

## ABSTRAK

**ALI SANGAP HARAHAHAP. Hubungan Antara Power Otot Lengan Dan Koordinasi Mata Tangan Dengan Akurasi Passing Rugby Universitas Negeri Jakarta 2019.**

Tujuan penelitian ini adalah untuk mengetahui: (1) Hubungan antara *power* otot lengan dengan akurasi *passing* rugby (2) Hubungan antara koordinasi mata tangan dengan akurasi *passing* rugby (3) Hubungan antara *power* otot lengan dan koordinasi mata tangan dengan akurasi *passing* rugby Universitas Negeri Jakarta.

Penelitian ini dilaksanakan pada bulan Desember 2018 di Kampus B Fakultas Ilmu Keolahragaan Universitas Negeri Jakarta, menggunakan metode penelitian deskriptif dengan teknik korelasi. Populasi dalam penelitian ini adalah mahasiswa atlet rugby Universitas Negeri Jakarta yang masih aktif berlatih, teknik pengambilan sampel menggunakan *sampling jenuh*, dimana semua anggota populasi digunakan sebagai sampel. Sampel dalam penelitian ini berjumlah 30 orang. Instrumen penelitian ini yaitu: (1) tes *standing medicine ball side throw* (2) tes lempar tangkap bola tenis (3) tes akurasi *passing*.

Analisa data dalam penelitian ini menggunakan teknik korelasi dan regresi linier ganda dengan mencari persamaan regresi dan koefisien korelasi, berdasarkan analisis data penelitian diperoleh hasil sebagai berikut: (1) Hubungan antara *power* otot lengan dengan akurasi *passing* rugby dinyatakan oleh persamaan regresi  $Y = 70.40 + 0.408 X_1$  dengan nilai korelasi  $r_{y_1} = 0.859$ , terlihat bahwa  $t_{hitung} = 2.366$  lebih besar dari  $t_{tabel} = 1.701$ . Berdasarkan perhitungan tersebut, maka  $H_0$  ditolak dan  $H_1$  diterima yang menyatakan terdapat hubungan yang signifikan antara *power* otot lengan

dengan akurasi *passing* rugby didukung oleh data penelitian, dan koefisien determinasi = 0.1664 hal ini 16.64% akurasi *passing* dipengaruhi oleh *power* otot lengan. (2) Hubungan antara koordinasi mata tangan dengan akurasi *passing* rugby dinyatakan oleh persamaan regresi  $Y = 7.025 + 0.859 X_2$  dengan nilai korelasi  $r^2 = 0.165$ , terlihat bahwa  $t_{hitung} = 8.897$  lebih besar dari  $t_{tabel} = 1.701$ . Berdasarkan perhitungan tersebut, maka  $H_0$  ditolak dan  $H_1$  diterima yang menyatakan terdapat hubungan yang signifikan antara koordinasi mata tangan dengan akurasi *passing* rugby didukung oleh data penelitian dan koefisien determinasi = 0,7378 hal ini 73,78% akurasi *passing* dipengaruhi oleh koordinasi mata tangan. (3) Hubungan antara *power* otot lengan dan koordinasi mata tangan dengan akurasi *passing* rugby dinyatakan oleh persamaan regresi  $Y = 6.35 + 0.033 X_1 + 0.844 X_2$  dengan nilai korelasi  $r_{1-2} = 0.899$ , terlihat bahwa  $f_{hitung} = 56.93$  lebih besar dari  $f_{tabel} = 3.35$ . Berdasarkan perhitungan tersebut, maka  $H_0$  ditolak dan  $H_1$  diterima yang menyatakan terdapat hubungan yang signifikan antara *power* otot lengan dan koordinasi mata tangan secara bersama-sama dengan akurasi *passing* rugby didukung oleh data penelitian dan koefisien determinasi = 0.8082 hal ini 80.82% akurasi *passing* dipengaruhi oleh *power* otot lengan dan koordinasi mata tangan.

## ABSTRACT

**ALI SANGAP HARAHAHAP. Relationship Between Arm Muscle Power And Hand Eye Coordination With Rugby Passing Accuracy, State University Of Jakarta 2019.**

The purpose of this study was to determine: (1) Relationship between arm muscle power and rugby passing accuracy (2) Relationship between hand eye coordination and rugby passing accuracy (3) Relationship between arm muscle power and hand eye coordination with rugby passing accuracy Jakarta State University.

This research was conducted in December 2018 at Campus B, Faculty of Sport Science, Jakarta State University, using descriptive research methods with correlation techniques. The population in this study were students of the Jakarta State University rugby athlete who were still actively practicing, sampling techniques using saturated sampling, where all members of the population were used as samples. The sample in this study amounted to 30 people. The instruments of this study are: (1) standing medicine ball side throw test (2) tennis ball throwing test (3) passing accuracy test.

Data analysis in this study uses correlation techniques and multiple linear regression by looking for regression equations and correlation coefficients, based on the analysis of research data obtained the following results: (1) The relationship between arm muscle power and rugby passing accuracy is expressed by the regression equation  $Y = 70.40 + 0.408 X_1$  with the correlation value  $r_{y_1} = 0.859$ , it appears that  $t_{count} = 2.366$  is greater than  $t_{table} = 1.701$ . Based on these calculations,  $H_0$  is rejected and  $H_1$  is accepted stating that there is a significant relationship between arm muscle

power and rugby passing accuracy supported by research data, and the coefficient of determination = 0.1664, this is 16.64% passing accuracy is influenced by arm muscle power. (2) The relationship between hand eye coordination and rugby passing accuracy is expressed by the regression equation  $Y = 7,025 + 0.859 X_2$  with a correlation value  $r_y^2 = 0.165$ , it can be seen that  $t$  count = 8.897 is greater than  $t$ .table = 1.701. Based on these calculations,  $H_0$  is rejected and  $H_1$  is accepted stating that there is a significant relationship between hand eye coordination and rugby passing accuracy supported by research data and the coefficient of determination = 0.7378 this is 73.78% passing accuracy is influenced by hand eye coordination. (3) The relationship between arm muscle power and hand eye coordination and rugby passing accuracy is expressed by the regression equation  $Y = 6.35 + 0.033 X_1 + 0.844 X_2$ . with a correlation value  $r_{y_{1-2}} = 0.899$ , it appears that  $f$  count = 56.93 is greater than  $f$ .table = 3.35. Based on these calculations,  $H_0$  is rejected and  $H_1$  is accepted stating that there is a significant relationship between arm muscle power and hand eye coordination together with accuracy of passing rugby supported by research data and the coefficient of determination = 0.8082 this is 80.82% passing accuracy is influenced by power arm muscles and eye hand coordination.