ABSTRAK

HUBUNGAN ANTARA KEKUATAN OTOT LENGAN, *POWER* OTOT TUNGKAI DAN FLEKSIBILITAS TERHADAP KECEPATAN RENANG GAYA BEBAS 25 METER PADA *CLUB* RENANG TIRTA PAHOMAN

Oleh

Tobby Maulana

Tujuan penelitian ini adalah untuk mengetahui hubungan antara kekuatan otot lengan, *power* otot tungkai dan fleksibilitas terhadap kecepatan renang gaya bebas 25 meter.
Metode yang digunakan pada penelitian ini adalah *korelasi* dan *regresi*. Sampel yang digunakan sebanyak 10 atlet putra dan 10 atlet putri. Teknik pengambilan data tes kekuatan otot lengan menggunakan *push and pull dynamometer*, tes *power* otot tungkai menggunakan *standing broad jump*, dan tes fleksibilitas menggunakan *sit and reach.* Teknik pengambilan data tes renang gaya bebas menggunakan *stopwatch*. Teknik analisis data menggunakan uji normalitas kemudian diuji dengan teknik analisis korelasi *product moment* diuji signifikan.
Hasil penelitian menunjukkan (1) ada hubungan antara kekuatan otot lengan putra dan putri terhadap kecepatan renang gaya bebas 25 meter dengan rhitung 0,984 > rtabel 0,707 (Putra) & rhitung 0,756 > rtabel 0,707 (Putri) , (2) ada hubungan antara *power* otot tungkai terhadap kecepatan renang gaya bebas 25 meter dengan rhitung 0,953 > rtabel 0,707 (Putra) & rhitung 0,755 > rtabel 0,707 (Putri) , (3) tidak ada hubungan antara fleksibilitas terhadap kecepatan renang gaya bebas 25 meter dengan rhitung 0,379 < rtabel 0,707 (Putra) & rhitung 0,643 < rtabel 0,707 (Putri) , (4) ada hubungan antara kekuatan otot lengan, *power* otot tungkai dan fleksibilitas terhadap kecepatan renang gaya bebas 25 meter dengan fhitung 179,329 > ftabel 3,71 (Putra) & fhitung 8,865 > ftabel 3,71 (Putri) . Dapat disimpulkan bahwa ada hubungan yang signifikan antara kekuatan otot lengan, *power* otot tungkai, dan hubungan yang rendah fleksibilitas terhadap kecepatan renang gaya bebas 25 meter.

Kata Kunci : kekuatan otot lengan, *power* otot tungkai, fleksibilitas, kecepatan renang gaya bebas 25 meter

ABSTRACT

RELATIONSHIP BETWEEN ARM MUSCLE STRENGTH, LEMB MUSCLE POWER AND FLEXIBILITY TO SPEED SWIMMING FRONT CRAWL 5 METERS ON TIRTA PAHOMAN SWIMMING CLUB

By

Tobby Maulana

The purpose of this study was to determine the relationship between arm muscle strength, leg muscle power and flexibility on the speed of 25 meter front crawl swimming. This method used in this research is correlation and regression. This samples used were 10 male athletes and 10 female athletes. Data collection techniques for testing arm muscle strength used a push and pull dynamometer, leg muscle power tests using a standing broad jump, and flexibility tests using sit and reach. front crawl swimming test data collection technique using a stopwatch. Data analysis technique used the normality test and then tested with the product moment correlation analysis technique which was tested to be significant. The results showed (1) there was a relationship between male and female arm muscle strength on the speed of 25-meter front crawl swimming with rcount 0.984 > rtable 0.707 (Men) & rcount 0.756 > rtable 0.707 (Women), (2) there was a relationship between leg muscle power on the speed of 25 meter front crawl swimming with rcount 0.953 > rtable 0.707 (Men) & rcount 0.755 > rtable 0.707 (Women), (3) there is no relationship between flexibility and rcount 25 meter f front crawl with rcount 0.379 < rtable 0.707 (Men) & rcount 0.643 < rtable 0.707 (Women), (4) there is a relationship between arm muscle strength, leg muscle power and flexibility on the speed of 25 meter front crawl swimming with fcount 179.329 > ftable 3.71 (Men) & fcount 8.865 > ftable 3, 71 (Daughter) . It can be concluded that there is a significant relationship between arm muscle strength, leg muscle power, and a low flexibility relationship with the speed of 25 meter front crawl swimming.

Keywords: *arm muscle strength, leg muscle power, flexibility, 25 meter front crawl swimming speed*