that the field and running track was not comfortable. Only 2(5.7 %) replied very highly comfortable, and 10 (28.6 %) replied comfortable, 7 (20 %) replied averagely comfortable.

Table 4.6 also illustrated that, the mean value of respondents evaluation for adequacy of training equipment in each training program was below average (2.885 ± 1.007). Here, only 34.3 % respondents relied reasonably adequate, and 22.9 % replied averagely adequate. While, most of the respondents (42.8 %) replied it was not adequate. Respondents also evaluated and rated below average (m = 2.371 ± 0.988) for facilities, training kits and sportswear sufficiency. Here, only 17.1 % rated sufficient, and 22.9 % rated on average, but most of respondents 60 % rated at the contrary means facilities, training kits and sportswear were not sufficient. As well as, mean value of respondents evaluation for standard (well-equipped) gymnasium was below average (m = 2.142 ± 0.898). Only 8.5 % respondents replied well equipped, and 22.9 % replied on average, but 68.6 % replied the gymnasium is not well equipped.

The above table also revealed that the mean value of evaluation on how much available facilities and equipment were up to dated and supportive were below the average (m = 2.257 ± 0.905). Here, 3 (8.6 %) replied modernized and supportive, 11 (31.4 %) replied moderately modernized and supportive, but 60 % replied facilities and equipment are not modernized and supportive. Moreover, the clubs commitment to afford facilities and equipment were rated at the mean value of (m = 2.828 ± 1.027). Among the respondents 5.7 % and 22.9 % strongly agreed and agreed on the club's commitment respectively,25.7 % are neutral, but 40 % and 5.7 %

replied disagreed and strongly disagreed respectively, totally 45.7 % believed that club was not committed. It implies that the club is not well equipped.

4.7. Analysis of data gathered from Observation

In order to triangulate data, questionnaires, interview, and observation were employed by the researcher. Observations that supported by checklist were employed on Sebeta Athletics club.

The club has regular training programs for long distance athletes, which was three days per a week and 3 hours per a day. The observation was undertaken for five training days from January 2/2010 E.C to February 2/2010 E.C. Generally, the observation was focused on gathering data about long distance running training practice environment, training method and implementation, nutritional approach, and availability of equipment and facilities. Therefore, the observation checklist were mainly incorporated the following points:

- Annual, monthly and weekly training plan and its application
- Demonstration of designed training plan
- Coach – athlete/trainees relationship during training
- Applications of training principles
- Interactive instructional/training techniques
- Ways of motivation and encouragement used by coaches
- Facility and equipment of the club
- Facility and equipment of the club in the gymnasium
- Method and application of training.
- Punctuality of coaches and trainees for training
- Evaluation of daily training process

4.7.1. Observation findings on long distance training practice environment

Since, the study targeted to assess long distance athletes training practice environment, the observation also focused on evaluating it by observing the real training situation. Initially, the appropriate issues were developed on checklist and used to collect data via observation.

The first issue was about observing coach-athlete relationship. It was observed throughout the training process starting with the first contacts of trainees' and coaches up to the end of the training session. The way they great one another, the way they interact, ways of communication, ways to give and receive feedback and the like situations used to evaluate coach-athlete relationship in Sebeta Athletics Club. Thus, the observation revealed that Training practice environment develops positive coach-athlete relationships where athletes have input and ownership and coaches are enthusiastic, interested, approachable and fun with serious challenges.

Similar with data gathered on questionnaire, the coaches planned for sessions, blocks of sessions, the season and beyond. However, the training practices were not flexible and adaptable to meet long distance athletes' needs. Moreover, time and space provided for performing and learning was not sufficient, and this finding was similar with the findings on questionnaire. As observed, training practice involved interactive instructional techniques with explanation, demonstration, discussion, observation, positive constructive feedback and reflection; but, most of these instructional/training techniques were not well developed. For instance, from the beginning to the end of training practice there are a lot of time consuming activities, such as too long introduction, unorganized individual comments, arguments on feedbacks, unnecessary reflections, long explanations etc.

4.7.2. Observation findings on long distance training method and implementation

Here, during observation professional and scientific evaluation of training planes, methods, demonstration, principles, implementation of designs and technological advances was mandatory. Hence, in this study critically designed checklist by incorporating key points were utilized to gather data.

It was observed that the coaches developed annual, monthly and weekly training program/plan/ appropriately. As an illustration, long term, short term and medium term objectives were clearly stated, time and venue for training was clearly shown, facilities and equipment needed for training was illustrated. However, the biggest weakness of annual and monthly plans were time and venue of events were not clearly stated. As well as, the budget was not properly estimated for future events. Professionally, it may have multidirectional effect on the overall long distance training process.

The coaches' implementation of the designed plan during each training program was observed and it was good. However, delivery of training activities clearly lacks following training principles. Especially, the principles of warming up and cooling down was not applying appropriately. The trainees' ordered by coaches to warm up in group collectively/together and the same approaches were used during cooling down and stretching at the end of training. It implies that there are only narrow room for individual difference in human physiological state.

The observation also reveals that coaches always arrived early to arrange equipment and training kits for the training. As well as, most of the time coaches demonstrated each activity/drills for trainees'. This finding is parallel with the findings on questionnaire.

According to the sport science professional point of view, the observation revealed that scientific methods and technological advances were not utilizing for training. For instance, except stop watch neither videos nor cameras (images) are used/recorded throughout the training. In addition, humidity, wind speed and wind direction, temperature and similar variables were not recorded even for a single time. Thus, it implies that technological analysis and presentations were not practiced for long distance trainees in Sebeta Athletics Club. Here, the good point was coaches mostly (at the beginning and at the end of training) asked trainees' whether athletes experience injuries and/or risks. However, the trainees would get it only when they claimed to have medical care, unless no medical attention will be provided to them.

4.7.4 Analysis on the availability of equipment and facilities

Data that gathered through observation show that the club has running/training field area and running track, but not comfortable for all situations and training designs. The track is not constructed based on the International Association of Athletics Federation (IAAF). Most parts of

the field area and the track are drown, and have poor drainage system; as a result the training become difficult in rainy and wet situations.

Shortage of training equipment was also observed. Thus, trainees' running shoe and running cloths are not comfortable; even though, coaches and trainees mostly preferred to train earlier at the morning (before the sun raised, around 11:00 o'clock local time), they do not have safety gear (clothing with reflective surface and hand palms) for dark situation and head and eye gear during day light) and tech gear (running timers, interval timers, and heart rate monitors).

4.8. Analysis on Interview Responses

Long distance running coaches (N = 2), club administrative bodies (N = 3) and organizers of the club (N = 2) totally 7 participants were asked to forward their ideas in relation to the major factors that hinder long distance running trainees' of Sebeta Athletics Club. Thus, they mentioned the following issues:

- Training practice is guided by a clear 'big picture' of athlete progression along the athletes' pathway.
- Every stakeholder expected more success on trainees' and it is keeps the athletes under pressure.
- Club administrative bodies and organizers are not fully attending and observing the long distance running training. Most of the time they attend only to observe when trainees' have events in different levels.
- Stakeholders were invited to participate in strategic planning process of the club.
- The club organizations are working with Ethiopian Athletics Federation (EAF) and other stakeholders to create opportunities for long distance athletes' future success.
- The club gives less emphasis for documentation, record and archive of athletes and trainees of the club. Hence, the club did not allocated budget for this work.
- The club has awareness about the trainees complain on monthly salary. However, they do anything to improve their monthly salary scale.
- Long distance training kits are very expensive and the club has not strong finance to afford all necessary equipment for all trainees.
- The club has allocated budget for health care, but the club history is poor for athletes' medical investigation/diagnosis.
- The club has not a plan to employee professional nutritionist.

Most of the findings on interview were parallel with the findings with questionnaire and observation.

4.9 Document analysis

This tool was used to review minutes of the club, profiles of long distance running trainees', coaches, strategic and annual plan, finance of the club, contracts and payments of trainees and other related documents.

Data gathered through document analysis indicated that long distance running trainees' monthly salary range from 1500 to 3500 ETB. The average monthly salary of those trainees' was 2400 ETB. Moreover, data gathered through interview revealed that the club administrative bodies and organizers were aware of trainees' dissatisfaction on the salary. As well as, all trainees have signed a maximum of one (1) year contract. The document analysis also indicated that players profile has recorded using same format by hard copies, no archives (no data base) are available about the previous years' trophies, event participations/results and related history.

In general, data gathered through document analysis proved the findings via questionnaire, interview and observation were trustworthy and valid.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The purpose of this study was to examine factors that affect the performance of long distance athletes: The case of Sebeta town athletics club. For this purpose, the researcher reviewed the available literatures for theoretical, conceptual and empirical framework. The research design was descriptive survey and research method was both qualitative and quantitative approaches of organizing and analyzing the data supported by mean, standard deviation, graphs and tables. In this study trainees', coaches, administrative bodies and club organizers were participated and the total population were 42. In this research 35 trainees 2 coaches, 3 administrative bodies and 2 club organizers were selected using census sampling technique. The researcher used both primary and secondary sources of data to accomplish this study. Moreover, questionnaire,

interview, observation and document analysis were used to gather data. The data that collected through these multi-tools were analyzed both qualitatively and quantitatively. The data collected through structured questionnaires were also analyzed in SPSS version 20.0 (mean and standard division). Moreover, in order to assure the validity of the data that were obtained from questionnaire, triangulation method was employed by using interview, observation and document analysis. The major findings obtained from the multi method tools were:

- Most respondents agreed that long-distance running training practice environment in Sbeta sport Club was guided by a clear 'big picture' of athlete progression along the athletes' pathway, involves planning for sessions, blocks of sessions, the season and beyond. However, the findings revealed that the expectation from trainees' is not balance, positive coach-athlete relationship was below average, and time and space for performing and learning was not adequate.
- The club had clear organizational structure, and had clear strategic and annual plan. Also, they revealed that the club has clear athletes' selection criteria and organization is working with stakeholders to create the opportunity for athletes' participation and future success. Nevertheless, the club has less functional organization, and the average monthly payment of athletes were 2400 ETB as a result most of trainees are dissatisfied.
- Most of respondents agreed that coaches always targeted on long distance running trainees athletic development and progress for future success and there are not good risk and injury assessment. The coaches designed and delivered the training program based on the training principles, but means of motivation was not satisfactory. Also, the drawbacks of the training process were using scientific methods and latest technologies.
- The findings prove that the trainees' nutritional approach was managed by traditional methods without professional nutritionist. Thus, there is need of improvement regarding nutritional culture of the trainees'.
- The findings proved that the club has training fields and running track but not comfortable for long distance athletes training. Especially, the running track was not synthetic and it needs immediate repair. Shortages of equipment are another challenge for long distance training practice.

5.2 Conclusion

Based on the major findings the following conclusions were made:

- Long-distance running training practice environment in Sbeta Athletics Club was guided by a clear ‘big picture’ of athlete progression but coach-athlete relation was not good enough; and imbalance expectation from athletes’ progress was keeping pressure on trainees.
- In adequate time and space for performing and learning was one of the challenges for long distance trainees’ performance development.
- The club had clear organizational structure, and had clear strategic and annual plan, and it helps to work for the future success oriented training practice.
- The club has less functional organization, and the average monthly payment of athletes were 2400 ETB as a result most of trainees are dissatisfied.
- Most of respondents agreed that coaches always targeted on long distance running trainees athletic development and progress for future success and there are not good risk and injury assessment.
- Long distance running coaches not well applying training principles.
- Training process were not using scientific methods and latest technologies, and these were one of the major factor for athletes’ performance progress.
- Trainees’ nutritional approach was not managed and supported by professional nutritionists and scientific methods.
- Training fields and running track were not comfortable for long distance athletes training. Especially, the running track was not synthetic and it needs immediate repair.
- Shortages of equipment are another factor for long distance training practice and athletic development.

5.3 Recommendation

Based on the major findings and the conclusions drawn, the researcher would like to recommend the following suggestions.

- The club should focus on improvisation of long-distance running training practice environment and the expectation from athletes' progress should be balanced to reduce pressure on them.
- Coaches should managed time and space for performing and learning than discussion, reflection and feedback.
- The club organizational structure should be functional and organizers and administrative bodies should participate actively on different decisions.
- The club should fulfill/provide all necessary equipment, latest technologies and training kits for both trainees' and coaches for effective athletic performance progress.
- The club should design the strategy of generating funds to increase average monthly payment of athletes. This may reduce dissatisfaction of athletes.
- The club organization should develop appropriate schedules and reasonable risk management and injury assessment mechanisms.
- Coaches always should use scientific training methods with training principles for the sake of long distance running trainees' performance progress.
- The club should employee professional sport nutritionist and should manage trainees' nutritional approach by scientific methods.
- The club organizations should repair training fields and running track; should also generate fund to have standard synthetic running track for the future.

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Appendices

Appendix A

Addis Ababa University

Department of Sport Science

Post Graduate Studies

Questionnaires provided for Sebeta Town Athletics Club Long Distance Running Trainees.

General direction

A questionnaire designed on the factors that affect the performance of long distance trainees' at Sebeta Town Athletics Club. This questionnaire has **six sections** and it is to be filled by the long distance trainees. The purpose of this questionnaire is to collect information about the current status of Sebeta Town Athletics Club long distance trainees' performance. It is also based on identifying the major causes that hinder long distance trainees' athletic performance. Therefore, you are kindly requested to fill in the questionnaires that incorporate different issues related to the study. Your realistic response will contribute a lot for the success of this research.

Thank you in advance for your cooperation.

Part one: Bibliographical data of a Trainees

Instruction:

- No need to write your name.
- Please respond for the following close ended questions by putting the symbol **"√"** on the space provided.

1. You are coaching in Sebeta Town Athletics Club Yes ☐ No ☐
2. Your Sex Male ☐ Female ☐
3. Your Age 18 – 22 ☐ 23 – 27 ☐ 28 – 32 ☐ 33 – 37 ☐ 38 and above ☐
4. Training Experience in years 1 – 2 ☐ 3 – 4 ☐ 5 – 6 ☐ 7 – 8 ☐ 9 and above ☐

5. Educational level (status) High school completed ☐ Certificate ☐ Diploma ☐ Degree ☐ Masters and above ☐

6. Marital status Single ☐ Married ☐ Divorced ☐ Widowed ☐

Part Two: Questionnaires about Training Environment

Instruction: Each closed ended questions will allow you to evaluate training environment practice in your club. Thus, your evaluation can range from very high to very low. Therefore, very high (5), Hugh (4), Medium (3), Low (2) and Very Low (1). You can put the symbol only once for each question/item.

In regard of long distance running training practice environment in Sbeta Athletics Club	**5**	**4**	**3**	**2**	**1**
Coaching/training practice environment:					
Emphasizes development and investing for the future over results					
Is guided by a clear 'big picture' of athlete progression along the athletes' pathway.					
Involved balanced expectations.					
Develops positive coach-athlete relationships where athletes have input and ownership and coaches are enthusiastic, interested, approachable and fun.					
Involves planning for sessions, blocks of sessions, the season and beyond.					
Is flexible and adaptable to meet long distance athletes' needs with challenging environments and rate of progression.					
Provides more time and space for performing and learning					
Emphasizing development and progression of high quality skills and knowledge					
Involves well developed interactive instructional techniques such as explanation, demonstration, discussion, observation, positive constructive feedback and reflection					

Part Three: Questionnaires about organizational structure of Sebeta Athletics Club

Instruction: Each closed ended questions will allow you to evaluate the organizational structure of Sebeta Town Athletics Club. Thus, your evaluation can range from very high to very low. Therefore, very high (5), Hugh (4), Medium (3), Low (2) and Very Low (1). You can put the symbol only once for each question/item.

In Regard of organizational structure of the club	**5**	**4**	**3**	**2**	**1**
The club has clear organizational structure					
The organizational structure of the club is functional					
The club administrative bodies and organizers have properly administering and organizing the club					
The club has clear strategic and annual plan					
The organization of the club objectively working on facilitating convenient for coaches and athletes					
The club organization is working with stakeholders to create the opportunity for athletes participation in various competitions					
The club has clear records and archives of long distance runners profile, contract, participation, trophies, progress and status.					
The club has clear athletes' evaluation/selection criteria while long distance trainees' are joining the club.					
The club adequately afford athletes monthly salary.					
Long distance athletes are satisfied by the amount of money that the club paid to them.					

Part Four: Questionnaires about training method and implementation of the club

Instruction: Each closed ended questions will allow you to evaluate the training method, program (session) and implementation of Sebeta Town Athletics Club. Thus, your evaluation can range from very high to very low. Therefore, very high (5), Hugh (4), Medium (3), Low (2) and Very Low (1). You can put the symbol only once for each question/item.

In Regard of training program (Session) of the club	**5**	**4**	**3**	**2**	**1**
The club hired/employed qualified long distance running coaches					
Coaches always targeted on trainees athletic development and progress for future success					
The coaches developed annual, monthly and weekly training program/plan/ appropriately					
The coaches implement the designed plan during each training program					
The coaches designed and delivered the training program based on the training principles					
The coaches demonstrated each activity/drill during training program					
The coaches motivates and encourages trainees throughout the training program.					
The coaches are always arrived early and prepared the training program based on the training plan					
The coaches used scientific method and used new trainings and technological advances					
The coaches are always able to managed and evaluate each trainee progress and the training.					
The coaches assessed and managed risks and injuries of the trainees' during and after training and competition.					

Part Five: Questionnaires about nutrition of the club

Instruction: Each closed ended questions will allow you to evaluate the nutrition of Sebeta Town Athletics Club. Thus, your evaluation can range from very high to very low. Therefore,

very high (5), Hugh (4), Medium (3), Low (2) and Very Low (1). You can put the symbol only once for each question/item.

In regard of nutrition of the club	**5**	**4**	**3**	**2**	**1**
The club has dish menu for each athletes what to eat/drink before, during and after training or game					
Long distance runners' encouraged to take favorable food/drink before, during and after training					
Runners' have awareness about nutrition usage before, during and after training or competition					
The club always cheek/control runners' food/dish type and eating habit every day					
The club employed professional nutritionist for the sake of long distance runners' performance.					

Part Six: Questionnaires about availability of equipment and facility of the club

Instruction: Each closed ended questions will allow you to evaluate the availability of equipment and facility of Sebeta Town Athletics Club. Thus, your evaluation can range from very high to very low. Therefore, very high (5), Hugh (4), Medium (3), Low (2) and Very Low (1). You can put the symbol only once for each question/item.

In Regard of availability of equipment and facility of the club	**5**	**4**	**3**	**2**	**1**
The club has adequate running/training field area and running track					
The training field area and track is comfortable/suitable for all training programs					
Training equipment have adequate for each training program					
The club have sufficient facilities, training kits and sports wear					
The club has standard (well-equipped) gymnasium for indoor training					
Available facilities and equipment are up to dated (modernized) and supportive					
The club is committed to afford all facilities and equipment for the sake of long distance runners performance enhancement					

Appendix B

Addis Ababa University

Department of Sport Science

Post Graduate Studies

Interview for Long Distance Coaches, Administrative Bodies and Club Organizers

Deer Respondent The purpose of this interview is to identify the major causes that hinder long distance trainees' in Sebeta Town Athletics Club and to indicate remedial solutions to improve the situation. Therefore you are kindly requested to respond the interview questions that incorporate different issues related to the study. Your realistic response will contribute a lot for the success of this research. **Thank you in advance for your cooperation.**

General Information:

- What is your responsibility in the club? ----------
- Age? ----------
- How many years do you serve in this responsibility?----------
- Educational status? ----------
- Athletics training level?----------
- Marital status?----------

Interview Questions:

1. Do you believe training practice is guided by a clear 'big picture' of athlete progression along the athletes' pathway?
2. Do every stakeholder of Sebeta Athletics Club expected more success on trainees'?

    2.1 Do you think it plays part to keep athletes under pressure?

3. Do Club administrative bodies and organizers are fully attending and observing the long distance running training?

    3.1 When they attend to observe long distance trainees'?

4. Do stakeholders are invited to participate in strategic planning process of the club?
5. Do you believe the club organizations are effectively working with Ethiopian Athletics Federation (EAF) and other stakeholders to create opportunities for long distance athletes' future success?

6. Do you think that the club emphasized documentation, record and archive of athletes and trainees of the club?

    6.1 Do the club allocate budget for documentation and archive?

7. Long distance athletes are not satisfied on their salary. Do the club aware of it?

    7.1 What the club do to improve their monthly salary scale?

8. Do you think that long distance training has sufficient training kits, equipment and facility?

    8.1 If not, why the club fulfill those equipment and facility?

    8.2 Do the club has a plan for the future?

9 Do the club has allocated budget for health care?

    9.1 Do the club investigate and assess injuries and health issues of the trainees adequately?

10 Documentations reviled that the club has not employed professional nutritionist. Do the club has a plan to employee professional nutritionist?

Appendix C

Addis Ababa University

Department of Sport Science

Post Graduate Studies

Observation Checklist

- **Club's Name ----------**
- **Target of Observation ----------**
- **Time Begun ----------**
- **Time End ----------**
- **Observation Round ----------**

Section one: Observation on annual, monthly and weekly training plan and its application

No	Activities to be observed	Start (ST) and end time (ET)	Day-1		Day-2		Day-3		Day-4		Day-5	
			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1	The coach has annual plan	ST=										
		ET=										
2	The coach has monthly plan	ST=										
		ET=										
3	The coach has weekly and daily plan	ST=										
		ET=										
4	The plan gives more time for training and learning of athletes	ST=										
		ET=										
5	The coaches apply training based on the plan	ST=										
		ET=										

Section two: Observation on Demonstration of designed training plan

No	Activities to be observed	Start (ST) and end time (ET)	Day-1		Day-2		Day-3		Day-4		Day-5	
			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

1	The coach explained clearly what trainees' have to do	ST=										
		ET=										
2	The coaches demonstrated the activities	ST=										
		ET=										
3	The coaches follow the trainees' movement throughout the training.	ST=										
		ET=										
4	The coaches give feedback throughout the training session.	ST=										
		ET=										

Section Three: Observation on Coach – athlete/trainees relationship during training

No	Activities to be observed	Start (ST) and end time (ET)	Day1		Day2		Day3		Day4		Day5	
			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1	The coach-athlete relation is good at the beginning of the training	ST=										
		ET=										
2	The coach-athlete relation is good at during the training session.	ST=										
		ET=										
3	The coach-athlete relation is good at the end of training	ST=										
		ET=										

Section Four: Observation on training method, applications and process of training principles

No	Activities to be observed	Start (ST) and end time	Day1		Day2		Day3		Day4		Day5	
			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

		(ET)										
1	The plan designed based on training principles	ST=										
		ET=										
2	The coaches apply training principles appropriately throughout the session	ST=										
		ET=										
3	Trainees' are committed to follow training principles (starting from stretching and/or warming up, up to cooling down)	ST=										
		ET=										

Section Five: Observation on Ways of motivation and encouragement used by coaches

No	Activities to be observed	Start (ST) and end time (ET)	Day1		Day2		Day3		Day4		Day5	
			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1	Coaches used motivational words, phrases and actions at the beginning of the training and trainees seem motivated.	ST=										
		ET=										
2	Coaches used motivational words, phrases and actions during the training session and trainees are encouraged for training.	ST=										
		ET=										
3	Coaches used motivational words, phrases and actions at the end of the training.	ST=										
		ET=										

Section Six: Observation on Facility and equipment of the club

No	Activities to be observed	Start (ST) and end time (ET)	Day1		Day2		Day3		Day4		Day5	
			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

1	There are adequate facilities and equipment for long distance trainees' training.	ST=										
		ET=										
2	Long distance trainees' have appropriate training kits.	ST=										
		ET=										
3	The facilities and equipment available are standard and comfortable for long distance training	ST=										
		ET=										
4	The coaches used and managed the equipment and facilities appropriately throughout the training.	ST=										
		ET=										
5	The coaches delivered the planned using appropriate training method											
6	The training process is significantly accurate to the session objective.											

Section Seven: Observation on Facility and equipment of the club in the gymnasium

No	Activities to be observed	Start (ST) and end time (ET)	Day1		Day2		Day3		Day4		Day5	
			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1	The club has a	ST=										

	Gymnasium	ET=										
2	The gymnasium has adequate facilities and equipment	ST=										
		ET=										
3	The gymnasium is open for all long distance trainees' per their schedule	ST=										
		ET=										
4	Long distance trainees' actively involved in different workouts in the gymnasium	ST=										
		ET=										

Section Eight: Observation on Punctuality of coaches and trainees for training

No	Activities to be observed	Start (ST) and end time (ET)	Day1		Day2		Day3		Day4		Day5	
			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1	The coaches arrived earlier in training day	ST=										
		ET=										
2	The coaches arranged all training equipment needed for training before the training begin.	ST=										
		ET=										
3	All long distance running trainees arrived in time for training.	ST=										
		ET=										