

ABSTRAK

Aulia Habib (Nim : 6191121004), “Pengaruh Latihan *Mountain Climber* & Latihan *Hip Dip Plank* Terhadap *Power* Otot Lengan Pada Atlet Renang Gaya Bebas Umur 7-13 Tahun *Sailfish Swimming Club* Tahun 2025”.

(Pembimbing : Basyaruddin Daulay)

Skripsi : Pendidikan Kepelatihan Olahraga, Fakultas Ilmu Keolahragaan, Universitas Negeri Medan

Penelitian ini bertujuan untuk mengetahui pengaruh latihan *mountain climber* dan latihan *hip dip plank* terhadap peningkatan *power* otot lengan pada atlet renang gaya bebas usia 7–13 tahun di *Sailfish Swimming Club* tahun 2025. *Power* otot lengan merupakan komponen kondisi fisik yang sangat penting dalam renang gaya bebas, khususnya pada fase *pull* dan *push* yang menentukan efektivitas dorongan ke depan. Berdasarkan hasil observasi awal, ditemukan bahwa kemampuan *pull* atlet masih kurang optimal sehingga diperlukan metode latihan yang aman, efektif, dan sesuai dengan karakteristik usia anak. Metode penelitian yang digunakan adalah metode eksperimen dengan desain *pre-test dan post-test*. Populasi dalam penelitian ini adalah seluruh atlet renang gaya bebas usia 7–13 tahun *Sailfish Swimming Club*, dengan sampel yang dibagi ke dalam dua kelompok perlakuan, yaitu kelompok latihan *mountain climber* dan kelompok latihan *hip dip plank*. Instrumen penelitian menggunakan AAHPERD Medicine *Ball Throw Test* untuk mengukur *power* otot lengan. Data yang diperoleh dianalisis menggunakan uji normalitas, uji homogenitas, dan uji hipotesis.

Hasil penelitian menunjukkan bahwa latihan *mountain climber* dan latihan *hip dip plank* sama-sama memberikan pengaruh yang signifikan terhadap peningkatan *power* otot lengan atlet renang gaya bebas usia 7–13 tahun. Namun, hasil pengujian hipotesis menunjukkan bahwa latihan *mountain climber* memberikan peningkatan *power* otot lengan yang lebih besar dibandingkan latihan *hip dip plank*. Hal ini disebabkan oleh karakteristik latihan *mountain climber* yang bersifat dinamis dan melibatkan kontraksi otot lengan serta inti tubuh secara simultan. Berdasarkan hasil penelitian tersebut, dapat disimpulkan bahwa latihan *mountain climber* dan *hip dip plank* efektif digunakan sebagai alternatif latihan untuk meningkatkan *power* otot lengan atlet renang usia dini, dengan latihan *mountain climber* sebagai metode yang lebih dominan. Penelitian ini diharapkan dapat menjadi referensi bagi pelatih dalam menyusun program latihan yang aman, variatif, dan berbasis ilmiah bagi atlet renang usia anak.

Kata kunci: *Mountain Climber*, *Hip Dip Plank*, *Power* Otot Lengan, Renang Gaya Bebas.

ABSTRAK

Aulia Habib (NIM: 6191121004), "The Effect of Mountain Climber Training and Hip Dip Plank Training on Arm Muscle Power in Freestyle Swimmers Aged 7-13 Years at the Sailfish Swimming Club in 2025."

(Supervisor: Basyaruddin Daulay)

Thesis: Sports Coaching Education, Faculty of Sport Science, Medan State University

This study aims to examine the effect of *mountain climber* and *hip dip plank* exercises on the improvement of arm muscle power in freestyle swimming athletes aged 7–13 years at *Sailfish Swimming Club* in 2025. Arm muscle power is a crucial physical component in freestyle swimming, particularly during the *pull* and *push* phases that determine propulsion efficiency. Based on preliminary observations, it was found that athletes' pulling ability was still suboptimal, indicating the need for safe, effective, and age-appropriate training methods. This research employed an experimental method using a *pre-test and post-test* design. The population consisted of all freestyle swimming athletes aged 7–13 years at *Sailfish Swimming Club*, with the sample divided into two treatment groups: the *mountain climber* exercise group and the *hip dip plank* exercise group. Arm muscle power was measured using the AAHPERD Medicine Ball Throw Test. Data were analyzed through normality tests, homogeneity tests, and hypothesis testing.

The results showed that both *mountain climber* and *hip dip plank* exercises had a significant effect on improving arm muscle power in freestyle swimming athletes aged 7–13 years. However, hypothesis testing indicated that the *mountain climber* exercise resulted in a greater improvement in arm muscle power compared to the *hip dip plank* exercise. This finding is attributed to the dynamic nature of the *mountain climber* exercise, which simultaneously engages the arm muscles and core muscles. In conclusion, *mountain climber* and *hip dip plank* exercises are effective training alternatives for improving arm muscle power in young freestyle swimming athletes, with the *mountain climber* exercise demonstrating a more dominant effect. This study is expected to serve as a scientific reference for coaches in designing safe, varied, and evidence-based training programs for young swimmers.

Keywords: Mountain Climber, Hip Dip Plank, Arm Muscle Power, Freestyle Swimming.