

# THE EFFECT OF WEIGHT TRAINING PROGRAM ON MUSCLE STRENGTH AND ENDURANCE OF PUSLATDA PETANQUE DIY ATHLETES

by Ahmad Nasrulloh, Sumaryanto, Sumarjo, Rina Yuniana, Krisnanda Dwi Apriyanto

## ABSTRACT

The physical conditions most needed in the sport of petanque are muscle strength and endurance. The right exercise to increase muscle strength and endurance is Weight Training. Therefore, the researcher intends to apply the effect of the Weight Training Program to increase the Muscle Strength and Endurance of the DIY Petanque Puslatda Puslatda Athletes. The aim of this research is to analyze the effect of the weight training program on the muscle strength and endurance of athletes at Puslatda Petanque DIY.

The research method used was an experiment with a two group pretest-post test design. Participants in this research activity were Petanque athletes in the Special Region of Yogyakarta who took part in the 2023 BK PON selection. The treatment given to the sample was in the form of a weight training program with body weight and free weight. The research instruments used in this study were the Hand Grip Dynamometer to measure the strength of the hand muscles, measuring the endurance of the arm muscles using the push up test, and the Wall Sit Test to measure the endurance of the leg muscles. Data analysis techniques use normality, homogeneity and two-way ANOVA tests to test hypotheses.

The research results of all the treatments given in this study showed significant results and had a good effect on the Muscle Strength and Endurance of the DIY Petanque Puslatda Puslatda Athletes.

Kata Kunci: *Weight Training, Strength, Muscle Endurance, Petanque Athlete*