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Development of Characteristic Indicators for Identifying Talented Youth Football in Meizhou, Guangdong

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Abstract

Background and Aim: Sport is important to the people and the country in terms of improving the quality of life promoting health, cultivating sportsmanship, making pride, and economic development of the country. The development of athletes' potential and elevating the standard of the national sport requires knowledge and processes**.** The research aims to develop the indicators of special abilities of youth football players and create normal criteria for the indicators of talent of youth football players classified by playing positions.

Materials and Methods: The Population and sample are 20 teams, 320 male youth football players in Meizhou city, and high-potential youth football players aged between 16-18 years. The research process is as follows: 1) study relevant documents, textbooks, research papers, and literature to determine competency indicators; 2) present the draft indicator prototype to experts and experts for review to consider its validity; 3) collect test data; 4) create normal criteria and scoring criteria of the talent indicator test for youth football players; 5) connoisseurship Talented Indicator of special abilities of youth football players by 11 experts. Using descriptive statistics such as percentages, arithmetic mean, and standard deviation for analyzing the data.

Results: The results obtained talent indicators of special abilities of youth football players and normal criteria for talent indicators of special abilities of youth football players in 4 areas: 1. Physiology and physical fitness; 2. Body composition; 3. Football skills; and 4. Cognitive function, which can be applied in examining youth football athletes with outstanding abilities or in selecting youth football athletes to represent the country in international competitions including used to check the strengths and shortcomings of athletes.

Conclusion: This study has developed normal criteria for indicators of special abilities of youth football players using the Normalized T-score method by setting the score criteria into 5 levels that correspond to the T-score and percentile. However, the normal criteria obtained from this research study can be used to evaluate potential and genius in youth football. This will give you information about football players' youth with special abilities or important characteristics that are likely to be successful in sports at the highest level internationally in the future.

Keywords: Talented Indicator; Norm Criteria; Youth Football Athletes

Introduction

Sport is important to the people and the country in terms of improving the quality of life promoting health, cultivating sportsmanship, making pride and economic development of the country. The development of athletes' potential and elevating the national sport's standard requires knowledge and processes. Football is regarded as a sport that has gained popularity and received widespread attention around the world, as evidenced by the football competitions held in various national and international programs such as the World Cup, Olympic Games, Asian Games SEA Games or many club-level programs. Various football training centers offer football training and teaching on all continents around the world.

At present, football has developed rapidly and plays an important role in the development of youth in all aspects for children and youth who aim to play sports for it is excellent to enter into that training systematically. Some trainers still have the misconception that training is focused on the child, train hard and do as you have been trained based on experience or bring a training pattern. The adult model is used to hope that the child has the best potential. However, age is one of the most important factors affecting physical fitness enhancement. Therefore, long-term athlete development (Long Term Athlete Development) for maximum potential must be trained systematically and properly. Coaches should pay attention to the use of scientific methods in the selection of athletes in addition, it can be seen that football has developed rapidly and leaps and bounds as a career can generate income and reputation for athletes. However, there are still not many football players in the People's Republic of China who can Step up to the international arena or become world-class players. In the past, only a few people went to football in European leagues or Well-known leagues in Asia. However, when the level

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of competition rises or the international competition between the People's Republic of China national team found that it was not very successful, while various agencies are trying to push for many projects to support the national team of the People's Republic of China to compete in the final round of the World Cup.

However, for football players to show their peak performance, it is imperative to appropriately apply knowledge of sports science and technology to allow athletes to show their potential and have the highest physical fitness through the training process systematic and correct by relying on 3 important components together, namely physical preparation, tactical/technical preparation, and mental preparation, all three of which are strongly correlated in a competition that cannot lack any one of them to being successful in international competitions and becoming an elite athlete. One of them is the process of selecting athletes (Talent Identification) by using indicators to be used in the recruitment and selection of athletes. This is a process that must cover all relevant elements to obtain the highest caliber football players. In general, indicators that determine the ability of football include anthropology, physiology, physical fitness, and cognitive and mental nervous system (Reilly et al., 2000) Williams and Reilly (2000) defined the athlete selection process as a process that selects potential participants to become elite players with steps in the process of finding. There are 4 steps to excellence in sports: searching, identifying, selection, and development. In addition, a person with exceptional athletic ability is defined as someone who excels at others in the same environment and age. In a study by Vaeyens et al. (2006), it was found that elite players had better physical performance and technical skills than other players. At present, there is research that tries to find a model, method, and process for finding and developing. There are many ways to develop and maintain top-quality athletes to support high-performance athletes (Reilly et al., 2000; Gil et al., 2007; Waldron & Worsfold, 2010; Gil et al., 2014). Systematic excellence will be able to reduce the time and procedures used in teaching and rehearsals for obtaining ability in various fields that are important elements of football players. Therefore, searching for athletes with qualifications appropriate to the sport of football will help to predict a player's future potential accurately and effectively, and coaches need to prepare and integrate many aspects. There must be guidelines for seeking out the talents of quality children by implementing a step-by-step verification process with the use of tools and proper way based on the above principles and reasons, the researcher wants to develop a talent indicator of football players to be a model for searching and selecting football players at the youth level and being able to develop football players to have high potential, resulting in continuity in sustainable football development and having the opportunity to experience future success. In addition, the normal criteria for special ability indicators of this research can be used as criteria for the selection process of football players.

Objectives

To develop the indicators of special abilities of youth football players.

To create normal criteria for the indicators of talent of youth football players classified by playing positions.

Literature Review

1. The talent and giftedness development

According to psychometric definitions, the terms apply to individuals who score well in psychometric tests (e.g., tests of intelligence or creativity). Performance definitions describe those individuals as gifted or talented who demonstrate high achievements, for instance, the best pupil in a certain class or a school valedictorian. According to labeling definitions, gifts/talents are socially accorded, usually by an expert. In the case of specific giftedness/talent definitions, strengths in a particular domain (e.g., music, mathematics, endurance running) qualify a person as gifted or talented. (Ford et al., 2020). The lack of uniform distinctions between the terms giftedness and talent is as problematic as the sheer variety of definitions that can be found in the literature. There is no generally accepted understanding of the difference between the two. Although some researchers use both terms synonymously, others seek clear distinctions. Some researchers view talent as a hyponym of giftedness with achievements. In this chapter, we will use the terms giftedness and talent as conceptually overlapping terms. Another fundamental problem of most definitional approaches is their propensity to assume that gifts and talents are personality traits. This has received a considerable amount of critical attention. A Delphic definition avoids this problem by basing definitions of giftedness and talent on expert opinions about the probability of

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future learning and achievement development of a person. According to this probability-based approach, talented persons are individuals who may one day achieve domain-specific excellence. Gifted persons are individuals who will probably one day achieve domain-specific excellence. Experts are those individuals who already have achieved excellence in a specific domain. Theoretical models and conceptions of giftedness are similarly heterogeneous the fuzziness of giftedness conceptions also shows up in the research on gifted identification and education. For this reason, we will first discuss trends and cultural differences in conceptions of giftedness. We will then review recent trends in international research on gifted identification types of gifted education and their effectiveness. (Bidaurrazaga-Letona et al., 2019).

2. Factors influencing success in sport at the international level

Developing athletes for success in world-class competition has been promoted and supported in terms of policy and budget by the governments of many leading countries such as the United States, Canada, Australia, Japan, the Republic of Korea, etc., to create prestige. build a reputation Build the pride of the people in the nation, including the development of socio-economic aspects. Achievements in international sporting events (Olympic Games Asian Games) for a long time. It is a result of government policies that support the "Elite Sports System" (Oakley and Green, 2001) that uses a theoretical model of policy Sports Policy Factors Leading to International Sporting Success: SPLISS, as in Figure 1, consists of 9 key pillars:

Pillar 1 is budget support.
Pillar 2 is the governance, organization, and structure of government sports policy.
Pillar 3 is basic readiness. and participation
Pillar 4 is a search and development system for talented athletes.
Pillar 5 is the professional support of athletes after they retire from sports.
Pillar 6 is the place, with equipment for training.
Pillar 7 is coaching readiness and coach development
Pillar 8 is a national and international competition.
Pillar 9 is innovation and scientific research.

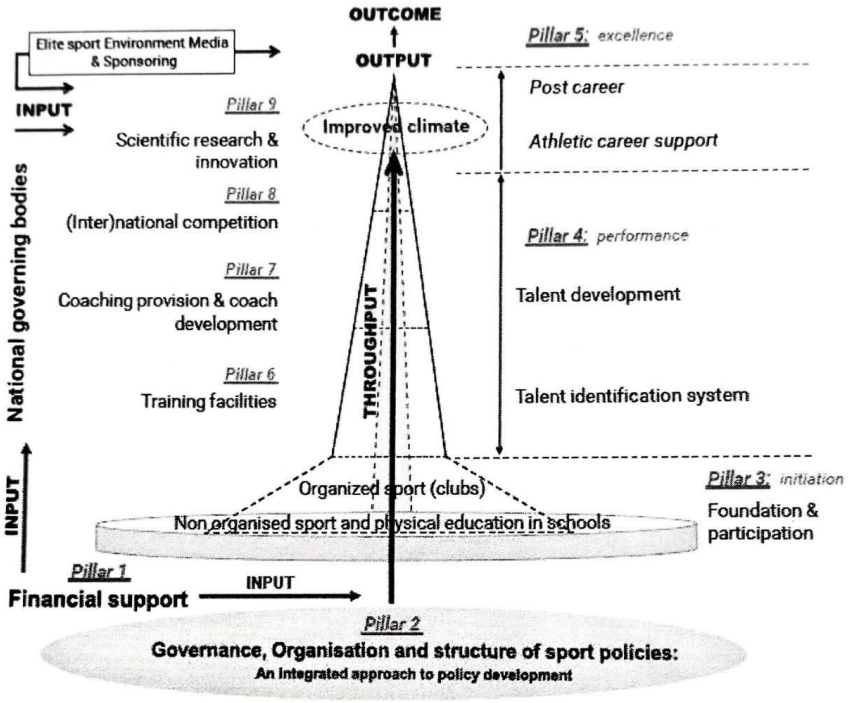

Figure 1 Theoretical Model of Sports Policy Factors Influencing International Success (De Bosscher et al., 2015)

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From that theory, it can be seen that Thailand still lacks action and needs to be developed urgently regarding the systematic search and development of talented young athletes based on the principles of sports science. This is in line with the 6th National Sports Development Plan (2017 - 2021) which has set goals for the development of the selection system and development of talented and skilled children and youth athletes to develop excellence.

3. Assessment and examination of football potential

Identifying unique and outstanding talents is a process that attempts to convey the prospects of experiencing future success. In addition to the instincts of scouts and coaches in selecting players who have ability scientific variables that determine football players' abilities. It is an important tool to help a great way to discover and develop athletes' abilities. Various variables may have a predictive value of future athlete success or suitability to play in different positions, the qualities that these scouts or Coaches see that it is important in selecting young football players, include technique (first touch, performance, technique under pressure), strategy (play intelligence, decision-making), psychological (positive attitude) (Larkin & O'Connor, 2017).

A survey was conducted and found that 29 professional clubs around the world used only a handful of sports science methods. in the search and development of youth football players, such as medical testing physical fitness tests, and family background assessment of footballers aged 8-11 years; Competitive statistics were assessed as age progressed and recent studies in several countries have looked at the variables that make up elite youth footballers in several ways, holistically, to evaluate the attributes of high-talented football players against those of lower levels. Recruiting into clubs or setting standards for the level of qualifying ability whether it's body composition, physical fitness, skills, or psychological variables such as cognitive skills, cognition, and personality were associated with the search for high-potential young footballers where successful footballers exhibit excellent techniques, skills, strategies, physiological and psychological qualities (Sarmento et al., 2018).

Roberts et al. (2019) conducted a study on important factors used in forecasting top youth soccer players by playing position (establishing a consensus of position-specific predictors for elite youth soccer in England). Important attributes in each position of football for the coach or scout of the team (Scout) to use in the search process for young football players with high potential (Talent Identification), both qualitative and qualitative research methods are used.

Conceptual Framework

The conceptual framework for this research is as follows:

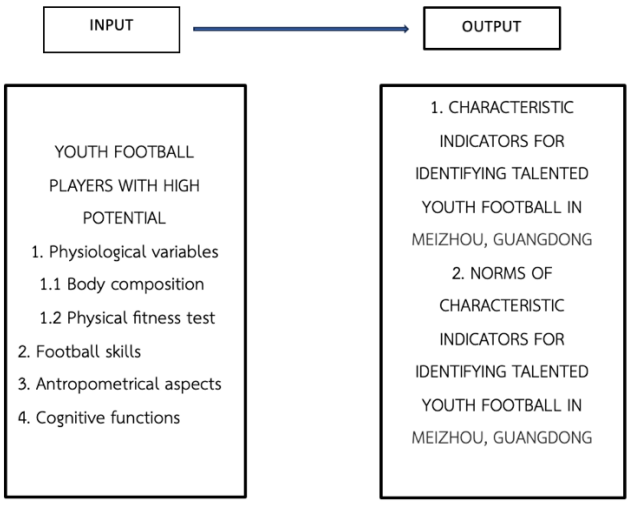

Figure 2 Conceptual Framework

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Methodology

1. Population and sample size

Population and sample are 20 teams, 320 male youth football players in Meizhou city, high potential youth football players aged 16-18 years and consisting of 1) A football player who is a member of a school team participating in an interschool football game. Department of Physical Education, Meizhou City. In the age group between 16-18 years old, type A, during the past 5 years (2018-2022), there were 10 teams, 160 male youth football players; and 2) A football player who is a member of a youth team of a professional football club that has received a professional club licensing license from the Meizhou Football Confederation (MFC) (one of the criteria for obtaining the license for a professional football club is to develop the club's youth team) and join the Football League. (Meizhou, Guangdong Province Youth League). In the past 5 years (2018-2022), there have been 10 teams, and 160 male youth football players.

2. Research tools

Normal criteria of the special abilities of football players from each indicator.

Data Collection

Stage 1: Study relevant documents, textbooks, research papers, and literature to determine competency indicators, and analyze until the indicators of the talent of youth football players are obtained.

Stage 2: Present the draft indicator prototype to experts and experts will review its validity.

Stage 3: Proceed to request for ethics consideration for human research.

Stage 4: Collect the test data that was divided into 2 days

Stage 5: Create the normal criteria and scoring criteria of the talent indicator test for youth football players.

4. Data Analysis

4.1 Basic Statistical Analysis: The general characteristics of the subject or research participants and the characteristics of the study variables such as date of birth, sports experience, training volume per day and week, playing position, injury history, dominant hand/foot, and indicators of talent of young football players corresponding to the test items were used using descriptive statistics such as percentage, arithmetic mean, and standard deviation.

4.2 An analysis of the results for the development of normal criteria for the talent indicators of youth football players by finding normalized T-score and percentile values.

4.3 Connoisseurship Talented Indicator of special abilities of youth football players by 11 experts.

Results

Through Connoisseurship Talented Indicator of special abilities of youth football players by 11 experts, the results are as follows:

Physiology Variables

Table 1 Connoisseurship Talented Indicator of special abilities of youth football players in physiology variables

Talented Indicator of special abilities of youth football players	Identification of Experts	Suggestion of Experts
1. Physiology Variables 1.1 Body Composition 1.2 Physical Fitness	1. Physiological factors like cardiovascular fitness, strength, and speed are crucial for a football athlete's performance. These factors can provide insights into an athlete's potential. 2. Assessing physiological	1. Collaborate with sports scientists and physiologists to design and conduct physiological tests that are relevant to football performance. 2. Assess factors such as aerobic capacity, muscular strength, and speed, and establish benchmarks for

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Talented Indicator of special abilities of youth football players	Identification of Experts	Suggestion of Experts
	variables like cardiovascular fitness, strength, and agility is crucial for identifying talent in youth football. 3. Assessing physiological variables like endurance, speed, and strength is crucial for talent identification in football. These can significantly impact a player's performance. 4. Physiology indicators may include factors like aerobic capacity, strength, speed, and agility. Involve sports scientists, fitness trainers, and medical experts in your panel of connoisseurs to assess and validate these physiological aspects. Use standardized tests and measurements, such as VO2 max tests or strength assessments, to gather quantitative data.	different age groups. 3. Engage experts to validate the importance of specific physiological indicators in predicting football talent. 4. Collaborate with sports scientists and medical professionals who can provide expertise in physiological assessments. Use standardized fitness tests and monitoring tools to collect data. Analyze the data to determine the physiological benchmarks that distinguish talented youth football athletes from others. Connoisseurship can involve experts in sports physiology and conditioning. 5. Collaborate with sports scientists and fitness trainers to design and conduct physiological tests that are relevant to football. Use established protocols to ensure consistency. Consider factors like VO2 max, sprint times, and strength levels.

Anthropometric Aspects

Table 2 Connoisseurship Talented Indicator of special abilities of youth football players in anthropometric aspects

Talented Indicator of special abilities of youth football players	Identification of Experts	Suggestion of Experts
2. Anthropometric Aspects:	1. Anthropometric measurements can offer valuable information about an athlete's physical characteristics, which can be indicative of potential talent. 2. Anthropometric measurements, such as height, weight, body composition, and limb length, can provide valuable insights into the potential of young athletes. 3. Anthropometric measurements can provide insights into a player's physical potential and suitability for	1. Include measurements like height, weight, body composition, limb length, and muscle mass. 2. Establish norms for these measurements based on age and position, as different positions may require different body types. 3. Involve experienced sports trainers and anthropometrists to ensure accuracy and consistency in measurements. 4. Engage experts in sports nutrition and anthropology to guide your research. Collect

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Talented Indicator of special abilities of youth football players	Identification of Experts	Suggestion of Experts
	specific positions. 4. Anthropometric indicators include height, weight, body composition, and other physical measurements. 5. Engage experts in sports medicine, nutrition, and kinesiology to assess and validate these aspects. 6. Ensure that the measurements are taken accurately and consistently to establish reliable norms.	anthropometric data using standardized methods and equipment. Analyze the data to establish norms for youth football athletes based on age and playing positions. Connoisseurship can involve experts in sports medicine and physical therapy who understand the importance of specific anthropometric factors in football performance. 5. Work with experts in biomechanics and sports medicine to identify relevant anthropometric measures such as height, weight, body composition, limb length, and joint flexibility.

Football Skills

Table 3 Connoisseurship Talented Indicator of Special Abilities of youth football players in football skills

Talented Indicator of special abilities of youth football players	Identification of Experts	Suggestion of Experts
3. Football Skills	1. Football-specific skills encompass a wide range of abilities, including dribbling, passing, shooting, and positional awareness. Identifying and quantifying these skills can be complex. 2. Assessing football-specific skills, such as dribbling, passing, shooting, and tactical understanding, is essential for talent identification in football. 3. Football skill assessment is fundamental for talent identification. Skills include dribbling, passing, shooting, and game intelligence. 4. Football skill indicators encompass technical abilities such as passing, dribbling, shooting, and defensive skills.	1. Develop a comprehensive skill assessment battery that covers different aspects of football skills. Use video analysis, technical drills, and game scenarios to evaluate these skills. Leverage the expertise of experienced football coaches to provide insights into skill development and talent identification. 2. Work closely with experienced football coaches, scouts, and former players to develop skill assessment protocols. Record and analyze performance in game situations and drills. Identify the key technical and tactical benchmarks that differentiate

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Talented Indicator of special abilities of youth football players	Identification of Experts	Suggestion of Experts
	Include experienced coaches and former professional players as connoisseurs to evaluate these skills. Use video analysis and live assessments to capture skill performance and collect qualitative data. 5. Skill assessment is vital in identifying talent. It encompasses technical skills, tactical understanding, and football-specific abilities.	talented players. Connoisseurship should involve football experts who can provide insights into the nuances of skill development and recognition. 3. Engage experienced football coaches and former professional players to evaluate the technical skills of young football athletes. Use standardized skill tests and game scenarios to assess their abilities. Develop a scoring system to quantify skill levels.

Cognitive Function

Table 4 Connoisseurship Talented Indicator of special abilities of youth football players in cognitive function

Talented Indicator of special abilities of youth football players	Identification of Experts	Suggestion of Experts
4. Cognitive Function	1. Cognitive functions such as decision-making, spatial awareness, and tactical understanding are critical for success in football, especially as players advance to higher levels. 2. Cognitive abilities like decision-making, spatial awareness, and situational awareness are critical in football. 3. Cognitive abilities like decision-making, spatial awareness, and reaction time are increasingly recognized as critical in football. 4. Cognitive indicators could involve decision-making, situational awareness, and mental resilience. 5. Collaborate with sports psychologists and experts in cognitive science to assess and validate these cognitive	1. Design cognitive assessments that mimic real-game situations, requiring participants to make decisions under pressure. 2. Collaborate with sports psychologists to develop and validate cognitive assessment tools. 3. Engage football coaches and analysts to provide input on the importance of cognitive function in talent identification. 4. Collaborate with sports psychologists and experts in cognitive science. Develop cognitive assessment tools and scenarios specific to football. Collect data on decision-making speed, accuracy, and adaptability. Analyze the data to determine cognitive benchmarks. Connoisseurship should include experts in sports psychology and coaching who

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Talented Indicator of special abilities of youth football players	Identification of Experts	Suggestion of Experts
	aspects. 6. Employ cognitive tests, scenario-based assessments, and expert interviews to gather data. General Suggestions:	can evaluate players' cognitive abilities in real-game situations.

Connoisseurship summarizes talented Indicator of special abilities of youth football players by 11 experts as follows:

1. Physiology variables, the indicators are as follows:
   1.1 Body composition
      1.1.1 Body fat
      1.1.2 Muscle mass
   1.2 Physical fitness
      1.2.1 Weakness in the muscles of the posterior thigh and lower back.
         1) High jump, countermovement jumps without swinging the arm.
         2) High jump, countermovement jump, by swinging the arm.
         3) High jump, drop jump
         4) Standing Long jump
      1.2.2 Speed
      1.2.3 Anaerobic power system.
      1.2.4 Aerobic power system.
2. Anthropometric aspects, the indicators are as follows:
   2.1 Height, weight, body on as index (Standing height)
   2.2 Sitting height
   2.3 Measure the length of arms, legs, feet, legs and calf's circumference (Girth measurement)
   2.4 The ratio of the index finger to the ring finger (2D:4D).
3. Football skill, the indicators are as follows:
   3.1 Dribbling speed
   3.2 Lough borough football passing test (Short-term passing skills
   3.3 Long-distance passing skills
   3.4 Heading test
   3.5 Goal-shooting skills
4. Cognitive functions, the indicators are as follows:
   4.1 Data processing speed (Choice reaction time test)
   4.2 Management of the Flexible Thinking Brain
   4.3 Brain management of selective attention and inhibition control
   4.4 Management of cognitive flexibility and inhibition control
   4.5 Spatial abilities related to mental image rotation

Conclusion

Part 1 Basic information

Basic information, it is found that All youth football athletes participated in the study. The basic information is as follows: the average age is 17.13 years, the majority of football players 85 percent are right-handed, 81.7 percent are right-footed, have an average of 7.87 years of experience in football, have an average daily training volume of 2.13 hours, and a daily training volume of 1 Week average

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5.78 days.

Part 2 Data of Measurement and Test Physiology Variables and Anthropometric Aspects Talented Indicator of Youth Football

2.1 Data of Measurement and Test Physiology Variables and Anthropometric Aspects Talented Indicator of Youth Football information on Physiological variables and body proportions, it was found that all football athletes participating in the research Average body weight was 66.71 kilograms, average standing height was 174.14 centimeters, average sitting height was 89.97 centimeters, average body mass index was 21.83 kg/m2, subcutaneous fat was 12.15 percent, average muscle mass was 33.07 kilograms, finger length ratio (index finger/ring finger) of the right and left hands, average 0.97, average upper right arm length is 33.48 centimeters, average upper left arm length is 33.56 centimeters, average middle right arm length is 25.50 centimeters, average lower left arm length is 25.79 centimeters, length Average right actual leg length is 90.95 centimeters. The average left actual leg length is 90.90 centimeters. The average right apparent leg length is 98.14 centimeters. The average left apparent leg length is 97.75 centimeters. The average right foot length is 26.58 centimeters. The average left foot length is 26.47 centimeters, the average right thigh circumference is 54.45 centimeters, the average right thigh circumference is 54.03 centimeters, the average right calf circumference is 37.62 centimeters, the average left calf circumference is 37.66 cm

2.2 Data of Measurement and Test Physical Fitness Talented Indicator of Youth Football There are data on many aspects of physical fitness as follows: muscle flexibility Ability to balance, muscle strength muscle endurance nimbleness muscle power, speed, anaerobic energy system, and aerobic energy system. It was found that all football athletes participating in the research There is weakness in the muscles. The results of the Sit & reach test with an average of 15.39 centimeters and the Shoulder stretch test which the right arm is on and the left arm is on. The answer values are 9.69 and 5.03 centimeters, respectively. Y-Balance test results the right leg Composite score was 111.31 and the left leg Composite score was 110.72. Push-ups for 40 seconds were 17.68 times and sit-ups for 40 seconds were 32.49 times. The results of the muscle endurance test using the Static plank test method had an average value of 94.28 seconds, results of the Arrowhead agility test, running in a left loop took 9.48 seconds, running in a right circle took 9.69 seconds, and the total time in both directions was 19.16 seconds. In counter movement jump test without swinging the arms, the average height was 37.06 centimeters, and in the arm swing, the average height was 43.46 centimeters. The long jump has an average distance of 210.50 centimeters. The drop jump test has an average jump height of 33.23 centimeters, an average ground contact time of 0.25 seconds, and a Reactive strength index equal to 1.35 meters/second. Results of the test of running 40 meters fast at a distance of 10 meters, took 1.74 seconds, a distance of 20 meters took 3.06 seconds to answer, a distance of 30 meters took 4.29 seconds, and a distance of 40 meters took 5.54 seconds. System testing anaerobic energy from the running-based anaerobic sprint test, the test results for maximum anaerobic power equal to 602.92 watts, average anaerobic power equal to 471.49 watts, and fatigue index 3.94 watts/second and the distance that can be run from Yoyo intermittent recovery level 1 test is 1,281 meters.

2.3 Data of Measurement and Test Football Skills Talented Indicator of Youth Football Competency in 5 areas of football skills, consisting of short-range passing skills, long-distance passing skills, and heading skills. For football dribbling skills and shooting skills, it was found that all football athletes participating in the research Have the average value of the total time for passing the ball (Performance time) from the Loughborough soccer passing test equal to 47.78 seconds. Has an average score from the 35-meter ball passing test equal to 6.63 points. Has a score for heading the ball. In front and from the right side, the answer was 5.68 and 4.37 points, respectively, with a dribbling speed of 2.48 meters per second and the score for a field goal is 1.72 points.

2.4 Data of Measurement and Test Cognitive Functions Talented Indicator of Youth Football the results of the brain ability test. It was found that for all football athletes, there is a time taken to respond 401.45 milliseconds and a 93.70% accuracy rate on the multiple-choice reaction time test. It took 33.76 seconds on the Trail Making test and 71.97 on the Trail Making B test for the Franke test. Congruent patterns achieved a mean response time of 407.23 MS and inconsistent response times of 470.45 MS while achieving a composite score based on unique image designs. 26.80 images and received a score from the mental image rotation test of 7.15 points.

Discussion

Determining indicators of football talent at the youth level in this research study is consistent and goes in the same direction as the theoretical principles. A body of knowledge and several past research

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studies regarding youth football athletes with talent or sporting genius in the year 2000 by Reilly et al., (2000), a study was conducted on the important characteristics of youth football athletes with an average age of 16.4 years who were at the elite level, numbering 16 people and 15 people at the sub-elite level, using a test about 4 important factors, namely size. and body proportions (Anthropometric), 15 items, physiology (Physiological), 8 items, Psychological, 3 items, and football-specific skills. (Soccer-specific skills) totaling 2 items. The results of the study found that elite-level football athletes have better abilities than sub-elite football athletes in terms of speed performance, agility aerobic endurance, dribbling skills, and mental skills which show that these characteristics can be applied as an indicator or used to monitor football athletes have special abilities at the youth level.

In 2006, Vaeyens et al. (2006) presented a youth football player selection model using interdisciplinary variables in science, which was used to study youth football athletes at the elite (elite), sub-elite, and amateur (non-elite) levels under the age of 13 - 16 years using measures and tests. In terms of body proportions (Anthropometric), technical and sports skills, various aspects of physical fitness, including muscle strength, muscle power, muscle flexibility, speed, the endurance of the heart and respiratory system, and anaerobic energy capacity, and it is known as that youth football athletes and elite athletes perform better than non-elite athletes in terms of muscle strength, muscle flexibility, speed, aerobic endurance, and anaerobic energy system. In addition, when considering the age group, it was found that the most important characteristics in the age group of 13-14 years are speed and football skills, while the age group 15-16 years. A distinctive feature is the endurance of the cardio-respiratory system. or an energy system that uses oxygen

The key factors used to predict elite youth soccer players in a study by Roberts et al. (2019) highlighted four characteristics important to ability special football sports include the body, mind, technique, and other factors, which have been determined as tools in youth athletes examined in this study included agility, balance, speed, and muscle strength, aerobic endurance, high jumping, concentration and focus dribbling, shooting, heading, accuracy in passing.

This study has developed normal criteria for indicators of special abilities of youth football players using the Normalized T-score method by setting the score criteria into 5 levels that correspond to the T-score and percentile. Files obtained from the analysis of the results and there is an interpretation at each level of score Corresponds to each test variable. However, the normal criteria obtained from this research study can be used to evaluate potential and genius in youth football. This will give you information about football players' youth with special abilities or important characteristics that are likely to be successful in sports at the highest level internationally in the future. It will also reveal the multidimensional ability levels of youth football athletes at the current time or during the assessment period. The information obtained can be used as basic information or comparisons between athletes of each team, including sports coaches and sports scientists can use it in planning and designing training programs to develop characteristics that are still at a low level.

Recommendations

1. Suggestions for applying research

1.1 This research can be applied in screening, evaluating, inspecting, and searching for youth football athletes with high potential in the country to bring them into the process of developing sports ability using scientific methods. It is systematic and can raise the level or advance to being a world-class athlete in the future.

1.2 This research can be applied to selecting youth football athletes with outstanding abilities to be Representatives of the country and compete at the international level.

1.3 This research can be applied to selecting football athletes at the school level and youth development centers (Academy) of professional football clubs.

1.4 Athletic trainers and sports scientists can adopt tests and benchmarks for performance indicators. The special characteristics of youth football athletes will be used to check the strengths and shortcomings of athletes, which will be important information in planning and setting training programs to develop their athletic abilities. continuously improving.

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2. Suggestions for future research studies

2.1 Studies should be conducted to develop normal criteria for important sports characteristics to cover all age groups or competition levels, such as athletes aged 13-15 years, football players at the university level. or football players at the professional level, etc.

2.2 Studies should be conducted to develop normal criteria for indicators of special abilities in other sports such as volleyball, basketball, futsal, badminton, swimming, handball, etc.

References

Bidaurrazaga-Letona, I., Lekue, J. A., Amado, M., & Gil, S. M. (2019). Progression in youth soccer: Selection and identification in youth soccer players aged 13–15 years. *The Journal of Strength & Conditioning Research*, *33*(9), 2548-2558.

De Bosscher, V., Shibli, S., Westerbeek, H., & Van Bottenburg, M. (2015). *Successful elite sport policies: an international comparison of the sports policy factors leading to international sporting success (SPLISS 2.0) in 15 nations*. Meyer & Meyer Sport.

Ford, P. R., Bordonau, J. L. D., Bonanno, D., Tavares, J., Groenendijk, C., Fink, C., & Di Salvo, V. (2020). A survey of talent identification and development processes in the youth academies of professional soccer clubs from around the world. *Journal of Sports Sciences*, 38(12), 1269-1278.

Gil, S. M., Zabala-Lili, J., Bidaurrazaga-Letona, I., Aduna, B., Lekue, J. A., Santos-Concejero, J., & Granados, C. (2014). Talent identification and selection process of outfield players and goalkeepers in a professional soccer club. *Journal of Sports Sciences*, 32(20),1931-1939.

Gil, S., Ruiz, F., Irazusta, A., Gil, J., & Irazusta, J. (2007). Selection of young soccer players in terms of anthropometric and physiological factors. Journal of Sports Medicine and Physical Fitness, (47)12, 25–32.

Larkin, P., & O'Connor, D. (2017). Talent identification and recruitment in youth soccer: Recruiter's perceptions of the key attributes for player recruitment. *PLOS one*, 12(4), 716.

Oakley, B., & Green, M. (2001). The production of Olympic champions: International perspectives on elite sport development systems. *European Journal for Sports Management*, 8 (1), 83-105.

Reilly, T., Williams, A. M., Nevill, A., & Franks, A. (2000). A multi-disciplinary approach to Talent Identification in Soccer. *Journal of Sports Sciences*,*18*(9),695-702.

Roberts, S.J., McRobert, A.P., Lewis, C.J., & Reeves, M.J. (2019). Establishing consensus of position-specific predictors for elite youth soccer in England. *Science and Medicine in Football*, *3*(3), 205-213.

Sarmento, H., Anguera, M. T., Pereira, A., & Araújo, D. (2018). Talent identification and Development in male football: A systematic review. *Sports Medicine*,*48*(4),907- 931.

Vaeyens, R., Malina, R. M., Janssens, M., Van Renterghem, B., Bourgois, Vrijens, J., & Philippaerts, R. M. (2006). A multidisciplinary selection model for youth soccer: the Ghent Youth Soccer Project. *British journal of sports medicine*, 40(11), 928- 934.

Waldron, M., & Worsfold, P. (2010). Difference In the game-specific skills of elite and sub-elite youth football players: Implications for talent identification. *International journal of performance analysis in sport*, 10(1), 9-24.

Williams, A.M., & Reilly, T. (2000). Talent identification and development in soccer. *Journal of Sports Sciences*, 18(9), 657-67.

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