

ABSTRAK

Verdino Gilang Retama. 2026. Pengaruh Latihan *Resistance Band* Dan Botol Berisi Pasir Terhadap *Power* Otot Lengan (Studi Pada Pemain Klub PBV Gareno Madiun). Skripsi. Ilmu Keolahragaan, Ilmu Kesehatan dan Sains, Universitas PGRI Madiun. Program Sarjana S-1. Pembimbing (I) Drs. Lukas Susanto, M.Kes. Pembimbing (II) Ghon Lisdiantoro, S.Pd.,M.Or.

Power otot lengan merupakan komponen kondisi fisik yang sangat penting dalam permainan bola voli karena berperan dalam pelaksanaan servis, *smash*, dan *passing*. Berdasarkan hasil observasi di Klub PBV Gareno Madiun, masih terdapat pemain yang memiliki *power* otot lengan rendah sehingga pukulan servis dan *smash* kurang maksimal. Selain itu, program latihan yang diterapkan masih kurang bervariasi sehingga diperlukan metode latihan yang lebih efektif. Penelitian ini bertujuan untuk mengetahui pengaruh latihan *resistance band*, pengaruh latihan botol berisi pasir, serta perbedaan efektivitas kedua metode latihan terhadap peningkatan *power* otot lengan pemain Klub PBV Gareno Madiun. Penelitian ini menggunakan pendekatan kuantitatif dengan jenis penelitian eksperimen dan desain *Two Group Pretest–Posttest Design*. Populasi penelitian berjumlah 90 atlet aktif PBV Gareno Madiun, sedangkan sampel sebanyak 32 atlet putra usia 12–18 tahun yang dipilih menggunakan teknik *purposive sampling*. Data diperoleh melalui tes *Two-Hand Medicine Ball Put* yang dilaksanakan sebelum dan sesudah perlakuan. Analisis data dilakukan menggunakan statistik deskriptif, uji normalitas *Shapiro–Wilk*, uji *homogenitas Levene*, *paired sample t-test*, dan *independent sample t-test* pada selisih skor dengan bantuan *software* SPSS. Hasil penelitian menunjukkan bahwa latihan *resistance band* dan latihan botol berisi pasir sama-sama memberikan pengaruh yang signifikan terhadap peningkatan *power* otot lengan pemain Klub PBV Gareno Madiun. Selain itu, terdapat perbedaan efektivitas antara kedua metode latihan, di mana latihan *resistance band* memberikan peningkatan *power* otot lengan yang lebih baik dibandingkan latihan botol berisi pasir.

Kata Kunci : *Resistance Band*, Botol Berisi Pasir, *Power* Otot Lengan, Bola Voli

ABSTRACT

Verdino Gilang Retama. 2026. *The Effect of Resistance Band and Sand-Filled Bottle Training on Arm Muscle Power (A Study of PBV Gareno Madiun Players)*. Thesis. Department of Sports Science, Health Sciences, and Science, Universitas PGRI Madiun. Undergraduate Program. Supervisor (I) Drs. Lukas Susanto, M.Kes. Supervisor (II) Ghon Lisdiantoro, S.Pd., M.Or.

Arm muscle power is a crucial component of physical fitness in volleyball because it plays a role in serving, smashing, and passing. Based on observations at the PBV Gareno Madiun Club, some players still have low arm muscle power, resulting in suboptimal serves and smashes. Furthermore, the training program implemented is still lacking in variety, requiring more effective training methods. This study aims to determine the effects of resistance band training, sand-filled bottle training, and the differences in effectiveness of the two training methods on increasing arm muscle power among PBV Gareno Madiun players. This study employed a quantitative approach with an experimental research type and a Two Group Pretest–Posttest Design. The study population consisted of 90 active athletes of PBV Gareno Madiun, while the sample size was 32 male athletes aged 12–18 years old, selected using a purposive sampling technique. Data were obtained through a Two-Hand Medicine Ball Put test administered before and after treatment. Data analysis was performed using descriptive statistics, the Shapiro–Wilk normality test, Levene's homogeneity test, paired sample t-test, and independent sample t-test on selisih skors using SPSS software. The results showed that resistance band training and sand bottle training both significantly increased arm muscle power in PBV Gareno Madiun players. Furthermore, there was a difference in effectiveness between the two training methods, with resistance band training providing a better increase in arm muscle power than sand bottle training.

Keywords : *Resistance Band, Sand Bottle, Arm Muscle Power, Volleyball*