

ABSTRAK

HUBUNGAN KOORDINASI MATA TANGAN, KEKUATAN OTOT LENGAN DAN OTOT PERUT TERHADAP KEMAMPUAN LEMPAR LEMBING MAHASISWA PENJAS UNSOED ANGKATAN 2018

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Latar Belakang: Terdapat mahasiswa Penjas Unsoed yang masih mengalami kendala pada saat melakukan lempar lembing. Komponen kondisi fisik pada nomor lempar lembing adalah kekuatan, kecepatan, kelentukan, kelincahan, koordinasi serta keseimbangan. Penelitian ini bertujuan untuk mengetahui hubungan koordinasi mata tangan, kekuatan otot lengan dan kekuatan otot perut terhadap kemampuan lempar lembing serta seberapa besar pengaruh atau sumbangannya dari tiap-tiap variabel.

Metodologi: Penelitian ini merupakan penelitian korelasional dengan teknik pengumpulan data menggunakan tes dan pengukuran, jumlah sampel sebanyak 16 mahasiswa menggunakan teknik *purposive sampling*. Data dianalisis menggunakan uji statistik korelasi *pearson product moment*, uji korelasi ganda, uji regresi linear sederhana, uji regresi linear berganda, serta sumbangannya efektif dan sumbangannya relatif.

Hasil Penelitian: Hasil dari penelitian ini dapat diuraikan bahwa ada hubungan koordinasi mata tangan terhadap kemampuan lempar lembing dengan nilai $p = 0,00$, $r = 0,880$ dan $SE = 29,7\%$, ada hubungan kekuatan otot lengan terhadap kemampuan lempar lembing dengan nilai $p = 0,00$ $r = 0,812$, $SE = 22,6\%$, ada hubungan kekuatan otot perut terhadap kemampuan lempar lembing dengan nilai $p = 0,00$, $r = 0,906$, $SE = 40\%$, ada hubungan koordinasi mata tangan, kekuatan otot lengan dan kekuatan otot perut terhadap kemampuan lempar lembing dengan nilai $p = 0,00$ dan $r = 0,961$ serta nilai koefisien determinasi ke-tiga variabel bebas $R^2 = 0,923$ artinya kontribusi simultan sebesar 92,3%.

Kesimpulan: Berdasarkan penelitian yang telah dilakukan, dapat disimpulkan bahwa terdapat hubungan antara koordinasi mata tangan, kekuatan otot lengan dan kekuatan otot perut terhadap kemampuan lempar lembing.

Kata Kunci: Koordinasi Mata Tangan, Kekuatan Otot Lengan, Kekuatan Otot Perut, Lempar Lembing.

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ABSTRACT

THE RELATION OF EYE-HAND COORDINATION, ARM MUSCLE STRENGTH AND ABDOMINAL MUSCLES TO JAVELIN-THROWING ABILITY ON UNSOED PHYSICAL EDUCATION STUDENTS CLASS 2018

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Background: There are Unsoed's Physical Education students who still have trouble while doing the javelin-throw. The components of the physical condition in the javelin-throwing sport are strength, speed, flexibility, agility, coordination and balance. This research aims to determine the relation of eye-hand coordination, arm muscle strength and abdominal muscle strength to the ability to throw a javelin and how much the effect or contribution of each variable.

Methods: This research is a correlational research who use tests and measurements as techniques to collect the data. The number of samples is 16 students using purposive sampling technique. Data were analyzed using pearson product moment correlation test, multiple correlation test, simple linear regression test, multiple linear regression test, and effective contribution and relative contribution.

Result: The results of this research can be described that there is a relation between eye-hand coordination and javelin-throwing ability with $p = 0.00$, $r = 0.880$ and $SE = 29.7\%$, there is a relation between arm muscle strength and javelin-throwing ability with $p = 0.00$, $r = 0.812$, $SE = 22.6\%$, there is a relation between abdominal muscle strength and javelin-throwing ability with $p = 0.00$, $r = 0.906$, $SE = 40\%$, there is a relation between eye-hand coordination, arm muscle strength and abdominal muscles strength on the ability to throw a javelin with a value of $p = 0.00$ and $r = 0.961$ and the value of the coefficient of determination of the three independent variables $R^2 = 0.923$, it means that the simultaneous contribution is 92.3%.

Conclusion: Based on the research that has been done, it can be concluded that there is a relation between hand-eye coordination, arm muscle strength and abdominal muscle strength on the ability of javelin-throwing sport.

Keywords: Eye-Hand Coordination, Arm Muscle Strength, Abdominal Muscle Strength, Javelin Throw.

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