

## ABSTRAK



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**HUBUNGAN RESIKO CEDERA MUSKULOSKELETAL EKSTREMITAS BAWAH DENGAN KEKUATAN *CORE STABILITY* PADA PEMAIN BASKET SEKOLAH MENENGAH ATAS (SMA) USIA 15-17 TAHUN**

Terdiri dari VI Bab, 88 Halaman, 34 Gambar, 11 tabel, 7 grafik, 3 lampiran

**Tujuan:** Mengetahui hubungan antara resiko cedera muskuloskeletal ekstremitas bawah dengan kekuatan *core stability* pada pemain basket Sekolah Menengah Atas (SMA) usia 15-17 tahun.

**Metode:** Penelitian ini merupakan penelitian non eksperimental untuk hubungan antara resiko cedera muskuloskeletal ekstremitas bawah dengan kekuatan *core stability*. Sampel terdiri dari 32 orang yang diambil berdasarkan rumus *Pocock*, setiap sampel dilakukan pengukuran kekuatan *core stability* dan pengukuran resiko cedera. Pengukuran kekuatan *core stability* menggunakan *prone plank core stability test* dan untuk resiko cedera muskuloskeletal bawah menggunakan *functional movement screen (FMS)*.

**Hasil:** Hasil uji normalitas dengan *Kolmogorov-Smirnov* menunjukkan data terdistribusi normal dengan nilai *p-value* 0,2000 untuk *core stability* dan 0,072 untuk nilai FM. Uji Korelasi dengan Uji *Pearson Product Moment* didapatkan hasil *p-value* antara *core stability* dan FMS sebesar 0,03 yang menunjukkan adanya hubungan antara kekuatan *core stability* terhadap resiko cedera ekstremitas bawah. Analisa regresi digunakan untuk melihat sejauh mana pengaruh variabel independen terhadap variabel dependen setelah diketahui adanya hubungan. Dengan melihat koefisien determinasi ( $R^2$ ) didapatkan pengaruh variabel independen (*core*) terhadap variabel dependen (FMS) sebesar 25,4%.

**Kesimpulan:** Terdapat hubungan antara resiko cedera muskuloskeletal ekstremitas bawah dengan kekuatan *core stability* pada pemain basket Sekolah Menengah Atas (SMA) usia 15-17 tahun.

**Kata kunci :** *core stability*, resiko cedera ekstremitas bawah, pemain basket

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**THE RELATIONSHIP BETWEEN LOWER EXTREMITY MUSCULOSKELETAL RISK INJURY AND CORE STABILITY STRENGTH IN SENIOR HIGH SCHOOL BASKETBALL PLAYER AGED 15-17 YEARS OLD**

Consist of VI Chapters, 88 Pages, 34 Pictures, 11 Tables, 7 Charts, 3 attachments

**Objective** : Determine the relationship between lower extremity musculoskeletal risk injury and core stability strength in senior high school basketball player aged 15-17 years old

**Method** : This study is a non-experimental research on the relationship between the risk of lower extremity musculoskeletal injury with core strength stability. The sample consisted of 32 people who were taken by the formula Pocock, each sample were measured core stability strength and risk of injury. Measurement of the strength of core stability using the prone plank core stability test and for lower extremity risk injury using functional movement screen (FMS).

**Result** : The test results with the *Kolmogorov-Smirnov* normality test indicates the data are normally distributed with p-value 0.2000 for core stability and 0,072 to the value of FMS. Correlation test with *Pearson Product Moment* test p-value is obtained between core stability and FMS 0,03 which shows the relationship between the strength of core stability to the risk of lower extremity injury. Regression analysis is used to see how far the influence of independent variables on the dependent variable after a known relationship. By looking at the coefficient of determination ( $R^2$ ) obtained influence of independent variables (core) to the dependent variable (FMS) amounted to 25.4%.

**Conclusion** : There is a relationship between the risk of musculoskeletal injury of the lower limb with core strength stability at high school basketball player aged 15-17 years.

**Keyword** : core stability, lower extremity musculoskeletal risk injury, basketball player