Development of Website-Based Scoring Talent Identification for Athletics

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ABSTRACT: This research aims to produce a website-based talent identification scoring product for athletics, as a tool to process and analyze the talent test data for the children aged 13-15 years old in athletics. This study was a research and development (R&D) and the methods were based on the reference to the borg and gall research steps that had been simplified by the Puslitjaknov 2008 team. The research population and sample were the athletic coaching students at Athletics UKM UNY (Athletics Students Club of UNY). The research instrument was a questionnaire and an evaluation sheet in the form of a google form. The results of the data were analyzed by descriptive quantitative and qualitative analysis. The results show that the website-based athletics identification talent scoring is appropriate to be used in identifying, differentiating the potential and talent of the children aged 13-15 years old in athletics. These results are gained from: a) material expert validation of 94.23% which means "Good/Decent", b) media expert validation of 96.15% which means "Good/Decent", c) small group trial of 94.68% which means "Good/Decent" and 97.08% in the large group trial are included in the "Good/Decent" category. Hence, it can be concluded that this product is good/appropriate to use in distinguishing the potential and talent of the children aged 13-15 years old in athletics.

KEYWORDS: Scoring, talent identification, website

INTRODUCTION

A peak achievement in the world of sports cannot be achieved instantly, but must go through a long and gradual path, even in developed countries. Mansur (2011: 2) said that the lag behind national sports achievements compared to other Asian countries is one of the big problems for the nation to improve its sports achievements. Until now, sports achievements have not been optimal, because each sport and the athletes themselves have not shown optimal results. This is because there are obstacles in searching for and finding talented athletes. One effort to get talented athletes is by carrying out talent scouting efforts from an early age. Kusnanik (2014: 147) also said that one of the causes of Indonesia's lagging sports performance is due to a lack of attention to the search for talented athletes as an effort to regenerate athletes in the future. Improving sports performance is a long-term process that involves all parties and scientific disciplines that are studied scientifically. from the start until an athlete achieves achievement. These stages start from the nursery, coaching process and evaluation process to the achievements achieved by the athlete. And all of this is done by prioritizing a science and technology approach.

The development of sports achievements is the result of a combination of physical, technical, tactical and mental abilities of athletes obtained through the right coaching process. Successful achievement in sports is also determined by the level of training according to the child's age level. To achieve optimal performance, a continuous, gradual and continuous training process is needed. For this reason, it is necessary to conduct a talent search through sports search (Isfiani T, et al, 2013). Sport search is a method of identifying potential sports talent, which aims to help children determine their potential in sports according to the child's characteristics and potential (Isfiani T, et al, 2013). The uneven existence of sports search, especially at the regional level, is an inhibiting factor in the search for athletes who have good talent in the field of sports. Talent is an ability that a person has, this ability is inherent in him and can be used to do certain things faster and better. According to (KBBI) Big Indonesian Dictionary, what is meant by talent is the basis (smartness, character and disposition) that is innate from birth. Based on the definition above, it can then be said that identification of sports talent is the process of giving characteristics to the basic abilities that are inborn which can underlie sports skills. A talent scouting program needs to be carried out considering that athlete talent is the main factor in achieving achievement, so selecting young athletes is carried out selectively and optimally if the athletes being trained are

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potential athletes in accordance with the demands of the specifications of the sport in question, the time and resources used for the process. training of talented athletes more efficiently. (Kusnanik, 2014: 147).

An early childhood talent identification program is needed before carrying out a training process oriented towards achieving high achievement. The talent identification process is carried out to determine children who have potential in one sport, according to their talents. In particular, nursery is a very important foundation in the process of coaching athletes to achieve achievements. If you look at the early childhood coaching process, it certainly cannot be separated from the topic of talent search. Talent search is an initial stage that must be carried out as early as possible according to the characteristics of a particular sport. Talent search is the process of selecting prospective athletes which involves the process of measuring various internal qualities of athletes which include: physical quality, anthropometry, motor quality and psychological quality (Depdiknas, 2004: 3).

Based on existing facts, a good biomotor is needed for an athlete to achieve the highest performance. Data about the athlete's physical condition in the form of biomotor components is very important for preparing training periodization. Information about the athlete's physical condition or abilities is very necessary when coaching and developing the athlete's overall physical condition is carried out. According to Mansur, et al (2020: 2) say that the physical condition of an athlete in the world of sports performance is very important and fundamental, because to get good performance the athlete must have excellent physical condition. Physical condition is a fundamental foundation that must be fulfilled first of all the stages for an athlete to achieve perfect training quality in order to achieve maximum performance when competing. Physical condition itself consists of basic biomotor components consisting of components of strength, endurance, flexibility and speed.

Knowledge about the athlete's condition is one of the main factors that must be considered in the training process in order to achieve high performance. The main aim is to increase the athlete's functional potential and develop biomotor abilities to the highest degree (Bompa & Haff, 2009). Thus, the main aim of identifying prospective athletes is to identify and select prospective athletes who have the best abilities according to the particular sport. chosen. (Bompa, 1990) stated that in western countries the identification of prospective athletes is not a new concept in the field of sports, although the activity of identifying prospective athletes has not been carried out formally. Most Eastern European countries have established specific methods for identifying potential athletes. The procedure for selecting prospective athletes is discovered and directed by sports scientists, then the scientists provide recommendations for several potential athletes in certain sports to the coaches. By using the procedure for selecting prospective athletes as mentioned above the results are truly amazing. Several athletes from the German Democratic Republic who won medals at the 1972 Olympics were selected as prospective athletes through scientific selection. Nearly 80% of the country's medal winners are the result of a process of identifying potential athletes carried out using a scientific and science and technology approach.

The Long Term Athlete Development in Athletics (LTAD.IAAF) model has been used in various countries as a long-term athletic athlete development platform. With this phasing, the division of coaching responsibilities will become clear, for example between government and private sector, amateurs and professionals and so on. With the development stages, an athlete's career path can also be prepared, from childhood to peak performance and retirement as an athlete. Competition levels can also be more clearly arranged and in accordance with the growth and development of children (athletes).

The stages of long-term athlete development in athletics are divided into 5 stages, namely:
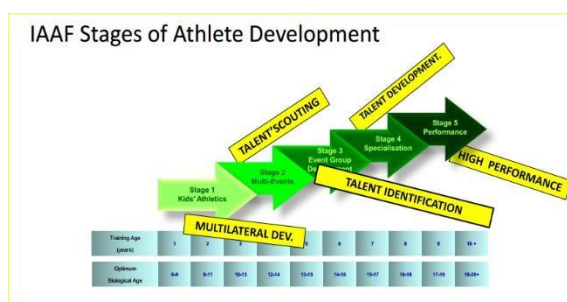
Picture 1. IAAF Stages of Athlete Development (sumber: IAAF, 1991)

Stage I in athletics, namely Kids' Athletics, emphasizes the factor of introducing various basic movements and children becoming skilled. The competition is held in the form of a contest/festival, as a means of motivating and a place to see children's potential. At the end of Kids' Athletics, talent scouting is carried out to see children's potential for sports. At this stage it is possible for children to have potential in several sports. Stage II, namely Multi Event, emphasizes basic athletic movements and is thoroughly trained as a basis for athletes to start athletic training. Competitions are held in the form of combined events, for example tri competitions and five competitions. The test used at this stage is talent scouting, as a means of identifying children's

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talents in athletic events. It is possible for children to change numbers in athletics, due to the influence of their growth and development. Stage III is Event Group Development, which emphasizes the development of numbers that are potential athletes. The competitions that athletes take part in are numbers according to their potential, for example athletes take part in the 100m & 200m sprint races, or athletes take part in the long jump and triple jump. The test used is talent identification, as a means of seeing the athlete's potential talent. Stage III of the Event Group Development emphasizes the development of numbers that are the athlete's potential for the child's Specialization stage. In this stage there is a talent identification instrument to identify and select prospective athletes who have the best abilities according to the chosen sport.

Currently, technological developments are increasingly helping people to achieve maximum results in the field of sports. Wilson, (2010: 34) states that the development and use of technology in the field of sports is very important, this is intended to analyze athlete performance and carry out plans to improve the athlete's performance. However, the talent identification test is still carried out manually in terms of its application, so its use is still not optimal and requires a long process and time to find out the results. Based on the reality in the field, support for talent identification tests in athletics is still done manually, therefore, to support and facilitate the implementation of talent identification tests, there needs to be development that can help the committee when carrying out the tests. The importance of the talent identification scoring application for organizers is to simplify and speed up the process of recording final test results. For coaches it is also no less important, because coaches can monitor athletes and create strategies to achieve the best performance for their athletes.

The symptoms found in the field, based on the researcher's observations when he was on the talent identification test committee for athletics on the FIK football field at Yogyakarta State University in April 2019, were that the process of processing the results of the talent identification test while it was taking place was felt to be less effective. There are many test result processing tools available in the field encountered is using Microsoft Excel. The test results are distributed to the coordinator for processing using Microsoft Excel. Researchers feel that the management of talent identification test results for athletics needs to be innovated, especially in the processing of talent identification test results for athletics. Considering that technological developments are increasingly advanced, improving the quality of sports in the field of science and technology can be realized.

Based on this background, researchers had the idea to develop talent identification scoring media for athletics to analyze data and statistics on athletes' biomotor components. Having data on athletes' biomotor components as a whole can be a basis for coaches to identify talent, recommend numbers to be pursued according to the child's biomotor abilities and design training programs to improve the performance of each individual athlete so that they can achieve maximum performance.

RESEARCH METHODS

This research is research and development Research and Development (R&D) developed by Sugiyono. According to Sugiyono (2016: 333) the research and development method is a research method used to produce a particular product, and test the effectiveness of the product. To produce certain products, research is used in the form of needs analysis and to test the effectiveness of the product so that it can function in the wider community, so research is needed to test the effectiveness of the product.

Data Collection Instrument

A research instrument is a tool used to measure observed natural and social phenomena. (Sugiyono 2016: 118). In this research, the instrument used was a questionnaire in the form of a Google form. According to Sugiyono (2015: 142), a questionnaire is a data collection technique by giving written questions to respondents to answer. Data collected in media development is in the form of quantitative and qualitative data. Qualitative data obtained from assessing the quality of media products can be used for product quality development purposes. Meanwhile, quantitative data is obtained from scores obtained from questionnaires filled out by material experts, media experts and respondents.

The quantitative data obtained in this research is data in the form of numbers from the results of the questionnaire. Later, the questionnaire in this research will be given to material experts, media experts, and athletic training students who have taken talent identification courses at the Student Activities Unit (UNY Athletics UKM). Quantitative data obtained through questionnaires were analyzed using quantitative descriptive analysis techniques expressed in the distribution of scores and percentages of the specified assessment scale categories. Each question is given a weightage of 1,2,3, and 4.

Data analysis technique

Data analysis techniques are a step to find out the results of the research carried out. Data analysis includes all activities of clarifying, analyzing, using and drawing conclusions from all data collected in action. After the data is collected, the data will be processed. The data analysis technique used in this research is a quantitative analysis technique which is an assessment using

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numbers and qualitative analysis. Percentages are intended to determine the status of something that is presented as a percentage and is still presented in the form of a percentage.

The results of the data calculations are then made in percentage form by multiplying by 100%. After obtaining the percentage using this formula, the feasibility of the talent identification scoring application media in this development research is classified into four feasibility categories using the following scale:

No	Score (%)	Category
1	< 40%	Not Good/Not Eligible
2	40% - 55%	Not Good/Not Appropriate
3	56% - 75%	Fairly Good/Decent
4	76% - 100%	Good/Decent

Source: Suharsimi Arikunto (2004: 10)

The questionnaire used in this research is an assessment or response questionnaire with the form of answers and assessment information 1: Very unsuitable/very inappropriate, 2: Not suitable/not feasible, 3: Suitable/feasible, 4: Very suitable/very appropriate.

DEVELOPMENT RESULTS AND DISCUSSION

Development Results

The product developed is a media website scoring talent identification for athletic sports. This development is intended for the selection committee or team to identify talent in athletics. This website-based talent identification scoring media product for athletics was developed to help the talent identification selection committee or team in processing test result data.

The product "media website scoring talent identification for athletics" which is being developed is a data processing media for talent identification test results for athletics in the form of a website, where the data processing media can simplify and speed up the processing of the final results of the talent identification test.

Research result

Material Expert Validation

The material in the talent identification scoring media developed in this research was validated by material expert Prof. Dr. Ria Lumintuarso M.Sc. lecturer in charge of the Athletic Coaching course, Sports Coaching Education Department, Faculty of Sports Science, Yogyakarta State University. Data from material validation was obtained through a questionnaire that covered material content. Before filling out the questionnaire provided by the researcher, the material expert first studied the development of website-based talent identification scoring for athletics accompanied by the researcher. In the validation process, material experts ask directly about the media to be developed. In the Material Validation stage for the development of "Scoring Talent Identification for Website-Based Athletic Sports Branches" Based on the data obtained in the stage I material expert assessment regarding the quality of the product being developed is "Good / Decent" with a percentage obtained of 86.53% and the stage II material expert's assessment regarding the quality of the product being developed is "Good / Decent" with a percentage of obtained by 94.23%.

Media Expert Validation

The media expert in this development research is Faidillah Kurniawan, M.Or who is one of the teaching lecturers at the Department of Coaching Education, Faculty of Sports Science, Yogyakarta State University. Researchers chose him as a media expert because of his adequate competence in the media field. Data from media expert validation was obtained in two stages. The first stage was carried out to identify weaknesses and recommend improvements by media experts. The second stage was carried out after there was a revision based on the validation of the first stage. In this validation, media experts fill out a questionnaire provided by the researcher. The questionnaire covers the media content that is developed. In the Media Validation stage of development of "Scoring Talent Identification for Website-Based Athletic Sports Branches" Based on the data obtained in the phase I media expert's assessment regarding the quality of the product being developed, it is "Quite Decent" with a percentage obtained of 73.07% and the phase II media expert's assessment regarding the quality of the product being developed is "Good / Decent" with a percentage obtained of 96 .15%.

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Product Trial

After carrying out expert validation and making several improvements from material experts and media experts, the talent identification scoring for athletics is suitable for testing. Here the researchers took samples from small group trials with 10 respondents and large group trials with 30 respondents from the background of athletic training students at the Faculty of Sports Science, Yogyakarta State University who had taken talent identification courses at the Athletics UKM, Yogyakarta State University. Data collection was carried out by providing developed products and questionnaires (Google Form) to research subjects online due to the situation in the Covid19 emergency PPKM situation. In the trial stage of development of "Website Based Scoring Talent Identification for Athletic Sports Branches" Based on the results of small group and large group trials, data is produced that shows a good/feasible trial. These results refer to predetermined assessment guidelines. The feasibility category used in this research is divided into several parts, namely, a value < 40% is categorized as not good/not feasible, 41 - 55% is categorized as not good/not feasible, 56 - 75% is categorized as quite good/quite feasible, and 76 - 100 % categorized as feasible.

Discussion

This research uses the research and development (R&D) method, which is a research method used to produce certain products and test the effectiveness of these products by referring to the borg and gall research steps which have been simplified by the Puslitjaknov team, namely analysis of the media used, product development, validation expert, revision, small group trial, revision of small group trial, large group trial, and product development results. The product produced in the research is a website-based scoring talent identification media for athletic sports. Development of Website-Based Talent Identification Scoring Talent Identification Media, designed and produced as an analytical based that makes it easier for coaches, test committees, and athlete development centers from regional to central level to identify and scout talent aged 13-15 years, especially in athletics according to developments. today's sports world. The reason the researcher developed this product came from the process of observations in the field and also personal experience. Researchers observed during the talent identification test process for athletics on the FIK football field at Yogyakarta State University in April 2019, namely that the process of processing the results of the talent identification test while it was taking place was felt to be less effective because the data processing of the test results was still manual using Microsoft Excel. Therefore, researchers want to develop a Website-Based Media Scoring Talent Identification for Athletic Sports Branches. In this millennial era, technological advances are increasingly sophisticated and everything has become very practical. With this development, the process of identifying the talents of children aged 13-15 years in athletics is more effective. The convenience of the website includes that we can access it anywhere and anytime with any device as long as it has an internet network connection.

After the product is finished, the product is validated by material experts and media experts. Material validation resulted in an average Material Aspect assessment of 94.23% by category **Good / Decent**, as well as the results of the Media Aspect assessment from media experts of 96.15% which is grouped into the **Good / Decent** category. There were several inputs and suggestions obtained during this process, such as adding ratings to the test results, increasing the amount of data, changing the word potential to talented, adding instructions for using media and increasing the level of contrast in the initial display.

The next stage is the trial stage which is carried out twice, namely the small group trial stage and the large group trial stage. In the small group trial, the assessment of the material suitability aspect was scored 95%, the assessment of the media appearance aspect was with a score of 93.5%, while the assessment of the programming aspect received a score of 95.5%. The total assessment at the small group trial stage received a score of 94.68%. Based on the results of the assessment, the score was converted based on the trial score conversion so that it can be concluded that the results of the assessment of the Material Suitability Aspect, appearance aspect and programming aspect are said to be Good/Decent. In the large group trial, the assessment of the material suitability aspect was with a score of 97.08%, the assessment of the media appearance aspect was with a score of 96.83%, while the assessment of the programming aspect received a score of 97.33%. The total assessment at the small group trial stage received a score of 97.08%. Based on the results of the assessment, the score was converted based on the trial score conversion so that it can be concluded that the results of the assessment of the Material Suitability Aspect, appearance aspect and programming aspect are said to be Good/Decent.

The subjects of this research were athletic coaching students who had taken a talent identification course. Small group trials were carried out on 10 respondents, large group trials with 30 respondents at the Student Activity Unit (UKM) Athletics at Yogyakarta State University. The instruments used were questionnaires and evaluation sheets in the form of Google forms. The data obtained are quantitative and qualitative descriptive. Quantitative data is obtained from questionnaire results in the form of numbers. Qualitative data is analyzed using a rating scale so that it can show the level of product suitability.

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CONCLUSIONS AND RECOMMENDATIONS

Conclusion

The product resulting from this research is website-based talent identification scoring for athletics based on the results of biomotor and anthropometric tests for children aged 13-15 years, especially in athletics, which was developed in accordance with the current needs of the sports world and with input and suggestions from experts. material and media experts, the product that has been developed has gone through several stages of manufacture including the stages of the material collection process, product creation process, material expert validation process, media expert validation process, small scale trials and large scale trials.

The development of website-based talent identification scoring for athletics was developed using a research and development (R&D) approach. Overall, this scoring media is said to be suitable for use in the process of identifying talent in athletics after going through several stages of expert validation and 2 stages of testing. The level of validation feasibility of material experts is included in the "Good/Decent" category and media experts are included in the "Good/Decent" category. The small group trial of 10 people is included in the "Good/Decent" category and the large group of 30 people is included in the "Good/Decent" category.

Overall, this development makes it easier for committees and coaches to identify and differentiate the potential and talents of children aged 13-15 years, so that it can be effectively used by coaches and test committees in the process of identifying sports talent to move towards specialization, especially in athletics.

Suggestion

Based on the conclusions and implications above as well as the results of research that has been carried out, stating that this development research is appropriate and validated by material experts and media experts, there are several suggestions as follows:

1. For the committee to use it as a guiding medium in carrying out talent identification tests for athletics.
2. For trainers to use it as a medium to analyze the results of anthropometric and biomotor tests for children aged 13-15 years so that they can be trained at the right specialization stage to reach peak performance.
3. Sports coaching students are expected to be able to make more comprehensive developments in line with the current needs of the sports world.

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