ABSTRAK

HUBUNGAN KOORDINASI MATA TANGAN DAN KEKUATAN OTOT LENGAN DENGAN KETEPATAN *FLYING SHOOT* BOLA TANGAN TIM *HANDBALL* PUTRA SMA N 4 PURWOKERTO

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Latar Belakang: *Handball* atau bola tangan merupakan suatu permainan yang melibatkan bola dilempar dan ditangkap menggunakan kedua tangan, dimainkan di lapangan dengan ukuran tertentu, baik dalam ruangan maupun luar ruangan. Beberapa teknik yang dapat dilakukan seperti *dribling, passing,* dan *Shooting*. Dalam mencapai teknik yang baik salah satunya dapat dilakukan koordinasi mata tangan dan kekuatan otot lengan. Berdasarkan observasi di SMA N 4 PURWOKERTO menunjukkan bahwa siswa masih kesulitan kurang dalamm melakukan salah satu teknik bola tangan yaitu *flying shoot* maka dari itu peneliti tertarik untuk meneliti hubungan koordinasi mata tangan dan kekuatan otot lengan terhadap ketepatan *flying shoot*.

Metodologi: Penelitian ini merupakan penelitian deskriptif kuantitatif dengan desain korelasional pendekatan *cross-sectional.* Sampel penelitian terdiri dari 16 atlet laki-laki bola tangan SMAN 4 Purwokerto berusia 17-19 tahun yang dipilih menggunakan teknik purposive sampling. Variabel yang diukur meliputi tes *two hand eye cordination*, tes *medicine ball*, dan tes *Shooting* target. Analisis data penelitian ini menggunakan uji normalitas *shapiro wilk*, uji linearitas, uji hipotesis seperti uji pearson product moment dan korelasi ganda, serta sumbangan efektif (SE) dan sumbangan relatif (SR).

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Hasil Penelitian: Hasil analisis menunjukkan adanya hubungan yang signifikan antara koordinasi mata tangan terhadap ketepatan *flying shoot*. ($r = 36{,}3\%$; $p < 0{,}05$), kekuatan otot lengan terhadap ketepatan *flying shoot*. ($r = 63{,}7\%$; $p < 0{,}05$), serta koordinasi mata tangan, dan kekuatan otot lengan, secara bersama memiliki hubungan terhadap ketepatan *flying shoot*. ($r = 81\%$. $p < 0{,}05$). Analisis regresi menunjukkan bahwa kekuatan otot lengan memiliki kontribusi terbesar terhadap ketepatan *flying shoot* dibandingkan koordinasi mata tangan.

Kesimpulan: Terdapat hubungan yang signifikan antara *power* otot lengan dan koordinasi mata-tangan terhadap ketepatan *flying shoot* pada atlet bola tangan SMAN 4 Purwokerto.

Kata Kunci: *Handball*, kekuatan otot lengan, koordinasi mata tangan, ketepatan *flying shoot*.

ABSTRACT

THE RELATIONSHIP BETWEEN EYE-HAND COORDINATION AND ARM MUSCLE STRENGTH WITH THE ACCURACY OF *FLYING SHOOT* OF THE BOYS' HANDBALL TEAM OF SMA N 4 PURWOKERTO

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***Background**: Handball is a game that involves throwing and catching a ball using both hands, played on a field with a certain size, both indoors and outdoors. Some techniques that can be done are dribbling, passing, and Shooting. In achieving good techniques, one of which is hand-eye coordination and arm muscle strength. Based on observations at* SMA N 4 PURWOKERTO*, it shows that students still have difficulty in doing one of the handball techniques, namely flying shoot, therefore researchers are interested in examining the relationship between hand-eye coordination and arm muscle strength to the accuracy of flying shoot.*

***Methodology**: This study is a quantitative descriptive study with a correlational design of a cross-sectional approach. The sample of the study consisted of 16 male handball athletes of SMAN 4 Purwokerto aged 17-19 years who were selected using a purposive sampling technique. The variables measured included the hand eye coordination test, push up test, and target Shooting test. Data analysis of this study used the Shapiro Wilk normality test, linearity test, hypothesis test such as the Pearson product moment test and multiple correlation, as well as effective contribution (SE) and relative contribution (SR).*

***Research Results**: The results of the analysis showed a significant relationship between hand-eye coordination and flying shoot accuracy. ($r = 36.3\%$; $p < 0.05$), arm muscle strength and flying shoot accuracy. ($r = 63.7\%$; $p < 0.05$), and hand-eye coordination and arm muscle strength, together have a relationship to flying shoot accuracy. ($r = 81\%$. $p < 0.05$). Regression analysis showed that arm muscle strength has the greatest contribution to flying shoot accuracy compared to hand-eye coordination.*

***Conclusion**: There is a significant relationship between arm muscle power and eye-hand coordination on flying shoot accuracy in handball athletes at SMAN 4 Purwokerto.*

***Keywords**: Handball, arm muscle strength, hand eye coordination, flying shoot accuracy*.