The Impact of Bait Ball and Hanging Ball Training on Smash Ability in Volleyball Games

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Received: December 23, 2022; Reviewed: January 15, 2023; Accepted: February 03, 2023; Published: February 08, 2023

ABSTRACT
This study aims to determine the effect of the bait ball and hang ball smash training on the smash ability of male athletes. The method used in this study was an experimental method and the subjects of this study consisted of 12 athletes. Data collection was carried out in two stages, namely: pre-test and post-test which were data collected after carrying out a training program. After the data was collected, an analysis was carried out: Hypothesis I. A t-count of 8.62 was obtained. then this price is compared with the ttable price with dk = n – 1 (6-1 = 5) at a significant level a = 0.05 is 2.75 thus t-count > t-table (8.62 > 2.75). This means that Ho is rejected and Ha is accepted. Thus it can be concluded that there is a significant influence from the form of bait ball smash training. Hypothesis II. Obtained a t-count of 3.85. then this price is compared with the ttable price with dk = n – 1 (6-1 = 5) at a significant level a = 0.05 is 2.75 thus t-count > t-table (3.85 > 2.75). This means that Ho is rejected and Ha is accepted. Thus it can be concluded that there is a significant influence from the form of hanging ball smash training. Hypothesis III. Obtained a t-count of 0.39. then this price is compared with the ttable price with dk = n1 + n2 – 2 = 10 at a significant level a = 0.05 is 2.23, thus t-count < t-table (0.39 > 2.23). This means that Ho is accepted and Ha is rejected. Thus it can be concluded that the form of bait ball smash training has no greater effect than the hanging ball smash practice on the results of smashes in male athletes.

Keywords: Impact of Influence, Training, Against Smash Ability

INTRODUCTION
One sport that is well-known in society is volleyball. Because, this game is free to be played by the upper and lower classes (Rudi & Arhesa, 2020). Volleyball games are often found and played in several areas, both cities and villages, for both young people and adults (Endriani, Akhmad, et al., 2022). A volleyball game is a group game in which each team consists of 6 players. Where the match is carried out by 2 teams facing each other. There are several reasons why everyone plays volleyball, namely: to sweat, to fill spare time, and even to carve out achievements that can be continued to a more advanced stage of training.
Volleyball is a sport with an exciting game to play because it is useful in terms of adjusting to conditions that might arise (Akhmad & Mesnan, 2019). There are differences in the number of players according to the place of play, including field volleyball with 6 players and beach volleyball with 2 players. Several places can be played in this sport of volleyball, namely: in all forms of courts, natural grass, artificial floors, sand, and buildings. (Endriani, Sitompul, et al., 2022) states that there are several techniques in volleyball games, namely techniques using the ball through service, top passing, bottom passing, bait smashes, and blocks. Required mastery of various kinds of basic training techniques that are carried out repeatedly and continuously both from children and adults until they can be good at running them. Volleyball is an educational sport that is always taught in schools, both elementary, junior high and high school to university (Supriadi et al., 2022; Supriadi & The, 2022). Physical education is a learning process through physical activity designed to improve physical fitness, develop motor skills, knowledge and behaviour of healthy and active living, sportsmanship, and emotional intelligence (Nurkadri et al., 2023). To realize the goals of physical education, one of the ways efforts to be carried out is to develop the ability to move (Dewi & Verawati, 2021) Movement ability is a basic ability in volleyball games so through movement abilities (basic techniques) carried out by players, it causes the rapid development of this volleyball sport.

The development of the sport of volleyball, especially in the North Sumatra region, looks quite rapid because many government agencies, both public and private, schools of various levels, and even universities, organize intra and inter-volleyball matches. Apart from fulfilling the needs of individuals, the games were held to develop and increase the popularity of the game of volleyball. Through increasingly advanced developments, it does not mean that there are no problems in the game of volleyball, but rather that these problems occur during training and matches.

The elements that support the special smash technique in volleyball are the physical components consisting of strength, explosive power, speed and flexibility to develop these physical components through physical training (Imran Akhmad, 2022). Physical exercise refers to a training strategy that is carried out in a structured, planned and advanced manner. The purpose of the exercise is to develop skills that are adapted to the physical system so that the physical condition can carve out the achievements of each player to become more advanced.

The results of observations made by researchers from 12 athletes who took the test,
there were still many athletes who had not achieved good results. Where it was noted that several athletes were classified as lacking and not very good at smashing. Based on the initial data from the test results, it can be concluded that there is a lack of athlete's smash technique ability. Mastery of basic techniques is essential when playing volleyball. This is because the tempo of volleyball is relatively fast, so attacking techniques are needed to score points to achieve a victory. Opinion (Suharta et al., 2021) regarding the game of volleyball that there are techniques consisting of serving, passing over, passing down, set-up (bait), smash, and block. Of the several techniques, the smash technique is the most dominant to be executed to practice all attacks on the opponent to get scores or points. Apart from that, the smash technique can also hypnotize the audience through the speed of its movement while flying in the air as well as being a match boomerang for the opponent.

Seeing these conditions, it takes smash practice with repeated practice to get accuracy in hitting the ball. This has been planned by researchers to realize better and more efficient training to grow agile smash hitters. Through good and efficient training, it is hoped that athletes can grow and develop rapidly to perform smash techniques so that they can compete against other clubs and teams in volleyball competitions. From this description, the researcher's determination emerged to carry out research using bait ball and hanging ball hitting exercises. Where this form of training is used to forge volleyball players so that they can increase their smash power to the maximum.

Based on the results of observations and observations, the researchers concluded that the smash ability of the Youth Development Club volleyball athletes was still in the unfavourable category. Due to the lack of variation in the smash drills that were carried out throughout the practice, the exercises given by the volleyball coach at the Youth Development Club were still felt to be very monotonous according to the athletes. Therefore it is important to apply appropriate and accurate training strategies to help athletes better understand and master the volleyball smash. Bait balls and hanging balls are intended to make it easier for athletes to carry out basic volleyball smash techniques and improve smash skills. The advantage of this form of the bait ball and hanging ball training is that the athlete can control his footsteps when jumping and landing and so that the athlete can control the jump when the ball arrives. (Yanuar, 2020) a hanging ball is a medium for conveying information to the recipient, in this case, information on correct body position and the momentum of the palm hitting the ball.

Several studies related to the problems that the authors reveal support the researcher's
statement that smashes ability is influenced by bait ball and hanging ball exercises. (Wahyudi, 2022) explains that (1) hanging ball practice has a significant value effect. (2-tailed) of $0.000 < 0.05$, the conclusion in this study is that hanging ball exercises are more effectively used to increase smash strokes. (Suwarda Gadis Notriya, 2018) explained that the practice of hitting the hanging ball had a significant effect on increasing the accuracy of volleyball smashes (Trio Aprianto, 2018).

**METHOD**

The method used in this study is an experimental method by collecting data using tests and measurements. According to (Sugiyono, 2010) in experimental research, there is a treatment (treatment) which is given. Where this method means as a research method used to see how the effect of certain treatments on other variables in situations that can be controlled.

The design used in this research is a field experiment using tests and measurements. Where the group is divided equally into two. For the division of groups using techniques matching pairing. The following is the research design designed in the table below:

<table>
<thead>
<tr>
<th>Table 1. Matching Pairing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-test</strong></td>
</tr>
<tr>
<td>T1</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Acquisition of initial data results obtained from the data test and post-test then processed and then will be analyzed statistically to measure the acceptance or rejection of the hypothesis proposed for this study. The results obtained from the test and post-test were then described using calculating regression, normality test, homogeneity and hypothesis testing.

**RESULTS**

The implementation of research based on data from test results and measurements in the field was carried out in 18 meetings. This is done to prove the answer to the hypothesis. Test and measurement data that has been processed using statistical formulas can be seen in the table below:
### Table 2.
Results Pre-Test and Post-Test exercise smash bait and practice balls smash the hanging ball against the ability smash male athlete

<table>
<thead>
<tr>
<th>Data Description</th>
<th>Ability Smash volleyball</th>
<th>Exercise smash bait ball</th>
<th>Exercise smash bait ball</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td></td>
<td>2-9</td>
<td>7-11</td>
<td>3-7</td>
<td>8-14</td>
<td>5,83</td>
<td>9,50</td>
</tr>
<tr>
<td>Average value</td>
<td></td>
<td>5,83</td>
<td>9,50</td>
<td>5,00</td>
<td>10,00</td>
<td>2-48</td>
<td>1-97</td>
</tr>
<tr>
<td>Standard deviation</td>
<td></td>
<td>2,48</td>
<td>1,97</td>
<td>1,67</td>
<td>2,45</td>
<td>3,66</td>
<td>5,00</td>
</tr>
<tr>
<td>Average difference</td>
<td></td>
<td>2,34</td>
<td>1,41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The standard deviation is different</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t_count</td>
<td></td>
<td>3,85</td>
<td>8,62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t_table</td>
<td></td>
<td>2,75</td>
<td>2,75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>s_combination</td>
<td></td>
<td>2,22</td>
<td>2,22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t_count</td>
<td></td>
<td>0,39</td>
<td>0,39</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t_table</td>
<td></td>
<td>2,23</td>
<td>2,23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the results of pre-test practice groups Nash bait ball has a payoff smash with a range between 2-9 with an average value of 5.83 and a standard deviation of 2.48. Through data, the post-test obtained a range between 7-11 with an average value of 9.50 and a standard deviation of 1.97. Next, data pre-test practice group smash hang ball there is revenue acquisition smash with a range between 3-7 with an average value of 5.00 and a standard deviation of 1.67. Based on the data post-test obtained a range between 8-14 with an average value of 10.00 and a standard deviation of 2.45. than average pre-test and post-test, it is obtained that the difference value is 5.00 with a different standard deviation value of 1.41 so that the value of count 8.62. The average pre-test and post-test obtained a different value of 3.66 with a different standard deviation of 2.34, therefore the value of t is obtained with a count of 3.85. Based on the calculation of the final data obtained a combined standard deviation value of 2.22 and a value of count combined of 0.39.

**Uji Normality**

Based on normality data testing using test Lilliefors, on column pre-test exercises mash bait ball for skills match male athletes club build youth in 2022 obtained by $L_{count} = 0.033567$ and $L_{Table} = 0.319$ where the value $n = 12$ and the real level is denoted by $= 0.05$. Because Count $< Table it can be concluded that the sample comes from a normal population. In the list, column post-test exercises nash bait ball for skills match male athletes club build youth in 2022 obtained by $L_{count} = 0.149233$ and $L_{table} = 0.319$ with $n = 12$ and a significant level $= 0.05$. Because Count$< Table it can be concluded that the sample comes from a normal population. In the section table presentation pre-test that exercises mash hanging ball against ability smash male athletes club build youth in 2022 obtained
by $L_{\text{count}} = 0.051567$ and $L_{\text{table}} = 0.319$ with a value of $n = 12$ and a significant level = 0.05. Because Count $< Table$ it is concluded that the sample comes from a normal population.

In column post-test exercises mash hanging ball for ability smash male athletes club build youth in 2022 obtained by $L_{\text{count}} = 0.039433$ and $L_{\text{count}} = 0.319$ with a value of $n = 12$ and a significant level denoted by $= 0.05$. Because $L_{\text{count}} < Table$ it can be concluded that the sample comes from a normal population.

**Table 3. Normality Test Results**

<table>
<thead>
<tr>
<th>Exercise Group</th>
<th>Mean And Standard Deviation</th>
<th>$L_{\text{count}}$</th>
<th>$L_{\text{table}}$</th>
<th>$\alpha$</th>
<th>Is</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results Smash Male Athlete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise Group Smash Bait Ball</td>
<td>Pre-test [\bar{x} = 5.83] S = 2.48</td>
<td>0.033567</td>
<td>0.319</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td>Post-test [\bar{x} = 9.50] S = 1.97</td>
<td>0.149233</td>
<td>0.319</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>Exercise Group Smash Hanging Ball</td>
<td>Pre-test [\bar{x} = 5.00] S = 1.67</td>
<td>0.051567</td>
<td>0.319</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td>Post-test [\bar{x} = 10.00] S = 2.45</td>
<td>0.039433</td>
<td>0.319</td>
<td>0.05</td>
<td>Normal</td>
</tr>
</tbody>
</table>

**Uji Homogenitas**

To test homogeneity through the results pre-test on smash volleyball between practice groups smash bait and practice balls smash hanging ball gets value $F_{\text{count}} = 0.45$ it is known that $n_1 = 12$, $V_1 = N - 1 = 12 – 1 = 11$ whereas $n_2 = N – 1 = 12 – 1 = 11$. Then the F value is obtained $F_{\text{count}}(0.05)(5, 5) = 5.05$ with a real level $\alpha = 0.05$ then value $count < Table(0.45 < 5.05)$ it can be concluded that the two variances are homogeneous. As for the data homogeneity test post-test on results smash volleyball between practice groups smash bait and practice balls smash hanging ball gets value $count = 1.54$ which is known that $n_1 = 12$, $V_1 = N – 1 = 12 – 1 = 11$ whereas $n_2 = N – 1 = 12 – 1 = 11$ until the F value is obtained $F_{\text{count}}(0.05)(5, 5) = 5.05$ with a real level denoted by $= 0.05$ for $count < Table(1.54 < 5.05)$ it can be concluded that the two variances are homogeneous. Test the homogeneity of the two data pre-test and post-test above the results smash in volleyball games in both practice groups smash bait and practice balls smash hanging ball gets value $F_{\text{count}} = 0.72$. Where, it is known that the value of $n_1 = 12$, $V_1 = N - 1 = 12 – 1 = 11$ whereas $n_2 = N – 1 = 12 – 1 = 11$ until the F value is obtained $F_{\text{count}}(0.05)(5, 5) = 5.05$ with real level denoted by $= 0.05$ then value $count < F_{\text{table}}(0.72 < 5.05)$ it can be concluded that the two variances are homogeneous.
Hypothesis testing

The Effect of Bait Ball Smash Training

Based on the calculated data that has been collected, the results of the hypothesis test are obtained with a value of a count of 3.85. Next, the price is compared with the price $t_{table}$ with $dk = n-1$ ($6-1 = 5$) at a significant level with symbols = 0.05 is 2.75 thus $t_{count} > t_{table}$ (3.85>2.75). So, it is obtained that $H_a$ rejected and $H_a$ be accepted. Thus it can be concluded that there is a significant influence of the form of exercise smashes bait ball for the results-smash in male athletes.

The Influence of Hanging Ball Smash Training

Based on calculations through data obtained during the study, it is obtained in testing the hypothesis of the t-value count of 8.62. Then, the price is compared with the price $t_{table}$ with $dk = n-1$ ($6-1 = 5$) at a significant level denoted by $a = 0.05$ is 2.75 thus $t_{count} > t_{table}$ (8.62>2.75). This is meaningful The rejected and $H_a$ be accepted. Therefore, it can be concluded that there is a significant influence from the form of exercise smash hanging ball against the results mash in male athletes.

Differences in the Effect of Bait Ball and Hanging Ball Smash Training

Based on the calculated results data, the results of the hypothesis test are obtained with a value of $t_{count}$ of 2.23. Then, the price is compared with the price $t_{table}$ with $dk = n_1 + n_2 - 2$ ($6+6-2=11$) at the marked significant levels = 0.05 is 0.39 thus $t_{count} > t_{table}$ (2.23>0.39). It has a meaning $H_a$ accepted and $H_a$ rejected. Where, it can be concluded that the form of exercise smashes hanging ball has no greater influence than the form of training smash bait ball for the resulting smash in male athletes.

DISCUSSION

Based on the data from the results of the first hypothesis testing, it shows that there is a significant effect on the training group smash bait ball for the results mash male athlete. This exercise is performed the same as doing smash in the real game. This is due to practice smash bait ball is a form of training that has characteristics to improve accuracy or right on target directions mash enter the field. Whether or not the direction of the ball is done by a smasher is very influential on the numbers generated to get points for his team and win the match. This is relevant to what was stated by (Yanuar, 2020) which states the training procedures mash with bait balls, where the players are provided with training
entities on technique smash by hitting the baited ball with real motion and repetitive motion.

This exercise is aimed at making the players skilled in hitting movements smash and applying the actual movement pattern. Through the habit of this practice, players can carry out strokes smash using the correct and appropriate motion patterns automatically. Training with a bait ball will go a long way to benefit the players who have the basic ability to smash and good coordination. In addition, it also speeds up the mastery of technical skills, because the techniques and movement patterns are directly carried out with actual movements with the help of tools. The existence of this exercise can provide maximum results if the basic components of the movement smash such as movement coordination, and basic skills are already dominated by players and not suitable for players who have poor coordination and timing in hitting the ball.

The results of testing the second hypothesis explained that there was a significant effect on the training group smash hanging ball against the results mash male athlete club. Exercise smash hanging ball is required when performing smash must be right on the palm and must hit the head of the ball because the ball that is hit does not move so it will be easier to do it. Exercise smash Hanging balls can provide valuable experience to improve movement abilities, especially techniques to mash. Because the players can master the basic movement components of the technique smash in more depth and earnestly for the players to have better movement techniques or timing in hitting the ball. Besides having advantages, practice smash also has drawbacks, namely the implementation of exercises that are classified as boring and require a long time because you have to master the basic movements first.

Based on the results of the third hypothesis testing, it was explained that there was a significant effect on the training group's smash hanging ball against the results of the male athlete. The two forms of training that are carried out, both bait ball and hanging ball exercises, have the same characteristics to increase results smash. Due to the form of exercise smash sample bait balls are more difficult to hit the ball because the ball to be hit is in a state of motion soul smasher must require focus and concentration to be able to hit the moving ball, while in the form of training, smash hang the ball until it is easier to hit the ball precisely on the palm and can hit the head of the ball because the ball that is hit does not move. However, with the movement of the ball, we can feel how the smash is conducted. This is what forms the exercise smash hanging ball is not more influential than the form of training smash bait ball. This is relevant to the opinion presented by (Wahyudi,
2022) which states that there is a difference between smash bait ball from practice smash hanging ball. It can be seen from the two forms of exercise both have advantages and disadvantages. There is a training effect that is specific, so you can see the difference in the form of training that produces a different effect. The form of exercise that is carried out repeatedly can affect the stage of forming the ability to move which can give impulses to the nervous system, resulting in automatic movements. Same with movement smash which is carried out repeatedly can result in automatic movements against different influences.

If seen from the percentage increase in skills smash, it is seen that the exercise group smash bait ball better results. Exercise smash with a bait ball is an effort made to reduce the level of difficulty in technical ability training smash as well as to form a pattern of ability movement smash consciously so that at the next stage of ability smash can be mastered properly. This exercise has its advantages. Even though the results of the percentage increase in ability smash practice group smash the bait ball is better, when viewed from the test the difference between the two forms of training has a significant difference. This is in line with research conducted by (Wahyudi, 2022; TrioAprianto, 2018; Yanuar, 2020)

CONCLUSIONS

Based on the results of the hypothesis calculation that has been done, it can be concluded as follows:

a. Exercise smash bait ball has a significant effect on the ability to smash in male athletes.

b. Exercise smashing hanging balls has a significant effect on the ability to smash in male athletes.

C. Exercise smash hanging ball has no greater influence than training smashes bait ball with a percentage of 40%: 60% of ability smash in male athletes.

SUGGESTIONS

Based on the results of the research and conclusions above, the researcher provides the following suggestions:

a. In the future, the trainer gives training smash bait and practice balls smash hanging balls because the two forms of exercise affect the increase in the ability to smash at a volleyball game.
b. Coaches or sports teachers at school pay attention to other forms of training that are following increasing abilities smash in a volleyball game.

c. Future researchers can conduct research with a larger sample so that the research results are more accurate.

REFERENCES


The Impact of Bait Ball and Hanging Ball Training on Smash Ability in Volleyball Games
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Journal: Humanities and Social Sciences, 4(2), 3170–3176.
https://doi.org/10.33258/cjpko.v4i2.2049


Supriadi, A., & The, S. (2022). The Effect of Learning Manipulative Skills Using Ball Thrower Learning Media on the Ability to Throw and Catch the Ball in Elementary School Students To cite this article: The Effect of Learning Manipulative Skills Using Ball Thrower Learning Media on th.


