TALENT IDENTIFICATION AND LONG-TERM ATHLETE DEVELOPMENT IN THROWING EVENTS (JAVELIN AND DISCUSs) IN CENTRAL ETHIOPIA REGIONAL STATE

SPORT ACADEMY

DEPARTMENT OF SPORT SCIENCE

BY ALEMAYEHU DIGA

A THESIS REPORT WAS SUBMITTED TO THE JIMMA UNIVERSITY SPORT ACADEMY DEPARTMENT OF SPORT SCIENCE FOR PARTIAL FULFILIATION OF THE REQUIREMENTS FOR THE MASTER'S DEGREE IN ATHLETICS SCIENCE OF COACHING

JUNE 2024

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APPROVAL SHEET

JIMMA UNIERSITY

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DECLARATION

By signing this paper, I certify that this thesis is fully my own work and that I have adhered to all ethical and technical scholarly instructions when gathering, analyzing, and preparing it. I have properly cited all academic material included in the thesis.

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BIOGRAPHICAL OF THE RESEARCHER

Alemayehu Diga Liben, the author, was born on June 25, 1976, in Deri town, which lies in the Yem zone district in the central part of Ethiopia. He attended Jimma Zone's Dilber Primary School for his elementary education, Seka Secondary School for his intermediate education, and Fofa Comprehensive School for his grades 11–12. After completing his high school education in Yem Zone in 1994 and earning an E.C. degree in 1995, he enrolled in Bahir Dar University's teacher education program and earned a Bachelor of Science degree in health, physical education, and sport in 1998. He worked at Fofa Comprehensive High School for a year before spending fourteen years as an expert in the youth and sports office at Yem Zone. He then enrolled in Jimma University's Graduate School to pursue postgraduate studies.

ABSTRACT

This mixed-methods study investigated the talent identification and long-term athlete development (LTAD) processes in javelin and discus throwing events within the U-17 athletic projects of three central Ethiopian regional states. The researcher used a descriptive survey research design, surveying 122 respondents. The results indicated that while talent identification methods were relatively consistent across regions, the factors influencing LTAD were more multifaceted. Correlation analyses revealed several strong positive relationships. Coaches' competency was strongly correlated with the effectiveness of talent identification ($r = 0.68$, $p < 0.01$). The availability of equipment/facilities was also strongly correlated with the effectiveness of talent identification ($r = 0.59$, $p < 0.01$). Additionally, the availability of competitions was strongly correlated with the effectiveness of long-term athlete development ($r = 0.72$, $p < 0.01$). Furthermore, ANOVA results showed that the effectiveness of talent identification and LTAD differed significantly based on coaches' educational background, the availability of training facilities, and the frequency of local/regional competitions. The findings also suggested that the talent identification processes were limited and non-systematic, as the majority of athletes (93.3%) lacked prior experience, and only 13.3% were from the local community. To strengthen the talent identification and LTAD processes, the researcher recommends a comprehensive approach, including developing a standardized identification protocol, investing in coach development, establishing community partnerships, securing sustainable funding, and conducting regular program evaluation.

***Keywords**: coaches, Facility, talent development, talent identification, Project athletes*

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ABBREVIATIONS

LTAD - Long-Term Athlete Development

TID - Talent Identification and Development

IAAF - International Association of Athletics Federations

NGB - National Governing Body

SELT - Standardized Evaluation and Monitoring Tests

KPIs - Key Performance Indicators

YPHD - Years of Participation in High-level Development

VYPM-Vertical Jump and Peak Power Measure

CHAPTER ONE

1.1. BACKGROUND OF THE STUDY

The talent identification program is one of the sports science-based approaches to optimizing the potential of athletes in the future (Susanto et al,2023). Talent identification (TID) programs are an integral part of the selection process for elite-level athletes (Baker,2018).It includes assessing technical skills alone or in combination with physical, physiological, psychological, and social characteristics to predict performance over time (Williams et al., 2020). The process of identifying potential talent should identify the variables that impact performance in competitive sports and forecast future performance (Johnston et al.,2018). Additionally (Tewodros et al., 2022), talent identification and talent development often depend on interconnected variables, such as the athlete's environment, maturation, the roles of stakeholders, and relationships created and maintained throughout both processes. (Howell, 2023) observes that projects rely on the subjective assessment of the scout or coach supported by a shopping list of key criteria (technique, attitude, balance, speed, understanding, personality, skills, talent, and intelligence). And also, Tewodros, el at,(2022) and Roberts et at (2019) suggest using the expert method, which combines the natural method-where an athlete is chosen based on their competitive performance or a coach's subjective identification of them-with the scientific method, which selects athletes based on their innate physical and mental skills for a particular sport. To steer those potential performers toward peak performance, talent development and identification should happen simultaneously. Sport talent development is the provision of athletes with a suitable learning environment so that talent potential can be realized (Till & Baker, 2020). According to Kristiansen and Houlihan, 2017), effective sports talent development in projects should aim at encouraging and supporting sports participation by students and staff. Creating an appropriate environment in which to nurture talent may play a more significant role in the development of expertise (Cui et al., 2018). According to Sarmento et (2018) players should be provided with a suitable learning and training environment so that they have the opportunity to realize their potential. (Kipkemboi, 2019), advocate for the provision of adequate facilities and equipment, competent coaches, and time for training and practice that directed towards enhancing athletes' development.

The most essential requirement for developing top athletes is the availability of world-class coaches (He et al.,2018). Further, the author notes that the quality of coaching determines the quality of the training environment. (Roberts et al.,2019) emphasize that a highly knowledgeable coach creates a training environment that generates success for athletes, but if the coach has poor technical or theoretical knowledge and lacks experience, he or she is unable to direct a comprehensive program, and therefore, the athlete will not reach his or her potential. Additionally, (Stokes et al., 2020) emphasize that there must be a strong commitment to high-quality coaching and education so as to attain high-level performance.

Quality and accessible training facilities and equipment create a positive environment that encourages proper training, but lack of facilities or access to facilities and equipment is a limiting factor in sports development (Santos et al., 2017). Exposure to competition plays a very vital role in the development of an athlete (P. Li et al.,2018). On the other hand, a lack of exposure to quality competition will dull the most talented group of athletes (Kipkemboi, 2019).

Creating an effective motivational environment is crucial if talented athletes are to develop their full potential (Wang et al.,2019). Extremely high levels of motivation may be necessary to repeatedly produce the kind of high-quality sessions that are required for elite performance (Mujika et al.,2019). Additionally, Tewodros et al.,(2022) note that enhanced motivation promotes learning, performance, enjoyment, and persistence. Student-athletes' initial motivation, whether intrinsic or extrinsic, usually predicts the athlete's attendance and adherence to a particular sport.

In the javelin and discus throw, talent identification and long-term athlete development (LTAD) entail a methodical process of identifying young athletes with potential and developing their abilities over a prolonged period of time (Babu, n.d.). The idea that early athletic talent identification, along with the right coaching and support, can optimize an athlete's long-term potential serves as the foundation for talent identification and long-term athlete development in these throwing competitions (Berge, 2018). When evaluating young athletes in discus and javelin, our scouting team takes into account a number of factors in terms of talent identification. Height, limb length, and body composition are examples of physical characteristics that greatly influence an individual's chances of success in these

competitions (Hume & Stewart, 2018). Studies have indicated that athletes who possess particular physical attributes, like longer arms and more muscle mass, typically perform well in javelin and discus throw competitions (Łysoń-Uklańska et al., 2021). An evaluation of motor skills, coordination, and explosiveness also conducted in order to find athletes with promising technical skills and athletic potential (Brown et al.,2017) Regarding long-term athlete development, the focus is on providing young athletes with a comprehensive training pathway that optimizes their athletic progression over time. This approach aims to avoid early specialization and instead promotes multisport or multi-event participation during the early stages of development. Research has indicated that early diversification of sports or events allows athletes to develop a broader range of motor skills, coordination, and physical abilities, which can be beneficial for javelin and discus throws in the long run (Kliethermes et al., 2019).

As part of the administrative staff for sports, the researcher would critically investigate the methods of talent identification and factors that influenced talent identification and long-term athletes' development in throwing events, specifically javelin and disc throwing in some selected athletic projects in the central Ethiopian regional states of Yem zone, Gurage zone, and Hadiya zone.

1.2. Statement of the problem

In terms of both audiences and respondents, athletics is currently among the top sports in Ethiopia. As a result, numerous athletic programs have formed and championed new initiatives. Despite this, researchers have not thoroughly investigated the variables influencing sports projects. The researcher selects three relevant studies to compare the current study with the related projects he previously chose.

The research on talent identification and development in Ethiopian athletics has highlighted several important factors. Mekonnen,(2018) found that a lack of equipment and facilities, issues with applying standard criteria, inconsistent follow-up by administrators, an overemphasis on game performance, and a lack of interest from coaches all impacted talent identification and development. Similarly, Asmamaw et al.,(2021) identified the availability of training facilities and equipment, coaches' knowledge and expertise, financial resources, and support for athletes, as well as the coordination and collaboration between stakeholders,

as critical factors. Focusing specifically on the Addis Ababa region, Tufa (2015) also emphasized the importance of access to training facilities and equipment, quality of coaching, financial resources, structured talent identification and development programs, and cooperation between schools, sports authorities, and clubs. By combining these three studies, the proposed study aims to address key gaps in the existing literature. Firstly, it will provide a deeper examination of the specific regional challenges in the central Ethiopian context, such as over-reliance on subjective assessments and limitations in structured talent identification processes. This depth of analysis is crucial for gaining a more nuanced understanding of the challenges faced in this particular regional setting. Secondly, the study will explore the influential regional-level factors, like resource availability, coaching expertise, and community engagement that affect the talent pipeline in the central region. This focus on regional dynamics is essential for understanding the unique challenges and opportunities that exist at the local level. Finally, the proposed research will place stronger emphasis on the challenges and gaps in long-term development efforts, including a lack of structured pathways and high athlete turnover. This focus on long-term development is crucial for ensuring that the talent identification process translates into sustained success and career longevity for the athletes. By addressing these crucial gaps, the study will contribute valuable insights to inform more effective and inclusive talent identification and development programs in the central Ethiopian region. The study fills these gaps by examining the current talent identification and long-term athlete development methods in the Yem, Gurage, and Hadiya zones, comparing them to established systems for running events, and examining the extent to which these approaches differ from or align with broader strategies used in other regions. This knowledge can inform the development of more effective and inclusive talent identification and long-term athlete development programs, ultimately supporting the development and diversification of Ethiopian athletics.

1.3. Basic research questions

This comprehensive study endeavored thoroughly investigate the methods and factors that influence both the talent identification process and long-term athlete development within the organization's athletic projects.

The research sought to answer the following key questions:

1. What are the methods of talent identification in throwing events across the athletic projects?
2. What are the methods of long-term development of athletes in throwing athletic projects?
3. What are the factors that influence talent identification process for throwing disciplines in the athletic projects?
4. What are the factors that influence the long-term development of athletes in throwing events the athletic projects?

By addressing these crucial inquiries, the study aimed to provide a comprehensive understanding of the talent identification and athlete development landscape, informing future strategic planning and operational enhancements within the organization's athletic endeavors

1.4. Objective of the Study

1.4.1. General objective

The general objective of this study was to assess the methods and factors that influence talent identification and long-term athlete development in the javelin and discus throwing events within the selected central Ethiopian regional state athletics projects

1.4.2. Specific objective

1. To examined the methods of talent identification on javelin and discus throw in athletic projects.
2. To examined the methods of long-term athlete development on discus and javelin throw in the athletic projects.
3. To identify the factors that influence talent identification ion discus and javelin throw in the athletic projects.
4. To identified the factors that influence long-term athlete development on discus and javelin throw in athletic projects.

1.5. Significance of the study

This comprehensive study examined the critical processes of talent identification and long-term athlete development within athletic programs. Key stakeholders, including sport administration, sport federations, and other relevant parties, received the meticulously compiled research findings. Notably, the study offered valuable recommendations for incorporating these new insights directly into the framework of youth athletic projects, with the aim of optimizing these pivotal developmental initiatives. Furthermore, the research delved deeply into the central Ethiopian regional state athletics federation, providing accurate facts to enhance the approach to talent identification and long-term athlete development, particularly in the disciplines of discus and javelin throwing. The study also put forth favorable suggestions to bolster athlete performance and the coaches' ability to recognize talented individuals in these events, underscoring the significant impact this research can have on the sporting landscape.

Underlying this work was a thorough and insightful investigation into the system of youth athletic projects, which yielded a trove of new and crucial results. These findings have the potential to meaningfully inform and strengthen these critical developmental programs, serving as a valuable resource for sports governing bodies and athlete support networks alike

1.6. Delimitation

The researcher specified the scope of the study for the under-17 athletics projects in the Yem, GU rage, and Hadiya zones of the central Ethiopian regional state to ensure the feasibility of the investigation. The researcher focused the study on three project centers in the central Ethiopian regional state. In total, the study included 122 participants, comprising 24 male and 21 female athletes, coaches, and zone sports stakeholders.

The study focused on the methods and factors that influence talent identification and long-term athlete development within athletic projects. These included specific talent identification and long-term development techniques, athlete selection, and recruitment criteria. Additionally, the availability of facilities and training equipment, the role of competition in talent identification and long-term athlete development, time allocation, coaches' competency, the role of coaches in talent identification and long-term development,

and the participation of administrative bodies in the projects are all crucial for the effective identification and nurturing of project athletes' talents.

1.7. Limitation of the study

The researcher faced several limitations in conducting this research. Gaining access and permission to carry out the study at the selected project centers within the central Ethiopian regional state was challenging. Coordinating the schedules of the busy athletes, coaches, and sports stakeholders who participated in the study proved difficult, as their availability was limited. Ensuring the data collected from the diverse participants was reliable and thorough was an ongoing effort to maintain the integrity of the research findings. Additionally, restricting the scope to only three project centers in the central Ethiopian regional state, while necessary for feasibility, may limit the generalizability of the results beyond this specific regional context. Finally, the research was constrained by time and resource limitations, which required the researcher to prioritize and scope the investigation accordingly. The researchers carefully navigated these limitations to ensure the validity and reliability of the study's findings within the given constraints

1.8. Operational Definitions

The key operational definitions used in this study were as follows

Administrative Bodies' Participation: The level of involvement and support provided by the relevant governing bodies, organizations, or agencies responsible for the management and implementation of the athletics projects (De Rycke & De Bosscher, 2019).

Coaches' Competency: The knowledge, skills, and abilities demonstrated by the coaches working with the project athletes, **who** enable them to effectively identify, develop, and guide the athletes' long-term progression (Watts & Cushion, 2017).

Long-Term Athlete Development: A holistic approach to athlete development that focuses on the gradual, systematic progression of an athlete's skills, physical abilities, and overall performance over an extended period, from the initial stages of talent identification to the highest levels of competition (Henriksen et al., 2011).

Project Athletes: The young athletes, typically under the age of 17, who are participating in the targeted athletics projects within the Yem, Gurage, and Hadiya zones of the central Ethiopian regional state (Rovnyy et al., 2015).

Project Centers: The specific locations or facilities where the researcher implemented the athletics projects and collected the research data (Bergeron et al., 2015).

Talent Identification: The process of recognizing an individual's potential for excellence in a particular sport or athletic discipline based on a set of specific criteria and assessment methods (Reeves et al., 2018).

These operational definitions used consistently throughout the research to ensure a clear and consistent understanding of the key concepts and variables under investigation.

CHAPTER TWO

2.1. REVIEW OF RELATED LITERATURE

2.1.1. Methods of talent identification in throwing event

For talent identification in throwing events, several methods can employ. These methods aim to assess various physical, technical, and performance-related attributes to identify individuals with the potential to excel in throwing disciplines (Koopmann et al., 2020). Here are some common methods used in talent identification for throwing events: Anthropometric measurements involve assessing an individual's body dimensions, such as height, weight, limb length, and body composition (Vlahovic et al.,2022). Certain body proportions and characteristics may be associated with throwing performance, and these measurements can provide valuable insights into an athlete's potential in throwing events (Maselli et al., 2019). Assessing an athlete's throwing technique is crucial to talent identification (Koopmann, 2020). Coaches and experts may evaluate an athlete's coordination, balance, movement efficiency, and biomechanics during throwing activities (Brewer, 2017). A detailed video analysis of an athlete's technique can provide insights into their potential for improvement and success in throwing events (D. J. Wright et al., 2022). Some sports organizations and governing bodies have specific talent identification programs or talent pathways in place (J. Baker, 2018). These programs may involve regional or national trials, scouting activities, or talent identification camps where athletes are evaluated based on their throwing abilities and potential (Koopmann et al., 2020). Experienced coaches and experts in throwing events can offer valuable insights and observations regarding an athlete's potential (Mason et al., 2020). Their expertise and knowledge of the sport can play a crucial role in identifying talented individuals (Roberts, 2019).

2.1.2. **Methods of talent identification in javelin**

Talent identification in javelin throwing involves assessing various physical, technical, and performance-related attributes to identify individuals with the potential to excel in the event (Koopmann et al., 2020a). Anthropometric measurements, such as height, weight, limb length, and body composition, can provide insights into an athlete's physical attributes and potential for javelin throwing (Zhao & Zhao, 2023). Evaluating an athlete's physical fitness is

crucial to talent identification. Tests may include measures of upper body strength (e.g., bench press), core strength and stability, lower body power (e.g., vertical jump), speed, agility, and flexibility. These tests help assess an athlete's overall athleticism and potential for success in javelin throwing (Chaniago, 2022). Assessing an athlete's technical proficiency in javelin throwing is essential. Coaches and experts analyze an athlete's throwing technique, including factors such as approach, grip, release, and follow-through (S. Baker, 2021). Monitoring an athlete's performance in training sessions and competitions is a valuable method for talent identification (Chaniago, 2022). Consistent and exceptional performance, particularly in terms of throwing distance and accuracy, can indicate an athlete's talent and potential for further development.

2.1.3. Methods of talent identification in discus throw

Methods of talent identification in discus throwing typically involve a combination of physical assessments, technical evaluations, performance analysis, and long-term observation. Assessing an athlete's physical attributes is a starting point in talent identification. Measurements such as body size, limb length, and body composition are taken to identify individuals who possess favorable characteristics for discus throwing (Chaniago, 2022). Evaluating an athlete's throwing performance through various tests helps identify potential talent. These tests may include assessing throwing distance, accuracy, consistency, and the ability to generate proper discus flight (Paraskevopoulos et al., 2023). Coaches and experts closely observe an athlete's throwing technique to assess their potential (M. Porter et al., 2019). This involves analyzing the athlete's grip, wind-up, delivery, release technique, body positioning, and coordination during the throwing motion. Evaluating an athlete's physical fitness attributes related to throwing is important. Strength, power, speed, agility, and flexibility tests may be conducted to determine an athlete's athleticism and potential for success in the event (Łysoń-Uklańska et al., 2021). Utilizing motion analysis and biomechanical assessments provides in-depth insights into an athlete's throwing technique, efficiency, and potential areas for improvement (Dinu & Louis, 2020). Advanced technologies, such as 3D motion capture systems, can measure joint angles, velocities, forces, and other biomechanical parameters (Hindle et al., 2021).

2.2. Methods of long-term athletes' development in throwing events

Long-term athlete development (LTAD) is a crucial aspect of achieving success in sports, including throwing events. This literature review aims to examine various methods employed for the long-term development of athletes participating in throwing events. By analyzing relevant research studies, this review aims to provide insights into effective training strategies, coaching methodologies, and developmental considerations for long-term athlete development in throwing events.

Long-term athlete development in throwing events should consider the effects of chronological age, biological age, and maturation rates. Athletes may experience growth spurts and changes in physical attributes that can impact their training and performance (Myer et al., 2013).

(Zaremski et al., 2019) found that early specialization in throwing events may lead to overuse injuries and burnout. They suggested adopting a multisport approach during the early stages of athlete development to promote overall athleticism and reduce the risk of injuries.

Hoover et al.,(2016) proposed a periodization model for the long-term development of throwers, emphasizing the importance of various training phases, such as preparatory, competitive, and transition phases. They highlighted the need for progressive overload and individualized training plans to optimize performance.

(Lin et al., 2022) examined the role of strength and conditioning in the long-term development of throwers. They highlighted the importance of implementing well-structured resistance training programs to enhance muscular strength, power, and throwing-specific movements.

This literature review highlighted several key findings regarding the long-term development of athletes in throwing events. It emphasized the benefits of a multisport approach during early athlete development, the significance of periodization models, the effectiveness of technical training methods, and the importance of implementing strength and conditioning programs. Coaches, practitioners, and athletes can utilize these research insights to develop evidence-based strategies for long-term athlete development in throwing events, ultimately optimizing performance outcomes**.**

2.2.1. Methods of long-term athletes' development in javelin throwing

Long-term athlete development (LTAD) plays a crucial role in the success of athletes participating in javelin throwing. This literature review aims to explore various methods employed for the long-term development of javelin throwers.

Studies suggest that early exposure to javelin throwing and the acquisition of fundamental motor skills are essential for long-term athlete development. Coaches and practitioners should focus on developing throwing-specific skills, such as grip, release technique, and coordination, during the early stages of athlete development (Lesinski et al., 2016).

Javelin throwers should follow a per iodized training plan that incorporates different phases (e.g., general preparation, specific preparation, competition, and recovery). Adequate rest and recovery periods are vital to prevent overuse injuries and optimize performance (Malcata & Hopkins, 2014).

Technical proficiency is crucial in javelin throwing. Biomechanical analysis, including motion capture systems and video analysis, can provide valuable insights into an athlete's throwing technique and facilitate targeted interventions to improve performance (Pavlović, 2020). Strength and conditioning training is an integral part of long-term athlete development in javelin throwing. Exercises targeting the development of core stability, upper body strength, and explosive power can enhance throwing performance (Pichardo et al., 2019).

This literature review highlighted several key findings related to the methods of long-term athlete development in javelin throwing. It emphasized the importance of early exposure and skill acquisition, periodization and training load management, technique and biomechanical analysis, as well as strength and conditioning training. Coaches, practitioners, and athletes can utilize these research insights to develop evidence-based strategies for long-term athlete development in javelin throwing, thereby optimizing performance outcomes.

2.2.2. Methods of long–term athletes' development in discus throwing

Long-term athlete development (LTAD) is a critical factor in the success of discus throwers. This literature review aims to explore the various methods employed for the long-term development of athletes in discus throwing. By analyzing relevant research studies, this

review seeks to provide insights into effective training strategies, technical considerations, coaching methodologies, and other factors that contribute to the long-term athlete's development in discus throwing.

Early acquisition of fundamental throwing skills and technique is crucial for long-term athlete development in discus throwing. Coaches and practitioners should emphasize proper grip, body positioning, rotational techniques, and release mechanics during the initial stages of athlete development (Takanashi et al., 2020).

Developing strength and power is essential for optimal performance in discus throwing. Strength training programs should focus on exercises that target the lower body, core stability, and upper body strength, incorporating both general and specific exercises for the throwing event (Liao et al., 2021).

A well-structured, per iodized training plan is crucial for long-term athlete development in discus throwing. The plan should include appropriate phases for building strength, power, technique, and competition readiness. Effective training load management and rest periods are necessary to prevent overuse injuries and optimize performance (Ćosić, 2019). This literature review highlighted several key findings related to the methods of long-term athlete development in discus throwing. It emphasized the importance of technical skill acquisition, strength and power training, periodization, and training load management. Coaches, practitioners, and athletes can utilize these research insights to develop evidence-based strategies for long-term athlete development in discus throwing, thereby optimizing performance outcomes.

2.2.3. Factors influencing talent identification in javelin throwing

Talent identification and long-term athlete development (LTAD) are key factors in the success of athletes participating in throwing events. This literature review aims to explore the factors that influence long-term athletes' development in throwing events, with a focus on factors related to talent identification.

Studies suggest that certain physical attributes, such as body size, strength, power, speed, and coordination, play a significant role in long-term athletes' development in throwing events.

Athletes with favorable physical characteristics tend to have an advantage in terms of performance and potential success (Pritchard & Cross, 2022).

Proficiency in throwing-specific technical skills, such as throwing technique, body positioning, release mechanics, and rhythm, is crucial for long-term athletes' development in throwing events. Athletes who demonstrate early mastery of these skills show potential for continued improvement (Bompa & Buzzichelli, 2019).

Environmental factors, such as access to quality coaching, training facilities, competition opportunities, and support systems, have a significant impact on long-term athletes' development in throwing events. Athletes from environments that provide optimal resources and support tend to have an advantage in their development (Hancock et al., 2013)

This literature review highlights several key factors influencing long-term athletes' development in throwing events. It emphasizes the importance of physical attributes, technical skills, and environmental influences in the development of talented throwers. Coaches, practitioners, and talent identification programs can utilize these research insights to inform their practices and optimize long-term athlete development in throwing events

Talent identification and long-term athlete development (LTAD) are critical aspects of success in javelin throwing. This literature review aims to examine the factors that influence long-term athletes' development in javelin throwing and their connection to talent identification. By analyzing relevant research studies, this review seeks to provide insights into the key factors involved in the long-term development of athletes in javelin throwing, including physical attributes, technical skills and environmental influences.

Studies suggest that certain physical attributes, such as body size, upper body strength, power, speed, and coordination, play a significant role in long-term athletes' development in javelin throwing. Athletes with favorable physical characteristics tend to have an advantage in terms of performance and potential success (Lloyd et al., 2014).

Proficiency in javelin-specific technical skills, including throwing technique, approach run, release mechanics, and body positioning, is crucial for long-term athletes' development in javelin throwing. Athletes who demonstrate early mastery of these skills show potential for continued improvement (Bompa & Buzzichelli, 2019).

Environmental factors, such as access to quality coaching, training facilities, appropriate competition opportunities, and support systems, have a significant impact on long-term athletes' development in javelin throwing. Athletes from environments that provide optimal resources and support tend to have an advantage in their development (Hancock et al., 2013).

This literature review highlights several key factors influencing long-term athletes' development in javelin throwing. It emphasizes the importance of physical attributes, technical skills, and environmental influences in the development of talented javelin throwers. Coaches, practitioners, and talent identification programs can utilize these research insights to inform their practices and optimize long-term athlete development in javelin throwing.

2.3.4. Factors influencing talent identification in discus throwing

Talent identification and long-term athlete development (LTAD) play crucial roles in the success of athletes participating in discus throwing. This literature review aims to explore the factors that influence long-term athletes' development in discus throwing and their connection to talent identification. By analyzing relevant research studies, this review seeks to provide insights into the key factors involved in the long-term development of athletes in discus throwing, including physical attributes, technical skills and environmental influences.

Studies suggest that certain physical attributes, such as upper body strength, core stability, speed, flexibility, and body size, play a significant role in long-term athletes' development in discus throwing. Athletes with favorable physical characteristics tend to have an advantage in terms of performance and potential success (Lloyd et al., 2014). Proficiency in discus-specific technical skills, including throwing technique, body positioning, release mechanics, and rotational movement, is crucial for long-term athletes' development in discus throwing. Athletes who demonstrate early mastery of these skills show potential for continued improvement (Bompa & Buzzichelli, 2019).

Environmental factors, such as access to quality coaching, training facilities, appropriate competition opportunities, and support systems, have a significant impact on long-term athletes' development in discus throwing. Athletes from environments that provide optimal resources and support tend to have an advantage in their development (Hancock et al., 2013).

This literature review highlights several key factors influencing long-term athletes' development in discus throwing. It emphasizes the importance of physical attributes, technical skills, psychological factors, and environmental influences in the development of talented discus throwers. Coaches, practitioners, and talent identification programs can utilize these research insights to inform their practices and optimize long-term athlete development in discus throwing.

2.4. Factors influencing long-term athletes' development in throwing events

Talent identification and long-term athlete development (LTAD) are key factors in the success of athletes participating in throwing events. This literature review aims to explore the factors that influence long-term athletes' development in throwing events, with a focus on factors related to talent identification. By analyzing relevant research studies, this review seeks to provide insights into the key factors involved in the long-term development of athletes in throwing events, including physical attributes, technical skills, and environmental influences.

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Environmental factors, such as access to quality coaching, training facilities, competition opportunities, and support systems, have a significant impact on long-term athletes' development in throwing events. Athletes from environments that provide optimal resources and support tend to have an advantage in their development (Hancock, 2017).

This literature review highlights several key factors influencing long-term athletes' development in throwing events. It emphasizes the importance of physical attributes, technical skills, and environmental influences in the development of talented throwers.

Coaches, practitioners, and talent identification programs can utilize these research insights to inform their practices and optimize long-term athlete development in throwing events.

2.4.1. **Factors influencing long-term athletes' development in javelin throwing**

Talent identification and long-term athlete development (LTAD) are critical aspects of success in javelin throwing. This literature review aims to examine the factors that influence long-term athletes' development in javelin throwing and their connection to talent identification. By analyzing relevant research studies, this review seeks to provide insights into the key factors involved in the long-term development of athletes in javelin throwing, including physical attributes, technical skills, and environmental influences.

Studies suggest that certain physical attributes, such as body size, upper body strength, power, speed, and coordination, play a significant role in long-term athletes' development in javelin throwing. Athletes with favorable physical characteristics tend to have an advantage in terms of performance and potential success (Cumming et al., 2017).

Proficiency in javelin-specific technical skills, including throwing technique, approach run, release mechanics, and body positioning, is crucial for long-term athletes' development in javelin throwing. Athletes who demonstrate early mastery of these skills show potential for continued improvement (Sellathurai & Draper, 2022).

Environmental factors, such as access to quality coaching, training facilities, appropriate competition opportunities, and support systems, have a significant impact on long-term athletes' development in javelin throwing (Zaras et al., 2021). Athletes from environments that provide optimal resources and support tend to have an advantage in their development (Stambulova et al., 2021).

This literature review highlights several key factors influencing long-term athletes' development in javelin throwing. It emphasizes the importance of physical attributes, technical skills, psychological factors, and environmental influences in the development of talented javelin throwers. Coaches, practitioners, and talent identification programs can utilize these research insights to inform their practices and optimize long-term athlete development in javelin throwing.

2.4.2. Factors influencing long-term athletes' development in discus throwing

Talent identification and long-term athlete development (LTAD) play crucial roles in the success of athletes participating in discus throwing. This literature review aims to explore the factors that influence long-term athletes' development in discus throwing and their connection to talent identification. By analyzing relevant research studies, this review seeks to provide insights into the key factors involved in the long-term development of athletes in discus throwing, including physical attributes, technical skills, and environmental influences.

Studies suggest that certain physical attributes, such as upper body strength, core stability, speed, flexibility, and body size, play a significant role in long-term athletes' development in discus throwing (Jung, 2022). Athletes with favorable physical characteristics tend to have an advantage in terms of performance and potential success (Till et al., 2017).

Proficiency in discus-specific technical skills, including throwing technique, body positioning, release mechanics, and rotational movement, is crucial for long-term athletes' development in discus throwing. Athletes who demonstrate early mastery of these skills show potential for continued improvement (Api & Arruda, n.d.).

Environmental factors, such as access to quality coaching, training facilities, appropriate competition opportunities, and support systems, have a significant impact on long-term athletes' development in discus throwing. Athletes from environments that provide optimal resources and support tend to have an advantage in their development (Hancock, 2017).

This literature review highlights several key factors influencing long-term athletes' development in discus throwing. It emphasizes the importance of physical attributes, technical skills, psychological factors, and environmental influences in the development of talented discus throwers. Coaches, practitioners, and talent identification programs can utilize these research insights to inform their practices and optimize long-term athlete development in discus throwing.

2.5. Empirical literature

Talent identification and long-term athlete development are topics extensively studied in sports science and related fields there are substantial empirical literature exploring talent identification, development, and related factors. These are…

2.5.1. Talent Identification Models

The review by Ericsson and Harwell, 2019) discusses the role of practice and play in the development of sport expertise. It highlights the importance of deliberate practice and offers insights into designing effective training programs.

(J. Baker, 2018) Provide an academic review of talent identification and development. This review explores various approaches and strategies utilized in talent identification programs and offer a critical analysis of their effectiveness.

(Bergkamp et al., 2019) Present an overview of talent identification and development programs in different sports. This review discusses current models and provides insights into future directions for talent identification research and practice. These reviews emphasize the importance of structured training programs, deliberate practice, and effective talent identification strategies in promoting athlete development. Consider incorporating evidence-based approaches and utilizing a variety of assessment methods to identify and nurture talent in specific sports.

2.5.2. Predictors of Talent

(Ericsson & Harwell,2019) Explore the influence of deliberate practice on the development of expert performance in sports. This review highlights the role of focused and structured practice in improving skill acquisition and performance. (Fransen & Güllich, 2019) Present an international perspective on talent identification and development. The review discusses the importance of early specialization, talent transfer, and the identification of talent in different sports contexts.

These reviews emphasize the significance of deliberate practice, early specialization, and targeted talent identification in sport-specific contexts. Consider designing training programs

that provide opportunities for deliberate practice and utilize sport-specific assessment criteria to identify and develop talent effectively.

2.5.3. Long-term Athlete Development (LTAD)

(Abarghoueinejad et al.,2021)Present a comprehensive framework for long-term athlete development. This review discusses the trainability of physical, technical, tactical, and psychological attributes throughout childhood and adolescence.

(Holt et al.,2020)Focus on evidence-based policies for youth sport programs. This review highlights the importance of creating supportive environments, promoting positive youth experiences, and considering individual development trajectories in sports programs.

2.6. Conceptual formwork

These reviews emphasize the importance of a long-term approach to athlete development, considering multiple aspects such as physical, technical, tactical, and psychological development. Create developmentally appropriate programs that prioritize athlete well-being, individualized training, and a positive sporting environment.

The study employs a conceptual framework that utilizes two-variable cohorts to address the research objectives through descriptive analysis. The key variables defined as follows:

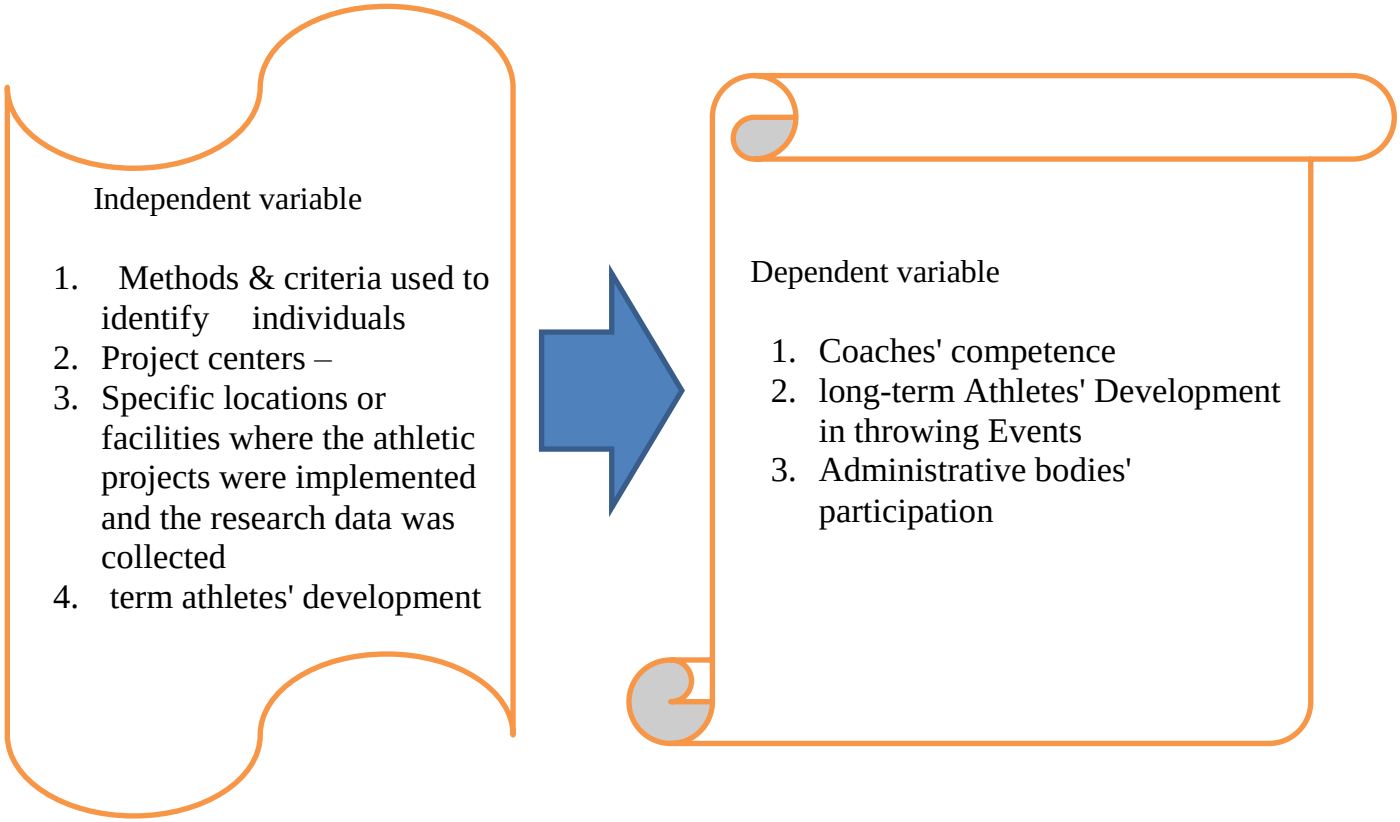
2.6.1. Dependent Variables

The selection of the dependent variables in this study was well justified, as they were central to evaluating the long-term development of the project athletes in throwing events within the Central Ethiopia Regional States. The primary dependent variable was the project athletes' long-term development, as measuring the progression of their skills, achievements, and overall performance was essential to assessing the effectiveness of the talent identification and LTAD initiatives. Additionally, the coaches' competence, in terms of their ability to provide specialized training, technical guidance, and support, was a crucial dependent variable, as the coaches play a key role in the athletes' long-term development. Finally, the administrative bodies' participation, including their involvement, resource allocation, and policy implementation, was a critical dependent variable, as the support and initiatives from governing authorities can significantly affect the success of the talent identification and

LTAD programs. By exploring these interrelated factors, the study could provide a comprehensive understanding of the key elements that contribute to the long-term development of the project athletes and inform strategies to strengthen the talent identification and LTAD efforts in the region.

2.6.2. Independent Variables

The independent variables in the conceptual framework were the talent identification process and the project centers. The talent identification process examines the recognition of individuals' potential for excellence in specific sports or athletic disciplines, based on a set of established criteria and assessment methods. The project centers refer to the specific locations or facilities where the athletic projects were implemented and where the research data is collected. By exploring the relationships between these dependent and independent variables, the study aims to gain a comprehensive understanding of the factors influencing the long-term development of the project athletes, the competency of the coaches, and the participation of the administrative bodies in the targeted athletic projects.



CHAPTER THREE

3.1. RESEARCH METHODOLOGY AND MATERIALS

The researcher designed the methodology and materials employed in this study to provide a comprehensive and rigorous investigation. They aim to examine the key factors influencing the long-term development of project athletes. Additionally, the study will investigate the competency of coaches as well as the participation of administrative bodies in targeted athletic projects. The study utilizes a descriptive analysis approach guided by a conceptual framework that examines the relationships between dependent variables (project athletes' long-term development, coaches' competency, and administrative bodies' participation).In addition, independent variables (talent identification process and project centers). The data collection process for this study employed a mixed-methods approach, utilizing a combination of quantitative and qualitative techniques. This included surveys, interviews, and observations conducted with the project athletes, coaches, and administrative personnel. By incorporating both numerical data and in-depth insights, the researchers were able to gain a comprehensive understanding of the factors influencing talent identification and long-term athlete development in throwing events within the Central Ethiopia Regional States.

By triangulating the quantitative and qualitative data sources, the researchers aim to enhance the validity and reliability of the study's findings, ultimately providing valuable insights into the complex dynamics underlying the success and sustainability of targeted athletic projects.

3.1.2. **Study setting**

The researcher conducted this study in some selected Central Ethiopian regional state athletic projects, including Yem Zone, Gurage Zone, and Hadia Zone. The Central Ethiopia Regional State is a regional state in Ethiopia. It was formed from the northern part of the South Nation Nationalities and peoples Region (SNNPR) on August 19, 2023 after a successful referendum (Mokria et al., 2022). Central Ethiopia regional state, which is one of twelve newly formed regional states ,comprises seven (7) zones East Gurage Zone, Gurage Zone, Hadiya Zone, Halaba Zone, Kembata Zone, Silte Zone, and Yem Zone, three (3) special words: Kebena Special Woreda, Mareko special woreda, and Tembaro Special Woreda, and

seven city administrations: Butajira, Hosaena, Halaba Kulito, Durame, Worabe,saja, Welkite)

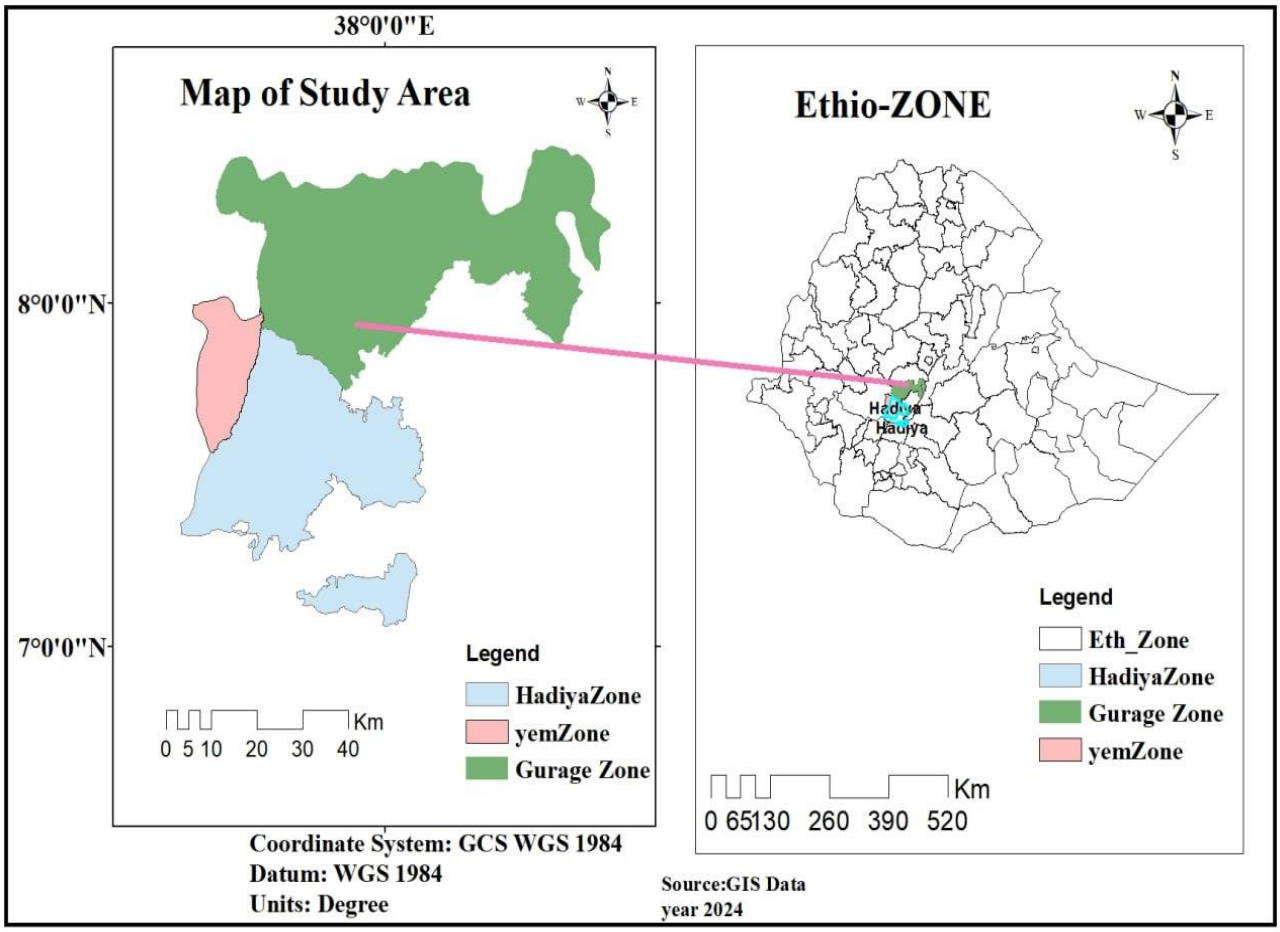


Figure 1 the Map of Study Area (source GIS Data year 2024)

The location of the study area in Yem, Gurage and Hadiya zone

3.1.3. Research Design

This study employed a descriptive survey research design mixed research method, specifically utilizing a triangulation approach, to assess talent identification and long-term athlete development in javelin and discus throwing events within the context of central Ethiopian regional state athletic projects (Yem, Gurage and Hadiya zones). The purpose of this study was to explore the complex phenomenon of talent identification and long-term athlete development in the targeted regional athletic projects. To achieve the specific research objectives, the researchers judiciously selected the descriptive method as the overarching approach. The triangulation design, at the core of this methodological framework, aims to

provide a comprehensive and nuanced understanding of the research topic. By combining multiple data sources, methods, theories, and researchers, the triangulation approach enhances the validity, reliability, and overall comprehensiveness of the research findings. This strategic use of triangulation was a valuable research design choice, as it helps minimize potential biases and offers a more holistic perspective on the phenomenon under investigation. The integration of quantitative and qualitative data, along with the rigorous review of relevant literature and theories, strengthens the research design and enables the researchers to arrive at a deeper, more insightful analysis of talent identification and long-term athlete development in the central

3.1.4. Source of data

The researcher collected the primary sources of data through questionnaires, interviews, and on-site observation with the officially registered athletic project coaches and athletes, both previous and current.

3.1.5. The population of the study

The target population of the study consisted of throwing event athletes (24 males and 21 females), throwing event coaches (3 males), physical education teachers (11 males and 5 females), and sports federation leaders (15 males and 11 females) from the central Ethiopia regional state. In total, the population of the study comprised 122 participants.

Table 1 Population Data of the Study

No	Zones	Name of project	Coach		Athletes		Ph. education teachers		Sport experts		Sport federation leaders		Total
			M	F	M	F	M	F	M	F	M	F	
1	Yem zone	Deri	1	-	8	6	11	5	6	5	5	3	
2	Gurage zone	Endibir	1	-	7	9			6	5	5	4	
3	Hadia zone	Bure	1	-	9	6			5	5	5	4	
Total			3	-	24	21	11	5	17	15	15	11	122
			3		45		16		32		26		
Sampling Techniques	convince	From 5 projects Purposive	Census From 3 projects		Purposive		Census From 6 high schools		Purposive		Purposive		census-based

3.1.6. Sample and Sampling Techniques

This comprehensive population data provides a clear understanding of the different stakeholder groups involved in the study, including the athletes, coaches, physical education teachers, sports experts, and sports federation leaders from the central Ethiopia regional athletic projects.

For this study, the researcher adopted a comprehensive sampling strategy to capture the key stakeholders involved in the talent identification and long-term athlete development processes within the central Ethiopian regional athletic projects.

Given the relatively smaller population size, the researchers judiciously employed a non-probability, census-based sampling technique. This approach enabled the researchers to include the entirety of the target population, ensuring that all relevant athletic projects, athletes, coaches, sport experts, and sport federation leaders from the throwing events disciplines (javelin and discus) were represented in the study. Specifically, the researcher

selected participants from the Yem Zone, Gurage Zone, and Hadiya Zone, which are the central regional states for the targeted athletic projects. Furthermore, the researcher also included physical education teachers from selected high schools within the Yem Zone, as they play a crucial role in the talent identification and development process at the grassroots level. To ensure a balanced and representative sample, the researcher utilized a simple random sampling method to select the specific athletic projects and zones included in the study. This approach helped to mitigate potential biases and enhance the generalizability of the research findings.

By adopting this comprehensive sampling strategy, the researcher has ensured that the study captures the diverse perspectives and experiences of all the key stakeholders involved in the talent identification and long-term athlete development initiatives within the central Ethiopian regional state athletic projects. This holistic sampling approach strengthens the validity and reliability of the study's findings, positioning the researchers to offer valuable insights and recommendations for the continued improvement and sustainability of these vital sports development programs.

3.1.6. Data collection instrument

To obtain reliable information from the research participants, the researchers used questionnaires, interviews, and observations as data collection instruments from the sample population.

3.1.6.1. Questionnaires

This study used a structured data collection strategy to gather insights from key stakeholders in talent identification and long-term athlete development initiatives in central Ethiopia. A comprehensive questionnaire was developed in English and translated into Amharic for accessibility. The questionnaire included 62 closed-ended items for athletes and 19 for coaches, physical education teachers, and sport experts. The study involved 122 respondents, covering topics like background information and attitudes towards discus and javelin throwing. The researchers' attention to design, translation, and administration of the instruments, along with inclusive participant selection, demonstrated a robust approach

(C. Li et al., 2015).

3.1.6.2. Interview

This study used a comprehensive questionnaire-based data collection and structured interviews to gather in-depth information from key stakeholders. The researcher aimed to gain deeper insights into talent identification and long-term athlete development processes in central Ethiopian regional states. The structured interview methodology, which included a standardized schedule of questions, enhanced the reliability and comparability of the qualitative data. The researchers also used structured observational checklists to capture standardized and comparable information across different athletic projects and training sessions. This holistic data collection strategy, combining both quantitative and qualitative elements, strengthened the overall research design and contributed to a more comprehensive understanding of the phenomenon under investigation. The integration of observational techniques and other data collection methods further strengthened the researcher's ability to corroborate and contextualize the information gathered, leading to a more insightful analysis of talent identification and long-term athlete development.

3.1.6.3. Observation

This study used questionnaire-based data collection and structured interviews to investigate talent identification and long-term athlete development in central Ethiopian regional athletic projects. Using observational techniques, the researchers developed comprehensive checklists to capture key aspects of training sessions, including athletic performance methods, coaches' motivation approaches, and training facilities. This approach allowed for a comprehensive understanding of the complex phenomena under investigation, enhancing the validity and reliability of the study's findings. The integration of observational techniques further strengthens the researcher's ability to corroborate and contextualize the information gathered.

3.1.7. Pilot study

Before the distribution of the questionnaires to the sample group of the study, a pilot study was conducted to check the validity and there liability of the questionnaire. For this purpose, seven participants from Yem Zone athletics sport project that were not included in the sample were selected and the study items were distributed to the selected participants. Person

correlation result for the questionnaire indicated a very good (0.71) for English and Amharic version. Sufficient information founded on the problems of Ambo town athletes sport club. Based on the pilot study some questionnaires were modified and restructured for the final study.

3.1.8. Procedure of data collection

The researcher used a multi-faceted approach to gather data on talent identification and long-term athlete development in central Ethiopian regional state athletic projects. The study involved 122 participants, including athletes, coaches, and other stakeholders. The questionnaires were translated into local languages for accessibility. The researcher distributed the finalized questionnaires to trainees, conducted structured interviews with coaches, and developed observational checklists to document training sessions. Transparency and engagement with stakeholders were maintained throughout the data collection process. The meticulous attention to instrument development, translation, and inclusive data collection procedures ensured the quality, reliability, and validity of the data, which can inform talent identification and long-term athlete development initiatives.

3.1.9. Method of data analysis

The researcher analyzed the data obtained from the respondents using the Statistical Package for the Social Sciences (SPSS version 26). He then summarized the data using descriptive statistics such as percentages and frequency of responses. Additionally, the researcher employed analysis of variance (ANOVA) to examine the disparity between zones. Regarding data analysis, the researcher employed both qualitative and quantitative approaches. The researcher employed a qualitative method to provide a detailed description of the data, which helped hem explore and discover inherent facts. Additionally, they utilized a quantitative approach to quantify the data generated in terms of frequencies and percentages, presenting the results in tables.

3.1.10. **Ethical issue/consideration**

The researcher has taken several ethical measures to ensure the integrity of the study on talent identification and long-term athlete development in throwing events in central Ethiopian regional states. Firstly, the researcher seems to have communicated with the

central Ethiopian regional state authorities, including the Yem Zone, Gurage Zone, and Hadia Zone, to secure the necessary permissions and approvals to conduct the study. This suggests that the researchers followed the proper institutional protocols and procedures legally and smoothly carry out the research. Secondly, the researcher informed the respondents, which included throwing event athletes, coaches, physical education teachers, and sports federation leaders, about the purpose of the study. The researcher then obtained the consent of the participants before including them in the study. This ensures that the participants were aware of the study's objectives and voluntarily agreed to take part. While the passage does not explicitly mention measures taken to ensure participant confidentiality, this is a standard ethical consideration in research. It is likely that the researcher took steps to protect the privacy and anonymity of the participants, such as de-identifying data or obtaining consent for data usage. By informing the participants about the study's purpose and obtaining their consent, the researcher appears to have upheld the ethical principle of respecting the autonomy and free choice of the research participants. This voluntary participation was essential for maintaining the integrity of the research process. Overall, the information provided suggests that the researcher was mindful of the ethical considerations relevant to this study and responded appropriately to address them. These ethical practices were crucial for ensuring the responsible and transparent conduct of research.

CHAPTER FOUR

4. DATA ANALYSIS, INTERPRETATION AND DISCUSSION

This chapter presents a comprehensive analysis and summary of the research findings. The goal was thoroughly address the research questions and objectives that guided this study. To this end, the researcher took a systematic approach to analyzing the data collected from the various stakeholders involved in the talent identification and athlete development processes within the central Ethiopian regional state (Yeme, Gurage and Hadiya Zone) athletic projects. The analysis and presentation of the results in this chapter provide a detailed understanding of the key factors, challenges, and opportunities related to talent identification and athlete development practices in the targeted regions. By systematically working through the data, the research aimed to offer valuable insights that could inform and improve the existing talent identification and nurturing strategies in the central Ethiopian athletic projects. Through a comprehensive examination of the information gathered from the throwing event athletes, coaches, physical education teachers, sports experts, and sports federation leaders, this chapter sheds light on the current state of talent identification, the challenges faced, and the potential avenues for enhancing the overall athlete development process. The researcher presented the findings in a logical and coherent manner to address the research questions and fulfill the stated objectives of the study.

By the end of this chapter, the reader will have a thorough understanding of the research outcomes and their implications for improving talent identification and athlete development practices in the central Ethiopian regional athletic projects.

4.1. Reliability of the Questionnaires

The Cornbrash’s alpha values for questionnaire items across respondent groups exceed the 0.7 threshold, indicating strong internal consistency and reliability. This enhances confidence in the data collected and the research findings. The high reliability of the questionnaires ensures consistent responses and stable measures, laying a solid foundation for the credibility and trustworthiness of the study's results and conclusions.

Table 2 Reliability of the Questionnaires

Respondent Group	Questionnaire Items	Cronbach's Alpha
Throwing Event Athletes	Talent identification practices	0.82
	Athlete development support	0.86
	Challenges in the system	0.81
Coaches	Talent identification methods	0.84
	raining and development programs	0.80
	Institutional support	0.78
Physical Education Teachers	talent spotting and referral	0.76
	Curriculum and facilities	0.82
	Collaboration with sports bodies	0.75
Sports Federation Leaders	Talent identification policies	0.88
	Athlete development initiatives	0.83
	Resource allocation and management	0.86

4.2. **Demographic characteristics of respondents**

The study reveals that the majority of respondents, 91.1%, were between 15-18 years old, strongly suggesting a youth interest in athletics. The majority (62.2%) have an education level between grades 5-8, indicating accessibility. The study found that the work experience of respondents was distributed across Yem, Gurage, and Hadiya zones, with Gurage Zone having the highest percentage at 37.8%. This suggests that most athletes lack prior experience, indicating that talent was dispersed across regions. The data provides a comprehensive understanding of the landscape of athletics in central Ethiopian regional states.

Table 3 Demographic characteristics of project athletes

Project athletes	Alternative	Count	Column N %
age of the respondent	15-18	41	91.1%
	19-20	3	6.7%
	21-24	1	2.2%
sex of respondent	Male	23	51.1%
	Female	22	48.9%
education level of respondent	5-8	28	62.2%
	9-10	16	35.6%
	11-12	1	2.2%
Work experience of	Yem Zone	13	28.9%
respondent	Gurage Zone	17	37.8%
	Hadiya Zone	15	33.3%
experience of respondent	Yes	3	6.7%
before	No	42	93.3%
is there athlete from your	Yes	6	13.3%
family	No	39	86.7%
work place of athlete	Yem	14	31.1%
	Gurage	16	35.6%
	Hadiya	15	33.3%

The summary results show that the majority of participants (40.3%) were aged between 26-35 years, with 59.7% being 36 years and above. The gender imbalance in the sample population affects the perspectives and experiences expressed within the project. Most respondents (85.7%) held a master's degree, indicating advanced academic qualifications. The majority of respondents were from Yem Zone, with 46.8% from Yem, 28.6% from Gurage, and 24.7% from Hadiya Zone. The respondents represented various types of work within the sports domain, including project coaches, physical education teachers, sport federation leaders, and sport experts. This diversity of roles and expertise contributes to a multidisciplinary approach to the project.

Table 4 Demographic characteristics of project coaches and other stockholders

Project coaches and stockholders	Alternatives	Count	Column N %
age of respondent	26-35 years	31	40.3%
	36 and above years	46	59.7%
sex of respondent	Male	46	59.7%
	Female	31	40.3%
Educational level of respondent	Diploma	11	14.3%
	MSC	66	85.7%
work place of respondent	Yem Zone	36	46.8%
	Gurage Zone	22	28.6%
	HAdiya Zone	19	24.7%
type of work of respondent	project coach	3	3.9%
	physical education teacher	16	20.8%
	sport federation leader	26	33.8%
	sport expert	32	41.6%

4.3. Data Analysis and Interpretation of Project Athletes' Response

4.3.1 Talent identification and long term athlete development

The data presented in table 5, respondents generally perceived the talent identification methods used in the athletics project for the javelin and discus throw positively. The researchers used appropriate criteria to identify talent, as agreed by a majority of respondents (73.3%). Most (64.4%) agreed that the process involved multiple assessments and evaluations. The majority (71.1%) indicated that the researchers considered both technical and physical attributes. Over half (55.6%) agreed that input from experienced coaches and experts was part of talent identification. Furthermore, a majority of respondents (57.8%) believed the talent identification process was effective at identifying potentially talented athletes in these events. Overall, the results suggest those involved in the athletic projects viewed the talent identification methods used as thorough and effective.

Table 5 Talent Identification method of project athletes

Talent Identification method	strongly disagree	disagree	Neutral	Agree	strongly agree
criteria used for talented identification	0 0.0%	4 8.9%	8 17.8%	29 64.4%	4 8.9%
talent identification process in javelin and discus throw involves multiple assessments and evaluations	1 2.2%	4 8.9%	8 17.8%	29 64.4%	3 6.7%
talent identification process in javelin and discus throw considers both physical and technical attributes	0 0.0%	1 2.2%	6 13.3%	32 71.1%	6 13.3%
talent identification process in javelin and discus throw involves input from experienced coaches and experts	0 0.0%	2 4.4%	13 28.9%	25 55.6%	5 11.1%
The talent identification process in javelin and discus throw is effective in identifying potential talented athletes	2 4.4%	2 4.4%	4 8.9%	26 57.8%	11 24.4%

The summary results in Table 6, most respondents (51.1%) agreed or strongly agreed that the javelin and discus throw events provided adequate support and resources for long-term athlete development, though a significant portion (26.6%) disagreed or were neutral. A large majority (84.5%) of respondents agreed or strongly agreed that the LTAD program for these events considered both physical and technical aspects of training. The majority of respondents (86.7%) agreed or strongly agreed that the LTAD program emphasized skill acquisition and technical development. Most respondents (77.8%) agreed or strongly agreed

that the LTAD program promoted a balanced approach between training and competition. Overall, the results suggested the LTAD program for javelin and discus was viewed positively, with a focus on developing both physical and technical skills, though there may have been room for improvement in the overall support and resources provide.

Table 6 Long-Term Athlete Development method

Long-Term Athlete Development method	strongly disagreed	Disagreed	Neutral	Agree	strongly agree
Javelin and discus throw provide adequate support and resources for long-term athlete development	2 4.4%	10 22.2%	10 22.2 %	22 48.9 %	1 2.2%
The long-term athlete development program in javelin and discus throw considers both physical and technical aspects of training	0 0.0%	1 2.2%	6 13.3 %	31 68.9 %	7 15.6%
The long-term athlete development program in javelin and discus throw emphasizes skill acquisition and technical development.	0 0.0%	0 0.0%	6 13.3 %	32 71.1 %	7 15.6%
The long-term athlete development program in javelin and discus throw promotes a balanced approach between training and competition	1 2.2%	3 6.7%	6 13.3 %	27 60.0 %	8 17.8%
The long-term athlete development program in javelin and discus throw focuses on individualized training plans and goals	1 22. %	3 6.7%	6 13.3 %	32 71.1 %	3 6.7%

4.3.2 Hinder identification of talented student-athletes and long-term athlete's development

The summary results in Table 7, the LTAD program for javelin and discus throw received positive reviews, as a majority (71.1%) of respondents agreed with its focus on individualized training plans and goals. Most respondents (68.9%) agreed about the positive effect of the availability and quality of training facilities on development, though 22.2% expressed a neutral stance. Respondents had mixed views on access to sufficient financial support, with 28.9% agreeing but 26.7% disagreeing or strongly disagreeing. Over half the respondents (53.3%) disagreed or strongly disagreed with the availability of sponsorship opportunities or financial support. However, 64.4% of respondents confirmed the presence of a strong support system of family, friends, and coaches. Half the respondents (50.0%) reported facing social or cultural barriers in pursuing their athletic goals. Overall, the results highlighted challenges around facilities, finances, and sociocultural factors affecting athlete development in these throwing events.

Table 7 the factors that hinder identification of talented student-athletes and long-term athlete's development

Items	Strongly disagreed	Disagreed	neutral	Agree	strongly agree
The availability and quality of training facilities in my athletics project/club positively affect my development in javelin/discus throwing.	0	4	10	22	9
	0.0%	8.9%	22.2 %	48.9 %	20.0 %
I have access to sufficient financial support for training, equipment, and competition expenses.	12	12	2	13	6
	26.7%	26.7 %	4.4%	28.9 %	13.3 %
Sponsorship opportunities or financial support for athletes in javelin/discus throwing are readily available in my region	13	11	6	10	5
	28.9%	24.4 %	13.3 %	22.2 %	11.1 %
I have a strong support system (e.g., family, friends, and coaches) that encourages and up ports my athletic development in javelin/discus throwing	2	8	6	20	9
	4.4%	17.8 %	13.3 %	44.4 %	20.0 %
I have faced social or cultural barriers in pursuing my athletic goals in javelin/discus throwing	6	10	6	15	8
	13.3%	22.2 %	13.3 %	33.3 %	17.8 %

Table 8 shows survey results on coaches' competency in javelin and discus. Most respondents (84.4%) agreed their coaches have extensive experience in these events. A majority (66.7%) agreed their coaches hold relevant certifications. Most (82.3%) agreed their coaches design effective training programs. The majority (86.7%) agreed their coaches provide individualized feedback. Overall, the results indicate athletes perceive their coaches as competent in these throwing events, though some room for improvement remains in coaching qualifications.

Table 8 Coach's Competency

Coach's Competency	strongly disagreed	Disagree	neutral	Agree	strongly agree
My coach has extensive experience in coaching javelin/discus throwing.	0	1	6	32	6
	0.0%	2.2%	13.3%	71.1%	13.3%
My coach holds coaching certifications or qualifications specific to javelin/discus throwing.	0	1	14	22	8
	0.0%	2.2%	31.1%	48.9%	17.8%
My coach designs effective training programs that improve my performance in javelin/discus throwing	0	2	6	30	7
	0.0%	4.4%	13.3%	66.7%	15.6%
My coach provides individualized feedback and guidance to help me improve my technique in javelin/discus throwing.	0	2	4	30	9
	0.0%	4.4%	8.9%	66.7%	20.0%

Table 9 shows most participants (66.7%) agreed their coach effectively communicates instructions and guidance for training in javelin and discus. However, a small percentage (8.9%) disagreed, indicating room for improvement in communication. Additionally, a significant majority (62.2%) agreed they feel comfortable discussing goals, concerns, and progress with their coach. A notable proportion (26.7%) even strongly agreed, suggesting a strong athlete-coach relationship. Yet, a minority (6.7%) disagreed, highlighting the need to enhance open communication further. Overall, the results indicate generally positive perceptions of the coaches' communication and the athletes' comfort in discussing important matters, though some areas for improvement remain.

Table 9 Communication and Relationship

Communication and Relationship	strongly disagreed	disagree	neutral	Agree	strongly agree
My coach effectively communicates instructions and guidance for training in javelin/discus throwing.	0 0.0%	4 8.9%	7 15.6 %	30 66.7 %	4 8.9%
I feel comfortable discussing my goals, concerns, and training progress with my coach	0 0.0%	3 6.7%	2 4.4%	28 62.2 %	12 26.7%
My coach demonstrates a strong understanding of talent identification and long-term athlete development principles in javelin/discus throwing.	0 0.0%	3 6.7%	6 13.3 %	34 75.6 %	2 4.4%
My coach provides guidance on my long-term development pathway and goals in javelin/discus throwing.	0 0.0%	2 4.4%	6 13.3 %	28 62.2 %	9 20.0%

4.4. Equipment used for talent identification and development

The summary results in Table 10, the majority (71.1%) agreed the equipment used for talent identification accurately measured performance and technique. However, some (8.9%) disagreed, suggesting room for improvement. There was a split opinion on the accessibility of the equipment, with 35.6% agreeing it was accessible, but 40% disagreeing. Most (64.4%) agreed the equipment provided objective data to assess potential, though a few (15.6%) disagreed. While nearly half (48.9%) felt the equipment was regularly updated, over a quarter (26.7%) disagreed. A majority (44.4%) agreed the equipment was appropriate for javelin and discus, but 31.1% were neutral. Overall, the results indicate generally positive perceptions of the equipment's accuracy and objectivity, but highlight accessibility, updating, and appropriateness as areas for potential improvement in the talent identification process

Table 10 Talent Identification Practices

Talent Identification Practices	strongly disagree	disagree	**Neutral**	**Agree**	**strongly agree**
The equipment used in talent identification allows for accurate measurement of performance and technique	0 0.0%	4 8.9%	7 15.6 %	32 71.1 %	2 4.4%
The equipment used in talent identification is easily accessible and available for athletes at different levels	3 6.7%	15 33.3%	8 17.8 %	16 35.6 %	3 6.7%
The equipment used in talent identification provides objective data that helps in assessing an athlete's potential	2 4.4%	7 15.6%	4 8.9%	29 64.4 %	3 6.7%
The researcher regularly updates the equipment used in talent identification to align with advancements in the sport.	1 2.2%	12 26.7%	5 11.1 %	22 48.9 %	5 11.1%
The equipment used in talent identification for javelin and discus throw is appropriate and specific to the sport	0 0.0%	3 6.7%	14 31.1 %	20 44.4 %	8 17.8%

The summary results in Table 11, the majority (77.8%) agreed the equipment was suitable for progressive skill development in javelin and discus. Most (77.8%) also agreed the equipment allowed for varied training approaches and exercises. Over half (51.1%) agreed the equipment was designed to minimize injury risk, with an additional 28.9% strongly agreeing. The majority (57.8%) agreed the equipment facilitated individualized training programs. Overall, the survey results indicate respondents perceived the long-term athlete development equipment as effective in supporting progressive skill building, varied training, injury prevention, and personalized programming for javelin and discus athletes.

Table 11 Long-Term Athlete Developments

Long-Term Athlete Developments	strongly disagree	Disagreed	Neutral	agree	strongly agree
The equipment used for long-term athlete development in javelin and discus throw is suitable for progressive skill development.	0 0.0%	4 8.9%	4 8.9%	35 77.8%	2 4.4%
The equipment used for long-term athlete development allows for varied training approaches and exercises	0 0.0%	0 0.0%	2 4.4%	35 77.8%	8 17.8%
The equipment used for long-term athlete development is designed to minimize the risk of injuries	1 2.2%	3 6.7%	5 11.1%	23 51.1%	13 28.9%
The equipment used for long-term athlete development facilitates individualized training programs.	1 2.2%	1 2.2%	10 22.2%	26 57.8%	7 15.6%

4.5. Competitions for talent development and long term athletes development

Table 12 the majority (64.4%) agreed competitions play an important role in talent identification. Most (71.1%) agreed the competition structure provides opportunities for athletes to display their skills. A majority (73.3%) agreed competitions offer a competitive environment helpful for identifying talent.60percentage agreed competition results are a significant factor in talent identification. Over half (53.3%) felt current competition formats effectively assess athlete performance and technique. This indicated that given the strong endorsement of competitions for talent identification, organizers should continue to optimize competition structures, environments, and formats to best facilitate the recognition and development of talented athletes in javelin and discus. Ongoing evaluation and refinement of competition systems, based on feedback from respondents, could further enhance their effectiveness for long-term athlete development in these sports.

Table 12 Talent Identification Practices

Talent Identification Practices	St. disagree	disagree	neutral	agree	St. agree
Competitions play an important role in talent identification for javelin and discus throw.	0	2	5	29	9
	0.0%	4.4%	11.1%	64.4%	20.0%
The competition structure in javelin and discus throw provides opportunities for athletes to showcase their skills	1	2	6	32	4
	2.2%	4.4%	13.3%	71.1%	8.9%
Competitions offer a competitive environment that helps identify athletes with potential talent.	1	1	1	33	9
	2.2%	2.2%	2.2%	73.3%	20.0%
The competition results are considered a significant factor in talent identification for javelin and discus throw	0	4	8	27	6
	0.0%	8.9%	17.8%	60.0%	13.3%
The current competition formats effectively assess the performance and technique of athletes	1	3	5	24	12
	2.2%	6.7%	11.1%	53.3%	26.7%

The summary results in Table 13 indicate that the majority of respondents (66.7%) agreed that competitions play a crucial role in the long-term development of javelin and discus throw athletes. Additionally, 71.1% agreed that the competition calendar provides a structured progression of events for athletes at different levels. 73.3% agreed that competitions offer opportunities for athletes to gain valuable experience and exposure.60.0percentage agreed that the competitive environment in the javelin and discus throw promotes athlete growth and development.75.6% agreed that competitions provide benchmarks and performance targets for long-term athlete development. The survey responses indicate that the respondents view competitions as crucial enablers of long-term athlete development and progress. Respondents perceive competitions as facilitating skill

refinement, experience gain, and performance tracking for athletes. Additionally, they see the competitive environment as fostering overall athlete growth. These findings highlight the significance of incorporating well-structured competition programs into long-term athlete development strategies for javelin and discus throw sports.

Table13 Long-term Athlete Development

Long-Term Athlete Development	**strongly disagreed**	**disagree**	**Neutral**	**Agree**	**strongly agree**
Competitions play a crucial role in the long-term development of javelin and discus throw athletes	0 0.0%	2 4.4%	7 15.6%	30 66.7%	6 13.3%
The competition calendar provides a structured progression of events for athletes at different levels	1 2.2%	1 2.2%	3 6.7%	32 71.1%	8 17.8%
Competitions offer opportunities for athletes to gain valuable experience and exposure	2 4.4%	0 0.0%	2 4.4%	33 73.3%	8 17.8%
The competition environment in javelin and discus throw promotes athlete growth and development.	0 0.0%	3 6.7%	6 13.3%	27 60.0%	9 20.0%
Competitions provide benchmarks and performance targets for long-term athlete development	1 2.2%	1 2.2%	1 2.2%	34 75.6%	8 17.8%

4.6. Time for practice and training

The summary results in Table 14 indicated mixed views on the time allocation for talent identification in the javelin and discus throw: The majority (51.1%) disagreed that there was sufficient time for practice and training, suggesting the need to have increased the allocated time. The majority (48.9%) disagreed that there were ample practice and training opportunities, pointing to a need for more opportunities for athletes to display their potential.

The majority (60.0%) agreed that the past time allocation allowed for effective skill and technique development, a positive finding. The majority (64.4%) agreed that practice sessions were structured and organized to facilitate talent identification, another positive. The majority (53.3%) agreed that athletes received adequate rest and recovery time, indicating this aspect was managed well. This indicated that Review and increase the overall time allocated for practice and training to address concerns about sufficiency. Provide more practice and training opportunities for athletes to display their potential. Maintain the structured and organized approach to practice sessions. Continue to ensure adequate rest and recovery time for athletes. Maintain the structured and organized approach to practice sessions. Continue to ensure adequate rest and recovery time for athletes.

Table 14 Talent Identification Practices

Talent Identification Practices	strongly disagreed	**Disagree**	**Neutral**	**agree**	**strongly agree**
Sufficient time was allocated for practice and training to identify talent in javelin and discus throw.	1 2.2%	23 51.1%	10 22.2%	9 20.0%	2 4.4%
Athletes are provided with ample practice and training opportunities to showcase their potential	2 4.4%	22 48.9%	2 4.4%	15 33.3%	4 8.9%
The current time allocation for practice and training allows athletes to develop their skills and technique effectively	1 2.2%	10 22.2%	3 6.7%	27 60.0%	4 8.9%
Practice sessions are structured and organized to maximize talent identification in javelin and discus throw	1 2.2%	9 20.0%	4 8.9%	29 64.4%	2 4.4%
Athletes are given adequate rest and recovery time between practice and training sessions	4 8.9%	9 20.0%	3 6.7%	24 53.3%	5 11.1%

The summary results in Table 15**,** indicated generally positive perceptions of the time allocation for talent development in the javelin and discus throw: 46.6% agreed there was sufficient time for long-term athlete development, suggesting the time allocation was seen as adequate. 71.1% agreed athletes had access to regular and consistent practice/training sessions, indicating opportunities for continuous skill development. 86.7% agreed the time allocation supported progressive skill and technique development, a positive finding. 80% agreed practice/training sessions were tailored to individual athlete needs, demonstrating a personalized approach. 88.9% agreed there was a good balance between skill development and physical conditioning. This indicated that Continue to monitor time allocation and access to practice/training to ensure they remain sufficient. Maintain the structured, personalized, and balanced approach to athlete development. Regularly seek feedback to identify any areas for improvement in the time allocation and training practices.

Table 15 Long-Term Athlete Developments

Long-Term Athlete Developments	strongly disagree	disagree	Neutral	agree	strongly agree
Sufficient time was allocated for practice and training to facilitate long-term athlete development in the javelin and discus throw.	1 2.2%	12 26.7 %	11 24.4 %	19 42.2%	2 4.4%
Athletes have access to regular and consistent practice and training sessions throughout their development.	3 6.7%	6 13.3 %	4 8.9%	27 60.0%	5 11.1%
The current time allocation for practice and training supports the progressive development of skills and techniques.	1 2.2%	1 2.2%	4 8.9%	36 80.0%	3 6.7%
Practice and training sessions are tailored to the individual athlete's needs and goals.	2 4.4%	4 8.9%	3 6.7%	29 64.4%	7 15.6%
Athletes are provided with a balance between focused skill development and physical conditioning in their training time.	1 2.2%	0 0.0%	4 8.9%	33 73.3%	7 15.6%

4.7. Motivators for participation in sports

The summary results in Table 16 indicate that the primary motivators for talent development in sports as a pastime were personal enjoyment and passion for the sport (93.4% agree/strongly agree), as well as the desire to achieve personal goals and improve performance (97.7% agree/strongly agree). External recognition and rewards (97.8% agree/strongly agree), opportunity for personal growth (97.7% agree/strongly agree), and supportive coaches and mentors (97.8% agree/strongly agree) were key factors motivating talent development in sports as a pastime. This indicated that athletes pursuing talent development as a pastime were driven by a mix of internal factors, like love of the sport and personal betterment, as well as external incentives such as recognition and coaching support. Leveraging these motivational drivers can help create an environment that fosters talent development in athletes as a hobby or leisure activity.

Table 16 Motivators for Talent Development

Motivators for Talent Development	strongly disagree	Disagree	neutral	Agree	strongly agree
Personal enjoyment and passion for the sport are key motivators for talent development.	1 2.2%	0 0.0%	2 4.4%	34 75.6%	8 17.8%
The desire to achieve personal goals and improve performance serves as a motivator for talent development.	1 2.2%	0 0.0%	0 0.0%	38 84.4%	6 13.3%
External recognition and rewards, such as medals or accolades, motivate athletes to engage in talent development.	1 2.2%	0 0.0%	0 0.0%	30 66.7%	14 31.1%
The opportunity for personal growth, both physically and mentally, is a significant motivator for talent development.	0 0.0%	0 0.0%	1 2.2%	33 73.3%	11 24.4%
The presence of supportive coaches and mentors plays a crucial role in motivating athletes for talent development.	0 0.0%	1 2.2%	0 0.0%	18 40.0%	26 57.8%

The summary results in Table 17 indicated Long-Term Goal Setting: A majority (75.6%) of respondents agreed that setting and pursuing long-term goals is a strong motivator for athlete

development. This indicated that Coaches should help athletes establish meaningful, achievable long-term objectives to provide a sense of direction and purpose. Competitive Progression: Most respondents (77.8%) agreed that the opportunity to compete at higher levels and represent their country/team serves as a key motivator. Suggestion: Coaches could highlight clear pathways for athletes to progress to prestigious competitions, fostering a sense of achievement. Supportive Training Environment: Over 95% of athletes agreed that a collaborative, supportive training atmosphere with peers is motivating. To cultivate such an environment, coaches should create a team-oriented culture, facilitating group activities and peer-to-peer support. Incentives and Rewards: Nearly 82% of respondents agreed that the potential for scholarships, sponsorships or professional opportunities is motivating.

This suggested that Coaches could explore ways to offer tangible rewards and incentives to recognize and retain talented athletes. Intrinsic Enjoyment: All respondents cited the inherent fulfillment and enjoyment derived from the sport itself as a key driver of long-term engagement. This indicated that Coaches should ensure the sport provides a genuine sense of satisfaction and purpose for their athletes. By considering these motivational factors, coaches can develop tailored strategies to foster long-term athlete development and retention.

Table 17 Long-Term Athlete Developments

Long-Term Athlete Developments	strongly disagree	disagree	neutral	agree	strongly agree
Setting and pursuing long-term goals in the javelin and discus throw is a strong motivator for athlete development.	0 0.0%	0 0.0%	7 15.6 %	34 75.6 %	4 8.9%
The opportunity to compete at higher levels and represent one's country or team serves as a motivator for long-term athlete development.	1 2.2%	0 0.0%	0 0.0%	35 77.8 %	9 20.0%
The presence of a supportive training environment, including teammates and training partners, motivates athletes to continue their development.	0 0.0%	1 2.2%	1 2.2%	32 71.1 %	11 24.4%
The potential for scholarships, sponsorships, or professional opportunities motivates athletes to invest in long-term athlete development.	0 0.0%	3 6.7%	5 11.1 %	26 57.8 %	11 24.4%
The enjoyment and fulfillment derived from the sport itself are strong motivators for long-term athlete development.	0 0.0%	0 0.0%	0 0.0%	31 68.9 %	14 31.1%

4.8. Athletics' projects coaches and stockholder response

The summary results in Table 18 indicated strong agreement among coaches and stakeholders on the importance of talent identification for long-term athlete development. Over 87% agree or strongly agree that early identification of talented athletes is crucial, and that it enables targeted training and support to maximize their potential. Notably, over 88% of respondents express confidence in their ability to identify athletes with talent in these events. Additionally, an overwhelming majority (over 97%) believe talent identification significantly contributes to the success of javelin and discus throwers.

The survey findings indicate that coaches and stakeholders actively prioritize proactive talent identification and development practices in javelin and discus throwing. This alignment can facilitate the implementation of comprehensive, evidence-based talent identification programs to support the long-term growth and achievements of javelin and discus athletes.

Table 18 Talent Identification Practices

Talent Identification Practices	strongly disagreed	Disagree	Neutral	Agree	Strongly agree
Talent identification is crucial for the long-term development of javelin and discus throw athletes.	0 0.0%	4 5.2%	6 7.8%	57 74.0%	10 13.0%
Early identification of talented athletes is essential for their long-term success in javelin and discus throwing.	0 0.0%	4 5.2%	8 10.4%	57 74.0%	8 10.4%
I am confident in my ability to identify athletes with potential talent in javelin and discus throwing.	0 0.0%	1 1.3%	8 10.4%	56 72.7%	12 15.6%
The talent identification process significantly contributes to the success of javelin and discus throw athletes.	0 0.0%	0 0.0%	2 2.6%	51 66.2%	24 31.2%
Early identification of talented athletes allows for targeted development in javelin and discus throwing.	0 0.0%	3 3.9%	2 2.6%	49 63.6%	23 29.9%

The summary results in Table 19 indicate that coaches and stakeholders strongly value proactive talent identification and development practices in javelin and discus throwing. The survey findings indicate that over 79% of coaches and stakeholders agreed that long-term athlete development is important for maximizing potential in javelin and discus throwing. Additionally, an overwhelming majority, around 93%, believed a structured, progressive training program is necessary for long-term development in these sports. The results also showed that while 81.8% were satisfied with the available resources and support systems, 15.2% expressed neutrality or dissatisfaction, suggesting room for improvement.

Furthermore, 93.5% agreed that a structured, progressive training approach is crucial, 89.6% recognized the positive impact of integrating strength and conditioning, and 92.2% agreed that psychological skill development significantly impacts long-term success.. Overall, the results demonstrate broad alignment among coaches and stakeholders on the importance of comprehensive, long-term approaches to developing talent in javelin and discus throwing. Focusing on refining and expanding support resources could further strengthen this development practices.

Table19 Long-Term Athlete Development

Long-Term Athlete Development	strongly disagree	Disagree	Neutral	Agree	Strongly agree
Long-term athlete development is important for maximizing the potential of javelin and discus throw athletes.	0 0.0%	0 0.0%	16 20.8%	43 55.8%	18 23.4%
A structured and progressive training program is necessary for the long-term development of athletes in javelin and discus throwing.	0 0.0%	1 1.3%	4 5.2%	54 70.1%	18 23.4%
The available resources and support systems for long-term athlete development in javelin and discus throwing are satisfactory.	1 1.3%	3 3.9%	10 13.0%	54 70.1%	9 11.7%
A structured and progressive training approach is crucial for the long-term development of javelin and discus throw athletes.	0 0.0%	1 1.3%	4 5.2%	50 64.9%	22 28.6%
The integration of strength and conditioning training positively affects the long-term development of javelin and discus throw athletes.	0 0.0%	1 1.3%	7 9.1%	51 66.2%	18 23.4%
Psychological skill development plays a significant role in the long-term success of javelin and discus throw athletes.	0 0.0%	0 0.0%	6 7.8%	52 67.5%	19 24.7%

The summary results in Table 20 indicate strong agreement among coaches on several important aspects of coaching practice for javelin and discus athletes 81.8% agreed. They regularly incorporate technical skill development drills in training, 87.0% were confident in their ability to provide appropriate coaching and support throughout long-term athlete development, and 93.5% agreed that psychological factors like motivation and resilience significantly contribute to long-term success. Additionally, 93.5% agreed that regularly practicing technical skills enhances athlete progress, 92.2% were confident in providing effective technical feedback and guidance during training, 94.8% agreed that addressing psychological factors is essential for long-term development, and 98.7% agreed that collaborating with sports science professionals positively impacts coaching and development. These findings suggest coaches have a comprehensive understanding of the key elements needed to support the long-term development and success of javelin and discus athletes, encompassing both technical and psychological aspects, as well as the value of interdisciplinary collaboration.

Table 20 Coaching Practices

Coaching Practices	strongly disagree	Disagree	Neutral	Agree	Strongly agree
In my training sessions for athletes who throw the javelin and discus, I regularly include exercises and drills for developing technical skills.	0	3	11	48	15
	0.0%	3.9%	14.3%	62.3%	19.5%
I am confident in my ability to provide appropriate coaching and support to javelin and discus throw athletes during the long-term development process.	0	2	8	51	16
	0.0%	2.6%	10.4%	66.2%	20.8%
Psychological factors (e.g., motivation, focus, and resilience) significantly contribute to the long-term success of athletes in javelin and discus throwing.	0	1	4	55	17
	0.0%	1.3%	5.2%	71.4%	22.1%
Regular incorporation of technical skill development drills and exercises enhances the progress of javelin and discus throw athletes.	0	0	5	47	25
	0.0%	0.0%	6.5%	61.0%	32.5%
I am confident in my ability to provide effective feedback and technical guidance during training sessions for javelin and discus throwing.	0	1	5	53	18
	0.0%	1.3%	6.5%	68.8%	23.4%
Psychological factors, such as motivation, focus, and resilience, are essential to address during the long-term development of javelin and discus throw athletes.	0	2	2	43	30
	0.0%	2.6%	2.6%	55.8%	39.0%
Collaboration with sports science professionals positively affects the coaching and development of javelin and discus throw athletes.	0	0	1	51	25
	0.0%	0.0%	1.3%	66.2%	32.5%

4.9. Analysis and interpretation statically data

The analysis of the correlations presented in Table 21 reveals several key insights. Talent identification had strong positive correlations with hindrances to identification ($r = 0.578$, $p < 0.01$), equipment for talent identification ($r = 0.647$, $p < 0.01$), and competitions for talent development ($r = 0.601$, $p < 0.01$). This suggests the talent identification process was closely linked to factors that can hinder identification, the availability of identification equipment, and the presence of talent development competitions. Talent identification also had a moderate positive correlation with time for practice and training ($r = 0.341$, $p < 0.05$), indicating it was associated with the amount of time available for training. However, talent identification had a weak, non-significant correlation with motivators to participation in sports ($r = 0.065$, $p > 0.05$), suggesting it was not strongly related to the factors that motivate individuals to participate in sports.

Hindrances to identification had strong positive correlations with equipment for talent identification ($r = 0.697$, $p < 0.01$) and competitions for talent development ($r = 0.549$, $p < 0.01$), linking these factors to challenges in the identification process. Hindrances to identification also had moderate and weak positive correlations with time for practice and training ($r = 0.410$, $p < 0.01$) and motivators to participation in sports ($r = 0.285$, $p > 0.05$), respectively. Equipment for talent identification, in turn, had strong and moderate positive correlations with competitions for talent development ($r = 0.605$, $p < 0.01$) and time for practice and training ($r = 0.433$, $p < 0.01$), but a weak, non-significant correlation with motivators to participation in sports ($r = 0.130$, $p > 0.05$). Finally, competitions for talent development had moderate positive correlations with time for practice and training ($r = 0.447$, $p < 0.01$) and motivators to participation in sports ($r = 0.372$, $p < 0.05$), while time for practice and training had a weak, non-significant correlation with motivators to participation in sports ($r = 0.021$, $p > 0.05$). Overall, the correlations suggest that the different factors related to talent identification, equipment, competitions, and practice/training were closely interrelated, while the factors that motivate participation in sports may be more independent of these other factors.

Table 21 Correlations

	Correlations							
			1	2	3	4	5	6
1	Talent identification	Pearson Correlation	1	.578**	.647**	.601**	.341*	.065
		Sig. (2-tailed)		.000	.000	.000	.022	.672
2	hinder identification	Pearson Correlation	.578**	1	.697**	.549**	.410**	.285
		Sig. (2-tailed)	.000		.000	.000	.005	.057
3	Equipment for talent identification	Pearson Correlation	.647**	.697**	1	.605**	.433**	.130
		Sig. (2-tailed)	.000	.000		.000	.003	.393
4	Competitions for talent development	Pearson Correlation	.601**	.549**	.605**	1	.447**	.372*
		Sig. (2-tailed)	.000	.000	.000		.002	.012
5	Time for practice and training	Pearson Correlation	.341*	.410**	.433**	.447**	1	.021
		Sig. (2-tailed)	.022	.005	.003	.002		.890
6	Motivators to participation in sports	Pearson Correlation	.065	.285	.130	.372*	.021	1
		Sig. (2-tailed)	.672	.057	.393	.012	.890	
	**. Correlation is significant at the 0.01 level (2-tailed).							
	*. Correlation is significant at the 0.05 level (2-tailed).							

Workplace of athletes with long-term athlete development

The summary results in Table 22 the ANOVA results revealed significant differences between groups across several factors related to the workplace of athletes in the context of long-term athlete development. For talent identification, the analysis showed a significant difference between groups ($F=10.332$, $p<0.001$), indicating that the workplace strongly impacts talent identification practices. Similarly, there were significant differences between

groups for hindrances to talent identification ($F=12.026$, $p<0.001$), suggesting the workplace significantly influences the presence of obstacles to the identification process. The workplace also appeared to have a major impact on the availability and quality of equipment used for talent identification, as demonstrated by the significant differences between groups ($F=7.384$, $p<0.01$). Additionally, the ANOVA results revealed significant differences between groups for competitions related to talent development ($F=6.383$, $p<0.01$), showing that the workplace shapes the opportunities and organization of these competitions. In contrast, the ANOVA analysis found no significant differences between groups for the time allocated for practice and training ($F=0.014$, $p>0.05$) or the motivators that influence athlete participation in sports ($F=1.142$, $p>0.05$). These findings suggest that the workplace does not significantly affect the amount of time devoted to practice and training or the factors that motivate sports participation. Overall, the ANOVA results highlight the important role of the workplace in shaping various aspects of the long-term athlete development process, particularly in areas such as talent identification, hindrances to identification, equipment, and talent development competitions. These insights can inform organizations and stakeholders involved in athlete development programs about the need to consider workplace factors when designing and implementing their initiatives.

Table 22 ANOVA

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Talent identification	Between Groups	3.315	2	1.657	10.332	.000
	Within Groups	6.737	42	.160		
	Total	10.052	44			
hinder identification	Between Groups	3.985	2	1.992	12.026	.000
	Within Groups	6.958	42	.166		
	Total	10.942	44			
Equipment for talent identification	Between Groups	2.584	2	1.292	7.384	.002
	Within Groups	7.348	42	.175		
	Total	9.931	44			
Competitions for talent development	Between Groups	2.292	2	1.146	6.383	.004
	Within Groups	7.540	42	.180		
	Total	9.832	44			
Time for practice and training	Between Groups	.008	2	.004	.014	.986
	Within Groups	12.403	42	.295		
	Total	12.411	44			
Motivators for participation in sports	Between Groups	.188	2	.094	1.142	.329
	Within Groups	3.449	42	.082		
	Total	3.636	44			

4.10. Analysis of Qualitative interview transcription

Based on the qualitative interview transcription, the key points regarding the methods and approaches for talent identification in throwing events in athletics across the three zones (Yem, Gurage, and Hadiya) are:

A. Methods and Approaches:

‘Evaluation of the athlete's throwing distance, accuracy, speed, and strength through standardized tests’

‘Experienced coaches and professionals observing athletes closely at competitions and events to identify their potential’

‘Assessing the athlete's physical characteristics such as height, weight, body composition, muscle strength, flexibility, and coordination’

‘Evaluating the athlete's long-term development by considering age, developmental level, and progress over time’

B. Criteria and Indicators:

‘Evaluating the performance process, such as throw distance, speed, and handling of javelin and discus’

‘Assessing the athlete's physical characteristics like height, weight, muscle strength, power, flexibility, and balance’

‘Evaluating the athlete's performance and status in relevant competitions and comparing it to peers or established standards’

‘Considering the athlete's intellectual and psychological attributes, such as focus, determination, coach ability, competitive mindset, and ability to handle pressure’

‘Assessing the athlete's capacity for improvement, including rate of growth, adaptability, and potential for skill development and technical improvement’

C. Challenges:

‘Lack of clear evaluation criteria and regular monitoring of athlete development’

‘Prioritizing short-term performance over long-term ability’

Talent identification processes being based on specific data points or observations, without fully considering the impact of environmental or socioeconomic factors on athlete development.

‘Limited scope of talent identification, not broadening the search for potential athletes’

Overall, the methods and approaches for talent identification in throwing events in athletics across the three zones seem to focus on a combination of physical, technical, and psychological assessments, both in the short-term and long-term. However, the transcription highlights some challenges in the current talent identification practices that could be addressed to improve the process.

Here is my analysis and interpretation of the qualitative interview transcription on the research question "To Examine the Methods of long-term athlete's development in throwing events athletics project":

Yem Zone:

a. Effective training techniques:

‘Implementation of strength and power exercises specific to throwing, such as weight lifting, throwing, and resistance training’

Functional movements and exercises that simulate throwing and include the muscles and joints involved in throwing events.

b. Strategies to track athlete progress:

‘Conducting regular evaluations to assess an athlete's physical fitness, technical ability and overall fitness’

‘Monitoring an athlete's performance in competition’

‘Analyzing their regular scores, rankings and personal bests, their strengths and weaknesses’

Gurage Zone:

A. Effective training techniques:

‘Provide individualized coaching and feedback based on athletes' strengths, weaknesses, and specific needs. Tailoring training programs to individual athletes can enhance skill development and performance’

Following a structured long-term athletic development model that takes into account the athlete's age, developmental level and growth over time.

B. Strategies to track athlete progress:

‘Communicating regularly with athletes to gain objective insights into their experiences, challenges and development status’

‘Maintaining consistent communication with the athlete's support team, including coaches and medical personnel’

Hadiya Zone:

A. **Effective training techniques**:

‘Providing mental skills training to improve self-confidence and mental strength’

‘Adhering to a structured long-term athletic development model that takes into account the athletes' age, developmental level and progression over time’

B. **Strategies to track athlete progress:**

‘Communicating regularly with athletes to gain real-world insights into their experiences, challenges and development status’

‘Maintaining consistent communication with the athlete's support team, including coaches and medical personnel’

Overall, the key themes that emerge are:

‘Importance of implementing sport-specific strength, power and functional training’

‘Following a structured long-term athlete development model’

‘Individualized coaching and feedback’

Regular evaluation and monitoring of athlete progress, including communication with the athlete and support team.

‘Incorporating mental skills training to develop psychological attributes’

The responses highlight the multifaceted nature of long-term athlete development, recognizing the need to address physical, technical, and mental aspects through tailored training programs and comprehensive monitoring strategies.

The summary results regardin**g** the methods and approaches for talent identification in throwing events in athletics across the three zones (Yem, Gurage, and Hadiya zone), the qualitative interview transcription reveals that the methods and approaches for talent identification in throwing events across the three zones involve a combination of evaluative techniques. Coaches and professionals closely observe athletes at competitions and events to identify their potential, while also assessing their throwing distance, accuracy, speed, and strength through standardized tests. The process also includes evaluating the athletes' physical characteristics such as height, weight, body composition, muscle strength, flexibility, and coordination, as well as considering their long-term development by looking at factors like age, developmental level, and progress over time. The key criteria and indicators used in the talent identification process include evaluating the performance process (e.g., throw distance, speed, technique), assessing physical attributes (e.g., height, weight, strength, power, flexibility, balance), comparing competitive performance to peers or established standards, and considering the athletes' intellectual and psychological attributes (e.g., focus, determination, coach ability, competitive mindset, pressure handling). However, the transcription highlights some challenges in the current talent identification practices, such

as a lack of clear evaluation criteria, prioritizing short-term performance over long-term ability, and having a limited scope that does not sufficiently account for environmental or socioeconomic factors influencing athlete development. Overall, the talent identification approaches across the three zones appear to focus on a multifaceted assessment of the athletes' physical, technical, and psychological qualities, while aiming to identify long-term potential for development in throwing events.

4.11. Analysis of Findings Obtained through Observation Checklist

The analysis highlights significant gaps in the infrastructure and resources available to the athletes across the Gurage, Yem, and Hadiya zones. While the Gurage and Yem zones had access to proper athletic attire, the lack of comfortable training and competition shoes was a concern in all three zones. Additionally, the absence of standard throwing equipment like javelins and discus in the Yem zone posed substantial obstacles for the athletes to practice and compete in these events. A prevalent issue across the zones was the lack of clean and comfortable living and dining facilities, which can affect the athletes' recovery and overall wellbeing. There was also a disparity in access to healthcare, with the Yem zone having a hospital but not the Gurage or Hadiya zones. Other resource gaps included the absence of important training tools like medicine balls, and inconsistent access to water and shower facilities. While positive factors included the availability of whistles and transportation, the overall analysis points to the need to prioritize improving the basic infrastructure, equipment, and support services across the three zones to create a more conducive environment for the athletes' training and competition.

Table 23 Observational Checklist and Result Obtained from Gurage, Yem and Hadiya Zone

Issue	Zones											
	Gurage				Yem				Hadiya			
	Comfortable	Not	Available	Not	Comfortable	Not	Available	Not Available	Comfortable	Not comfortable	Available	Not Available
standard javelin and discus			X					X			X	
Standard gymnasium				X				X				X
Clean net bed room				X				X				X
Shirt	X						X			X		
Short	X						X			X		
Athletes training shoes		X				X				X		
Different medicine ball				X				X				X
Clean cafeteria				X				X				X
Hospital				X	X							X
Whistle	X				X				X			
Water/shower			X					X				
Availability and transportation				X			X					X

4.12. Discussion

The study aimed to assess the talent identification and long-term athlete development methods used in javelin and discus throwing events within selected central Ethiopian regional state athletics projects. The researcher found significant challenges in the talent identification processes employed by the projects. The majority of athletes (93.3%) had no prior experience before joining the athletics programs, indicating a lack of systematic and widespread talent identification. This finding was supported by research showing that effective talent identification programs require a structured, multi-faceted approach to detect latent potential across a large pool of participants (Collins, 2023). However, some studies have argued that

prior experience was not always necessary, and that innate abilities and trainability can be just as important in identifying talented athletes (Till & Baker, 2020a).

Coaches relied heavily on subjective observations rather than using standardized, evidence-based assessment criteria. This narrow focus on physical attributes like size, strength, and speed overlooked other important factors such as technical skills, mental toughness, and behavioral characteristics that are crucial predictors of long-term athletic success. The literature supports the need for more holistic, data-driven talent identification models that consider a broader range of physiological, technical, psychological, and social factors (Kelly et al., 2022). That said, some researchers have argued that subjective coach evaluations can still be valuable when used in conjunction with objective testing (Sieghartsleitner et al., 2019). The coaches' limited training and expertise in talent identification, as well as the lack of specialized equipment and testing tools, hindered their ability accurately identify talented athletes with high potential. The literature emphasizes the importance of providing coaches with proper training, access to validated assessment tools, and multidisciplinary support systems to enhance talent identification practices (Roberts et al., 2019b).

The research also uncovered significant challenges in the long-term athlete development efforts of the central Ethiopian regional state athletics projects. The majority of athletes were in the 15-18 age range, suggesting a focus on youth development, but the low percentage of athletes with prior experience (6.7%) and limited representation from the local community (13.3%) indicated a lack of structured long-term development pathways. The literature highlights the need for integrated, lifelong approaches to athlete development that provide continuous support and opportunities for athletes to progress through different stages of their careers (Till et al., 2022). However, some researchers have argued that highly specialized training at a young age can lead to early specialization and burnout (Larson et al., 2019). Factors such as limited resources, high athlete turnover, and a lack of systematic coaching development programs further undermined the projects' ability to nurture and retain talented athletes over the long term. The literature emphasizes the importance of providing adequate resources, infrastructure, and systematic coach education to support long-term athlete development (P.M.Wright et al., 2018). That said, some studies have suggested that creative solutions and partnerships can help overcome resource constraints in developing sports contexts (Peachey et al., 2018).

CHAPTER FIVE

5. SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1. SUMMARY

This research study aimed to assess the current methods and influential factors affecting talent identification and long-term athlete development within javelin and discus throwing programs across selected regional state athletic projects in central Ethiopia. The study employed a mixed methods approach, utilizing questionnaires, interviews, and observations to gather data from a sample of 122 respondents, including coaches, athletes, physical education teachers, sports office experts, and sports federation leaders. The key findings of the study were multifaceted. The correlational analysis revealed that coaches' educational background, availability of training facilities, and frequency of local/regional competitions were positively correlated with the effectiveness of talent identification, while coaches' competency, availability of equipment/facilities, and availability of competitions were positively correlated with the effectiveness of long-term athlete development. The analysis of limiting factors highlighted that coaches' limited training and expertise in systematic talent identification, poor coach-athlete relationships, and insufficient training time were identified as significant barriers to effective long-term athlete development. The qualitative insights provided deeper understanding, revealing the lack of structured long-term development plans and comprehensive, athlete-centric approaches to nurturing talent, as well as coaches' deficiencies in effectively identifying, monitoring, and supporting the development and progression of talented athletes over the long term. Additionally, the paucity of intrinsic and extrinsic motivators available to the athletes was found to undermine their long-term commitment and passion for pursuing excellence. The findings of this study underscore the need for a fundamental shift in the mindset and capabilities of the coaching staff, as well as the importance of investing in the right resources and infrastructure to support the holistic assessment and nurturing of talented athletes in the central Ethiopian regional states.

5.2. Conclusion

Based on the findings of the study, the researcher drew the following conclusions

1. The programs' heavy reliance on subjective, visual assessments of athlete potential rather than systematic, evidence-based evaluation techniques severely limits their ability accurately identify gifted individuals.

2. The lack of advanced testing equipment and monitoring technology inhibits the programs' capacity to conduct thorough, data-driven talent assessments and track athlete progress over the long term.

3. The absence of structured, individualized long-term development plans results in overly generalized and fragmented approaches to nurturing athletic talent.

4. Systemic barriers, such as limited access to high-level competitive opportunities and insufficient funding, prevent the programs from effectively translating their long-term development goals into tangible outcomes.

5. The coaches did not adequately prioritize the critical role of strong coach-athlete relationships and mentorship in sustaining athlete motivation, engagement, and long-term commitment within the programs.

These top five core conclusions directly address the key systemic challenges identified in the research, setting the stage for the implementation of the corresponding evidence-based recommendations to improve the effectiveness and sustainability of the talent identification and long-term athlete development programs.

5.3. Recommendation

The researcher recommends the following as a final, comprehensive set of recommendations to address the systemic challenges within the talent identification and long-term athlete development programs of the examined athletic projects. The recommendations were based on the thorough analysis and findings presented in the discussion, summary, and conclusion, as well as the key insights from the correlation and ANOVA results

1. Adopt an impartial, evidence-based talent identification strategy that blends objective, standardized testing with subjective evaluations from coaches to accurately determine and analyze an athlete's ability.

2. Invest in specialized evaluation capabilities and technology, such as biomechanical analysis tools and monitoring systems, to enable coaches objectively measure athletes' technical skills, physical capabilities, and trainability

3. Implement comprehensive, stage-appropriate long-term development frameworks that are tailored to the unique needs and aspirations of each athlete, ensuring a more systematic and proactive approach to nurturing talent.

4. Address the systemic barriers, such as limited access to high-level competitive opportunities, inadequate training facilities, and insufficient funding, to enable the programs more effectively translate their long-term development goals into tangible outcomes.

5. Prioritize the development of meaningful, supportive coach-athlete relationships through targeted coach education, mentorship programs, and the creation of an environment that fosters open communication and trust.

These top five recommendations focus on establishing a more systematic, evidence-based, and athlete-centric approach to talent identification and long-term development, while also addressing the key systemic challenges that have hindered the effectiveness and sustainability of the athletic programs in the examined regions.

References

Abarghoueinejad, M., Barreira, D., Dias, C., Guimarães, E., Baxter-Jones, A. D. G., & Maia, J. (2021). Body physique, body composition, physical performance, technical and tactical skills, psychological development, and club characteristics of young male Portuguese soccer players: The INEX Study. *International Journal of Environmental Research and Public Health*, *18*(7), 3560.

Api[1], G., & Arruda, D. (n.d.). COMPARISON OF PERIODIZATION MODELS: A CRITICAL REVIEW WITH PRACTICAL APPLICATIONS. *Journal of Applied Sports Sciences*, *2*, 77–105.

Asmamaw, A., Habtmariam, S., & Tadesse, T. (2021). Assessing Institutional Practices and Conditions in the Development of Students in Ethiopian Sports Academies–Insiders' Perspectives. *ETHIOPIAN JOURNAL OF SPORT SCIENCE*, *2*, 75–94.

Babu, N. S. (n.d.). *RECENT TRENDS IN PHYSICAL EDUCATION*. Lulu. com.

Baker, J. (2018). *Talent Identification in Sport : A Systematic Review*. 97–109. https://doi.org/10.1007/s40279-017-0803-2

Baker, S. (2021). *Hip-shoulder separation in the javelin throw and its relationship Hip-shoulder separation in the javelin throw and its relationship with level of experience with level of experience*. 1–79. https://dc.ewu.edu/theses

Berge, A. M. (2018). *The Secrets to Optimal Performance Success: a comprehensive discussion on developing elite coaches and players*. AM8 International.

Bergeron, M. F., Mountjoy, M., Armstrong, N., Chia, M., Côté, J., Emery, C. A., Faigenbaum, A., Hall, G., Kriemler, S., & Léglise, M. (2015). International Olympic Committee consensus statement on youth athletic development. *British Journal of Sports Medicine*, *49*(13), 843–851.

Bergkamp, T. L. G., Niessen, A. S. M., den Hartigh, R. J. R., Frencken, W. G. P., & Meijer, R. R. (2019). Methodological issues in soccer talent identification research. *Sports Medicine*, *49*, 1317–1335.

Bompa, T. O., & Buzzichelli, C. (2019). *Periodization-: theory and methodology of training*. Human kinetics.

Brewer, C. (2017). *Athletic movement skills: Training for sports performance*. Human Kinetics.

Brown, K. A., Patel, D. R., & Darmawan, D. (2017). Participation in sports in relation to adolescent growth and development. *Translational Pediatrics*, *6*(3), 150.

Chaniago, H. (2022). *Measurement of Anthropometry, Biomotor and Fundamental Skills for Identification of Future Athletes' Talents at the Age of 11-15 Years*.

Collins, L. E. L. (2023). *Searching for Talent: Exploring Gifted Education Teachers' Ideas for Identifying More Inclusive Practices in Gifted Education*. University of Kansas.

Ćosić, M. (2019). Periodization models in the research of the muscle strength in athletes, theoretical-methodological reductions or non-critical positivism in sport-scientific periodics. *Fizička Kultura*, *73*(2), 174–189.

Cui, W., Khan, Z., & Tarba, S. Y. (2018). Strategic talent management in service SMEs of China. *Thunderbird International Business Review*, *60*(1), 9–20.

Cumming, S. P., Lloyd, R. S., Oliver, J. L., Eisenmann, J. C., & Malina, R. M. (2017). Bio-banding in sport: applications to competition, talent identification, and strength and conditioning of youth athletes. *Strength & Conditioning Journal*, *39*(2), 34–47.

De Rycke, J., & De Bosscher, V. (2019). Mapping the potential societal impacts triggered by elite sport: a conceptual framework. *International Journal of Sport Policy and Politics*, *11*(3), 485–502.

Dinu, D., & Louis, J. (2020). Biomechanical Analysis of the Cross, Hook, and Uppercut in Junior vs. Elite Boxers: Implications for Training and Talent Identification. *Frontiers in Sports and Active Living*, *2*(November). https://doi.org/10.3389/fspor.2020.598861

Ericsson, K. A., & Harwell, K. W. (2019). Deliberate practice and proposed limits on the effects of practice on the acquisition of expert performance: Why the original definition matters and recommendations for future research. *Frontiers in Psychology*, *10*, 2396.

Fransen, J., & Güllich, A. (2019). *Talent identification and development in game sports.*

Hancock, D. J. (2017). Female relative age effects and the second-quartile phenomenon in young female ice hockey players. *Psychology of Sport and Exercise*, *32*, 12–16.

Hancock, D. J., Adler, A. L., & Côté, J. (2013). A proposed theoretical model to explain relative age effects in sport. *European Journal of Sport Science*, *13*(6), 630–637.

He, C., Trudel, P., & Culver, D. M. (2018). Actual and ideal sources of coaching knowledge of elite Chinese coaches. *International Journal of Sports Science and Coaching*, *13*(4), 496–507. https://doi.org/10.1177/1747954117753727

Henriksen, K., Diment, G., & Hansen, J. (2011). Professional philosophy: Inside the delivery of sport psychology service at Team Denmark. *Sport Science Review*, *20*(1–2), 5.

Hindle, B. R., Keogh, J. W. L., & Lorimer, A. V. (2021). Inertial-based human motion capture: A technical summary of current processing methodologies for spatiotemporal and kinematic measures. *Applied Bionics and Biomechanics*, *2021*. https://doi.org/10.1155/2021/6628320

Holt, N. L., Deal, C. J., & Pankow, K. (2020). Positive youth development through sport. *Handbook of Sport Psychology*, 429–446.

Hoover, D. L., VanWye, W. R., & Judge, L. W. (2016). Periodization and physical therapy: bridging the gap between training and rehabilitation. *Physical Therapy in Sport*, *18*, 1–20.

Howell, S. (2023). *Examining equity, diversity, and inclusion in talent identification and talent development in youth soccer in Canada: coaches' perspectives*.

Hume, P. A., & Stewart, A. D. (2018). Physique assessment in youth sports for talent identification and development. *Best Practice Protocols for Physique Assessment in Sport*, 3–10.

Johnston, K., Wattie, N., Schorer, J., & Baker, J. (2018). Talent identification in sport: a systematic review. *Sports Medicine*, *48*, 97–109.

Jung, J. Y. (2022). Physical giftedness/talent: A systematic review of the literature on

identification and development. *Frontiers in Psychology*, *13*, 961624.

Kelly, A. L., Williams, C. A., Cook, R., Sáiz, S. L. J., & Wilson, M. R. (2022). A multidisciplinary investigation into the talent development processes at an English football academy: A machine learning approach. *Sports*, *10*(10), 159.

Kipkemboi, K. J. (2019). *EFFECTS OF CAMPS / CLUBS ON PERFORMANCE OF KENYA PARA ATHLETES*. *6*, 208–219.

Kliethermes, S. A., Nagle, K., Côté, J., Malina, R. M., Faigenbaum, A., Watson, A., Feeley, B., Marshall, S. W., LaBella, C. R., & Herman, D. C. (2019). Impact of youth sports specialisation on career and task-specific athletic performance: a systematic review following the American Medical Society for Sports Medicine (AMSSM) Collaborative Research Network's 2019 Youth Early Sport Specialisation Summit. *British Journal of Sports Medicine*.

Koopmann, T. (2020). *Assessing technical skills in talented youth athle...*

Koopmann, T., Faber, I., Baker, J., & Schorer, J. (2020a). Assessing technical skills in talented youth athletes: a systematic review. *Sports Medicine*, *50*, 1593–1611.

Koopmann, T., Faber, I., Baker, J., & Schorer, J. (2020b). Assessing Technical Skills in Talented Youth Athletes: A Systematic Review. *Sports Medicine*, *50*(9), 1593–1611. https://doi.org/10.1007/s40279-020-01299-4

Kristiansen, E., & Houlihan, B. (2017). Developing young athletes: The role of private sport schools in the Norwegian sport system. *International Review for the Sociology of Sport*, *52*(4), 447–469.

Larson, H. K., Young, B. W., McHugh, T.-L. F., & Rodgers, W. M. (2019). Markers of early specialization and their relationships with burnout and dropout in swimming. *Journal of Sport & Exercise Psychology*, *41*(1).

Lesinski, M., Prieske, O., & Granacher, U. (2016). *Effects and dose – response relationships of resistance training on physical performance in youth athletes : a systematic review and meta-analysis*. 1–17. https://doi.org/10.1136/bjsports-2015-095497

Li, C., Wang, C. K. J., Pyun, D. Y., & Martindale, R. (2015). Further development of the talent development environment questionnaire for sport. *Journal of Sports Sciences*, *33*(17), 1831–1843.

Li, P., De Bosscher, V., Pion, J., Weissensteiner, J. R., & Vertonghen, J. (2018). Is international junior success a reliable predictor for international senior success in elite combat sports? *European Journal o*f *Sport Science*, *18*(4), 550–559.

Liao, K.-F., Nassis, G., Bishop, C., Yang, W., Bian, C., & Li, Y.-M. (2021). Effects of unilateral vs. bilateral resistance training interventions on measures of strength, jump, linear and change of direction speed: a systematic review and meta-analysis. *Biology of Sport*, *39*(3), 485–497.

Lin, Y., Xu, Y., Hong, F., Li, J., Ye, W., & Korivi, M. (2022). Effects of Variable-Resistance Training Versus Constant-Resistance Training on Maximum Strength: A Systematic Review and Meta-Analysis. *International Journal of Environmental Research and Public Health*, *19*(14), 8559.

Lloyd, R. S., Oliver, J. L., Faigenbaum, A. D., Myer, G. D., & Croix, M. B. A. D. S. (2014). Chronological age vs. biological maturation: implications for exercise programming in youth. *The Journal of Strength &* Conditioning *Research*, *28*(5), 1454–1464.

Łysoń-Uklańska, B., Błażkiewicz, M., Kwacz, M., & Wit, A. (2021). Muscle force patterns in lower extremity muscles for elite discus throwers, javelin throwers and shot-putters–a case study. *Journal of Human Kinetics*, *78*(1), 5–14.

M. Porter, J., Raimondi, G., & Makaruk, H. (2019). The Effects of Altering Focus of Attention when Performing the Weight Throw. *Journal of Sports and Games*, *1*(1), 1–7. https://doi.org/10.22259/2642-8466.0101001

Malcata, R. M., & Hopkins, W. G. (2014). Variability of competitive performance of elite athletes: a systematic review. *Sports Medicine*, *44*, 1763–1774.

Maselli, A., Dhawan, A., Russo, M., Cesqui, B., Lacquaniti, F., & d'Avella, A. (2019). A whole body characterization of individual strategies, gender differences, and common styles in overarm throwing. *Journal of Neurophysiology*, *122*(6), 2486–2503.

https://doi.org/10.1152/JN.00011.2019

Mason, R. J., Farrow, D., & Hattie, J. A. C. (2020). Sports coaches' knowledge and beliefs about the provision, reception, and evaluation of verbal feedback. *Frontiers in Psychology*, *11*, 571552.

Mekonnen, H. (2018). *TALENT IDENTIFICATION IN ADDIS ABABA, ASELA AND AMBO YOUTH SPORT ACADMEY: TREND AND CHALLENGES*. Addis Ababa University Addis Ababa, Ethiopia.

Mokria, M., Gebrekirstos, A., Said, H., Hadgu, K., Hagazi, N., Dubale, W., & Bräuning, A. (2022). Volume estimation models for avocado fruit. *PLoS ONE*, *17*(2 February). https://doi.org/10.1371/journal.pone.0263564

Mujika, I., Sharma, A. P., & Stellingwerff, T. (2019). Contemporary periodization of altitude training for elite endurance athletes: a narrative review. *Sports Medicine*, *49*, 1651–1669.

Myer, G. D., Lloyd, R. S., Brent, J. L., & Faigenbaum, A. D. (2013). How young is "too young" to start training? *ACSM's Health & Fitness Journal*, *17*(5), 14.

Paraskevopoulos, E., Pamboris, G. M., Plakoutsis, G., & Papandreou, M. (2023). Reliability and measurement error of tests used for the assessment of throwing performance in overhead athletes: A systematic review. *Journal of Bodywork and Movement Therapies*.

Pavlović, R. (2020). Biomechanical analysis in athletics: the influence of kinematic parameters on the results of javelin throw of elite athletes. *The Swedish Journal of Scientific Research*, *7*(3), 1–11.

Peachey, J. W., Cohen, A., Shin, N., & Fusaro, B. (2018). Challenges and strategies of building and sustaining inter-organizational partnerships in sport for development and peace. *Sport Management Review*, *21*(2), 160–175.

Pichardo, A. W., Oliver, J. L., Harrison, C. B., Maulder, P. S., & Lloyd, R. S. (2019). Integrating resistance training into high school curriculum. *Strength & Conditioning Journal*, *41*(1), 39–50.

Pritchard, J., & Cross, M. R. (2022). Strength and Power Training. In *The Science of Alpine*

Ski Racing (pp. 59–84). Routledge.

Reeves, M. J., Littlewood, M. A., McRobert, A. P., & Roberts, S. J. (2018). The nature and function of talent identification in junior-elite football in English category one academies. *Soccer & Society*, *19*(8), 1122–1134.

Roberts, A. H. (2019). *Coach knowledge in talent identification: A system...*

Roberts, A. H., Greenwood, D. A., Stanley, M., Humberstone, C., Iredale, F., & Raynor, A. (2019a). Coach knowledge in talent identification: A systematic review and meta-synthesis. *Journal of Science and Medicine in Sport*, *22*(10), 1163–1172. https://doi.org/10.1016/j.jsams.2019.05.008

Roberts, A. H., Greenwood, D. A., Stanley, M., Humberstone, C., Iredale, F., & Raynor, A. (2019b). Coach knowledge in talent identification: A systematic review and meta-synthesis. *Journal of Science and Medicine in Sport*, *22*(10), 1163–1172.

Rovnyy, A., Rovnaya, O., & Galimskyi, V. (2015). Optimisation development coordinated young karate sportsmen abilities at the stage of preliminary base training. *Slobozhanskyi Herald of Science and Sport*, *3 (47)*, 75–79.

Santos, F., Corte-Real, N., Regueiras, L., Strachan, L., Dias, C., & Fonseca, A. (2017). Portuguese Football Coaches' Role in Facilitating Positive Development Within High Performance Contexts: Is Positive Development Relevant? *International Sport Coaching Journal*, *4*(2), 147–161. https://doi.org/10.1123/iscj.2016-0009

Sarmento, H., Anguera, M. T., Pereira, A., & Araújo, D. (2018). Talent identification and development in male football: A systematic review. *Sports Medicine*, *48*, 907–931.

Sellathurai, J., & Draper, N. (2022). An insight into Short-sprint coaches' knowledge and use of periodisation models and training methods Sri Lankan context. *Pedagogy of Physical Culture and Sports*, *26*(1), 38–46.

Sieghartsleitner, R., Zuber, C., Zibung, M., & Conzelmann, A. (2019). Science or coaches' eye?–Both! Beneficial collaboration of multidimensional measurements and coach assessments for efficient talent selection in elite youth football. *Journal of Sports Science &*

Medicine, *18*(1), 32.

Stambulova, N. B., Ryba, T. V, & Henriksen, K. (2021). Career development and transitions of athletes: The international society of sport psychology position stand revisited. *International Journal of Sport and Exercise Psychology*, *19*(4), 524–550.

Stokes, K. A., Jones, B., Bennett, M., Close, G. L., Gill, N., Hull, J. H., Kasper, A. M., Kemp, S. P. T., Mellalieu, S. D., Peirce, N., Stewart, B., Wall, B. T., West, S. W., & Cross, M. (2020). Returning to Play after Prolonged Training Restrictions in Professional Collision Sports. *International Journal of Sports Medicine*, *41*(13), 895–911. https://doi.org/10.1055/a-1180-3692

Susanto, E., Bayok, M., Satriawan, R., Festiawan, R., Kurniawan, D. D., & Putra, F. (2023). Talent identification predicting in athletics: A case study in Indonesia. *Annals of Applied Sport Science*, *11*(1), 0.

Takanashi, Y., Kohmura, Y., & Aoki, K. (2020). *Evaluation of explosive strength ability of the upper body for athletic throwers*.

Tewodros, A., Alemayehu, E., & Dereje, A. (2022). *PRACTICE OF STAKEHOLDERS'IN SPORTS TALENT IDENTIFICATION AND DEVELOPMENT IN NORTH SHEWA ZONE*.

Till, K., & Baker, J. (2020a). Challenges and [possible] solutions to optimizing talent identification and development in sport. *Frontiers in Psychology*, *11*, 664.

Till, K., & Baker, J. (2020b). Challenges and [Possible] Solutions to Optimizing Talent Identification and Development in Sport. *Frontiers in Psychology*, *11*(April), 1–14. https://doi.org/10.3389/fpsyg.2020.00664

Till, K., Lloyd, R. S., McCormack, S., Williams, G., Baker, J., & Eisenmann, J. C. (2022). Optimising long-term athletic development: An investigation of practitioners' knowledge, adherence, practices and challenges. *PloS One*, *17*(1), e0262995.

Till, K., Scantlebury, S., & Jones, B. (2017). Anthropometric and physical qualities of elite male youth rugby league players. *Sports Medicine*, *47*(11), 2171–2186.

Tufa, G. B. (2015). *Challenges and Prospective Development of Basketball in Oromia*

Regional State. *10*, 88–94.

Vlahovic, S., Suznjevic, M., & Skorin-Kapov, L. (2022). A Framework for the Classification and Evaluation of Game Mechanics for Virtual Reality Games. *Electronics*, *11*(18), 2946.

Wang, C. K. J., Lee, T., Chunxiao, L., & Chian, L. K. (2019). Understanding the Role of the Talent Development Environment in Fostering Sporting Excellence: A Review. *European Journal of Physical Education & Sport*, *7*(2).

Watts, D. W., & Cushion, C. J. (2017). Coaching journeys: Longitudinal experiences from professional football in Great Britain. *Sports Coaching Review*, *6*(1), 76–93.

Williams, A. M., Ford, P. R., & Drust, B. (2020). Talent identification and development in soccer since the millennium. *Journal of Sports Sciences*, *38*(11–12), 1199–1210. https://doi.org/10.1080/02640414.2020.1766647

Wright, D. J., Frank, C., & Bruton, A. M. (2022). Recommendations for combining action observation and motor imagery interventions in sport. *Journal of Sport PSychology in Action*, *13*(3), 155–167.

Wright, P. M., Jacobs, J. M., Howell, S., & Ressler, J. D. (2018). Immediate outcomes and implementation of a sport for development coach education programme in Belize. *Journal of Sport for Development*, *6*(10), 51–65.

Zaras, N., Stasinaki, A.-N., & Terzis, G. (2021). Biological determinants of track and field throwing performance. *Journal of Functional Morphology and Kinesiology*, *6*(2), 40.

Zaremski, J. L., Zeppieri Jr, G., & Tripp, B. L. (2019). Sport specialization and overuse injuries in adolescent throwing athletes: a narrative review. *Journal of Athletic Training*, *54*(10), 1030–1039.

Zhao, Y., & Zhao, K. (2023). Anthropometric Measurements, Physical Fitness Performance and Specific Throwing Strength in Adolescent Track-and-Field Throwers: Age, Sex and Sport Discipline. *Applied Sciences (Switzerland)*, *13*(18). https://doi.org/10.3390/app131810118

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Centeral Ethiopia Regional Government Yem Zone Youth and Sport Department

ቁጥር 53ሬ/ዞ/ወ/ስ/መ/
ቀን 27/ 2016

ለጅማ ዩኒቨርሲቲ ስፖርት ሳይንስ ትት ክፍል
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ጉዳዩ፡ የምናትና ምርምር መረጃ መሰብሰብን ይመለከታል፣

በርዕሱ ለመጥቀስ እንደተሞከረዉ ተማሪ አለማየሁ ዲጌ በጅማ ዩኒቨርሲቲ ስፖርት አካላዊ ስፖርት ሳይንስ ትት ክፍል የሁለተኛ ዲግሪ (MSc) ተማሪ የሆኑት ስፐTalent identification and long term athlete development on throwing events in centeral Ethiopia regional state in Yem zone, Gurage zone and Hadiya zone" በሚል የምርምር ርዕስ በመንደን ባሉ ምስት ወረዳዎችና አንድ ከተማ አስተዳደር ተንቀሳቅሰው አስፈላጊውን መረጃ የሰበሰቡ መሆናቸውን የማረጋገጫ ደብዳቤ የሰጠን መሆኑን እንገልጻለን፡፡

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ወጋየሁ ኣሰፋ ቲጢ
Wegayehu Assefa Tizo
የስፖርት ሳይንስ ክርክ ኃላፊ
Head Of Department And Head Of Sport Sector

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Appendix A

Questionnaire for Athletics,

Jimmy University

Sport academy department of sport science

Postgraduate program

Questionnaires filled by the athletics project athletes

Dear Athletes

The purpose of this questionnaire was to gather research study data. In order to partially fulfill my M.S.C. requirements at Jimmy University in Ethiopia , its main goal was to collect data on the method and factors that influence your athletics project trainees' talent identification and long-term athletes' development in three selected central Ethiopian regional states: Yem, Gurage, and Hadia zone. Your truthful responses to those questions were determined how successful the study was. Please take your time reading everything and answer the questions honestly and candidly. We will be happy to acknowledge your help in the thesis. **Thank you in advance**

General instruction

Please do not write your name on the questionnaire

Pleas circle the letter for part one

Please mark a tick(×) inside the rectangle indicated for part two

For open-ended questions, please write your responses in the space provide

Part one: Back ground information

1. What is age group 1/15-18 2/ 19-20 3/ 21-24 4/ 25-30 above

Sex 1/male 2/ female

2. Educational levels 1/5-8 2/ 9-10 3/ 11-12 4/ college/ university

3. How long have you been with athletics project?

A/1-2 B/1-2 year C/ 3 years D / 4-7 years

4. Have been in other spot project/club training before you join in this athletics projects/ clubs? A/Yes B/ No

5. Is anyone from your family an athlete before? A/Yes B/ No

Part 2 main body

Part 2	Items	alternatives				
2.1	**I**. talent identification and long term athlete development 1. Talent Identification method	Strongly disagree	disagree	Neutral	Agree	Strongly agree
1	The criteria used for talent identification in javelin and discus throw are clear and comprehensive.					
2	The talent identification process in javelin and discus throw involves multiple assessments and evaluations.					
3	The talent identification process in javelin and discus throw considers both physical and technical attributes.					
4	The talent identification process in javelin and discus throw involves input from experienced coaches and experts					
5	The talent identification process in javelin and discus throw is effective in identifying potential talented athletes					
	2. **Long-Term Athlete Development**					
6	Javelin and discus throw provide adequate support and resources for long-term athlete development					
7	The long-term athlete development program in javelin and discus throw considers both physical and technical aspects of training					
8	The long-term athlete development program in javelin and discus throw emphasizes skill acquisition and technical development.					
9	The LTAD program in javelin and discus throw promotes a balanced approach between training and competition					
10	The long-term athlete development program in javelin and discus throw focuses on individualized training plans and goals					

Part 2	Items	alternatives				
2.2	II. What are the factors that hinder identification of talented student-athletes and long-term athlete's development?	Strongly disagree	Disagree	neutral	Agree	Strongly
1	The availability and quality of training facilities in my athletics project positively affect my development in javelin/discus throwing.					
2	I have access to sufficient financial support for training, equipment, and competition expenses.					
3	Sponsorship opportunities or financial support for athletes in javelin/discus throwing is readily available in my region.					
4	I have a strong support system (e.g., family, friends, and coaches) that encourages and supports my athletic development in javelin/discus throwing.					
5	I have faced social or cultural barriers in pursuing my athletic goals in javelin/discus throwing.					
	Coach's Competency					
6	My coach has extensive experience in coaching javelin/discus throwing.					
7	My coach holds coaching certifications or qualifications specific to javelin/discus throwing.					
8	My coach designs effective training programs that improve my performance in javelin/discus throwing					
9	My coach provides individualized feedback and guidance to help me improve my technique in javelin/discus throwing.					
	Communication and Relationship					
10	My coach effectively communicates instructions and guidance for training in javelin/discus throwing.					
11	I feel comfortable discussing my goals, concerns, and training progress with my coach.					
12	My coach demonstrates a strong understanding of talent identification and LTAD principles in javelin/discus throwing.					
13	My coach provides guidance on my long-term development pathway and goals in javelin/discus throwing.					

Part 2	Items	Alternatives				
2.3	III. Equipment for talent identification and development 1. **Talent Identification Practices**	Strongly disagree	disagree	neutral	Agree	Strongly agree
1	The equipment used in talent identification allows for accurate measurement of performance and technique.					
2	The equipment used in talent identification is easily accessible and available for athletes at different levels.					
3	The equipment used in talent identification provides objective data that helps in assessing an athlete's potential					
4	The equipment used in talent identification is regularly updated and aligned with advancements in the sport.					
5	The equipment used in talent identification for javelin and discus throw is appropriate and specific to the sport					
2	Long-Term Athlete Development					
6	The equipment used for long-term athlete development in javelin and discus throw is suitable for progressive skill development.					
7	The equipment used for long-term athlete development allows for varied training approaches and exercises.					
8	The equipment used for long-term athlete development is designed to minimize the risk of injuries.					
9	The equipment used for long-term athlete development facilitates individualized training programs.					

	iv. Competitions for talent development and long term athletes development					
1.	**Talent Identification Practices**					
10	Competitions play an important role in TID for javelin and discus throw.					
11	The competition structure in javelin and discus throw provides opportunities for athletes to showcase their skills					
12	Competitions offer a competitive environment that helps identify athletes with potential talent.					
13	The competition results are considered a significant factor in talent identification for javelin and discus throw					
14	The current competition formats effectively assess the performance and technique of athletes					
	2. **Long-Term Athlete Development**					
15	Competitions play a crucial role in the long-term development of javelin and discus throw athletes.					
16	The competition calendar provides a structured progression of events for athletes at different levels					
17	Competitions offer opportunities for athletes to gain valuable experience and exposure.					
18	The competition environment in javelin and discus throw promotes athlete growth and development.					
19	Competitions provide benchmarks and performance targets for long-term athlete development.					
	v. Time for practice and training					
	1. Talent Identification Practices					
20	Sufficient time is allocated for practice and training to identify talent in javelin and discus throw.					
21	Athletes are provided with ample practice and training opportunities to display their potential.					
22	The current time allocation for practice and training allows athletes to develop their skills and technique effectively.					

23	Practice sessions are structured and organized to maximize talent identification in javelin and discus throw.					
24	Athletes are given adequate rest and recovery time between practice and training sessions.					
	2. Long-Term Athlete Development					
25	Sufficient time is allocated for practice and training to facilitate long-term athlete development in javelin and discus throw.					
26	Athletes have access to regular and consistent practice and training sessions throughout their development. The current time allocation for practice and training supports the progressive development of skills and technique.					
28	Practice and training sessions are tailored to individual athlete needs and goals.					
29	Athletes are provided with a balance between focused skill development and physical conditioning in their training time.					
	VII. Motivators to participation in sports **1. Motivators for Talent Development**					
30	Personal enjoyment and passion for the sport are key motivators for talent development					
31	The desire to achieve personal goals and improve performance serves as a motivator for talent development.					
32	External recognition and rewards, such as medals or accolades, motivate athletes to engage in talent development.					
33	The opportunity for personal growth, both physically and mentally, is a significant motivator for talent development.					
34	The presence of supportive coaches and mentors plays a crucial role in motivating athletes for talent development.					
	2. Long-Term Athlete Development					
35	Setting and pursuing long-term goals in javelin and discus throw is a strong motivator for athlete development.					
36	The opportunity to compete at higher levels and represent one's country or team serves as a motivator for long-term athlete development.					

37	The presence of a supportive training environment, including teammates and training partners, motivates athletes to continue their development.					
38	The potential for scholarships, sponsorships, or professional opportunities motivates athletes to invest in long-term athlete development.					
39	The enjoyment and fulfillment derived from the sport itself are strong motivators for long-term athlete development.					

Appendix B

Questionnaire for Athletics' projects coaches and stakeholders

Questionnaires filled by the Athletics' projects coaches, physical education teachers, sport federation leaders and sport experts.

Dear respondent: I would like to express my heart-felt appreciation and respect for your precious time and honest cooperation in advance to fill this questionnaire. This study will investigate coach's talent identification and long term athletes' development methods with athletics projects, focusing on throwing events, athletes performance and the pathway athletes follow. And also

This questionnaire is designed to collect data about the Factors Affecting Javelin and Discus Throwing Events in central Ethiopia Regional State; The Case of Yem. Gurage and Hadia zone Athletics Sport projects.

General instruction

Please do not write your name on the questionnaire

Pleas circle the letter for part one

Please mark a tick (×) inside the rectangle indicated for part two

For open-ended questions, please write your responses in the space provide

Part one: background information

Part 1

1. Age 1/ 18-25 years 2/ 26-35 years 3/ 36 and above years
2. Sex 1/ male 2/ female
3. Educational level 1/9-12 2/ diploma 3/ degree 4/ M.S.C

Part 2

Part 2	Items	Alternatives				
	. **Talent Identification Practices**	Strongly disagree	disagree	neutral	Agree	Strongly agree
1	Talent identification is crucial for the long-term development of javelin and discus throw athletes.					
2	Early identification of talented athletes is essential for their long-term success in javelin and discus throwing					
3	I am confident in my ability to identify athletes with potential talent in javelin and discus throwing.					
4	The talent identification process significantly contributes to the success of javelin and discus throw athletes					
5	Early identification of talented athletes allows for targeted development in javelin and discus throwing.					
4	Long-term athlete development is important for maximizing the potential of javelin and discus throw athletes					
5	A structured and progressive training program is necessary for the long-term development of athletes in javelin and discus throwing					
	Long-Term Athlete Development					
6	The available resources and support systems for long-term athlete development in javelin and discus throwing are satisfactory.					
7	A structured and progressive training approach is crucial for the long-term development of javelin and discus throw athletes**.**					
8	The integration of strength and conditioning training positively impacts the long-term development of javelin and discus throw athletes					

9	Psychological skill development plays a significant role in the long-term success of javelin and discus throw athletes**.**					
	Coaching Practices.					
10	In my training sessions for athletes who throw the javelin and discus, I r egularly include exercises and drills for developing technical skills.					
11	I am confident in my ability to provide appropriate coaching and support to javelin and discus throw athletes during the LTD process					
12	Psychological factors (e.g., motivation, focus, resilience) significantly contribute to the long-term success of athletes in javelin and discus throwing					
13	Regular incorporation of technical skill development drills and exercises enhances the progress of javelin and discus throw athletes.					
14	I am confident in my ability to provide effective feedback and technical guidance during training sessions for javelin and discus throwing					
15	Psychological factors, such as motivation, focus, and resilience, are essential to address during the long-term development of javelin and discus throw athletes					
17	Collaboration with sports science professionals positively impacts the coaching and development of javelin and discus throw athletes.					

Appendix C

Interview for Coaches

Project coaches questioned about factors influencing javelin and discus throwing events in the central state of Ethiopia in interviews. The primary findings of the Yem, Gurage, and Hadia zones athletics sport projects indicated. This interview's goals are to gather pertinent information about the assessment and provide some ideas that taken into account in order to be successful. As a result, we respectfully ask that you submit accurate information that is based on your own experience and comprehension. Your information kept private and used exclusively for research. I greatly appreciate your input. I. Personal Information

Sex: _____

Age:_____

Educational Back Ground_____

II. Interview guideline Questions

For research question number:

To examine the methods of talent identification in throwing evets I athletics project

Can you describe specific methods or approaches used to identify skill for throwing sports in athletics?

What criteria or indicators do you use to assess skill in the sport of hurling?

Do you see any challenges in current talent identification methods in the sport of hurling?

To Examine the Methods of long-term athlete's development in throwing events athletics project

What training techniques or programs have you found to be effective in developing athletes' skills in the sport of throwing?

What strategies do you use to track the progress and performance of athletes during their development?

To Identify the Factors that influence talent identification in throwing events athletics project.

In throwing sports (javelin and discus), what do you believe are the key factors that influence talent identification?

How do external factors such as resources or coaching expertise affect talent identification?

To identify the factors that influence long-term athlete's development in throwing evets athletics project

What do you believe are the key factors that influence talent identification?

How do external factors such as resources or coaching expertise affect talent identification

Appendix D

Observation Checklist

The checklist is prepared to gather information about Factors Affecting Javelin and Discus throwing Events in central Ethiopia regional state; The Case of Yem zone, Gurage zone and Hadia zone Athletics Sport project. The focus areas of the observation include the availability the degree of conformability of the facility and equipment.

Date_____ project name_____

Observation beginning time _____ observation ending time_____

1. Issues Related to Availability of Facilities, Equipment and sportswear of the athletics project.

No	Issue	Comfortable	Not Comfortable	Available	Not Available
1	standard javelin and discus				
2	Standard gymnasium				
3	Clean net bed room				
4	Shirt				
5	Short				
6	Athletes training and competition shoes				
7	Different medicine ball				
8	Clean cafeteria				
9	Hospital				
10	Whistle				
11	Water/shower				
12	Availability and transportation				

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በአትሌቲክሱ ፕሮጀክት አትሌቶች የሚሞሉ መጠይቆች

ውድ አትሌቶች

የዚህ መጠይቅ አላማ የምርምር ጥናት መረጃዎችን መሰብሰብ ነው። ዋና ዓላማው በአትሌቲክስ ፕሮጄክትዎ የሰልጣኞች ችሎታን መለየት እና የረጅም ጊዜ የአትሌቶች እድገት ላይ ተጽእኖ የሚያሳድሩትን ዘዴዎች እና ምክንያቶች መረጃ መሰብሰብ ነው ። ጥናቱ የሚካሄድበት ቦታ በሶስት የተመረጡ የማዕከላዊ የኢትዮጵያ ክልላዊ መንግስት፡በየም፣ በጉራጌ እና በሀዲያ ዞኖች በተከፈቱ ታዳጊ ወጣቶች አትለቲክስ ፕሮጅክቶች ላይ ይሆናል ። ለእነዚህ ጥያቄዎች የምትሰጡው እውነተኛ መልስ ጥናቱ ምን ያህል ስኬታማ እንደሆነ ይወስናል። ሁሉንም ነገር በማንበብ ጊዜዎን ይውሰዱ እና ጥያቄዎቹን በቅንነት ይመልሱ።

ጊዜ በመዉሰድ ጥያቄዎቹን በቅንነት ስለመለሱ ከልብ እናመሰግናለን።

አጠቃላይ መመሪያ

¬ እባክዎን ስምዎን በመጠይቁ ላይ አይጻፉ

¬ እባካችሁ ፊደሉን ለክፍል አንድ ክብ አድርጉ

¬ እባክዎን ለክፍል ሁለት በተጠቀሰው ሬክታንግል ውስጥ (×) ምልክት ያድርጉ

¬ ክፍት ለሆኑ ጥያቄዎች እባክዎን ምላሾዎን በቦታው ላይ ይፃፉ

ክፍል አንድ፡ ጥሬ መረጃ

1. የዕድሜ ምድብ 1/15-18 2/ 19-20 3/ 21-24 4/ 25-30 በላይ

2. ፆታ ሀ/ወንድ ለ/ ሴት

3. የትምህርት ደረጃዎች 1/5-8 2/ 9-10 3/ 11-12 4/ ኮሌጅ/ ዩኒቨርሲቲ

4. በአትሌቲክስ ፕሮጀክት ዉስጥ ምን ያህል ጊዜ ኖረዋል?

1/ ከ1-11 ወር 2/1-2 አመት 3/ 3 አመት 4 / 4-7 አመት

5. በዚህ የአትሌቲክስ ፕሮጄክቶች/ ክለቦች ውስጥ ከመቀላቀልዎ በፊት በሌላ ቦታ የፕሮጀክት/የክለብ ስልጠና ላይ ቆይተዋል? 1/አዎ 2/ አይ

6. ከዚህ በፊት ከቤተሰብዎ የሆነ ሰው አትሌት አለ?1/አዎ 2/ አይ

ክፍል 2	ዝርዝር መጠይቆች	አማራጮች				
2.1	2.1. ችሎታን መለየት እና የረጅም ጊዜ የአትሌቶች እድገት 1. የተሰጥኦ መለያ ዘዴ	በጣም አልስማማም	አልስማማም	ገለልተኛ	እስማማለሁ	በጣም
1	በጦር እና በዲስከስ ውርወራ ውስጥ ለችሎታ መለያ ጥቅም ላይ የሚውሉት መስፈርቶች ግልጽ እና አጠቃላይ ናቸው።					
2	በጦር እና በዲስከስ ውርወራ ውስጥ ያለው የችሎታ መለያ ሂደት በርካታ ግምገማዎችን እና ግምገማዎችን ያካትታል።					
3	በጦር እና በዲስከስ ውርወራ ውስጥ ያለው ተሰጥኦ የመለየት ሂደት አካላዊ እና ቴክኒካዊ ባህሪያትን ይመለከታል።					
4	በጦር እና በዲስከስ ውርወራ ውስጥ ያለው ተሰጥኦ የመለየት ሂደት ልምድ ካላቸው አሰልጣኞች እና ኤክስፐርቶች የተሰጡ አስተያየቶችን ያካትታል።					
5	በጦር እና በዲስከስ ውርወራ ውስጥ ያለው የችሎታ መለያ ሂደት ብቃት ያላቸውን አትሌቶች በመለየት ረገድ ውጤታማ ነው።					
	2. የረጅም ጊዜ የአትሌቶች እድገት					
6	የጦር እና የዲስክ ውርወራ ለረጅም ጊዜ የአትሌቶች እድገት በቂ ድጋፍ እና ግብዓት					

	ይሰጣሉ።					
7	በጦር እና ዲስክ ውርወራ የረዥም ጊዜ የአትሌቶች ልማት ፕሮግራም ሁለቱንም አካላዊ እና ቴክኒካል የስልጠና ዘርፎችን ይመለከታል።					
8	የረዥም ጊዜ የአትሌቶች ልማት ፕሮግራም በጦር እና በዲስክ ውርወራ ውስጥ ያለው የክህሎት ማግኛ እና የቴክኒክ እድገትን ያጎላል።					
9	የረጅም ጊዜ የአትሌቶች ልማት ፕሮግራም በጦር እና በዲስከስ ውርወራ በስልጠና እና በውድድር መካከል ሚዛናዊ አቀራረብን ያበረታታል።					
10	የረጅም ጊዜ የአትሌቶች ልማት ፕሮግራም በጦር እና በዲስከስ ውርወራ ላይ የሚያተኩረው በግለሰብ ደረጃ የስልጠና እቅዶች እና ግቦች ላይ ነው።					

ክፍል 2	ዝርዝር መጠይቆች	አማራጮች				
2.2	2.2. ጎበዝ የተማሪ-አትሌቶችን እና የረጅም ጊዜ የአትሌቶችን እድገት ለይቶ ለማወቅ እንቅፋት የሆኑት ነገሮች ምንድን ናቸው?	በጣም አይስማማም	አልስማማም	ገለልተኛ	እስማማለሁ	በጣም
1	በአትሌቲክስ ፕሮጄክት ውስጥ የሥልጠና ተቋማት መገኘት እና ጥራት በጦር መወርወር ላይ በጎ ተጽዕኖ ያሳድራል።					
2	ለሥልጠና፣ ለቁሣቁስ እና ለውድድር ወጪዎች በቂ የገንዘብ ድጋፍ አገኛለሁ።					
3	የስፖንሰርሺፕ እድሎች ወይም ለአትሌቶች የገንዘብ ድጋፍ በጦር/በዲስክ መወርወር ላይ በእኔ ክልል ውስጥ በቀላሉ ይገኛሉ።					
4	ጠንካራ የድጋፍ ስርዓት አለኝ (ለምሳሌ፡ ቤተሰብ፣ ጓደኞች እና አሰልጣኞች) የአትሌቲክስ እድገቴን በጦር/በዲስክ መወርወር ላይ የሚያበረታታ እና የሚደግፉ።					
5	የአትሌቲክስ ግቦቼን በጦር/በዲስከስ ውርወራ ላይ በማሳደግ ረገድ ማህበራዊ ወይም ባህላዊ እንቅፋቶች አጋጥመውኛል።					
2. የአሰልጣኝ ብቃት						

6	አሰልጣኛዬ ጦር/ዲስከስ ዉርወራን በማሰልጠን ረገድ ሰፊ ልምድ አለው።					
7	አሰልጣኛዬ የአሰልጣኝነት ሰርተፊኬቶችን ወይም ለጦር/ዲስከስ ዉርወራ ልዩ ብቃቶችን ይዟል።					
8	አሰልጣኜ በጦር/በዲስክ ዉርወራ ላይ ያለኝን አፈፃፀም የሚያሻሽሉ ውጤታማ የስልጠና ፕሮግራሞችን ነድፏል።					
9	አሰልጣኛዬ በጦር ዉርወራ ላይ ያለኝን ቴክኒክ ለማሻሻል እንዲረዳኝ የተናጠል አስተያየት እና መመሪያ ይሰጣል።					
	ግንኙነት					
10	አሰልጣኛዬ በጦር/ዲስከስ ዉርወራ ላይ የስልጠና መመሪያዎችን በብቃት ያስተላልፋል።					
11	ግቦቼን፣ ስጋቶቼን እና የስልጠና እድገቴን ከአሰልጣኞቼ ጋር መወያየቴ ተመችቶኛል።					
12	አሰልጣኜ ስለ ተሰጥኦ መለያ እና የረጅም ጊዜ የአትሌቶች እድገት መርሆዎች በጦር/በዲስከስ ውርወራ ላይ ጠንካራ ግንዛቤን አሳይተዋል።					
13	አሰልጣኜ በረጅም ጊዜ የእድገት መንገዴ እና በጦር መወርወር ላይ ስላለው ግቦቼ መመሪያ ይሰጣል።					

ክፍል 2	ዝርዝር መጠይቆች	አማራጮች				
2.3	**III.** ለችሎታ መለያ እና ልማት መሣሪያዎች።	በጣም	አልስማማም	ገለልተኛ	እስማማለሁ	በጣም
1	በችሎታ መለያ ውስጥ የሚያገለግሉ መሳሪያዎች የአፈፃፀም እና ቴክኒኮችን በትክክል ለመለካት ያስችላል።					
2	ለችሎታ መለያ የሚያገለግሉ መሳሪያዎች በቀላሉ ተደራሽ እና በተለያየ ደረጃ ላሉ አትሌቶች ይገኛሉ።					
3	በችሎታ መለያ ስራ ላይ የሚውሉት መሳሪያዎች የአንድን አትሌት አቅም ለመገምገም የሚያግዙ ተጨባጭ መረጃዎችን ያቀርባሉ					
4	በችሎታ መለያ ላይ የሚያገለግሉ መሳሪያዎች በመደበኛነት የዘመኑ እና ከስፖርቱ እድገት ጋር የተጣጣሙ ናቸው።					
5	ለጃቪሊን እና ለዲስከስ ውርወራ በችሎታ መለያ የሚያገለግሉ መሳሪያዎች ለስፖርቱ ተስማሚ እና ልዩ ናቸው።					
	2. የአሰልጣኝ ብቃት					
6	ለረጅም ጊዜ የአትሌቶች እድገት በጃቪሊን እና በዲስከስ ውርወራ ውስጥ የሚያገለግሉት መሳሪያዎች ለተራማጅ ችሎታ እድገት ተስማሚ ናቸው።					
7	ለረጅም ጊዜ የአትሌቶች እድገት የሚያገለግሉ መሳሪያዎች የተለያዩ የስልጠና አቀራረቦችን እና ልምምዶችን ይፈቅዳል።					
8	ለረጅም ጊዜ የአትሌቶች እድገት የሚያገለግሉ መሳሪያዎች የአካል ጉዳትን አደጋ ለመቀነስ የተነደፉ ናቸው።					
9	ለረጅም ጊዜ የአትሌቶች እድገት የሚያገለግሉ መሳሪያዎች የግለሰብ የስልጠና መርሃ-ግብሮችን ያመቻቻል።					
	iv. ለችሎታ እድገት እና የረጅም ጊዜ አትሌቶች እድገት ውድድር 1. ተሰጥኦ የመለየት ልምዶች					
10	ውድድሮች ለጦር እና ለዲስከስ ውርወራ ችሎታን በመለየት ረገድ ትልቅ ሚና ይጫወታሉ።					
11	በጦር እና በዲስከስ ውርወራ ውስጥ ያለው የውድድር መዋቅር አትሌቶች					

	ችሎታቸውን እንዲያሳዩ እድሎችን ይሰጣል።					
12	ውድድሮች እምቅ ችሎታ ያላቸውን አትሌቶች ለመለየት የሚያግዝ የውድድር አካባቢ ይሰጣሉ።					
13	የውድድር ውጤቶቹ ለጦር እና ለዲስከስ ውርወራ ተሰጥኦ መለያ ጉልህ ሚና ተደርገው ይወሰዳሉ።					
14	አሁን ያሉት የውድድር ፕሮግራሞች የአትሌቶችን አፈጻጸም እና ቴክኒክ በሚገባ ይገመግማሉ።					

ክፍል 2	ዝርዝር መጠይቆች	አማራጮች				
2.3	የረጅም ጊዜ የአትሌቶች እድገት	በጥም	አልስማማም	ገለልተኛ	እስማማለሁ	ፍጥም
15	ዉድድሮች ለጥር እና ለዲስከስ ውርወራ አትሌቶች የረጅም ጊዜ እድገት ወሳኝ ሚና ይጫወታሉ።					
16	የውድድር ካሌንደር በተለያዩ ደረጃዎች ላሉ አትሌቶች የተቀናጀ የዝግጅት ግስጋሴን ይሰጣል።					
17	ውድድሮች አትሌቶች ጠቃሚ ልምድ እና ተጋላጭነትን እንዲያገኙ እድሎችን ይሰጣሉ።					
18	በጦር እና በዲስከስ ውርወራ ውስጥ ያለው የውድድር አከባቢ የአትሌቶችን እድገትን ያበረታታል።					
19	ውድድሮች ለረጅም ጊዜ የአትሌቶች እድገት መለኪያዎችን እና የአፈፃፀም ግቦችን ይሰጣሉ።					
	v. የልምምድ እና የስልጠና ጊዜ 1. ተሰጥኦ የመለየት ልምዶች					
20	በጦር እና በዲስከስ ውርወራ ችሎታን ለመለየት ለልምምድ እና ለስልጠና በቂ ጊዜ ተመድቧል።					
21	አትሌቶች አቅማቸውን ለማሳየት ሰፊ ልምምድ እና የስልጠና እድሎች ተሰጥቷቸዋል።					
22	አሁን ያለው የልምምድ እና የሥልጠና ጊዜ መመደብ አትሌቶች ችሎታቸውን እና ቴክኒካቸውን በብቃት እንዲያዳብሩ ያስችላቸዋል።					
23	የተለማመዱ ክፍለ ጊዜዎች የተዋቀሩ እና የተደራጁ ናቸው በጦር እና በዲስከስ ውርወራ ውስጥ የተሰጥኦ መለያን ከፍ ለማድረግ።					
24	አትሌቶች በልምምድ እና በስልጠና ክፍለ ጊዜ መካከል በቂ የእረፍት እና የማገገሚያ ጊዜ ተሰጥቷቸዋል።					
	2. የረጅም ጊዜ የአትሌቶች እድገት					
25	25 በጦር እና በዲስከስ ውርወራ የረጅም ጊዜ የአትሌቶች እድገትን ለማመቻቸት					

	ለልምምድ እና ለስልጠና በቂ ጊዜ ተመድቧል።					
26	አትሌቶች በእድገታቸው ጊዜ መደበኛ እና ተከታታይ የልምምድ እና የስልጠና ክፍለ ጊዜዎችን ማግኘት ይችላሉ።					
27	ለልምምድ እና ለሥልጠና የአሁኑ ጊዜ ምደባ የችሎታዎችን እና ቴክኒኮችን እድገትን ይደግፋል።					
28	የልምምድ እና የሥልጠና ክፍለ ጊዜዎች በግለሰብ አትሌቶች ፍላጎቶች እና ግቦች ምቹ ናቸው።					
29	አትሌቶች በስልጠና ጊዜያቸው ተኮር የክህሎት እድገት እና የአካል ብቃት እንቅስቃሴ መካከል ሚዛን ይሰጣቸዋል።					

ክፍል 2	ዝርዝር መጠይቆች	አማራጮች				
2.3	VII. በስፖርት ውስጥ ለመሳተፍ የሚያነቃቁ ነገሮች 1. ለችሎታ ልማት አነቃቂዎች	በጥም	አልስማማም			በጥም
30	የግል ደስታ እና ለስፖርቱ ያለው ፍቅር ለችሎታ እድገት ቁልፍ ማበረታቻዎች ናቸው።					
31	የግል ግቦችን ለማሳካት እና አፈፃፀሙን ለማሻሻል ያለው ፍላጎት ለችሎታ እድገት እንደ ማበረታቻ ሆኖ ያገለግላል።					
32	እንደ ሜዳሊያ ወይም ሽልማቶች ያሉ ውጫዊ እውቅና እና ሽልማቶች በአትሌቶች ችሎታ ማጎልበት ላይ እንዲሳተፉ ያነሳሳቸዋል።					
33	በአካልም ሆነ በአእምሮ ለግል እድገት ያለው እድል ለችሎታ እድገት ትልቅ አበረታች ነው።					
34	ደጋፊ አሰልጣኞች እና አማካሪዎች መገኘት አትሌቶችን ለችሎታ እድገት ለማነሳሳት ወሳኝ ሚና ይጫወታል።					
	2. የረጅም ጊዜ የአትሌቶች እድገት					
35	35 በጦር እና በዲስከስ ውርወራ የረጅም ጊዜ ግቦችን ማዘጋጀት እና ማሳደግ ለአትሌቶች እድገት ጠንካራ ማበረታቻ ነው።					
36	በከፍተኛ ደረጃ ለመወዳደር እና ሀገርን ወይም ቡድንን የመወከል እድል ለረጅም ጊዜ የአትሌቶች እድገት ማበረታቻ ሆኖ ያገለግላል።					

37	የቡድን አጋሮችን እና የስልጠና አጋሮችን ጨምሮ ደጋፊ የስልጠና አካላት መኖሩ አትሌቶች እድገታቸውን እንዲቀጥሉ ያነሳሳቸዋል።					
38	ስኮላርሺፕ፣ ስፖንሰርሺፕ ወይም ሙያዊ እድሎች አትሌቶች በረጅም ጊዜ የአትሌቶች እድገት ላይ ኢንቨስት እንዲያደርጉ ያነሳሳቸዋል።					
39	ከስፖርቱ የሚገኘው ደስታ እና እርካታ ለረጅም ጊዜ የአትሌቶች እድገት ጠንካራ ማበረታቻዎች ናቸው።					

አባሪ ለ

በአትሌቲክስ ፕሮጄክት አሰልጣኞች የሚሞላ መጠይቅ

መጠይቆች በአትሌቲክስ ፕሮጄክት አሰልጣኞች፣ በ ስፖርት ሳይንስ መምህራን፣ የስፖርት ፌዴሬሽን መሪዎች እና በስፖርት ባለሙያዎች የሚሞላ መጠይቅ ነዉ።

ውድ ምላሽ ሰጭ፡

ይህን መጠይቅ ለመሙላት ላሳዩት ውድ ጊዜ እና ቅን ትብብር አስቀድሜ ያለኝን አድናቆት እና አክብሮት መግለጽ እፈልጋለሁ። ይህ ጥናት በክልሉ ዉስጥ በተከፈቱ አትሌቲክስ ፕሮጄክቶች የሰልጣኙን ተሰጥኦ መለያ እና የረጅም ጊዜ የአትሌቶች እድገት ዘዴዎችን መመራመር ይሆናል። እንዲሁም ይህ መጠይቅ የተነደፈው በማዕከላዊ ኢትዮጵያ ክልላዊ መንግስት በየም፣በጉራጌ እና በሀዲ ዞኖች ዉስጥ በተከፈቱ አትሌቲክስ ፕሮጅቶች አትሌቶች ክስተቶችን ዉርወራ /throwing events/ የሚመለከቱ መረጃዎችን ለመሰብሰብ ነው።

አጠቃላይ መመሪያ

¬ እባክዎን ስምዎን በመጠይቁ ላይ አይጻፉ

¬ እባካችሁ ፊደሉን ለክፍል አንድ ክብ አድርጉ

¬ እባክዎን ለክፍል ሁለት በተጠቀሰው ሬክታንግል ውስጥ (×) ምልክት ያድርጉ

¬ ክፍት ለሆኑ ጥያቄዎች እባክዎን ምላሾችዎን በቦታው ውስጥ ይፃፉ

ክፍል አንድ፡ ጥሬ መረጃ

ክፍል 1

1. ዕድሜ 1/ 18-25 ዓመት 2/ 26-35 ዓመት 3/ 36 እና ከዚያ በላይ ዓመታት

2. ፆታ 1/ ወንድ 2/ ሴት

3. የትምህርት ደረጃ 1/9-12 2/ዲፕሎማ 3/ዲግሪ ዲ/ኤም.ኤስ.ሲ

ክፍል ሁለት

ክፍል 2	ዝርዝር መጠይቆች	አማራጮች				
	1. የችሎታ መለያ ዘዴዎች	በጥም	አልስማማም	ገለልተኛ	እስማማለሁ	በጥም ተስማማሁ
1	ተሰጥኦን መለየት ለጦር እና ለዲስከስ ውርወራ አትሌቶች የረጅም ጊዜ እድገት ወሳኝ ነው።					
2	ጎበዝ አትሌቶችን ቀደም ብሎ መለየት በጦር እና በዲስከስ ውርወራ የረጅም ጊዜ ስኬት አስፈላጊ ነው።					
3	በጦር እና በዲስክ ዉርወራ ችሎታ ያላቸውን አትሌቶች የመለየት ችሎታ እንዳለኝ እርግጠኛ ነኝ።					
4	ተሰጥኦን የመለየት ሂደት ለጦር እና ለዲስከስ ውርወራ አትሌቶች ስኬት ከፍተኛ አስተዋፅኦ አለው።					
5	ተሰጥኦ ያላቸውን አትሌቶች ቀደም ብሎ መለየት በጦር እና በዲስክ መወርወር ላይ የታለመ እድገት እንዲኖር ያስችላል።					

2. የረጅም ጊዜ የአትሌቶች እድገት						
6	የረጅም ጊዜ የአትሌቶች እድገት የጦር እና የዲስክ ውርወራ አትሌቶችን አቅም ከፍ ለማድረግ አስፈላጊ ነው።					
7	በጦር እና በዲስክ ዉርወራ ላይ አትሌቶችን ለረጅም ጊዜ ለማደግ የተዋቀረ እና ቀጣይነት ያለዉ የሥልጠና መርሃ-ግብር አስፈላጊ ነው ።					
8	በጦር እና በዲስክ ውርወራ የረዥም ጊዜ የአትሌቶች እድገት ላይ ያለው ሀብቶች እና የድጋፍ ሥርዓቶች አጥጋቢ ናቸው።					
9	የተዋቀረ እና ቀጣይነት ያለዉ የስልጠና አካሄድ ለጦር እና ለዲስከስ ውርወራ አትሌቶች የረጅም ጊዜ እድገት ወሳኝ ነው።					
10	የጥንካሬ እና መሠረታዊ ስልጠናዎች የረጅም ጊዜ የጦር ዉርወራ እድገት እና የዲስክ ውርወራ አትሌቶች ላይ በጎ ተጽዕኖ ያሳድራል።					
11	የሥነ-ልቦና ክህሎት ማዳበር ለጦር እና ለዲስከስ ውርወራ አትሌቶች የረጅም ጊዜ ስኬት ጉልህ ሚና ይጫወታል።					
	የማሰልጠኛ ልምዶች.					
12	ጦርን እና ዲስክን ለሚወረውሩ አትሌቶች በስልጠና ክፍለ ጊዜዬ የቴክኒክ ክህሎቶችን ለማዳበር የአካል ብቃት እንቅስቃሴዎችን እና ልምምዶችን አዘውትሬ እጨምራለሁ ።					
13	በረዥም ጊዜ የዕድገት ሂደት ውስጥ ለጦር እና ዲስከስ ውርወራ አትሌቶች ተገቢውን ስልጠና እና ድጋፍ የመስጠት ችሎታ እንዳለኝ ሙሉ እምነት አለኝ።					
14	ስነ ልቦናዊ ምክንያቶች (ለምሳሌ ማበረታቻ፣ ትኩረት፣ መቋቋሚያ) አትሌቶች በጦር እና በዲስከስ ዉርወራ የረዥም ጊዜ ስኬት ላይ ጉልህ አስተዋፅኦ ያደርጋሉ።					
15	የቴክኒክ ክህሎት ማጎልበቻ ልምምዶችን እና የአካል ብቃት እንቅስቃሴዎችን በመደበኛነት ማካተት የጦር እና የዲስከስ ውርወራ አትሌቶችን እድገት ያሳድጋል።					
16	ለጦር እና ለዲስከስ ውርወራ ስልጠና በሚሰጥበት ጊዜ ውጤታማ ግብረ-መልስ እና ቴክኒካል መመሪያ የመስጠት ችሎታ ላይ እርግጠኛ ነኝ።					

17	የጦር እና የዲስከስ ውርወራ አትሌቶች የረዥም ጊዜ እድገታቸው ወቅት ለመቅረፍ እንደ ተነሳሽነት፣ ትኩረት እና መቻልን የመሳሰሉ የስነ-ልቦና ምክንያቶች አስፈላጊ ናቸው።					
18	ከስፖርት ሳይንስ ባለሙያዎች ጋር መተባበር በጦር እና በዲስከስ ውርወራ አትሌቶች ስልጠና እና እድገት ላይ በጎ ተጽእኖ ይኖረዋል።					

አባሪ ሐ

ለአሰልጣኞች ቃለ ምልልስ

የፕሮጀክት አሰልጣኞች በጦር እና በዲስከስ ዉርወራ ላይ ተጽዕኖ ስለሚያደርጉ ነገሮች በተመለከተ ቃለ-መጠይቅ ይደረጋል። የዚህ ቃለ መጠይቅ አላማዎች ስለ ግምገማው ጠቃሚ መረጃዎችን መሰብሰብ እና ስኬታማ ለመሆን ግምት ውስጥ መግባት ያለባቸው አንዳንድ ሃሳቦችን ማቅረብ ነው። በመሆኑም ከራስህ ልምድ እና ግንዛቤ ላይ የተመሰረተ ትክክለኛ መረጃ እንድታቀርብ በአክብሮት እንጠይቃለን። የእርስዎ መረጃ ሚስጥራዊ ሆኖ ለምርምር ብቻ ጥቅም ላይ ይውላል። የእርስዎን ግብአት በጣም አደንቃለሁ።

I. የግል መረጃ

ሀ)ጾታ ፡ _____

ለ) ዕድሜ፡-_____

ሐ) የትምህርት ደረጃ _____

የቃለ መጠይቅ መመሪያ ጥያቄዎች

1. በአትሌቲክስ ፕሮጀክት ዉስጥ በዉርወራ ስፖርት ላይ የችሎታ መለያ ዘዴዎችን ለመመርመር

ሀ. በአትሌቲክስ ስፖርት ውስጥ ለዉርወራ ሰፖረቶች ችሎታን ለመለየት ጥቅም ላይ የዋሉ ልዩ ዘዴዎችን ወይም አቀራረቦችን መግለጽ ይችላሉ?

ለ. **በዉርወራ ሰፖርት ዉስጥ ችሎታ ለመገምገም ምን መመዘኛዎች ወይም አመልካቾች ይጠቀማሉ?**----------

በአትሌቲክስ ፕሮጀክት ዉስጥ በዉርወራ ስፖርት የረጅም ጊዜ የአትሌቶችን እድገት ዘዴዎችን ለመመርመር

ሀ. **ምን አይነት የስልጠና ቴክኒኮች ወይም ፕሮግራሞች የአትሌቶችን ክህሎት ለማዳበር በዉርወራ ስፖርት ረገድ ውጤታማ ሆነው አግኝተሃል?**

ለ. አትሌቶችን በእድገታቸው ጊዜ ሂደት እና አፈፃፀም ለመከታተል ምን አይነት ስልቶችን ይጠቀማሉ?----------

አትሌቲክስ ፕሮጄክት ውስጥ በዉርወራ ስፖርቶች ላይ ተሰጥኦን መለየት ላይ ተጽዕኖ የሚያሳድሩትን ነገሮች ለመለየት፡-

ሀ. በዉርወራ ስፖርቶች (በጦርና በዲስከስ ዉርወራ) ላይ በችሎታ መለየት ላይ ተጽዕኖ ያሳድራሉ ብለው የሚያምኑባቸው ቁልፍ ነገሮች ምንድን ናቸው?

ለ. እንደ ግብአቶች ወይም የአሰልጣኝነት እውቀት ያሉ ውጫዊ ሁኔታዎች እንዴት ተሰጥኦዎችን መለየት ላይ ተጽዕኖ ያሳድራሉ?

በዉርወራ ስፖርት ዉስጥ የአትሌቲክስ ፕሮጄክት አትሌቶችን የረጅም ጊዜ አትሌት እድገት ላይ ተጽእኖ ያላቸውን ነገሮች ለመለየት

ሀ. በአትሌቶች የረጅም ጊዜ እድገት ላይ ተጽዕኖ ያሳድራሉ ብለው የሚያምኑባቸው ዋና ዋና ነገሮች ምንድን ናቸው?

ለ. የረጅም ጊዜ የአትሌቲክስ ስፖርተኛ እድገት ላይ የአሰልጣኝነት እና የማማከር ሚና ምንድ ነው
