THE EFFECTIVENESS OF SOFTBALL OVERHAND THROW SKILL TRAINING MODEL ON BASIC THROWING SKILLS IN BLACK DIAMON CIREBON SOFTBALL PLAYERS

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Abstract The purpose of this study was to produce and test a softball overhand throw skill training model. The research method uses research and development methods adopted from the theory of Borg & Gall. There are ten steps used in this study, namely needs analysis, initial product development, expert evaluation, small group trials, product revisions, large group trials, product revisions, effectiveness tests, revisions, and the final product. The research subjects were u-17 novice athletes with a total of 15 subjects in small group trials, large group trials of 40 novice athletes and 40 subject effectiveness tests conducted on u-17 novice athletes at the Black Diamon Club Cirebon. The data analysis technique used in this study to test the effectiveness of the model is the normality test, homogeneity test and independent sample-test. The results of the research produced a product in the form of softball overhand throw skill training. For the 17 years old group, 24 training models have been validated and revised by experts. The implication of this study is that the training model is feasible and effective for use by the age of 17 and over in improving softball overhand throw skills.

Keywords: training models; skills; overhand throw; softball
INTRODUCTION

Softball is a type of sport played by two teams, each team consisting of 9 people for seven rounds or until an agreed time limit consisting of attacking (hitting) and defending (Roi & Bianchedi, 2008). Softball is a fun and exciting sport, providing significant health benefits such as increased physical fitness, including strength, agility and upper and lower body coordination. Plus, important social skills can be learned by interacting with coaches and teammates (Nachtigal et al., 2016). Softball is a development of baseball (Singh et al., 2017). Softball is a physically demanding sport consisting of several specialties that require different types of skills and abilities.

Softball requires excellent hand-eye coordination, upper limb strength, grip strength, and coordinated movement of the hips, shoulders, arms, and wrists (Aswathy, 2018). Ability in physical condition is one of the factors that determine performance in softball (Saraya, 2018). Ability in physical condition is one of the factors that determine performance in softball. Some of the basic techniques that need to be mastered in this softball game are 1) throwing, 2) hitting, 3) Catch, 4) base running, 5) sliding (Mashuda & Purnomo, 2013).

Of all the techniques contained in softball, throwing techniques are prioritized in softball, although all techniques are needed, throwing requires special handling and intense training. In throwing techniques there are several types of throws namely overhand throw, sidehand/sidearm throw, underhand throw, dan pitching (Prakoso et al., 2017). This throwing technique has a function to turn off the batter or runner who is going to base. Throwing is one of the most important defensive skills in softball. The above throwing skills depend on the flexibility and mobility of the shoulder joints. Throwing and catching skills are important techniques when a team is defending in a softball game. Throwing is an important technique or skill that plays an important role in the game of softball. The game of softball has three common throwing techniques: the overhand throw, the side throw, and the underhand throw. The over throw technique is the technique most often used. To perform a good overhead throw, the athlete must have good flexibility, muscle strength, coordination, muscle synchronization,
and neuromuscular efficiency (Singh, 2017).

The main elements that need to be considered in throwing a softball include accuracy, speed of throwing and the path of the ball and the ease of throwing (Asrof & KS, 2015). If you don't have the technique and how to make good throwing movements, this will affect the results of the throw and the possibility of an error in the direction of the ball to the side, up or down. So the ball is slow and does not reach the target. There are several types of ball throws, namely: overhand throw, side arm throw, and underhand throw. (Asrof & KS, 2015).

In softball, the overhand throw ball is usually used for defensive play and requires proper mechanics and alignment (Rahman, 2019). This can put more wear and tear on the shoulder joint but allows for greater strength and speed. The underhand throw is primarily used to throw and relieves stress on the arms and shoulders. These are generally easier to learn but may not provide the same defensive advantages and versatility as throwing hands.

The reason for choosing to throw an overhand throw ball in this study is because the overhand throw allows players to make strong and accurate throws from the outside or inside court, giving a defensive advantage. As the results of research conducted by Mustofa, et al that providing the right method can improve the ability to throw the softball ball accurately (Mustofa et al., 2019).

Then, this overhand throw is a versatile skill that can be used in various situations in softball games, by improving this skill it can help athletes to develop proper hand throwing mechanisms and can help athletes to throw harder. So this allows the athlete to throw accurately with power. Overall, the overhand throw in softball provides an advantage in defense, allowing for the harder throws that the overhand throw can give players a competitive advantage.

Efforts that can be made in maximizing throws require a training model that is in accordance with the skills you want to improve. This training model can be imitated from world-class coaches or modified as needed in order to produce athletes who are able to compete at the world level, where athletes are required to be more perfect in playing softball and this is supported
by technical, physical and psychological exercises.

The model that is widely used in softball training revolves around models of how to throw properly and correctly, players in the softball infielder position (first baseman, second baseman, third baseman and shortstop) must throw with a target that is low and flat enough to make it easy to turn off runners. Besides that, the game situation is very fast, making infield players required to throw the ball precisely and quickly in any position, such as running, kneeling or flying in the air. Coaches must remember that proper throwing mechanics involve the whole body (KS, 2010).

Softball overhand throw skills are very important, in this case an intensive model of training and coaching is needed, especially coaching the players, some of which must be fostered include mental, technical and physical factors (Bob, 2004). So far, in training the overhand throw technique has not been maximized, many players and coaches assume that the warm-up throw-catch represents a way to improve overhand throw skills. This assumption turns out to be incorrect, because the overhand throw skill must have the appropriate movement so that the resulting throw is fast, accurate, easy to catch and preferably a low throw around the base keeper's knee as a ball catcher, while in the warm-up throw catch tends to have a high target around the captor's head or chest.

**METHOD**

This study uses quantitative research methods with experimental methods. The design of this research is The one Group Pretest-posttest Design. The variable to be examined is the effect of the softball overhand throw skill training model ($X_1$) on the basic throwing skills of softball players ($Y$).

Table 1. Research design

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre Test</th>
<th>Treatment</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>$O_1$</td>
<td>$X_1$</td>
<td>$O_2$</td>
</tr>
</tbody>
</table>

$O_1$: Observation in the form of a pre test

$O_2$: Observation in the form of a post test

$X_1$: Application of the training method with the softball overhand throw skill training model.

This research was conducted at 1 Softball Club, the research subjects were 17-year-old amateur Softball players at the Black Diamon Cirebon club.

**Table 2. Criteria and Research Subjects**
The time in this study starts from June 2023 to August 2023 with reference to experimental research.

Data were analyzed by t test. With a significance level ($\alpha$) 0.05. The data analysis technique that will be used to test this hypothesis is to be analyzed using inferential statistics, the formula $t$ test. The data collected is in the form of the first test score and the second test score. The data obtained from the test results were processed using statistical procedures.

RESULT AND DISCUSSION

**Tabel 3. Average value**

<table>
<thead>
<tr>
<th>Pair</th>
<th>Preliminary Test</th>
<th>Final Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>41.05</td>
<td>49.3</td>
</tr>
<tr>
<td>N</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>2.189</td>
<td>1.882</td>
</tr>
<tr>
<td>Std. Error Mean</td>
<td>.283</td>
<td>.243</td>
</tr>
</tbody>
</table>

Based on the output results using SPSS 16 that the average value of softball learning outcomes before being given the training model is 41.05 and after being given treatment with the training model 49.3 means that the average softball score is an increase.

**Table 4. Correlation coefficient**

<table>
<thead>
<tr>
<th>Pair</th>
<th>Preliminary Test &amp; Final test</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Preliminary Test &amp; Final test</td>
<td>40</td>
<td>.364</td>
<td>.004</td>
</tr>
</tbody>
</table>

Berdasarkan hasil output tabel di atas bahwa koefisien korelasi softball sebelum dan sesudah diberikan model latihan keterampilan overhand throw adalah 0.364 dengan $p$-value 0.00 < 0.05 jadi kesimpulannya signifikan.

**Table 5. Signifikansi perbedaan**

<table>
<thead>
<tr>
<th>Pair</th>
<th>Preliminary Test &amp; Final test</th>
<th>t-hit</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Preliminary Test &amp; Final test</td>
<td>68.97</td>
<td>5</td>
<td>0.00</td>
</tr>
</tbody>
</table>

In the significance test of the difference with SPSS 16, the results obtained were $t$-count = 68.975, df = 59 and $p$-value = 0.00 <0.05, which means that there was a significant difference in the learning of softball athletes before and after the treatment of the overhand throw skill training model. Based on this information, it can be said that the developed softball overhand throw skill training model for the 17-year-old age
group can effectively improve softball learning for beginners.

The following is a comparison of the average test levels before giving treatment and after giving treatment with the overhand throw skill training model with the bar chart in Figure below:

**Figure 1. Average test levels before and after giving treatment**

![Bar chart](image)

The results of small trials and large group trials can be concluded that the overhand throw skill training model for beginners can be used in the process of softball training for beginners and is feasible and effective for increasing students' overhand throw.

**CONCLUSION**

Based on the data obtained, from the results of field trials and discussion of research results it can be concluded that:

1. Overall, there is an influence of the overhand throw skill training method on the basic throwing skills of black diamond Cirebon softball players. This means that the influence of the overhand throw skill training method affects the basic throwing skills of black diamond Cirebon softball players.

2. Product Model softball overhand throw skill training for the age group of 17 years can be done and applied in the process of overhand throw training.

Product development of the overhand throw skill training model for beginners can be used in the process of softball training for beginners and is feasible and effective for increasing students' overhand throw.

**REFERENCE**


