

Validity of Pab Tennis Ball Catch- Throw Test for Volleyball in Selabora

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Abstract: This research has objectives to determine the validity of the PAB tennis ball throwing test (eye-hand coordination test) and to determine the relationship of the tennis ball throwing test and the ability to play volleyball for beginner male athletes of Selabora UNY. This research employs survey method with observation technique by judge. The sample in this study is 30 beginner male athletes of Selabora UNY, with a sampling technique applying purposive sampling. Instruments applied in this research are as follows: (1). Hand eye coordination test, (2). Volleyball ability test. Data analysis techniques used correlation test, normality test, Aiken test and objectivity test. The results showed that (1). The validity of the tennis ball throwing test (eye-hand coordination test), with the Aiken test calculation validity of = 0.78. (2). The objectivity of volleyball ability to play with Pearson correlation = 0.684 (Sig 0.00 <0.05) is significant. (3) Hand eye coordination is not significantly related to volleyball playing ability with $r = 0.321$ and $p: (0.084)$.

1 INTRODUCTION

In the process of practicing, if started at an early age, the basic technique will show better result. There are four basic techniques in volleyball namely bottom passing, top passing, block, smash and service. Managing exercises for children is quite difficult for coaches, because they have to create a sense of fun for volleyball. The main purpose of training for children is not mere achievement, but also increases fitness, raises feelings of pleasure, and practices basic techniques and correct tactics. Physical improvement from an early age needs to be done in stages, or it can't be done instantly. When athletes are still young, they need to be trained aspects including strength, endurance, flexibility, speed and coordination of motion. It is recommended that all training units use a play or integrated approach.

Kinesthetic intelligence is the basis of the ability to learn motion of various skills. Kinesthetic intelligence needs to be developed from an early age or a beginner athlete, so that the child's motor can develop optimally. Good kinesthetic intelligence is very important when children do training activities in sports that require a lot of coordination (Gardner, Howard, 2003), (Tadkiroatun Musfiroh, 2007). Children who possess kinesthetic intelligence will

tend to be more skillful in doing the various techniques needed in playing volleyball.

Volleyball requires the athletes to play the ball while it is still in the air, before falling and touching the floor. The athletes must approach the ball precisely. The athletes must stop near the ball and play it with parts of the body. In playing the ball they have to jump, with a short and precise time, so as to reach the maximum height in hitting the ball. There are still many skills that must be mastered in playing volleyball. Children who have good movement learning will find it easier to master a variety of basic techniques. The trainer should teach the basic movements first so that the technique is quickly mastered when teaching techniques to beginner athletes. There is a possibility that the trainer has not trained the basic movement skills to the best of his athletes. Thus when an athlete has to master high techniques there will be various obstacles.

Kinesthetic intelligence is one of the many intelligence possessed by a child. Children with high kinesthetic intelligence, will have the same potential as children who have other intelligence if developed. Kinesthetically intelligent children can also be successful individuals. If accompanied by the potential for high body posture, high physical fitness components, through practicing volleyball the children will also be successful. Many children with

high posture potential who learn the movements do not appear to be skillful at an early age. This has become a problem for volleyball coaches. In Gifted Education (PAB) for volleyball, problems often occur. At the beginning of the education, children with high posture potential do not show good development in learning techniques. Children who have a short posture are very fast in mastering various volleyball techniques. When they grow up, children with high posture show their skillful eminence in playing the game.

Children or beginner athletes who have good motor educability need to be found by conducting tests. Children with good kinesthetic intelligence have high coordination, agility, and balance. Development of the basic motion of kinesthetic intelligence needs to be trained since they are young (Tadkiroatun Musfiroh, 2027). Thus, when they grow up, they will be able to master techniques in sports well, particularly volleyball. In volleyball game intelligence is highly required, because this sport requires complex abilities in each of its movements. Harmony between motion and mind is needed in volleyball games, so when playing the game the athletes can dynamically move.

Tennis ball throwing tests have often been used for the selection process, various selection processes for prospective athletes, even for college entrance exams with a sports background. The tennis ball throwing test may still use logical validation, not yet quantitatively validated particularly for volleyball.

The throwing test with a tennis ball to find out the children's learning needs to be evaluated, whether it is valid or not yet. If it is invalid it can be harmful for volleyball coaching, because children with high posture potential can be knocked out by the test.

2 RESEARCH METHODS

2.1 Research Type

This research is a descriptive research, which is directed to provide symptoms, facts, or events systematically and accurately, regarding the characteristics of a particular population or area (Zuriah, 2005). The method used is a survey, data collection by observation by the judge. The ability of hand-eye coordination measured using a tennis ball catch test, and evaluated by a judge. The ability to play volleyball is also measured by the judge's observations, and by the scoring sheet instructions.

2.2 Research Time and Place

The research was conducted at the Sepak Takraw Field, and at the UNY Badminton Hall, located at Jl.Colombo No.1, Caturtunggal, Depok, Sleman, Special Region of Yogyakarta.

The research was conducted on September 22-26, 2018. The sample of this research was 30 beginner male volleyball athletes from UNY Selabora. Saturday, Tuesday and Wednesday at 3:30 p.m. to 6:00 p.m. and Sunday 7:00 a.m to 10:00 a.m.

2.3 Sample

The sample in this study were 30 beginner male athletes from UNY Selabora. The characteristics of the sample are as follows: (a) Beginner male athletes from UNY Selabora. (b) Willing to be sample. (c) Age range between 10-13 years. (d) Minimum age of exercise was 12 months.

2.4 Instruments and Data Collection Techniques

2.4.1 Volleyball Skill Testing

Data collection methods in research using observations and tests. Athletes playing 3 against 3 selected randomly. Judge made observations when both teams played. In each rally, all six players were given a base value of 50. When the rally ended, two judges were entitled to give a score of + or - to an athlete.

The following provisions are as follows (1) A total of 30 children selected (2) Grouped into 10, each group consisted of 3 people) randomly selected. (3) Using a field with a size of 12 m x 6 m with a net of 2.15 m. height. (4) Two sets of random groups were compared (5) Service implementation in play must take turns in accordance with rotation. (6) Judge Assessment: The judge would give a (+) score to the child who could be the key to getting points, or give a (-) score to the child who is the key to removing points. Each rally judge only gave a - or + score for once. For example:

(a) Child A does a very deadly service, and it is unacceptable that the player gets a + service performer score, the receiver does not get a score. If on the other hand, child A does light service, missed by child B, then the one who gets a - score is child B. (b) Child A does a hard smash and missed by child B or the smash directly falls to a hard floor then the one who gets the + score is the smasher, otherwise child

A does the slow smash and missed by child B then the one who gets a - score is child B. (c) Child A does a service to child B, but the service is not good (too close to the net or too far) so that child B fails to smash then the child who does the service gets a - score otherwise if Child A plays good (not near the net and not far net), but child B fails to make a smash out or snagged on the net, the smasher gets - score. (d) The last child to touch, or plays the ball when mistake happens does not get a - score, if the previous child makes difficulty for the next player. Children who get - score is difficulty maker.

(7) Judge scored as much as rally that occurs during 2 sets (8) The final score was the initial score (50) plus the number of + scores or the initial score (50) minus the - score.

Table 1: Assessment worksheet of objectivity of volleyball playing skill of the two judges with a pearson correlation of 0.684, with sig. 0,00 (significant).

No	Chest number	Name	Judge score	Total		Initial Score	Final Score
				+	-		
1						50	
2						50	
3						50	
4						50	
5						50	
6						50	

2.4.2 Tennis Ball Throwing Test

(1) Objective: to measure eye - hand coordination. (2) Target: male and female aged 10 years old and over. (3) Equipment: tennis ball, target wall, markers. (4) Implementation: (a) Throws with one hand and catches with the other. (b) Before doing the test, the respondents may try first until they feel to get used to it (c) The target is 30 cm in diameter, the distance from the wall is 2.5 meters. (5) Assessment : Every throw that hits the target and gets caught by another gets one score. (6) To get 1 score: (a) The ball must be thrown from the bottom (under arm). (b) The ball hits the target. (c) The ball must be able to be caught immediately without any obstruction beforehand. (d) Respondents don't go forward or move outside the boundary line to catch the ball. (e) Throws 20 times, 10 first throws and 10 second throws with a maximum score of 20.

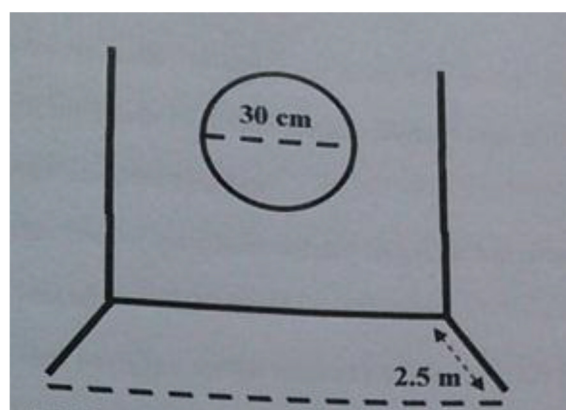


Figure 1: Image of target of tennis ball throwing test (Ismaryati, 2006)

2.5 Data Analysis Technique

Data analysis technique applies the normality test as a parametric statistical requirement. Objectivity and validity test with Pearson correlation, except for the validity of tennis ball throwing with the Aiken test.

3 RESEARCH METHODS

The age of Exercise of UNY Selabora of Beginner Male Athletes. The age of the research subjects: 12-18 months 12 athletes (46%), 19-24 months 8 athletes (26.67%), 25-31 months 4 athletes (13.33%), 35-41 months 3 athletes (10 %).

3.1 Tennis Ball Throwing Test Validity Result

The validity of the tennis ball throwing test (eye-hand coordination test) obtained a result of 0.78 with the Aiken test by 4 judges or experts. The objectivity of volleyball playing skills tests, from the two judges with a Pearson correlation of 0.684 (Sig 0.00) is significant.

3.2 Relationship between Volleyball Skill Tests and Tennis Ball Throwing Tests

The validity of the coordination test with the ball throwing in tennis balls, to learn motion or eye-hand coordination in volleyball training, found by correlating between the two instruments. With Pearson's correlation yields $r = 0.321$ and Sig. 0.084, besides the correlation coefficient is small, also not significant. Thus the results of the tennis ball

throwing test, is not significantly related, with the result of volleyball playing skill tests.

4 DISCUSSION

An assessment to determine the validity of the tennis ball throwing test carried out by 4 judges. The results of the data obtained there is an understanding of the assessment of items and test items among 4 judges so that the validity result obtained with the Aiken test of 0.78

The correlation coefficient (0.321) means that the relationship is low. On the correlation between hand eye coordination and volleyball skill $\text{Sig} > \alpha$ (0.084 > 0.05), it means that the results of the tennis ball throwing test is not significantly related to the test result of the ability to play volleyball. Test result shows that there are high result on tennis on ball throwing test results but low test result of volleyball skill.

In volleyball game the physical biomotor demands not only eye hand coordination. There are several other biomotor such as power, reaction speed, stamina, agility, and motion coordination (Suharno, 1981). From the result of research conducted shows that it is not significant, it is possible in playing volleyball the coordination test is less contributing to volleyball playing techniques, such as smash, block, service and passing.

With the result above, the instrument for testing existing giftedness on PAB, namely eye coordination for Selabora FIK UNY is not relevant. If used it must be given a small weight. If eliminated it will be more economical and efficient for Selabora. The form of the test might be used as a way to improve kinesthetic intelligence.

For children who potentially will have a high posture, usually their skills will be steps behind compared to potentially short-postured children. Children who are going to be taller have longer body segments, so that their angular inertia is large. To be able to move requires a greater force. If the coordination test is used in determining the volleyball athlete candidate, it is possible for children who will have a high posture to exclude. The current posture for volleyball determines achievement.

5 CONCLUSIONS

The relationship between the tennis ball throwing test, with the volleyball skill test for beginner male athletes at Selabora, or its validity "Low and insignificant" r of 0.321, and $\text{Sig. } 0,084 > 0,05$.

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