

ABSTRAK

PENGARUH PROGRAM LATIHAN POWER OTOT TUNGKAI SERTA POWER OTOT LENGAN DI AIR DAN DI DARAT TERHADAP KEMAMPUAN KECEPATAN RENANG GAYA BEBAS 50 METER PADA PESERTA DIDIK SWIMMING CLUB GURU RENANG LAMPUNG (GRL)

Oleh

I WAYAN PRIMA TERUNA

Penelitian ini bertujuan untuk mengetahui pengaruh program latihan *power* otot tungkai dan *power* otot lengan yang dilakukan di air dan di darat terhadap kemampuan renang gaya bebas 50 meter pada peserta didik *Swimming Club* Guru Renang Lampung (GRL). Penelitian ini menggunakan metode eksperimen semu dengan desain *two groups pretest–posttest*. Sampel penelitian berjumlah 22 peserta didik yang dibagi menjadi dua kelompok, yaitu kelompok latihan di air dan kelompok latihan di darat. Instrumen penelitian berupa tes kecepatan renang gaya bebas 50 meter dengan satuan waktu detik. Analisis data dilakukan menggunakan uji normalitas, uji homogenitas, serta uji hipotesis menggunakan *paired sample t-test* dan *independent sample t-test* pada taraf signifikansi 0,05. Hasil uji *paired sample t-test* menunjukkan bahwa latihan di air memberikan pengaruh yang signifikan ($t = 8,696$; $p < 0,05$), dan latihan di darat juga memberikan pengaruh yang signifikan terhadap kemampuan renang gaya bebas 50 meter ($t = 6,185$; $p < 0,05$). Selanjutnya, hasil uji *independent sample t-test* menunjukkan bahwa tidak terdapat perbedaan pengaruh yang signifikan antara kelompok latihan di darat dan kelompok latihan di air ($t = 0,278$; $p > 0,05$). Dengan demikian, latihan *power* otot tungkai dan *power* otot lengan baik di air maupun di darat sama-sama efektif dalam meningkatkan kemampuan renang gaya bebas 50 meter.

Kata kunci: *power* otot tungkai, *power* otot lengan, latihan di darat, latihan di air, renang gaya bebas 50 meter.

ABSTRACT

THE EFFECTS OF AQUATIC AND LAND-BASED LOWER AND UPPER LIMB MUSCLE POWER TRAINING PROGRAMS ON 50 METER FREESTYLE SWIMMING SPEED PERFORMANCE OF GURU RENANG LAMPUNG (GRL) SWIMMING CLUB ATHLETES

By

I WAYAN PRIMA TERUNA

This study aimed to determine the effect of lower limb muscle power and upper limb muscle power training programs conducted in water and on land on 50-meter freestyle swimming performance among students of the Guru Renang Lampung (GRL) Swimming Club. This research employed a quasi-experimental method with a two-groups pretest–posttest design. The sample consisted of 22 students who were divided into two groups: a water-based training group and a land-based training group. The research instrument was a 50-meter freestyle swimming speed test measured in seconds. Data were analyzed using normality tests, homogeneity tests, and hypothesis testing through paired sample t-tests and an independent sample t-test at a significance level of 0.05. The results of the paired sample t-test indicated that water-based training had a significant effect ($t = 8.696$; $p < 0.05$), and land-based training also had a significant effect on 50-meter freestyle swimming performance ($t = 6.185$; $p < 0.05$). Furthermore, the results of the independent sample t-test showed that there was no significant difference in the effect between the land-based training group and the water-based training group ($t = 0.278$; $p > 0.05$). Therefore, lower limb and upper limb muscle power training conducted both in water and on land are equally effective in improving 50-meter freestyle swimming performance.

Keywords: *lower limb muscle power, upper limb muscle power, land-based training, water-based training, 50-meter freestyle swimming.*