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Development Assessment Model for Talent Identification of Young Indonesian Basketball Players: Anthropometrics, Biomotor, Technical, and Tactical Skills

Nugroho Susanto[1], José Vicente García-Jiménez[2], Agnieszka Magdalena Nowak[3], Hendra Setyawan[4], Ratko Pavlovic[5], Afif Rusdiawan[6], Agam Akhmad Syaukani[7,*]

[1]Faculty of Sport Science, Universitas Negeri Padang, Indonesia
[2]Department of Artistic, Music and Physical Education, University of Murcia, Spain
[3]Faculty of Rehabilitation, Józef Piłsudski University of Physical Education, Poland
[4]Faculty of Health and Sport Siences, Universitas Negeri Yogyakarta, Indonesia
[5]Faculty of Physical Education and Sport, University of East Sarajevo, Bosnia and Herzegovina
[6]Faculty of Sports and Health Science, Universitas Negeri Surabaya, Indonesia
[7]Department of Physical Education, Universitas Muhammadiyah Surakarta, Indonesia

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Abstract This study aims to determine the potential and talent of young basketball players from an early age to make it easier for coaches to identify players who can be used as athletes by analyzing aspects of anthropometrics, bio-motor, technical, and tactical skills. The research method used is the Bord and Gall development model. The researcher deliberately chose this method to assess basketball players' talent comprehensively, including anthropometrics, bio-motor, technical, and tactical skills. The sample collection technique employed purposive sampling of school students aged 10-14. This research is not conducted in isolation. It is built upon a foundation of existing knowledge, drawing from literature studies in journals, articles, and previous research that are directly relevant to this study. This comprehensive approach ensures that our findings are well-informed and robust. Data analysis with descriptive statistics uses pre-determined instruments and indicators. The results showed that this assessment model could identify young basketball players related to their talents and interests. In addition, this research can make it easier for coaches to identify talented young basketball players more effectively. This study concludes that the four indicators, namely anthropometry, biomotor, skill tests, and tactical tests, can identify students in the talented to moderately talented category. Based on the research results, new knowledge can also be added to the procedures and implementation of basketball talent scouting tests for young athletes and coaches. This research implies that the benefits for coaches are that they can better understand their players' strengths and weaknesses, which can help them train more effectively. The benefit for basketball clubs is that they can be more effective in identifying and recruiting talented players, which can help them to improve their team performance.

Keywords Model Assessment, Talent Identification, Basketball, Young Basketball Players

1. Introduction

Various techniques in basketball games are a form of diversity and assessment. Knowing the talent of athletes is important to improve achievements. Coaching is carried out by empowering Sports organizations and developing sports coaching centres that are national and Darian can hold competitions in a tiered and sustainable manner [1]. The sports development system cannot be implemented presently to achieve these achievements [2]. It is necessary to have a detailed procedure and design. Sports development planning by producing outstanding athletes requires totality and commitment to build sports logically, analytically, and systematically [3]. The selection of talented athletes plays an important role in achieving peak achievements. Sports coaching and development start at an early age, approximately 6-14 years old, and are part of national policy [4]. Assessing an athlete's physical characteristics from an early age is important to determine the potential possessed by athletes [5]. Therefore, it is important to have an appropriate assessment model for identification.

The assessment model of young basketball players is important because it aims to identify the correlation, interaction, and significance of the Anthropometrics, Biomotor, Technical, and tactical Skills model in the talent identification process. In-depth knowledge related to physical, motor, and technical skills associated with the performance of young athletes will be provided to coaches [6]. Anthropometry is a test to identify athletes' talents through physical assessments such as height and weight [7]. Biomotor is an assessment test of basketball players through multistage fitness tests, spoken, and smart WRB 515-GM [8]. Next is the test of basketball game skills through assessments related to basketball game techniques. The tactics assessment is related to understanding basketball game tactics, types, understanding, and material tactics and strategies per basketball toy [9].

The assessment model for talent identification of young basketball players is an important focus to understand the relevant criteria to identify the athletic potential of young athletes [10], highlighting that it is important to measure anthropometric, bio-motor, and technical and tactical skills in the game. There is a more holistic and effective approach to evaluating the athletic potential of young basketball players. Research conducted by [11] found that psychology-based research models can accurately predict the potential of young basketball players. This study shows that psychology-based scoring models can predict the potential of young basketball players with an accuracy of 65%. Ibáñez et al. [12] also conducted a comparable study, discovering that assessment models based on skills and physical attributes effectively predict the potential of young basketball players. The results showed that 75% of the accuracy rate of skill-based and physical-based assessment models can be expected for young basketball players. Referring to the theory and results of previous research, the assessment model for talent identification of young basketball players is important to be examined because this model is carried out to identify the talents of young basketball players in increasing the accuracy of predicting the potential of players to assist coaches in selecting players who have the potential to be used as athletes [13]. In addition, this model is important because it aims to develop a more comprehensive assessment of the players' success in basketball. The most important thing is also to ensure the potential and talent of the players so that the potential can continue to be improved.

The assessment model for basketball players can be done with anthropometrics, motor, technical, and tactical skills. The diversity of assessment models is an alternative solution to determine the talents and abilities of young players. Anthropometrics, bio-motor, technical, and tactical skills are important factors for success in basketball [14]. This is because these variables can be measured and have values following the method used in this study. A study conducted by Miguel-Ortega [15] resulted in a significant correlation between anthropometric variables and young players' athletic performance in basketball games. This study found that morphological factors also play an important role in assessing the potential possessed by athletes and serve as predictors in the talent evaluation model of players. Ribeiro [16] conducted analogous research, emphasizing the correlation between bio-motor factors and athlete performance. The study found a holistic relationship that can provide deep insight into the capacity of athletes, especially young basketball players. Tactical skills become important in assessment according to the support of research results by Machado [17]. The existence of tactical skills can be a consideration in the decision-making and understanding of players, especially in identifying talented young athletes and knowing every potential they have.

Physical characteristics of athletes are important, so they can be described as needed concerning size, speed, strength, agility, flexibility, balance, and endurance [19]. The study's assessment drew upon various theories, including the long-term athlete development (LTAD) theory, which underscores the significance of nurturing athletes' talent over the long haul, from early to advanced levels [5]. The theory also explains that the development of athletes includes aspects of anthropometry, bio-motor, and technical skills, so it is in line with this study.

The study by Han et al. [20] systematically examines and analyzes physiological, anthropometric, and physical performance factors that influence the talent of basketball players. It shows that these factors have a strong relationship with basketball game performance. According

to research by Zhao et al. [21], anthropometry, basic skills, and bio-motor assessments can effectively identify athletes' talents at a young age. It also shows that bio-motor and anthropometric aspects are more dominantly used in identifying athletes, but it is also important to use skill performance aspect variables in decision-making. These studies certainly align with the problems raised in this study. Research by Han et al. [20] used aptitude, physiological, and anthropometric variables. Chaniago's study, "Assessment of Anthropometry, Biomotor Skills, and Fundamental Abilities for Detecting Future Athlete Talent in 11–15 Year-Olds" [22], employed fundamental anthropometric measurements, skills, and biomotor variables in children aged 11–15. Based on these studies, the relationship with this study is that this study is more complex and detailed, especially related to the variables of anthropometrics, bio-motor, technical, and tactical skills, which are used as indicators in the assessment of the young basketball players studied in this study. Previous research used Web of Science, PubMed, SPORT Discus, and Scopus in the data collection and analysis [20]. The research by Chaniago [22], measured variables by direct observation and assessment of selected samples, including by making direct measurements related to physical strength, posture, and endurance. What distinguishes this research from previous research is that this research method uses research and development analysis. The method was chosen to analyze the needs and test the effectiveness of the object under study. In addition, there are tests in this study so that this research can be more accurate. This research uses research and development analysis methods developed to be tested on the guidance of basketball talents aged 10–14 years, with the hope that this development can make it easier for coaches to find out the potential and abilities of young players. Previous research by Han et al. [20], conducted analysis and data collection from the results of comparisons between elite and non-elite basketball players in several countries using comparative literature studies against similar previous research. Chaniago's research [22] is based on a survey and direct observation of 408 participants who possess athletic talent and are between 11 and 15 years old in Salatiga City. In comparison, this study focused more on beginner basketball players between the ages of 10–14 years who were tested on ten athletes from SMP IT Abu Bakar Yogyakarta and athletes from CLUB Sahabat Bola Basket Sahabat Jogjakarta on a large scale.

This research aimed to confidently and diplomatically assess the potential and talent of young basketball players at an early age to help coaches identify athletes. In addition, this research must be carried out as a basis for adding new knowledge about the procedures and implementation of basketball talent scouting tests. The results of this study provide benefits as a benchmark for identifying basketball talent scouting for ages 10–14. In addition, this research also provides benefits in creating a good brand image about the scope of basketball. This study aims to develop an assessment model for talent identification for young basketball players: anthropometrics, bio-motor, technical, and tactical.

2. Materials and Methods

2.1. Research Design

This study employs research and development methods following the Bord and Gall development model. This method was chosen to devise an assessment approach to identify basketball player talents, considering anthropometric, bio-motor, technical, and tactical skills. Consequently, this study aims to devise an appropriate instrument and generate a model for guiding basketball talent among children aged 10-14. Figure 1 shows the steps in this study.

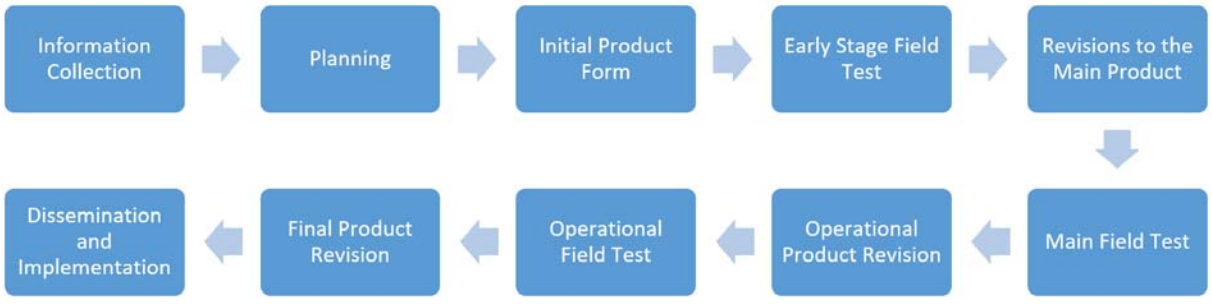

Figure 1. Research Procedure

In the initial phase, the researcher examines potentials and challenges, focusing on the significant issues stemming from advancements in science and technology. However, coaches need to pay more attention to talent scouting in basketball for individuals aged 10-14, which leads to subpar achievements. Based on the identified potential challenges, the subsequent step involves gathering information through literature reviews and field studies. Literature reviews entail analyzing pertinent theories, literature, and research findings. Field studies include observing actual conditions to gain insights into the prevailing circumstances. During the training process, there is no assessment or evaluation of the identification of basketball sports talents aged 10-14 using standard instruments. Furthermore, the purpose of collecting this data is to develop talent scouting through instruments in the form of guidebooks that follow the characteristics of basketball for 10-14 years old.

In the second stage, researchers begin to design products. Researchers design a list of products that will be made by preparing all physical materials in terms of basketball anthropometrics, biomotor, technical, and tactical skills as well as procedures and the preparation of guidebooks based on the results of needs analysis and theoretical studies. Activities aimed at creating tools that will serve as manuals and instruments for recognizing basketball player skills including: Initial field testing is carried out with subjects using data collection through observation, questionnaires, and measurement tests with experts, practitioners, physical condition experts, test and measurement experts, medical test experts, coaches, senior and junior athletes, and then the results are further analyzed.

In the subsequent phase, the researcher proceeds with product validation. After initial expectations are met, the draft undergoes input solicitation from pertinent experts (Expert Validation), including media specialists, material experts, and linguists. Expert feedback serves as a foundation for refining the draft. Following revisions based on expert input, the next step involves testing the revised draft. Product trials can be carried out in parts only on a small group of athletes who test at a club. After conducting trials and getting feedback from validators, researchers revise the draft guidelines that are ready to be operationalized based on suggestions and input from trial participants.

The next phase is conducting large-scale trials with questionnaire data collected and revised again. The purpose of the trial was to see the revision of the guide's product design based on suggestions from field tests. The trial results indicate that certain parts need revision. The final guide is a revision of the draft guide, followed by an effectiveness test, and becomes the final guide. The result of this research is a manual for coaches on guiding basketball talent and disseminating and implementing the guidebook at professional meetings and in journals. Furthermore, the study has been completed and declared feasible. In this case, the product in the form of a guidebook can be mass-produced, and the publisher can then cooperate with the publisher to carry out commercial distribution and monitor the guidebook that has been distributed to help with quality controls.

2.2. Data Collection Technique

In this study, the subjects in research and development were basketball athletes aged 10-14 years. The small-scale trial was carried out on ten extracurricular basketball students of Abu Bakar Integrated Islamic Junior High School Yogyakarta (SMP IT Abu Bakar Yogyakarta), while the large-scale trial involved 100 athletes from the Sahabat Bolabasket Club Sahabat Jogjakarta. The data collection technique in this study used tests and observation sheets of basketball practitioners, regional basketball coaches, national basketball coaches, senior basketball athletes, and junior basketball athletes, which were used to collect validity test data from experts to determine what test items were needed according to basketball talent aged 10-14. This age was chosen because, at this age, children experience a critical period of physical and mental development. At this age, children are flexible enough to learn and adapt to basic techniques quickly. After finding the results of expert validation, it was then tested in small-scale trials and large-scale trials using questionnaires and qualitative data using input sheets from experts, which were then analyzed. The test items are determined based on a careful literature review, formulated constructs and operational definitions, formulated grids, dimensions, and indicators, and rigorous trials to analyze trial result data and continue with the development of sports talent criteria.

2.3. Research Instrument

Table 1 shows the instruments used in this study.

2.4. Data Analysis Technique

The data analysis in this study centred on formulating a method for identifying basketball talent among individuals aged 10-14. The process involved creating a score scale by calculating the mean and standard deviation from aptitude test data, which was then categorized into five norms based on a normal distribution: very talented, talented, moderately talented, less talented, and not talented. Ensuring the validity and reliability of talent identification assessment tools is crucial. Data was meticulously processed and analyzed to determine the mean and standard deviation, and interpretation followed objective criteria, categorising data into the five categories above. This approach guarantees the reliability and objectivity of the study's findings. The categorization process and the relevant formulas are detailed in Table 2.

Table 1. Research Instruments Used

Test		Item
Anthropometer Test		Height
		Weight
		Arm Span
Biomotor Tests	Cardiovascular Test	Multistage fitness test
	General motion components	Soken/power ball overhead throw
	Reaction speed meter test	Smart WBR 515-GM
Technical Skills Test		Dribbling (Crossover dribble, Reserve dribble)
		Shooting (free throw)
Tactical Test		Knowledge Test Understanding Tactics as many as 2 items
		Knowledge Test Types of tactics as many as 7 items

Table 2. Basketball Sports Talent and Interest Categories

No	Category	Formula	
1	Very Talented	Down	> M + (1,5 X SD)
2	Talented	Above	M + (1,5 X SD) S/D M + (0,5 X SD)
3	Moderately Talented	Above	M + (0,5 X SD) S/D M - (0,5 X SD)
4	Less Talented	Above	M - (0,5 X SD) S/D M - (1,5 X SD)
5	Not Talented	Above	M - (1,5 X SD) < down

M = Mean

SD = Standard Deviation

S/D = Up to

The next step is to analyze the data by calculating the total acquisition of the value scale per test item to conclude with the norms of the talent category for the identification of basketball sports talent aged 10-14 from the research conducted.

3. Results

This study utilized pre-test and post-test data from students regarding basketball talent to evaluate the validity and reliability of the instruments employed. The validation and reliability assessments were conducted using data from the pre-test, which had been evaluated by instrument assessors. Table 3 displays the outcomes of the validity and reliability tests.

Based on Table 3, the correlation value or r obtained is greater than the r-table value with N = 100 and df = 28, which is 0.3610. This means that all items on the test performed are valid. For reliability testing, a Cronbach Alpha score of > 0.60 was obtained, so it can be said that all items in the test have been reliable enough to be used as research instruments to measure students' aptitude in basketball tests.

Descriptive statistical testing of each test item is carried out to obtain the mean and standard deviation values to begin categorizing these items. Table 4 shows the descriptive statistical results obtained.

The classification of test outcomes is based on the second test value from the post-test data as a benchmark. The subsequent section presents the categorization results for each test item value.

Table 3. Validity and Reliability

Test	Item	R	α	Information	
				Validity	Reliability
Anthropometers	Height	1.000	1.000	Valid	Reliable
	Weight	1.000	1.000	Valid	Reliable
	Arm Span	1.000	1.000	Valid	Reliable
Biomotor	Multistage Fitness Test	0.889	0.941	Valid	Reliable
	Soken	0.508	0.668	Valid	Reliable
	Smart WBR 515-GM	0.930	0.964	Valid	Reliable
Basketball Skill Test	Free throw	0.543	0.692	Valid	Reliable
	Dribbling	0.876	0.898	Valid	Reliable
Tactical	Understand and apply the instructions given by the trainer	0.768	0.774	Valid	Reliable

Table 4. Results of Descriptive Statistics

Test	Item	n	Mean	Standard Deviation	Description
Anthropometers	Height (cm)	100	145.97	9.814	Moderately Talented
	Weight (kg)	100	44.40	12.28	Moderately Talented
	Arm Span (cm)	100	155.6	11.29	Talented
Biomotor	Multistage Fitness Test (times)	100	6.22	0.58	Moderately Talented
	Soken (m)	100	5.87	1.17	Less Talented
	Smart WBR 515-GM (sec)	100	0.29	0.04	Moderately Talented
Basketball Skill Test	Free throw (Number of Balls In)	100	6.17	1.05	Moderately Talented
	Dribbling (seconds) (speed and ball control	100	10.6	2.82	Talented
Tactical	Understand and apply the instructions given by the trainer (values)	100	5.8	0.89	Moderately Talented

3.1. Height

The average height value and standard deviation were 145.97 cm and 9.814 cm, respectively. Then, it converted the fitness formula of the category of special interests and talents of basketball sports with the formula:

Table 5. Height Score Standard

Score	Category	Result	Sum	Percentage
5	Very talented	> 161 cm	0	0%
4	Talented	151 cm to 161 cm	35	35%
3	Moderately Talented	141 cm to 151 cm	25	25%
2	Less Talented	131 cm to 141 cm	23	23%
1	Not Talented	< 131 cm	17	17%
Total			100	100%

Table 5 shows that 35% of talented students have the highest category. However, the difference in value is similar to the moderately talented and less talented categories, which have percentages of 25% and 23%, respectively.

3.2. Weight

The average value and standard deviation of body weight were 44.40 kg and 12.28 kg, respectively. Then, it converted into the formula of the category of special interests and talents of basketball with the formula:

Table 6. Weight Score Standard

Score	Category	Result	Sum	Percentage
5	Very talented	> 161 kg	9	9%
4	Talented	151 kg to 161 kg	35	35%
3	Moderately Talented	141 kg to 151 kg	25	25%
2	Less Talented	131 kg to 141 kg	23	23%
1	Not Talented	< 131 kg	8	8%
Total			100	100%

Table 6 shows that the weight of students in the moderately talented and less talented group categories is similar to the percentages of 25% and 23%, respectively. The weight of students in the highly talented category is the same percentage as the untalented category, with a small percentage, only 8%.

3.3. Wingspan

The average value and standard deviation of body weight were 155.6 cm, respectively. Then, it converted into the formula of the category of special interests and talents of basketball with the formula:

Table 7. Wingspan Score Standard

Score	Category	Result	Sum	Percentage
5	Very talented	> 170 cm	0	0%
4	Talented	161 cm to 170 cm	35	35%
3	Moderately Talented	151 cm to 160 cm	35	35%
2	Less Talented	141 cm to 150 cm	21	21%
1	Not Talented	< 131 kg	9	9%
Total			100	100%

Table 7 shows that the arm span of students in the talented, moderately talented, and less talented categories had the same score of 35%.

3.4. Multistage Fitness Test

The average and standard deviations of the multistage fitness test were 6.22 times and 0.58 times, respectively. In this test, the value of the post-test data is also used, which is then converted into a formula for the category of special interests and talents in basketball with the formula:

Table 8. Multistage Fitness Score Standard

Score	Category	Result	Sum	Percentage
5	Very talented	> 7.1 times	0	0%
4	Talented	6.5 times to 7.1 times 12 40%	37	37%
3	Moderately Talented	5.9 times to 6.5 times	23	23%
2	Less Talented	5.4 times to 5.9 times	27	27%
1	Not Talented	< 5.4 times	13	13%
Total			100	100%

Table 8 shows an increase in the multistage fitness test scores of students in the talented category from 37%. So, the results of the multistage fitness test of students after using interest tests and special sports basketball were increased.

3.5. Soken/Power Ball Overhead Throw (Backwards)

The mean and standard deviation of the soken test were calculated to be 5.87 m and 1.17 m, respectively. In this test, the value of the post-test data is also used, which is then converted into a formula for the category of special interests and talents in basketball with the formula:

Table 9. Soken Score Standard

Score	Category	Result	Sum	Percentage
5	Very talented	> 8 m	0	0%
4	Talented	7 m to 8 m	8	8%
3	Moderately Talented	6 m to 7 m	21	21%
2	Less Talented	4 m to 6 m	71	71%
1	Not Talented	< 4 m	0	0%
Total			100	100%

Table 9 shows that 71% of students are in the less talented category in the post-test results. This shows increased students' soken test results after using the special interest and talents basketball test.

3.6. Smart WBR 515-GM

The average and standard deviations of the Smart WBR 515-GM test were 5.87 m and 1.17 m, respectively. In this test, the value of the post-test data is also used, which is then converted into a formula for the category of special interests and talents in basketball with the formula:

Table 10. Smart WBR 515-GM Score Standard

Score	Category	Result	Sum	Percentage
5	Very talented	> 0.35 sec	15,6	15,6%
4	Talented	0.31 sec to 0.35 sec	20,4	20,5%
3	Moderately Talented	0.27 sec to 0.31 sec	27,6	27,6%
2	Less Talented	0.23 sec to 0.27 sec	37,6	37,5%
1	Not Talented	<0.22 sec	0	0%
Total			30	100%

Table 10 shows an increase in the talented category to 20, 5%, and there were no more students in the untalented category from the post-test results in Table 10. This shows increased students' Smart WBR 515-GM test results after using the interest test and special basketball activities.

3.7. Free Throw

The average score and standard deviation of the free

throw test were 6.17 scores and 1.05 scores, respectively. In this test, the value of the post-test data is also used, which is then converted into a formula for the category of special interests and talents in basketball with the formula:

Table 11. Free Throw Score Standard

Score	Category	Result	Sum	Percentage
5	Very talented	> 8 score	0	0%
4	Talented	7 score to 8 score	16	16%
3	Moderately Talented	6 score to 7 score	21	21%
2	Less Talented	5 score to 6 score	63	63%
1	Not Talented	< 5 shoes	0	0%
Total			100	100%

Table 11 shows an increase in free throw scores in the talented category by 16% and the moderately talented category by 21%. There was a decrease in value in the less talented and untalented categories, but the untalented category experienced a significant decrease to 0%. So, from the diagram, there was an increase in students' free throw test results after using the special interest and talent test of basketball.

3.8. Dribbling

The dribbling test had a mean, value and standard deviation of 10.6 each. In this test, the value of the post-test data is also used, which is then converted into a formula for the category of special interests and talents in basketball with the formula:

Table 12. Dribbling Score Standard

Score	Category	Result	Sum	Percentage
5	Very talented	> 8 sec	0	0%
4	Talented	8.1 to 9 sec	6	6%
3	Moderately Talented	9.1 to 10 sec	34	34%
2	Less Talented	10.1 to 11 sec	48	48%
1	Not Talented	< 11 sec	12	12%
Total			100	100%

Table 12 reveals promising results. There is a significant increase in the dribbling p-value in the talented category by 6% and in the category of quite talented by 34%. This indicates a positive impact on students' dribbling test results after using the special interest and talent test of basketball.

3.9. Tactical Skill

The dribbling test's average value and standard deviation were 5.8, respectively. In this test, the value of the post-test data is also used, which is then converted into a formula for the category of special interests and talents in basketball with the formula:

Table 13. Tactical Skill Score Standard

Score	Category	Result	Sum	Percentage
5	Very talented	8.1 to 10	0	0
4	Talented	6.1 to 8	6	6%
3	Moderately Talented	4.1 to 6	34	34%
2	Less Talented	2.1 to 4	48	48%
1	Not Talented	0 to 2	12	12%
Total			100	100%

Table 13 shows that the value of tactical skill p in the talented category increased by 7% and the category of quite talented by 30 %. Thus, the diagram shows an increase in students' tactical skill test results after using the basketball special interest and talent test.

4. Discussion

4.1. Anthropometric Skill

In basketball, height is a crucial aspect in developing the potential and talent of young basketball players because it plays a central role in various aspects of the game [23]. The research results produce data if a basketball player has a height of 145.97 cm and above, he will be categorized as quite talented. The significance of anthropometric factors in basketball performance is widely acknowledged, and according to Han et al. [20], there exists a strong correlation between these attributes and player performance. The body weight of basketball players has an impact on the strength, speed, and physical endurance of players. The study results show that the average weight of basketball players is 44.40 kg, which can be categorized as quite talented. This is also in line with research conducted by Han [20], which states that anthropometric factors are closely related to the performance of basketball games. Supriyadi [24] shows that a balanced body weight by height can affect the athletic performance of basketball players. Optimal body weight can support body stability and more efficient movement, allowing players to be more agile on the field, and balanced body weight can also contribute to players' endurance during matches, ensuring that they can maintain high performance throughout the game [25].

Meanwhile, a larger hand span is positively related to the ability to grab rebound balls, increasing effectiveness in reaching the ball and overcoming opposing players. The study results show that basketball players with a hand span of 155.6 cm wide can be categorized as talented. Research by Han [20] supports the notion that anthropometric

parameters significantly affect basketball performance. Siahaan and Sinulingga [26] emphasize that optimal hand span provides an advantage in throwing and the ability to throw the ball, affecting the accuracy of shots and passes. Hand span also impacts defence, enabling players to block opponents' shots more and steal the ball more [18].

4.2. Biomotor Skill

The Multistage Fitness Test (MFT), often performed as an exercise, can increase a player's aerobic capacity. The MFT involves short running circuits that get faster, forcing players to adapt to the increased intensity of the exercise [27]. MFT measures cardiorespiratory fitness and reflects a player's ability to cope with the physical and mental stress required in a match environment. The results of the study show that basketball players who do MFT with an average value of a multistage fitness test of 6.22 times in one exercise can be categorized as quite talented. This research is in line with Chaniago [22]who says MFT can be used to evaluate the cardiorespiratory endurance of players to provide oxygen to muscles during intense physical activity.

The Soken or Power Ball Overhead Throw (Backwards) emphasizes using core muscles to produce thrust when throwing the ball. Based on the study's results, the Soken/Power Ball Overhead Throw (Backwards) data with a value of 5.87 m can be categorized as Less Talented. Another research that supports this is from Han [20], who states that strong core muscles support body stability and assist players in maintaining good posture during intense physical activity. It also provides valuable information about motor skills and mental speed, which are important in basketball to deal with dynamic and rapidly changing game situations [28]. Evaluating these aspects can help see how young players respond to visual stimuli and process information quickly, a precious skill in basketball.

Smart WBR 515-GM with second-time measurement helps evaluate reaction speed and hand-eye coordination. These skills are crucial in rapid response to changing game situations [29]. Chaniago [22] also supports this research, asserting the importance of the Smart WBR 515-GM in gauging player reaction speed during fast-paced and dynamic game scenarios. By combining these three biometric factors, coaches can design more targeted training programs, while talent developers can identify aspects that need to be improved to optimize the potential of young basketball players.

4.3. Technical Skills

Basketball skills tests that include shooting (free throw) and dribbling techniques are important in evaluating basketball players because they are fundamental aspects that significantly impact players' performance and contribution in matches. Shooting techniques, especially in free throw situations, allow scoring points without direct defensive interference. From the results of the research that has been done, if a basketball player performs the shooting technique (free throw) and produces an average value, and the standard deviation of the free throw test is 6.17 scores and 1.05 scores, respectively, it can be categorized as Moderately Talented. Accuracy and consistency in shooting techniques, including free throws, can indicate a player's reliability and effectiveness in scoring goals [30]. These skills are also decisive in crucial situations in the game, such as at the end of the match or other important moments.

Meanwhile, the research results produce data that if a basketball player performs the dribbling technique, an average value of 10.6 can be categorized as talented. This technique is important to control the ball by using hands to move on the field, which is very important in maintaining and distributing the ball. Research by Tyshchenko [31], showed that good dribbling skills could increase players' mobility, allowing them to avoid the opponent's defence, create space for shots, and support the team's attack. Integrating dribbling and shooting (free throw) techniques in basketball skills tests allows coaches and talent developers to evaluate basic abilities that play a vital role in a player's success on the court [32]. This test provides valuable information about a player's reliability in controlling the ball and ability to score points. By understanding these skills, coaches can design more focused training programs and provide better feedback to help players improve their performance on the basketball court.

4.4. Tactical Skill

From the results of research on tactical skills that have been carried out, the average value of 5.8 can be categorized as Moderately Talented. Meanwhile, the understanding and execution of the coach's instructions reflect the player's cognitive ability and football intelligence, which is a key element in evaluating talent [7]. A good understanding of the coach's instructions creates a basis for measuring technical and tactical skills. It reflects the player's ability to adapt to changes in-game strategy and implement learned skills effectively. Previous research by Han [20] also said that applying techniques mastered in playing could be used in players' readiness to learn, receive feedback, and actively participate in their development as basketball players.

4.5. Assessment Model for Talent Identification of Young Basketball Players

The Assessment Model for Talent Identification of Young Basketball Players integrates Anthropometry, Biomotor Skills, Technical Skills, and Tactical Understanding to evaluate a player's potential [33] comprehensively. This assessment model can pay attention to physical aspects such as speed, agility, physical strength and technical skills such as dribbling, shooting, and

decision-making in game situations [34].

According to this study's results, students' potential and talent can be identified through an assessment for a talent model using four assessment indicators, namely anthropometric skills, biomotor skills, technical skills, and tactical skills. This assessment model for talent identification of young basketball players provides benefits for players in that they can get the opportunity to develop talent and reach their full potential [35]. The benefit for coaches is that they can better understand their players' strengths and weaknesses, which can help them coach more effectively. The benefit of basketball clubs is that they can be more effective in identifying and recruiting talented players, which can help them to improve their team performance. This aligns with research by Sieghartsleitner [36], who found that this assessment model can effectively identify talented young players and predict player performance with up to 80% accuracy. In addition, the assessment model for talent identification of young basketball players can change how young players identify their talents and interests.

5. Conclusions

According to the results of the research conducted, the assessment model for talent identification of young basketball players can determine the potential and talent of young basketball players at an early stage. Integrating these assessment indicators forms a comprehensive model for talent identification in young basketball players. This model benefits players by providing opportunities for talent development and maximizing their potential. Coaches gain insights into players' strengths and weaknesses, facilitating more effective coaching strategies. Basketball clubs can enhance team performance by efficiently identifying and recruiting talented players. Furthermore, the assessment model demonstrates predictive accuracy in identifying talented players and has the potential to transform how young players recognize and pursue their talents and interests. Overall, the study underscores the importance of a holistic approach in evaluating and nurturing the talent of young basketball players, offering valuable insights for player development and team success.

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