

The Effect of Mounted Dumble Load Training on Turbo Throwing Ability in Students SD Negeri 19 Tebing Tinggi

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Abstract: Turbo throwing is one of the throwing number activities in kid's athletics, which is the activity of throwing with one hand to reach a certain distance. To increase the strength of the hand muscles it is necessary to do certain forms of exercise. The exercise used in this study is the mounted dumble load exercise. The research method is quantitative using the research method "pre-experimental planning" ie (pre-testing of one group -planning after the test). The population at this study had a total of 24 people. The sample in this study amounted to 24 people. Based on the results of hypothesis testing, the calculated t value = 8.250 > t table = 1.714 with a significant level ($\alpha : 0.05$), so it was rejected and accepted, so it can be concluded that the study with the title "The effect of mounted dumble load training on turbo throwing ability in extracurricular athletic students at SD Negeri 19 Tebing Tinggi" had a significant effect.

Keywords: Dumble Load, Exercise Mounted, Turbo Throwing Ability

A. Introduction

Sport is an activity related to the body, seen from the name "sport" which means to process, train and "body" which means body or body. Sport is a physical movement that a person does regularly and consciously to improve functional abilities in the field of sports, in accordance with the purpose of doing sports (Burhaein, 2017).

Physical education, sports and health (PJOK) is an important part of education, because PJOK is part of overall education that prioritizes physical activity and invites healthy living for balanced physical, mental, social and emotional growth and development (Rokim, 2016). The objectives of physical and sports education are biological, psychological, and social that involves movement to develop an integrated and balanced personality (Lleixà & Nieva, 2020). The attitude of discipline, honesty, sportsmanship, willingness to recognize the superiority of opponents and willing to accept shortcomings in oneself are some of the goals of the educational process through physical activity. During the learning, the teacher should modify the learning game to accelerate students' skill attainment and learning (O'Donnell, 2014). The application of appropriate training methods is one of the important factors to

increase physical capacity so as to be able to carry out exercises that lead to explosive movement techniques such as the ability of the muscles of the legs, hips, back and shoulders and other components of movement skills (Amirzan & Yahya, 2019). Furthermore, having a high fighting spirit to prepare for the upcoming game to perform better (Aditia, 2015).

Sports is a form of physical activity consisting of games, competitions, and physical activities with the aim of achieving optimal recreation, victory, and achievement (Muliadi, et al., 2017). Efforts to improve students' mastery of movement skills in various sports activities contained in the curriculum because one of the specific goals of sports and health education at all levels of education is the complete achievement of competency standards and basic competencies (Rewo, et al., 2017). Usually someone exercises to improve their physical health, but there are also people who exercise just for hobbies, losing weight, sweating, filling spare time, even for a career (Harsono, 2015). The characteristics of elementary school age children are related to physical activity, namely that generally children like to play, like to move, like to work in groups, and enjoy direct practice (Alim, 2009). Sports are divided into several types depending on the purpose, namely educational sports, recreational sports, and achievement sports (Hindriani, 2018). The Ministry of Education and Culture's annual program in 2020 concerning the implementation of special sports events for students in the framework of the Ministry of Education and Culture is the National Student Sports Olympiad (O2SN), now called the National Student Sports Competition (KOSN).

Turbo throwing is one of the throwing number activities in kid's athletics, which is throwing with one hand to reach a certain distance (Lumintuarso, 2008). The turbo throwing procedure begins with a 5-meter prefix, then the child throws the turbo into the throwing area limited by the throwing line, as with adult javelin throwing, safety factors in turbo throwing activities are also important to note so that safety such as when to throw the turbo and when to take the turbo back must be obeyed by all students (Muliadi, et al., 2017).

In turbo throwing, the basic techniques taught can be broken down into stages including: (1) starting run, (2) five rhythmic steps for turbo pulling, (3) five step run, (4) releasing turbo throws, (5) recovery. At the time of the initial stage movement, the turbo thrower accelerates the movement or acceleration. In the rhythmic five-step motion stage, the movement accelerates further and the thrower prepares for the turbo release stage, In the turbo release stage, additional speed is generated and transferred to the turbo before being released. In the recovery stage, the thrower holds back and avoids making mistakes (The Mercy Ones, 2017).

At the education level in Indonesia, elementary school students are children aged around 6 to 13 years. At this age, the physical development of children is different

from the previous period, the growth of hands and feet tends to be faster than the growth of the torso. At the end of the day muscle tissue will experience rapid development, this will be influenced by a greater increase in strength. Students' movement activities should be improved gradually, following the development of their physiological and psychological development (Mikalsen & Lagestad, 2020). Increased movement ability can be identified in the form of motion that can be done with more efficient body mechanics, the movements carried out become more smooth and controlled, the pattern or form of movement is more fariative, the movement is stronger and steadier. Factors that affect the development of children's movement ability when viewed in terms of the correctness of body mechanics and speed in carrying out movements are factors of body coordination, body size and muscle strength. Body movement skills will gradually increase, the development of coordination of gestures is the key to the development of mastery of various kinds of skills that have begun to be mastered in childhood and even in infancy. Activities that need to be done by large children are activities that use skills to achieve certain goals, activities in teams or groups, trial and error activities, activities to improve physical abilities and courage in the form of individual activities or group games, especially those that involve strength and endurance (Munasifah, 2018).

Extracurricular students only know how to throw, but it is difficult to do it with the correct technique, still mistakes occur at the time of execution. This is because exercises such as throwing and strength are not done optimally. Students still perform techniques according to the wishes and instructions of the coach, without knowing their own strengths. The results of turbo throws are still not optimal, so gradual training is needed to coordinate basic movements and physical abilities in order to create automation of movements that are formed and can affect the results of the throw. All of these components are needed in javelin throwing, but the most dominant physical components that require special attention are strength and *power*. For research interest, the authors again specialize in the practice of using to increase hand muscle strength. To increase the strength of the hand muscles it is necessary to do certain forms of exercise. The exercises used in this study were mounted exercises *dumbbell load*.

B. Methods

One group design used in the study *Pretest Posttest Design* Because the author will do the pretest first, the students will get action in the form of practice *levers* After the pretest *overhead* to increase the turbo throw yield. The population in this study was all 24 athletic extracurricular students. In this study, researchers will take the entire population as a sample. This study used a sampling technique like this called *saturated sampling*. The t test (for one sample) is used to test a hypothesis, involving one treatment or one measurement, using the mean as a parameter, or on the sample size

$n \leq 30$, or if the standard deviation of the population is unknown. Program SPSS 25 for Windows by Method *paired sample t-test* with significant rate = 0.05.

C. Results and Discussion

Throw Turbo pretest results

Data calculation *Pretest* this carried out at the first meeting, where the Sample has not been or has not been given any treatment before.

Table 1. Description of *pretest* data

N	24
Means	12.1612
Median	11.7240
Std. Deviation	2.20126
Deviation	4.235
Smallest	8.97
The most	16.04

From the results of the calculation of data on the results of students' turbo throws in extracurricular activities at SD Negeri 19 Tebing Tinggi, *pre-test* data scores Average score 1 : 2.1612 , median 11.724 0, St. Deviation 2.20126 , Variance 4.235 minimum 8.97 and maximum 16.04.

Turbo Throw Post-Test Results

Data calculation results *After testing* based on data obtained after the sample is given treatment or *exercise*. We follow this table's description of the result data *posttest*.

Table 2. Description of *post-test* data

N	24
Means	14.5140
Median	14.7400
Std. Deviation	2.87236
Deviation	8.810
Smallest	9.60
The most	21.21

From the results of the calculation of the turbo throw of SMPN 6 Tebing Tinggi extracurricular participants, the pretest obtained data values Average value of 1 : 4.5140, median 14.7400, St. Deviation 2.87236, variance 8.810 minimum 9.60 entry maximum 21.21. Analysis around the comparison Unfortunately, the average value of the pre-test and post-test turbo throw results. The blue color on the diagram

indicates the pretest mark. Because the color Red means the sign of fasting. Another comparison chart of this test is designed from the results of the relevant test. Initial test scores (pretest) obtained. The average score was 13.07 and the final test results (posttest) were obtained. average score 15.63. In the normality test, the initial test value (pretest) is obtained. The result is 0.113, while the final test (posttest) is obtained. yields 0.107. Based on the comparison of the results of the initial test (pretest) and the final test (post) above, then you can conclude this after being given treatment (treatment) through the influence of tailball game training there is a significant improvement to the turbo results met.

Normality test

The normality test can be seen from the following table:

Table 3. Normality Test Results

Data	Kolmogorov-Smirnov		Information
	Account	Table	
<i>Ready</i>	0,1 44	0,269	normal
<i>Publish</i>	0,1 21	0,269	normal

Based on the table above, the data before and *after* another test belongs to the value data group \leq table D so that other groups of data are said to be normally distributed.

Test homogeneity

The homogeneity of the data is shown in the following table 4:

Table 4. Recapitulation of homogeneity test results

Group	Count	Table	Information
<i>Pretest-Posttest</i>	1,55	2.07	Homogeneous

Based on the table above obtained, calculate the F value is 1.55 and the F value of the table is 2.07. Count $F 1.55 < F$ table So 2.07 thus this data has homogeneous variance.

Hypothesis testing

Hypothesis testing using *t-test* Samples related to the results can be seen in the following table:

Table 5. Hypothesis Test Results

Variable	t-test			Information
	t-calculate	t-table	Df	
	9,122	1.714	23	Affected

Based on the table above, $t_{\text{count}} 9,122$ and $t_{\text{table}} 1.714$. Because of the hypothesis testing criteria he liked the following: if the sign $t_{\text{count}} < t_{\text{table}}$ then H_0 is accepted and H_a is rejected, there is no effect. If the value of t is $t_{\text{calculate}} > t_{\text{table}}$, then H_0 is rejected and H_a is accepted, there is an effect. It turned out that the calculated t value was greater than the $t_{\text{table}} t$ ($9.122 > 1.714$), then H_0 was rejected and H_a was accepted, so it can be concluded that the study entitled "The effect of Mounted dumble load training on the results of turbo throws in extracurricular athletic students at SD Negeri 19 Tebing Tinggi has a significant effect.

D. Conclusions

The results of the study can be known after *pretest* and *Pos-ttes*. The result obtained from the average score of *pretest* and *Posttest* was an increase of 13.007 compared to 15.63. In the *pre-test*, only 7 of the 24 research samples met the very good criteria, namely 29%. But when the *posttest* was obtained 13 out of 24 research samples with very good criteria if the percentage was 54%. Furthermore, testing of data analysis requirements is carried out which begins with a normality test. normally distributed and based on hypothesis testing with t-test obtained a calculated t value greater than t_{table} ($8.250 > 1.714$) then H_0 was rejected and H_a was accepted, so it can be concluded research entitled " The effect of Mounted dumble load exercise On the results of turbo throwing in athletic extracurricular students at SD Negeri 19 Tebing Tinggi "there is a significant influence.

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