

ABSTRAK

Liquitha Permata Br Ginting. NIM 6213121091 (2021). “Perbedaan Pengaruh Latihan *Weight Training* Menggunakan Beban Luar Dan Beban Dalam Terhadap Kekuatan Otot Lengan Dan Kemampuan *Handstand* Atlet Junior Putra PERSANI Kota Medan Tahun 2025”. (Pembimbing Skripsi: Haris Kurniawan) Skripsi: Fakultas Ilmu Keolahragaan, UNIMED 2026.

Pada cabang olahraga senam, salah satu komponen kondisi fisik yang dibutuhkan adalah Kekuatan. Kekuatan merupakan faktor yang sangat penting dalam meningkatkan kondisi fisik yang baik akan menunjang teknik yang baik. Latihan yang dapat digunakan adalah *weight training* menggunakan beban luar dan beban dalam. Latarbelakang penelitian ini adalah dari hasil observasi yang dilakukan oleh peneliti dimana atlet junior putra Persani Kota Medan memiliki kekuatan otot lengan yang lemah yaitu dalam kategori kurang sekali. Dengan lemahnya kekuatan otot lengan tersebut maka atlet tidak dapat melakukan gerakan dengan baik seperti salah satu contoh gerakan *handstand*.

Penelitian ini bertujuan untuk mengetahui perbedaan pengaruh latihan *weight training* beban luar dan beban dalam terhadap kekuatan otot lengan dan kemampuan *handstand* atlet junior putra Persani Kota Medan Tahun 2025. Metode penelitian yang digunakan eksperimen kuantitatif. Populasi penelitian berjumlah 8 atlet. Teknik pengambilan sampel menggunakan *purposive sampling*. Jumlah sampel 8 atlet. Hasil analisis hipotesis pertama diperoleh nilai $t_{hitung} 25,36 > t_{tabel} 3,18$ dengan demikian H_a diterima dan H_o ditolak artinya terdapat pengaruh yang signifikan latihan *weight training* beban luar terhadap kekuatan otot lengan sebesar 59,24% pada atlet junior putra Persani Kota Medan Tahun 2025. Hasil analisis hipotesis kedua diperoleh nilai $t_{hitung} 20,21 > t_{tabel} 3,18$ dengan demikian H_a diterima dan H_o ditolak artinya terdapat pengaruh yang signifikan latihan *weight training* beban dalam terhadap kekuatan otot lengan sebesar 92,37% pada atlet junior putra Persani Kota Medan Tahun 2025. Hasil analisis hipotesis ketiga diperoleh $t_{hitung} 0,06 < t_{tabel} 2,44$ dengan demikian H_a ditolak dan H_o diterima artinya latihan beban dalam secara signifikan lebih besar pengaruhnya daripada latihan *weight training* beban luar terhadap kekuatan otot lengan atlet junior putra Persani Kota Medan Tahun 2025. Hasil analisis hipotesis keempat diperoleh nilai $t_{hitung} 11,13 > t_{tabel} 3,18$ dengan demikian H_a diterima dan H_o ditolak artinya terdapat pengaruh yang signifikan latihan beban luar terhadap kemampuan *handstand* sebesar 24,37% pada atlet junior putra Persani Kota Medan Tahun 2025. Hasil analisis hipotesis kelima diperoleh nilai $t_{hitung} 3,75 > t_{tabel} 3,18$ dengan demikian H_a diterima dan H_o ditolak artinya terdapat pengaruh yang signifikan latihan beban dalam terhadap kemampuan *handstand* sebesar 11,52% pada atlet junior putra Persani Kota Medan Tahun 2025. Hasil analisis hipotesis keenam diperoleh $t_{hitung} 0,03 < t_{tabel} 2,44$ dengan demikian H_a ditolak dan H_o diterima artinya bahwa latihan *weight training* beban dalam secara signifikan lebih besar pengaruhnya daripada latihan beban luar terhadap kekuatan otot lengan atlet junior putra Persani Kota Medan Tahun 2025.

Kata Kunci: *Weight Training*, Beban Luar, Beban Dalam, Kekuatan Otot Lengan, *Handstand*.

ABSTRACT

Liquitha Permata Br Ginting. NIM 6213121091 (2021). “The Difference in the Effect of External and Internal Weight Training on Arm Muscle Strength and Handstand Ability of Male Junior Athletes of PERSANI Medan City in 2025.” (Thesis Advisor: Haris Kurniawan) Thesis: Faculty of Sports Science, State University of Medan (UNIMED), 2026.

In the sport of gymnastics, one of the essential components of physical fitness required is strength. Strength plays a very important role because having good physical condition supports the development of proper technique. One of the training methods that can be used to develop strength is weight training, which can be performed using external or internal loads. The background of this research is based on the results of observations conducted by the researcher, which showed that the male junior athletes of Persani Medan City had weak arm muscle strength, categorized as very poor. Due to this lack of arm muscle strength, the athletes were unable to perform movements properly, such as the handstand.

This study aims to determine the difference in the effects of external weight training and internal weight training on arm muscle strength and handstand ability in male junior athletes of Persani Kota Medan in 2025. The research method used was quantitative experimentation. The research population consisted of 8 athletes. The sampling technique used was purposive sampling. The sample size was 8 athletes. The results of the first hypothesis analysis obtained a t -value of $25.36 > t\text{-table } 3.18$, thus H_a was accepted and H_o was rejected, meaning that there was a significant effect of external weight training on arm muscle strength of 59.24% in male junior athletes of Persani Kota Medan in 2025. The results of the second hypothesis analysis obtained a t -value of $20.21 > t\text{-table } 3.18$, thus H_a was accepted and H_o was rejected, meaning that there was a significant effect of internal weight training on arm muscle strength of 92.37% in male junior athletes of Persani Medan City in 2025. The results of the third hypothesis analysis obtained a t -value of $0.06 < t\text{-table } 2.44$, thus H_a was rejected and H_o was accepted, meaning that internal weight training has a significantly greater effect than external weight training on the arm muscle strength of male junior athletes of Persani Kota Medan in 2025. The results of the fourth hypothesis analysis obtained a t -value of $11.13 > t\text{-table } 3.18$, thus H_a was accepted and H_o was rejected, meaning that there was a significant effect of external load training on handstand ability of 24.37% in junior male athletes of Persani Kota Medan in 2025. The results of the fifth hypothesis analysis obtained a t -value of $3.75 > t\text{-table } 3.18$, thus H_a was accepted and H_o was rejected, meaning that there was a significant effect of indoor weight training on handstand ability of 11.52% in male junior athletes of Persani Kota Medan in 2025. The results of the sixth hypothesis analysis obtained a t -value of $0.03 < t\text{-table } 2.44$, thus H_a was rejected and H_o was accepted, meaning that weight training significantly has a greater effect than external weight training on the arm muscle strength of male junior athletes of Persani Kota Medan in 2025.

Keywords: *Weight Training, External Load, Internal Load, Arm Muscle Strength, Handstand.*