

The Effectiveness Test of Artistic Gymnastic Talent Scouting Selection Model – Based Application

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Abstract—The development of gymnastics athletes achievement in Indonesia did not show significant progress. Talent scouting is the important basic in achieving optimal achievement. The aim of this study to find children aged 7-9 years who are talented in gymnastics through artistic gymnastic talent scouting application software. This Study is survey and used descriptive qualitative method. 100 students, whose aged 7-9 years and study in Sleman area, recruited as samples. Data collection techniques used tests and measurements of anthropometry and biomotor. Data analysis techniques using early age artistic gymnastic talent scouting software determine the category of talented sample research. The results showed that of the total number of 100 students aged 7-9 years, there are 3 talented students, 46 students are quite talented, 50 less talented students, and 1 student is not talented. The results show that the talent scouting test model used to select artistic gymnastics talent is effective because of students who are basically not gymnastics athletes and have never practiced gymnastics, only 3 are talented and 46 are quite talented. Data analysis showed that artistic gymnastic talent is valid and reliabel.

Keywords—Effectiveness, Artistic Gymnastic, Talent Scouting, Based Application

I. INTRODUCTION

The Goal of Talent scouting in the early age is to find children who have talents and potential who are ready to be trained and fostered to become outstanding individuals. Various efforts have been made both by the government and people who have the competence to continue to explore and find talented children in all fields. Likewise in the field of sports, each sport has standards and measuring instruments to find gifted children. In general, talent scouting in sports is carried out with several tests including anthropometric measurements and biomotor tests.

Anthropometric measurement gymnastics includes weight, height, arm span, sitting height, leg length, chest circumference, pelvic circumference, BMI / IMT. Biomotor tests consist of the selectivity (sit and reach, side split and bridge / bridge attitude) , balance, strength (push ups, sit ups and chin ups), power (standing broad jump / jump without prefix), and agility.

Movement skills are the ability to carry out movements efficiently and effectively, as ahsil from the control and coordination of body parts involved in the movement. Movement skills are obtained from the process of learning motion, and to reach a certain level of skill requires a long time not the same for each individual depending on the talent. There are three artistic gymnastic basic skills: 1. Forward roll, 2. Sikap lilin, and 3. Bending skills.

Talent scouting is very important in order to find talented / gifted children. With the scouting of children who have talents it will be easier, faster, effective and efficient to shape children into athletes who have peak achievements. this is supported by several studies (Olaru, 2009; Endang, 2016). Talent scouting is an important element in developing athletes in the future. The principles of scouting Reigner, Salmela and Russell (1993) are: (1) Scouting of sports talent should be seen as a process, in the context of wide-ranging talent development, (2) Sports talent scouting is a long-term predictor of a child's sporting achievement, (3) Sports talent should consider the specific demands of each sport, (4) Sport talent scouting based on various disciplinary approaches, due to the appearance of the sport influenced many aspects, (5) Sports talent should be able to determine the sporting determinants of achievement, which are influenced by heredity or innate, (6) Scouting sports talent should consider the dynamic aspect of sporting performance, due to age, growth and exercise.

Olaru (2009) suggests that in performance sports, the role of selection is to choose children who have outstanding or most talented skills and qualities from a large number of children. Gymnastics as a sport with complex techniques requires special qualities for anyone who wants to achieve extraordinary results in this sport. One of the determinants of value in excellent artistic performance is the process of selecting and training children and junior-level gymnasts. Selection is the basis of exercise performance. Early selection of gymnastics exercises performed when 6 year olds only reveal the skills of the subject being investigated. Olaru in his research (2009) suggests success in the selection process related to the concept and personal experience of the models, methods, standards, experiments used, and maintenance of the ideal ability. Athletes are a decisive factor in achievement, so choosing athletes through talent identification and development must be done in earnest. Related research has been conducted in various countries, and it can be concluded that:

1. Skills and attitudes shown at a young age actually show a person's talent and performance.
2. Talent can disappear or not appear if there is no chance to display it.
3. Learning, practice and high motivation is needed to bring out one's talent.
4. There are differences in patterns of development, and speed between individuals.
5. The quality, type and intensity of training is crucial to the development of one's talents.
6. It takes more than ten years with concentrated training to develop talent and achieve maximum performance.
7. Children will not practice or not bring up their talents if this is not a push from around them.
8. Children will prefer to practice when they feel a progress. Likewise, it will be more enjoy an activity that matches their talent.
9. The development of talents depends on heredity, the environment, the impulses that give effect to the physical and psychological characteristics of a person.

Children aged 7-9 years are at the level of children who are educated in elementary school (SD). The proximity of the sports teacher can make it easier to do selection / selection. The sports teacher is also a trainer, so it is more careful for children who have more skills than other friends. The teacher as a trainer is accustomed to providing special training which is accommodated in Pengkab. Persani Sleman which has a gymnastics club. Thus the network can be carried out with the collaboration between researchers and trainers, teachers, Pengkab Persani Sleman and Pengda Persani DIY

II. METHOD

A. Participants

100 students, whose aged 7-9 years and study in Sleman area, recruited as samples. The following exclusion criteria were applied: student who study at sleman elementary school, no health problems or injuries, school who had not gymnastics ekstrakurikuler activity.

B. Study Design

This Study is survey and used descriptive qualitative method.

C. Data collection techniques

Data collection techniques used tests and measurements of anthropometry and biomotor. The test instruments in this study consisted of anthropometric measurements which included height, weight, sitting height, arm span, leg length, chest circumference, pelvic circumference and BMI / BML. While biomotor tests include flexibility (sit and reach, bridge / bridge attitudes), balance, strength (push ups, sit ups and chin ups), power, and agility. The data that has been obtained is then analyzed using an artistic gymnastic gift software application at an early age.

To know the basic skills of artistic gymnastics early childhood can be through several tests. The following are

examples of basic gymnastic skills tests consisting of forward roll, sikap lilin and bending over. Retrieval of basic skills data is carried out by 3 (three) judgments with scoring guidelines.

D. Statistical Analysis

Early age artistic gymnastic talent scouting software determine the category of talented sample research. Data analysis techniques using validity and reliability test. The validity test using inter-items correlations and reliability test using cronbach's alpha.

III. RESULT

After taking the research data about anthropometric ability, biomotor ability and gymnastic motion skills. The results of measurement of 100 elementary school students in Sleman Regency were obtained. Data obtained from these measurements were then analyzed by product moment and cronbach alpha. The data analyzed showed:

TABLE I. VALIDITY TEST

Items	Koefisien	Explanation
Biomotor	0,925	Valid
Forward Roll	0,954	Valid
Sikap Lilin	0,859	Valid
Bending Over	0,920	Valid

Table 1 show that all test items are valid. Biomotor coefficient of 0.925; forwar roll 0.954; sikap lilin 0.859 and bending over 0.920.

TABLE II. RELIABILITY TEST

Items	Koefisien	Explanation
Biomotor	0,943	Valid
Forward Roll	0,980	Valid
Sikap Lilin	0,967	Valid
Bending Over	0,933	Valid

Table II show that all test items are Reliabel. Biomotor coefficient of 0.943; forwar roll 0.980; sikap lilin 0.967 and bending over 0.933.

Measurement results in more detail can be seen in the following description.

Data on talent of research subjects was obtained from anthropometric tests and biomotor tests. Gymnastic talent test results can be seen in the following table:

TABLE III. TALENT TEST RESULT

Category	Frekuensi	Prosentasi (%)
Very Talented	0	0
Talented	3	3

Category	Frekuensi	Prosentasi (%)
Quite Talented	46	46
Less Talented	50	50
Not Talented	1	1

From the table above it can be seen that the results of the screening of Sleman District Elementary School students' gymnastic talent showed generally less talented (50%) and quite talented (46%), while the talented students were only 3% of the total students and 1% were included in the category not talented.

IV. DISCUSSION

The most basic stage that must be done to design a test model is the conceptualization of the problem. Furthermore, if the conceptualism of the problem has been carried out, the development of the product design can be carried out immediately. This artistic gymnastic talent test model is designed according to the needs of these types of sports. This talent test consists of anthropometric, biomotor tests and skills tests. Anthropometric measurements which included height, weight, sitting height, arm span, leg length, chest circumference, pelvic circumference and BMI / BMI. While biomotor tests include flexibility (sit and reach, bridge / bridge attitudes), balance, strength (push ups, sit ups and chin ups),

power, and agility. Gymnastic skill test consist forward roll, sikap lilin, and bending over.

Artistic gymnastics is a complex type of exercise that is influenced by several factors. the factors that influence the performance of one's gymnastics include anthropometry, biomotor, skill and psychological.

Gymnastic talented test consists of three components, that is anthropometry, biomotor and basic gymnastic skills. with the three test items consist in the gymnastic test. Gymnastic tests can capture the talents of gymnasts with valid and reliabel test instrument.

V. REFERENCES

- [1] Endang, Rini Sukamti. 2016. Pengembangan Model Pemanduan Bakat Senam Artistik Usia Dini (Disertasi). Yogyakarta: UNY
- [2] Olaru, Maria. (2009). Selection in Artistics Gymnastics. *Timisoara Physical Education and Rehabilitation Journal* Vol I. Timisoara: West University
- [3] Régnier, G., Salmela, J.H. and Russell, S.J. (1993). Talent detection and development in sport, in *A Handbook of Research on Sports Psychology* (eds