

**PENGARUH PELATIHAN PLYOMETRIK TERHADAP PENINGKATAN
DAYA LEDAK OTOT TUNGKAI SISWA EKSTRAKURIKULER
ATLETIK SMAN 1 ABIANSEMAL**

Oleh
I Gusti Agung Adi Permana, NIM 2116021003
Jurusan Ilmu Olahraga dan Kesehatan

ABSTRAK

Tujuan penelitian ini adalah untuk mengetahui pengaruh pelatihan plyometrik terhadap peningkatan daya ledak otot tungkai siswa ekstrakurikuler atletik SMAN 1 Abiansemal. Jenis penelitian ini yaitu *design kuasi-experimen*. Subjek pada penelitian ini berjumlah 30 siswa, dimana dari 30 siswa akan dibagi menjadi dua kelompok yang masing-masing kelompok berisi 15 siswa. Kelompok 1 diberi perlakuan pelatihan plyometrik beban ringan repetisi banyak sedangkan kelompok 2 diberi perlakuan pelatihan plyometrik beban berat repetisi sedikit dengan frekuensi latihan tiga kali pertemuan selama seminggu dengan total 18 kali pertemuan. Instrumen untuk mengukur daya ledak otot tungkai adalah menggunakan *standing broad jump test*.

Hasil peningkatan pelatihan plyometrik beban ringan repetisi banyak sebesar 6.34 cm, dari hasil *pre-test* 179.13 cm menjadi 185.47 cm pada saat *post-test*. Sedangkan hasil peningkatan pelatihan plyometrik beban berat repetisi sedikit sebesar 13.2 cm, dari hasil *pre-test* 179.73 menjadi 192.93 cm pada saat *post-test*. uji statistik menggunakan *paired sample test* pelatihan plyometrik beban ringan repetisi banyak menunjukkan nilai signifikansi 0.000, lebih kecil dari 0.05 berarti terdapat peningkatan daya ledak. Sedangkan pelatihan plyometrik beban berat repetisi sedikit menunjukkan nilai signifikansi 0.000, lebih kecil dari 0.05 berarti terdapat peningkatan daya ledak. Hasil uji hipotesis ketiga menggunakan *independent sample t test* menunjukkan nilai signifikansi 0.000, lebih kecil dari 0.05 berarti terdapat perbedaan pengaruh pelatihan plyometrik beban ringan repetisi banyak dengan pelatihan plyometrik beban berat repetisi sedikit terhadap daya ledak otot tungkai, yang mana pelatihan plyometrik beban berat repetisi sedikit memiliki pengaruh yang lebih besar.

Kata-kata kunci: Plyometrik, Beban Ringan Repetisi Banyak, Beban Berat Repetisi sedikit, Daya Ledak

**THE EFFECT OF PLYOMETRIC TRAINING ON INCREASING LEG
MUSCLE EXPLOSIVE POWER IN EXTRACURRICULAR ATHLETICS
STUDENTS AT SMAN 1 ABIANSEMAL**

By

I Gusti Agung Adi Permana, Student ID 2116021003

Department of Sports and Health Science

ABSTRACT

The purpose of this study was to determine the effect of plyometric training on increasing explosive leg muscle power in athletic extracurricular students at SMAN 1 Abiansemal. This study used a quasi-experimental design. Thirty students participated, divided into two groups of 15. Group 1 received plyometric training with light weights and high repetitions, while Group 2 received plyometric training with heavy weights and low repetitions. The training frequency was three times per week, for a total of 18 sessions. The instrument used to measure explosive leg muscle power was the standing broad jump test.

The results of the plyometric training with light weights and high repetitions showed an increase of 6.34 cm, from 179.13 cm in the pre-test to 185.47 cm in the post-test. Meanwhile, the results of the plyometric training with heavy loads and low repetitions increased by 13.2 cm, from a pre-test result of 179.73 to 192.93 cm in the post-test. Statistical testing using a paired sample t-test for plyometric training with light loads and high repetitions showed a significance value of 0.000, less than 0.05, indicating an increase in explosive power. Meanwhile, plyometric training with heavy loads and low repetitions showed a significance value of 0.000, less than 0.05, indicating an increase in explosive power. The results of the third hypothesis test using an independent sample t-test showed a significance value of 0.000, less than 0.05, indicating a difference in the effect of plyometric training with light loads and high repetitions compared to plyometric training with heavy loads and low repetitions on leg muscle explosive power, with plyometric training with heavy loads and low repetitions having a greater effect.

Keywords: Plyometrics, Light Loads and High Reps, Heavy Loads and Low Reps, Explosive Power