

PERBEDAAN DAYA LEDAK OTOT SEBELUM DAN SESUDAH INTERVENSI *PLYOMETRIC TRAINING* PADA ANGGOTA UKM OLAHRAGA FAKULTAS KEDOKTERAN UNSOED

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ABSTRAK

Latar belakang : Daya ledak otot merupakan salah satu komponen yang penting untuk menunjang *skill* dalam beberapa cabang olahraga. Daya ledak otot juga salah satu komponen kebugaran fisik yang berguna untuk menjaga tubuh dalam kondisi yang baik. Intervensi *plyometric training* merupakan latihan yang diduga dapat meningkatkan daya ledak otot. Unit Kegiatan Mahasiswa (UKM) Olahraga Fakultas Kedokteran Unsoed merupakan suatu kegiatan mahasiswa dibidang olahraga yang memerlukan kebugaran fisik khususnya daya ledak otot untuk mengikuti kompetisi. **Tujuan :** Mengetahui perbedaan daya ledak otot sebelum dan sesudah intervensi *plyometric training* selama 5 minggu. **Metode :** Penelitian menggunakan metode *quasi-experimental* dengan *pre and post test design without control*. Subjek penelitian berjumlah 15 mahasiswa yang dikumpulkan menggunakan metode *consecutive sampling* sesuai dengan kriteria inklusi dan eksklusi. Subjek penelitian melakukan intervensi *plyometric training* selama 5 minggu dengan 2 sesi setiap minggu.. Daya ledak otot diukur menggunakan metode *vertical jump* dilakukan sebelum dan sesudah intervensi. **Hasil :** Hasil uji t-berpasangan yaitu terdapat perbedaan yang bermakna pada nilai daya ledak otot sebelum dan sesudah intervensi *plyometric training* ($p= 0,001$; $p< 0,05$). Terjadi peningkatan daya ledak otot setelah intervensi *plyometric training* dari sebelumnya $45,50 \pm 9,98$ cm menjadi $59,86 \pm 1,07$ cm. **Kesimpulan :** Terdapat perbedaan daya ledak otot sebelum dan sesudah *intervensi plyometric training* selama 5 minggu.

Kata Kunci : Daya ledak otot, *plyometric training*, *vertical jump*, UKM Olahraga FK Unsoed

**MUSCLE EXPLOSIVE POWER BEFORE AND AFTER
INTERVENSI PLYOMETRIC TRAINING ON STUDENT MEMBER OF
'UKM OLAHRAGA' FACULTY OF MEDICINE JENDERAL
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ABSTRACT

Background: Muscle explosive power is one of the important components to support skill in some sports. Muscle explosive power is also one component of physical fitness that is useful for keeping the body in good performance. Plyometric training is a regimen of exercise that was expected to increase muscle explosive power. Unit Kegiatan Mahasiswa (UKM) Olahraga in Faculty of Medicine in Jenderal Soedirman University are groups of student activity in the field of sports that require physical fitness, especially muscular explosive power to follow the competition. **Objective:** To determine differences in muscle explosive power before and after plyometric training for 5 weeks. **Methods:** The study used a quasi-experimental method with pre and post test design without control. Subject were 15 students that was collected using consecutive sampling method based on inclusion and exclusion criteria. The subject of research was intervened plyometric training for 5 weeks with two sessions each week. Muscle explosive power was measured using the vertical jump method done before and after intervention. **Results:** The results of paired t-test were there are significant differences in muscle explosive power values before and after the intervention plyometric training ($p < 0.001$; $p < 0.05$). There was an increase in explosive muscle power after plyometric training intervention from 45.50 ± 9.98 cm to 59.86 ± 1.07 cm. **Conclusions:** There were differences in muscle explosive power before and after the intervention plyometric training for 5 weeks.

Keywords: Muscle explosive power, plyometric training, vertical jump, UKM Olahraga