

ABSTRAK

HUBUNGAN KEKUATAN OTOT LENGAN DAN KOORDINASI MATA TANGAN TERHADAP KEMAMPUAN *FREE THROW* SISWA EKSTRAKURIKULER BOLA BASKET SMA NEGERI 4 PURWOKERTO

Latar Belakang: Penelitian ini dilatarbelakangi oleh hasil observasi yang menunjukkan persentase *free throw* pada uji coba tim basket SMA Negeri 4 Purwokerto sebesar 43,75%, dan persentase tembakan *air ball* sebesar 55,6%. Penelitian ini bertujuan untuk mengetahui hubungan antara kekuatan otot lengan dan koordinasi mata tangan terhadap kemampuan *shooting free throw*.

Metodologi Penelitian: Penelitian ini menggunakan metode kuantitatif korelasional dengan desain penelitian *cross sectional*. Sampel pada penelitian ini sebanyak 20 peserta siswa ekstrakurikuler bola basket SMA Negeri 4 Purwokerto dan menggunakan teknik pengambilan sampel *purposive sampling*. Instrumen pengukuran pada penelitian ini menggunakan tes *push up*, lempar tangkap bola tenis, dan *shooting free throw*. Analisis menggunakan SPSS versi 25.0 dengan teknik analisis data berupa uji normalitas dan linearitas, uji hipotesis pada penelitian ini menggunakan uji *pearson correlation*, uji korelasi ganda, dan perhitungan sumbangan efektif dan sumbangan relatif.

Hasil Penelitian: Kekuatan otot lengan terhadap kemampuan *shooting free throw* memiliki hubungan dengan menunjukkan hasil korelasi *pearson* sebesar 0,823. Koordinasi mata tangan terhadap kemampuan *shooting free throw* memiliki hubungan dengan menunjukkan nilai *pearson* sebesar 0,912. Kekuatan mata tangan dan koordinasi mata tangan memiliki hubungan terhadap kemampuan *shooting free throw* dengan koefisien korelasi sebesar 0,940. Sumbangan efektif dan sumbangan relatif kekuatan otot lengan adalah 27,7% dan 31,3%. Sumbangan efektif dan sumbangan relatif dari koordinasi mata tangan adalah 60,7% dan 68,7%.

Kesimpulan: Penelitian ini menghasilkan adanya hubungan antara kekuatan otot lengan dan koordinasi mata tangan terhadap kemampuan *shooting free throw*.

Kata Kunci: Bola basket, Kekuatan otot lengan, Koordinasi mata tangan, *Free throw*.

ABSTRAK

The Correlation between Arm Muscle Strength and Hand-Eye Coordination with *Free throw* Ability of Basketball Extracurricular Students at SMA Negeri 4 Purwokerto

Background: This research was based on observations showing a free throw percentage of 43.75% and an air ball shooting percentage of 55.6% during a basketball trial by the SMA Negeri 4 Purwokerto basketball team. This study aimed to determine the relationship between arm muscle strength and hand-eye coordination on free throw shooting ability

Research Methodology: This research used a quantitative correlational method with a cross-sectional research design. The sample in this study was 20 students of the basketball extracurricular program at SMA Negeri 4 Purwokerto and used a purposive sampling technique. The measurement instruments in this study used push-up tests, tennis ball throwing and catching, and free throw shooting. Analysis used SPSS version 25.0 with data analysis techniques in the form of normality and linearity tests. Hypothesis testing in this study used the Pearson correlation test, multiple correlation tests, and calculations of effective contributions and relative contributions.

Research Result: Arm muscle strength and free throw shooting ability have a relationship with the Pearson correlation result of 0.823. Hand-eye coordination and free throw shooting ability have a relationship with the Pearson correlation value of 0.912. Hand-eye strength and hand-eye coordination have a relationship with free throw shooting ability with a correlation coefficient of 0.940. The effective contribution and relative contribution of arm muscle strength are 27.7% and 31.3%. The effective contribution and relative contribution of hand-eye coordination are 60.7% and 68.7%.

Conclusion: This research found a relationship between arm muscle strength and hand-eye coordination and free throw shooting ability.

Keywords: Basketball, Arm muscle strength, Hand eye coordination, Free throw.