The Influence of Target Games Training and Target Service Training of The Wall With Targets on Ability The Service Accuracy

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ABSTRACT
The main objective of this research is to analyze the effect of target game practice and over-the-wall practice to increase the accuracy of the top serve. This research was conducted on 30 students participating in volleyball extracurricular activities at SMAN 1 Balinggi. There were three groups, each group numbering 10 people, namely group 1 was given target game practice, group 2 was given training on serving against the wall with a target and the control group. Data retrieval is done by testing the service accuracy using the service accuracy test. Data analysis used paired t-test and Way ANOVA with = 0.05. Results: there is a significant effect of target game practice on the accuracy of the upper serve with a sig value of 0.000 <0.05. There is a significant effect of top-serve training with a target on the accuracy of the top serve with a sig value of 0.000 <0.05. There was a significant difference between the three groups in the accuracy of serving over 18.894>3.39. Group 1 was better than Group 2 and Group 3 in improving their top serve accuracy. Conclusion: There is a significant effect of target game practice and over-the-wall practice with targets in improving the accuracy of the top serve.

Keywords: Target Games Practice; Top Service Training with a Target; Upper Service Accuracy Ability.

INTRODUCTION
In recent years, volleyball has grown rapidly and has become increasingly popular and loved all over the world. Over time, many rules of volleyball have changed, as this sport has become more and more interesting and spectacular for the public to watch and more and more (Adin-Marian and Marilena 2015). Volleyball is one of the most popular sports in the world, as reflected by the membership of the Federation Internationale Volleyball (FIVB), the sport’s international governing body, which now numbers more than 225 national federations. (Reesser C Jonathan, 2017). Volleyball is a team sport characterized by periods of short duration (i.e. 3-9 seconds), high-intensity activity, interspersed with relatively long periods of recovery time (i.e. 10-20 seconds). (Polglaze
and Dawson 1992). Volleyball is characterized by the continuous play of short duration and high intensity punctuated by short recovery periods that occur successively during training sessions or matches. (Coimbra et al. 2021). Sports require the capacity to repeatedly perform efforts that require strength, power, and agility, causing high physical fatigue after training (Horta et al. 2017; Mroczek 2013; Timoteo et al. 2017).

Volleyball also requires perceptual psychomotor and cognitive skills, such as coordination, decision-making, reaction time, collective and individual team tactical actions, and emotional control. (Andrade et al. 2016; Mroczek 2013). In the process of training volleyball players, at all levels, specialists come up with a series of experimental methodologies, which are intended to increase the level of sportsmanship of the players (Reeser C Jonatan 2017; Ungurean and Puni 2019). In addition, the game of volleyball requires teamwork to score points and win the game in a match. (Reesser C Jonathan, 2017). The basics of playing volleyball involve mastering several neuromuscular skills, namely serving, smashing, passing and blocking (Sahabuddin and Hakim 2019).

Schools as formal institutions have limitations in terms of time, funds, and supporting facilities. So its role in forming values and attitudes in children cannot run optimally. Therefore additional time is needed outside of school hours to support national education goals. In forming a child's attitude, it is necessary to have activities outside of school hours that can give positive results. The curriculum has provided a way out, namely with a sports extracurricular program that is fostered and managed properly, directed, planned and sustainable. This is expected to support the formation of good character and social attitudes and can provide a good influence to be able to improve academic achievement. SMA Negeri 1 Balinggi, for student interest there is a very high sports field. This can be seen from the achievements obtained at various levels of the championship. The school organizes various kinds of extracurricular activities to explore, support and channel students' interests and talents, especially in sports. Of the several extracurriculars available, volleyball is one of them.

The volleyball game begins with serving from the back line of the court, the ball is hit over the net and falls on the opponent's court (Sahabuddin 2018). At first, the serve was only serving the first ball to start the game. In the development of modern volleyball, serving is an attack to get points (Saptiani, Sugiyanto, and Syafrial 2019). A hard and strong serve will provide a level of difficulty for the service received so that the team will easily get additional points (Ponidin, Haqiyah, and Riyadi 2017). There are several kinds
of serves in volleyball games (Zetou et al. 2012), namely the under serve, the top serve and the serve while jumping which is commonly known as the jump serve (Sahabuddin 2018).

According to (PBVSI 2021) Service is an attempt to put the ball into play by the right-back player who is in the service area. There are three types of serves in volleyball, namely the underhand serve, the upper hand serve and the jump serve or so-called jump serve (Jaya et al. 2019). Performing the overhand serve requires more power and the overhand serve has its level of difficulty for the receiver, because the ball moves quite fast and sharp. The ball will be more difficult to receive if the ball moves close to the top of the net (Sanur 2016; Prabawa, Kharisma, and Effendy 2019).

High school students are required to apply advanced techniques, this means that basic techniques are not being studied anymore because they should have mastered them in junior high school. But the reality says otherwise, there are still many high school or equivalent students whose basic technique is still lacking, for example, many high school students are still unable to do a top serve. When they serve the volleyball they don't cross the net or they are still netted. This may be due to the lack of student service techniques and poor service accuracy.

Based on the results of observations made at SMA Negeri 1 Balinggi, it was found that students in serving had not been able to direct the ball towards an empty field or players who had weak reception of the serve. There are still many balls that go out of the field and even netted in the net and are not directed properly or enter the opponent's field. To get points or points quickly, the server must be able to aim the ball at the player with the weakest reception of the service, direct the ball to the opponent's serving player or direct the server to the opposing player who will change positions. Accuracy in serving is very important to win a game. One form of exercise that aims to perform accurate serving is by practising target games and practising top-to-the-wall service with a target.

After implementing target game exercises and top serve exercises with targets, it is hoped that the extracurricular students of SMA Negeri 1 Balinggi will have more mastery of the basic techniques of playing volleyball, especially in the basic techniques of the top services, so that they can improve their achievements in volleyball. Following the existing problems, the purpose of this research is to examine the influence of target game exercises and over-the-wall service exercises with the aim of the extracurricular ability to serve at SMA Negeri 1 Balinggi.
METHOD

Quantitative research with a quasi-experimental design. The research design used a matching-only design.

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>T1</th>
<th>X1</th>
<th>T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>M2</td>
<td>T3</td>
<td>X2</td>
<td>T4</td>
<td></td>
</tr>
<tr>
<td>M3</td>
<td>T5</td>
<td>-</td>
<td>T6</td>
<td></td>
</tr>
</tbody>
</table>

Research design (Masum Ali, 2012)

The population in this study were all extracurricular students at SMA Negeri 1 Balinggi. The sample of this study was all extracurricular students of SMA Negeri 1 Balinggi as many as 30 people were selected by purposive sampling technique and the distribution of sample groups in this study used the ordinal pairing method.

It is necessary to know the limitations and scope of the study, so as not to cause different interpretations, operationally the research variables are defined as follows:

Target game practice is a form of exercise that is carried out by serving over the net with cardboard targets of various colours placed in 6 positions in the middle of the field. Doing the over-serve must be directed at the carton instructed by the coach/teacher.

![Figure 1. Target game practice](image1)

![Figure 2. Targeted wall drill](image2)
The instrument used in this study was the spike/smash accuracy test on volleyball, according to (Nurhasan and Hasanudin, 2007). This test aims to measure the skill of doing spikes/attacks over the net quickly and purposefully.

Data processing and analysis is a series that is carried out as an effort to obtain research conclusions. Data analysis was carried out using the Statistical Product for Social Science (SPSS) Serie 25 program.

RESULTS AND DISCUSSION

Table 1.
Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Means</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 Pretest</td>
<td>10</td>
<td>14.6000</td>
<td>6.16802</td>
<td>6.00</td>
<td>28.00</td>
</tr>
<tr>
<td>Posttest Group 1</td>
<td>10</td>
<td>23.9000</td>
<td>5.70477</td>
<td>15.00</td>
<td>36.00</td>
</tr>
<tr>
<td>Group 2 Pretest</td>
<td>10</td>
<td>12.8000</td>
<td>4.61399</td>
<td>5.00</td>
<td>19.00</td>
</tr>
<tr>
<td>Posttest Group 2</td>
<td>10</td>
<td>20.4000</td>
<td>4.06065</td>
<td>14.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Control Group Pretest</td>
<td>10</td>
<td>12.6000</td>
<td>4.88080</td>
<td>4.00</td>
<td>19.00</td>
</tr>
<tr>
<td>Posttest Control Group</td>
<td>10</td>
<td>14.6000</td>
<td>5.60159</td>
<td>5.00</td>
<td>23.00</td>
</tr>
</tbody>
</table>

The results of the initial upper serve accuracy test before being given target game practice obtained a mean value of 14.6, a standard deviation of 6.16 and the final test after being given target game practice obtained a mean value of 23.90 and a standard deviation of 5.70. The initial test results for the wall exercise group with a target obtained a mean value of 12.80, a standard deviation of 4.61 and the final test results after being given the wall exercise group with a target obtained a mean of 20.40 with a standard deviation of 4.06. The initial test results for the control group obtained a mean value of 12.60, and a
standard deviation of 4.88 and the final test results obtained a mean value of 14.60 and a standard deviation of 5.60. The data shows that all data increases from the pretest to the posttest. However, group 3 only slightly increased compared to group 1 and group 2 in their upper serve accuracy.

The effect of target game practice and wall service training with targets on the accuracy of the upper serve.

Table 2.
Paired Samples Test

<table>
<thead>
<tr>
<th>Pair</th>
<th>Paired Differences</th>
<th>Means</th>
<th>std. Deviation</th>
<th>std. Error Means</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Posttest Group 1 - Pretest Group 1</td>
<td>9.30000</td>
<td>3.71334</td>
<td>1.17426</td>
<td>6.64364 - 11.95636</td>
<td>7.920</td>
<td>9</td>
<td>.000</td>
</tr>
<tr>
<td>Pair 2</td>
<td>Posttest Group 2 - Pretest Group 2</td>
<td>7.60000</td>
<td>2.79682</td>
<td>.88443</td>
<td>5.59927 - 9.60073</td>
<td>8.593</td>
<td>9</td>
<td>.000</td>
</tr>
<tr>
<td>Pair 3</td>
<td>Control Group Posttest - Control Group Pretest</td>
<td>2.00000</td>
<td>1.24722</td>
<td>.39441</td>
<td>1.10779 - 2.89221</td>
<td>5.071</td>
<td>9</td>
<td>.001</td>
</tr>
</tbody>
</table>

The results of the paired sample test in group 1 obtained a sig value of 0.000 < 0.05, meaning that there was a significant effect of target game practice on the ability to serve accuracy. The results in group 2 obtained a sig value of 0.000 < 0.05, meaning that there was a significant effect of the wall service training with the aim of the upper serve accuracy ability. This shows an important finding that target game practice and wall service practice with targets have a significant effect on the accuracy of the upper serve.

Table 3.
Post Test One Way ANOVA

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>MeanSquare</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>291,800</td>
<td>145,900</td>
<td>18.894</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>208,500</td>
<td>7,722</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>500,300</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As it is clearly shown in Table 3 that the difference between the three groups for speed is t18.894 > t3.39, it can be said that there is a significant difference between the three groups in terms of upper serving ability.
Table 4.
Top Serviceability LSD Tests

<table>
<thead>
<tr>
<th>(i) Method</th>
<th>(J) Method</th>
<th>Mean Difference (IJ)</th>
<th>std. Error</th>
<th>Sig.</th>
<th>95% Confidence Intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Training 1</td>
<td>Group Training 2</td>
<td>1.70000</td>
<td>1.24276</td>
<td>.183</td>
<td>-.8499 - 4.2499</td>
</tr>
<tr>
<td></td>
<td>Control Group Training</td>
<td>7.30000*</td>
<td>1.24276</td>
<td>.000</td>
<td>4.7501 - 9.8499</td>
</tr>
<tr>
<td>Group Training 2</td>
<td>Group Training 1</td>
<td>-1.70000</td>
<td>1.24276</td>
<td>.183</td>
<td>-4.2499 - .8499</td>
</tr>
<tr>
<td></td>
<td>Control Group Training</td>
<td>5.60000*</td>
<td>1.24276</td>
<td>.000</td>
<td>3.0501 - 8.1499</td>
</tr>
<tr>
<td>Control Group Training</td>
<td>Group Training 1</td>
<td>-7.30000*</td>
<td>1.24276</td>
<td>.000</td>
<td>-9.8499 - -4.7501</td>
</tr>
<tr>
<td></td>
<td>Group Training 2</td>
<td>-5.60000*</td>
<td>1.24276</td>
<td>.000</td>
<td>-8.1499 - -3.0501</td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the 0.05 level.

The results of Table 4 show that the post hoc test using the Least Significant Difference (LSD) showed a significant difference between the three groups. Group 1 (target practice) was better than Group 2 (wall serve with target) or Group 3 (control group) in improving the accuracy of the upper serve. Based on research (Aini 2021) can improve students' passing skills by using game targets. Training in the application of net/wall play, or target play is accompanied by the development of useful, tactical solutions, some of which are exceptional as a basis for sports such as volleyball (Mitchell, Stephen, Oslin, Judith, Griffin 2013). This is supported by the results of research which states that to improve game skills, it can include developing learning methods to produce tactical and technical uses, one of which is using target games. (Memmert et al. 2015). Other studies also support the use of target games on top serve skills. Through the form of instruction in the form of games using targets, games can increase the focus of the pedagogical process with understanding through game activities. (Mesquita, Hastie, and Pereira 2016). The net/wall game teaches tactical skills related to finding the ideal solution for a particular situation, in this case serving in volleyball (Memmert and Blindness 2007). The results of this research are expected to be useful for practitioners and academics in the field of sports coaching as library material in developing the science of sports fatigue. With this research, it is hoped that coaches will be able to find out training methods that can improve the accuracy of the upper serve effectively and correctly so that the increase in performance can be carried out as intended. For academics in the field of sports coaching to continue to explore knowledge about the top service, considering that the top service is the initial attack in modern volleyball games.

CONCLUSIONS AND SUGGESTIONS

Based on the results of data analysis, description, testing of research results and discussion, it can be concluded as follows: There is a significant effect of target game
practice on the service accuracy ability of SMA Negeri 1 Balinggi extracurricular students, with a significant value 0.000 <0.05. There is a significant effect of the target serving practice on the accuracy of the service on the extracurricular students of SMA Negeri 1 Balinggi, with a significant value of 0.000 <0.05. There was a significant difference between the three groups in the accuracy of serving over 18.894>t3.39. Group 1 was better than Group 2 and Group 3 in improving their top serve accuracy.

Suggestions for coaches to use target games and wall drills in training the ability to serve accuracy for players. In addition, it is recommended to carry out further research with a large sample size so that better and more realistic results are obtained.

REFERENCES


Research Questions Related to Teaching Games for Understanding


The Influence Of Target Games Training And Target Service Training Of The Wall With Targets On Ability The Service Accuracy
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