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ABSTRACT
This study aims to determine differences in the effectiveness of the lay-up bounce and shoot through the boards directly to the female student of basketball hoop Studies Program Health and Physical Education and Recreation (Department PJKR) force 2009/2010 Faculty of Sport, State University of Yogyakarta. This research was comparative. The population of this study was student female PJKR force Department year 2009/2010 which took the course of a basketball Motion totaling 46 students. The sampling technique with the purposive sampling, obtained by 28 students. The research instrument in the form of lay-up test shoot of Imam Sodikun with validity and reliability of 0.675 0.509. Data collection techniques with test and measurement. Technical analysis of quantitative data with descriptive statistics.

The results showed no difference in the effectiveness of the lay-up shoot through and reflective boards directly to the student female a basketball hoop force Department PJKR 2009/2010. Based on the calculation that t of 4.448 is bigger than t table value 1.703. Based on the calculation of the mean, lay up shoot through the boards reflecting higher than the lay-up shoot straight to the basket, so that it can be concluded that the lay-up shoot through reflective board is more effective than the lay-up shoot straight to the basket.

Keywords: lay up shoot through reflective board, lay up a basketball hoop shoot directly into the ring

INTRODUCTION
One technique is to shoot the basketball game lay up. Lay up shot shoot is the kind of shot that is done by close as possible to basketball, preceded by a jump-step-jump. Lay up shots can be done with preceded running, herding or cut and run and headed toward the basket. Lay up shot is a complex movement which requires a two-step or hop-step-jump. Imam Sodikun (1992: 84) added that the lay-up shot is the shot that made close to the basket, usually shot is done from the first side and is reflected to the board reflecting the success rate is very large, but it is also often used to make the numbers in basketball game. This is very beneficial for shooting from long distances to close to basketball by doing lay ups.

Based on field observation during the process of learning basic basketball student movement PJKR Department, on the odd semester 2009/2010 shows the skills of playing basketball student daughter including quite visible from the ability to throw and catch the ball, dribble and shoot the ball under the ring (under basket). But to shoot a lay up movement requires coordination of these techniques were still found weaknesses student daughter. Weakness was seen from the shot that did not enter or fail. Weakness was also highly visible of an error in the initial phase, implementation, until the end of the movement lay up. As for the mistakes of the movement is as follows: step length less when the first step, aショーニング less strong so that the distance the ball with the ring can not be as close as possible, while dribbling out of control where the running speed (speed) is
not matched with adequate control of the ball, less just in time to release the ball when the position at the highest point, so the ball is not accurate. In addition, the board reflecting not fully utilized, because the tendency fired the ball straight to the basket.

Some experts argue that the lay-up shoot can be done by firing the ball straight to the basket and bounce off reflective board. Some coaches are satisfied that the players or children Satiyny obtain results using the shot through the back board first (Ambler, 2006: 40). The statement also confirmed by Dedy Surniaryono (2002: 36) that do lay up shots should bounce off the board around the vertical line drawn on a small plot on the basketball board. Meanwhile, according Muhajir (2006: 17) stated at the commencement of the lay-up shoot after reaching the highest point of jump, shoot the ball into the basket with one hand assisted with the lash wrist. Based on these statements can be interpreted that the shot was straight to the basket. However, based on observations, experiences and realities on the ground lay up in a situational shoot more often successful if done in a way at first reflected reflective board.

**Shooting Essense**

Shooting is a very important skill in basketball sports games. Basic techniques such as operands, herding, and rebounding led the players to get a great chance to make the score, but still, a player must be able to make shots. Even the skill to shoot the ball or the instinct to print the value to cover the weaknesses of other basic techniques.

There are several ways (with respect to attitudes) shoot the ball, among others facing the board reflecting the attitude stopped, facing the board with the attitude of the jump, facing the board with the attitude of running, his back to the board reflecting the attitude stop, and jump back to the board with an attitude (Engkos Kosasih, 1985: 191). Shooting technique is a technique that is very important that must be controlled by a player and should be taught before dribbling technique. Did not mean to exclude other techniques, basically by passing and shooting that made it into basketball, basketball game can take place.

Based on the above description can be concluded that the shooting is a skill or expertise of a basketball player in an attempt to enter the ball to the basket or baskets in order to produce a value or point.

**Lay Up Shoot**

Lay up shot is the shot that made close to the basket as if the ball was put in the basket after dribbling. To be able to jump that high in the movement lay up, then the required speed in the last three steps to get the ball. Beginning with the pedestal, long strides, landing, short step, to prepare to resist a strong third step upwards or vertically so that the position near the basket. Step before making the lay-up must be short so that it can be bent and then lift your knees to make the leap movement. Lift the knee while shooting and ball straight up, jumping and carrying the ball between the ear and shoulder. Move your arms, wrists and fingers straight toward the basket, with angle between 45 degrees to 60 degrees and release the ball from the middle Pointed finger with subtle touches. Maintain hand position to keep the ball until the ball off balance. Perform follow-through motion with fixed lifting arms outstretched and straight at the elbow, finger pointing straight at the target and your palms facing down to shoot.

According to Dedy Surniaryono (2002:32-33) factors that affect the shot:

1. **Distance**
   - Easily understood and felt that doing shots with long-distance, the more difficult and increasingly inaccurate. Conversely the closer it gets easier to insert the ball, but shot just under the basket is very difficult to do.

2. **Mobility**
   - Doing shots with attitude stops (rest) will be easier to do it than with the attitude of running, jumping or twisting. This is caused by the basic shooting techniques that have not been good, as well as custom made at the practice.
3. Shoot Attitude

The attitude of facing, or back difficult or easy it affect basketball shooter. Shooting with the attitude of facing the beginning of basketball is much easier to do than to turn one's back attitude of basketball.

4. Deuteronomy shots

Deuteronomy shots or the number of opportunities available shooters to make shots, the less gets the number of opportunities to shoot more and more difficult for the success of the shooter.

5. The situation and atmosphere

Situation and physical and psychological atmosphere like a guard who obstruct, interfere with the shooter, fatigue, exhaustion, the influence of the match, both opponents or friends will influence the shooter in doing his job to produce good shots.

According to Dedy Sumiyarsono (2002:35-36) shot lay up is the kind of shots are done with as close as possible to the basketball court, preceded by a jump - step - jump. Lay up Shooting can be done with preceded running, herding or cut and run and headed toward the basket. Lay up Shooting should be trained first, before implemented in real playing time. That is because the lay-up shots require two or hop step-step-jump, which will result in violation.

According to Dedy Sumiyarsono (2002: 36) in accordance with regulation basketball game every player who receives the ball while flying is allowed to continue with two steps. These measures can be done as follows:

a. If the first repercussion with the right foot, then left foot and ends with the right foot.

b. If the first repulsion using the left foot, then right foot on the end with the left foot.

Below is a picture how to lay up shot with one hand or two hands to do, so it can produce good repulsion.
Lay-up Technique shoot through reflection and Jump Board to Ring Basket

Lay-up shoot can be done by reflected on the board first, or directly incorporated into a basketball hoop from a variety of good position right, front or left. At the time of going to lay up can be initiated from the shoot lay ups, passing and dribbling shoot-shoot lay ups. According to Jon Oliver (2007: 14) lay up can be done with or without the reflective board. However, when a player near the basket from the right side or left side, reflecting the proper use of the board will increase the likelihood of successful shots. Lay-up shoot through reflective board and go directly to the basket the same technique, the difference is now its implementation, namely when releasing or firing the ball into the basket, go to the basket (clear shoot) or bounced into board first (bank shoot).

According to Vic Ambler (1995: 38) at the time of the lay-up shoot the ball must be thrown close to the board with wrist and fingers. In this case the ball should touch the board first before going into the net. Usually the shot is done from the right or left side of basketball and the ball bounce off the board prior to the bounce (Imam Sodikun, 1992: 84). The way it is most easily done, just take into account the reflection angle of the ball and force the hand when releasing the ball.

According to Jatmika Yoga Permana (2011: 33), lay up in basketball is a movement consisting of three step movement that is preceded by the step width, followed by a short step and jump to the top along with the ball into the ring and ended with a landing.

Thinking of Design

Lay-up shoot is one of the shooting technique in basketball games. Lay-up shoot has many advantages over other types of shots because in terms of distance, closer to the ring so that a more accurate shot or possibly a ball into the ring larger. Lay-up shoot can be done indirectly which is reflected in advance to the reflective board or directly to the basket with dribble preceded or through the pass from a friend. Shoot lay up Shooting with different distances, use the same angle and the same point on the board reflective, it is most likely done because the ball is not necessarily about the center point of the circle ring correctly for the ball can get in, but there must be an adjustment between distance and power issued.

Mastery of the skill lay up this shot was not easy, especially for beginners. Competence is one of the basic motion that must be mastered for students Department PJKR can play basketball well and as a Physical Education teacher candidates are competent .. This complex movement requires good coordination which is a series of leads, ball mastery, rhythmic steps, and techniques of the ball itself while in the air (jump).

RESEARCH METHODS

This research is a comparative study, which aims to determine the effectiveness of the differences between the lay-up bounce and shoot through the boards directly to the student female a basketball hoop on the armed PJKR 2009/2010. The population in this study are students PJKR female 2009/2010 force numbered 46 students. The research sample was taken using purposive sampling technique, as many as 28 students. The instrument used is the skill lay up test shoot of Imam Sodikun (1992:125) that have been modified with the validity and reliability of 0.675 0.509. Data collection techniques with test and measurement. Technical analysis of data using t-test calculations for related samples (correlated samples). (Burhan Nurgiyantoro, et al., 2004:188).

RESEARCH RESULTS

The subject of this research are students who take courses female basketball game in semester 2 PJKR Study Program. The experiment was conducted in June 2010. When data collection was assisted by fellow basketball game that is subject lecturer by Novita Eka Indra, M. Or. To answer this hypothesis is “There is a difference in effectiveness between the lay-up bounce and shoot through the boards directly into the basket on the student female at Department of Physical Education, health and recreation year 2009. The following will describe the results of these two variables are as follows:
1. Distribution data lay up shoot through reflective board
   Data lay up shoot through reflective board is denoted by X1. Here is a frequency distribution table:

   **Table 1. Variable frequency distribution lay up shoot through reflective board**

<table>
<thead>
<tr>
<th>No</th>
<th>Score</th>
<th>Frequency</th>
<th>Relative frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>4</td>
<td>14%</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>10</td>
<td>36%</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>10</td>
<td>36%</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>4</td>
<td>14%</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

   Based on the above data can be known that, in the calculation, the score with the range of 5 to 8. Average gained 6.50, while scores below the average of 14 and above average sebanyak14. Standard deviation is obtained at 0.92, the mode at 6 and median of 6.50.

2. Distribution data directly into the lay up a basketball hoop shoot
   Data direct to lay up a basketball hoop shoot denoted by X2. Here is a frequency distribution table:

   **Table 2. Variable frequency distribution lay up shoot through reflective board**

<table>
<thead>
<tr>
<th>No</th>
<th>Score</th>
<th>Frequency</th>
<th>Relative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>7</td>
<td>25%</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>8</td>
<td>29%</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>12</td>
<td>43%</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

   Based on the above data can be known that, in the calculation, the score with the range of 3 to 7. Average gained 5.43, while scores below average as many as 15 and above average sebanyak13. Standard deviation of 1.23 is obtained, the mode of 5 and a median of 5.43.

3. Prerequisite Test Results
   a. Normality Test

   Normality test using test-Sminov Kolmogorof. This will test the normality test samples come from normally distributed population. To accept or reject the hypothesis by comparing the prices Asymp. Sig (significance calculation) with 0.05. Criteria for accepting the hypothesis when Asymp Sig greater than 0.05, and if it does not meet these criteria then the hypothesis is rejected.

   **Table 3. Normality Test Results Calculation.**

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Asymp. Sig</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lay-up shoot through reflective board</td>
<td>0.186</td>
<td>Normal</td>
</tr>
<tr>
<td>2</td>
<td>Lay-up shoot directly into a basketball hoop</td>
<td>0.379</td>
<td>Normal</td>
</tr>
</tbody>
</table>
Based on table 3 above the price Asymp. Sig of the variable shoot lay ups through a board reflective of 0.186 and lay up shoot directly into the basket of 0.379. It can be concluded Asymp price. Sig of the two variables are all greater than 0.05 then the hypothesis that the samples based on normal distribution of the population received.

b. Homogeneity Test

Homogeneity test using the F test in this test will test that the variance of these variables together. To accept or reject the hypothesis by comparing the price of the F calculation (F-count) with F from the table (F-table) at significance level α = 0.05. The criteria is to reject the hypothesis if F-count price greater than or equal to F-table the significance level used, in other cases reject the hypothesis. In addition, to reject or accept the hypothesis is to compare the prices of significance arithmetic with 0.05. The criteria is to accept the hypothesis if the significance of calculating the price of greater than 0.05.

<table>
<thead>
<tr>
<th>F count</th>
<th>F(0.05)(1,54)</th>
<th>Sig.</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.694</td>
<td>4.020</td>
<td>0.107</td>
<td>Homogen</td>
</tr>
</tbody>
</table>

Based on the calculations, obtained F-count price of 2.694, while F-table α = (0.05) (1.54) equal to 4.020. because the price is less than the price F-count F-table, then the hypothesis that variants of the same variable is acceptable. Secondly, by comparing the price with 0.05 obtained by calculating the significance of the results of calculating the significance of 0.107 (> 0.05). It can be concluded that homogeneous population variance.

c. Hypothesis Testing Result

Based on the calculation test for normality and homogeneity test showed that the normal distribution and homogeneous variance, then the data were analyzed further with parametric statistics. As to accept or reject Ho with a way to compare prices with a price t t table at 5% significance level. The criteria is to accept Ho if the price of t smaller than t table, in other respects, reject Ho. The following hypothesis testing based on the hypothesis:

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Average</th>
<th>t count</th>
<th>t table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lay-up shoot through reflective board</td>
<td>28</td>
<td>6.5</td>
<td>4.448</td>
<td>1.703</td>
</tr>
<tr>
<td>Lay-up shoot directly into a basketball hoop</td>
<td>28</td>
<td>5.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the calculations in Table 5 above, it is known that t = 4.448 is greater than t (0.05) (27) = 1.703. It can be concluded that there was a significant difference in effectiveness between the lay-up shoot through reflective board and go directly to student daughter has a basketball hoop on PJKR Force 2009. Lay-up shoot through the boards reflecting the results are more effective when compared with the lay up that shoot straight to the basket. Conclusion it can also be seen by comparing the average magnitude of 6.5 to lay up and shoot through reflective board lay up 5.43 to shoot straight to the basket.

**DISCUSSIONS**

Discussion in this research are based on the results of research and testing of hypotheses, which can be described as follows:

Lay-up shoot through reflective board (bank shoot) the results are more effective than the lay-up shoot straight to the basket (clear shoot), influenced or caused by several factors, among other targets, motor
coordination lay up shoot, use reflective board. First to hit, which meant in this case is at the time of releasing the ball or shoot the ball into the basket with the help of reflective board, the target can be seen with clarity and real because of its size is quite large. However, if when releasing the ball or shoot the ball directly into the basketball hoop goals can not be seen with the real because only a limited ability to see the target just visible from below so it is a shadow only. These limitations will not be a barrier when doing lay up shoot has advantages in terms of height. This is due to the height and support the right person can freely see the goal or basketball hoop. However, in this study can not reveal in depth because of the role of height in the lay-up shoot either the reflected or direct to the basket because it has not been studied empirically. In principle lay up shoot can be done with or without the aid of reflective board, but when a player near the basket from the right or left side, reflecting the proper use of the board will increase the success of the shot (Jon Oliver, 2007: 14).

The ability of women students are still very heterogeneous due to the skill lay up shoot much needed coordination of the motion base drive and shoot, it appears once at the beginning, students immediately wanted to finish the lay-up shoot directed to the ring because they will soon find out if the ball came into the ring, just touching or even absent altogether. In addition to a good coordination is also required an understanding of the theories about the angle of incidence and angle of reflection to estimate how big or where the ball bounce.

Still associated with the first and second factor, the use of a small box on the board less than the maximum reflectance. A small box is targeted aid to fire the ball into the basket. A small box is more easily seen by the subjects rather than estimating the ball directly into the ring, so the ball is inserted through the board reflecting far greater odds than directly into the basket (clear shoot).

CONCLUSIONS AND SUGGESTIONS

Based on the results of research and discussion, it can be concluded as follows: There is a difference in effectiveness between the lay-up shoot through reflective board with a lay up a basketball hoop shoot directly into the student female Program studies Health and Physical Education and Recreation Force in 2009. Noting the results, can be recommended for students who are beginners in the basketball game, in order to master the basic competencies of motion shoot properly lay up should learn to shoot through reflective in the board first.

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