

ABSTRAK

YULI SETIANINGRUM “Relationship Of Muscle Strength Arm And Arm With a Number of Swimming Achievements Stroke 50 Meter Freestyle Swimming Club athletes At State University of Jakarta”. SKRIPSI. Jakarta : Program Studi Ilmu Keolahragaan Konsentrasi Kepelatihan Olahraga, Jurusan Olahraga Prestasi, Fakultas Ilmu Keolahragaan, Universitas Negeri Jakarta, Januari 2016.

This research aims (1) to find out the relationship between the strength of the arm muscles with feats swimming 50 m freestyle (x 1). (2) the relationship of number of swimming accomplishments arm stroke 50 m freestyle (x 2). (3) the relationship between muscle strength and arm, the number of swimming accomplishments arm stroke 50 meter freestyle Swimming Club athletes at State University of Jakarta.

This research was carried out in the pool Teen Rink in East Jakarta, streets of Otolskandar Dinata. In June 2015. The research was implemented on 1 June 2015. The sample of this research is the athletes Swimming Club State University of Jakarta. This research uses descriptive method done with engineering studies korelasional, with the number of samples that used as many as 20 athletes swimming pool athletes in particular who have been following the National Championship from 40 the number of the existing Swimming Clubs in the State University of Jakarta. This test uses an instrument of Vasa Ergometer test, Sony Handycam, and test taking time with a distance of 50 metres freestyle using the stopwatch.

Test data analysis research results showed that (1) there is a meaningful contribution between the muscle strength of the arm (x 1) and achievement of swimming the 50-meter freestyle (Y) of the correlation coefficients keberartian

test above seen that $t_{hitung} = 2.91$ greater than $t_{tabel} = 2.10$ means the correlation coefficient $r_{y1} = 0.56$ is the means, thus the hypothesis stating there is a relationship between the strength of the arm muscles with feats swimming 50 m freestyle is supported by data researchers. Coefficient determinasi the power of the arm muscles with results $(r_{y1})^2 = 0.319$ which means to have a relationship of 31.39% is influenced by the amount of stroke sleeves (x 1) (2) with the contribution of the meaning between the number of swimming accomplishments arm stroke 50 m freestyle (y) keberartian test koefisien correlation above seen that $t_{hitung} 4.64$ greater than $t_{tabel} = 2.10$ means the correlation coefficient $r_{y2} = 0.73$ is meaningless. Thus hepotesis stated there is a relationship between the number of swimming accomplishments arm stroke 50 metres freestyle backed up data by researchers. The coefficient of determination of the amount of results with arm stroke $(r_{y2})^2 = 0.73$ which means have a relationship of 54.45% is influenced by the amount of arm stroke (x 2). 3 there is a meaningful contribution between the muscle strength of the arm (x 1) and the number of arms stroke (x 2) with a 50-metre swimming achievements freestyle (Y), the correlation coefficient keberartian test above seen that $t_{hitung} = 9.02$ greater than $t_{tabel} =$ the coefficient means 3.58 $r_{y1} = 2.90$ meaning. Determinant of the coefficients $(r_{y1.2})^2 = 8,41$ having relationships of 53.29% yield with the achievements of the 50-meter freestyle swimming is influenced by the strength of the muscles of the arm and forearm stroke amount.