

ABSTRAK

I Wayan Diasa (2026), *Pengaruh Metode Pelatihan Pliometrik Box Jump dan Indeks Massa Tubuh (IMT) Terhadap Power Otot Tungkai Siswa SMP Negeri 2 Tegallalang*. Tesis, Penelitian dan Evaluasi Pendidikan Program Pascasarjana, Universitas Pendidikan Ganesha.

Tesis ini sudah disetujui dan diperiksa oleh pembimbing I: Prof. Dr. I Gusti Lanang Agung Parwata, S. Pd., M. Kes dan Pembimbing II: Dr. Ir. I Gede Ratnaya, S. T., M. Pd., MCE., IPM

Kata-kata Kunci: pelatihan pliometrik, *box jump*, indeks massa tubuh, *power* otot tungkai, Two-Way ANOVA.

Penelitian ini bertujuan untuk menganalisis pengaruh metode pelatihan fisik (pliometrik *box jump* vs konvensional) dan Indeks Massa Tubuh (IMT Normal vs *Overweight*) terhadap peningkatan *power* otot tungkai siswa. Penelitian ini menggunakan pendekatan kuantitatif dengan jenis penelitian eksperimen semu (*quasi-experiment*) menggunakan desain faktorial 2×2 . Data dikumpulkan melalui pengukuran antropometri Indeks Massa Tubuh (IMT) dan instrumen tes *power* otot tungkai menggunakan *vertical jump test*, dengan jumlah sampel sebanyak 200 responden siswa SMP Negeri 2 Tegallalang. Analisis data dilakukan menggunakan Analisis Varians Dua Jalur (*Two-Way ANOVA*) dengan bantuan aplikasi IBM SPSS Statistics. Hasil penelitian menunjukkan bahwa Pelatihan *box jump* meningkatkan *power* otot tungkai secara signifikan lebih tinggi dibanding metode konvensional ($F = 595,407$; $p < 0,001$). Kemudian tidak terdapat pengaruh interaksi yang signifikan antara metode pelatihan dan IMT ($F = 0,462$; $p = 0,498$). Lalu pada kelompok IMT Normal, pelatihan *box jump* lebih superior dibanding metode konvensional ($p < 0,001$). Serta pada kelompok IMT *Overweight*, pelatihan *box jump* tetap menghasilkan peningkatan *power* yang signifikan lebih tinggi dibanding konvensional ($p < 0,001$). Kesimpulannya, keunggulan pelatihan pliometrik *box jump* bersifat universal tanpa dipengaruhi status berat badan siswa. Peneliti selanjutnya disarankan mengkaji variasi tinggi kotak atau persentase lemak tubuh.

ABSTRACT

I Wayan Diasa (2026), *The Influence of Box Jump Plyometric Training Method and Body Mass Index (BMI) on Students' Leg Muscle Power in SMP Negeri 2 Tegallalang*. Thesis, Educational Research and Evaluation of Postgraduate Program, Ganesha University of Education.

This thesis has been approved and examined by Advisor I: Prof. Dr. I Gusti Lanang Agung Parwata, S. Pd., M. Kes and Advisor II: Dr. Ir. I Gede Ratnaya, S. T., M. Pd., MCE., IPM.

Keywords: plyometric training, box jump, body mass index, leg muscle power, Two-Way ANOVA.

This study aimed to analyze the influence of physical training methods (plyometric box jump vs conventional) and Body Mass Index (Normal vs Overweight BMI) on the improvement of students' leg muscle power. This study employed a quantitative approach with a quasi-experimental research design using a 2 x 2 factorial design. Data were collected through Body Mass Index (BMI) anthropometric measurements and a leg muscle power test utilizing the vertical jump test, with a total sample of 200 student respondents from SMP Negeri 2 Tegallalang. Data analysis was conducted using Two-Way Analysis of Variance (Two-Way ANOVA) with the assistance of IBM SPSS Statistics software. The results showed that box jump training significantly increased leg muscle power higher than the conventional method ($F = 595.407$; $p < 0.00$). Furthermore, there was no significant interaction effect between the training methods and BMI ($F = 0.462$; $p = 0.498$). Additionally, in the Normal BMI group, box jump training was more superior compared to the conventional method ($p < 0.001$). Moreover, in the Overweight BMI group, box jump training still resulted in a significantly higher increase in power than the conventional method ($p < 0.001$). In conclusion, the superiority of box jump plyometric training is universal without being influenced by the students' body weight status. Future researchers are suggested to examine variations in box height or body fat percentage.