

ABSTRAK
HUBUNGAN KEBUGARAN YANG DIUKUR DENGAN TES *TREADMILL*
METODE BRUCE DENGAN TES ERGOMETER SEPEDA FOX

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Latar Belakang: Kebugaran jasmani dapat diukur dengan tes *treadmill* metode Bruce dan tes ergometer sepeda Fox. Hasil VO_2 max yang diukur pada tes *treadmill* 5-15% lebih tinggi daripada yang diukur dengan tes ergometer sepeda atau tes bangku.

Tujuan: ingin mengetahui hubungan tes *treadmill* metode Bruce dengan tes ergometer sepeda Fox.

Metode Penelitian: Subjek Penelitian adalah 40 mahasiswa laki-laki UKM dengan tinggi minimal 165 cm, berusia 18-25 tahun. Desain penelitian adalah survei analitik. Pengukuran kebugaran dilakukan dengan tes *treadmill* metode Bruce dan tes ergometer sepeda Fox.

Hasil: Pada tes *treadmill* metode Bruce didapatkan hasil 95% berkriteria Baik, 5% berkriteria Sedang dan 0% berkriteria Buruk. Dengan VO_2 maks rata-rata = 54,92 mlO₂/kgBB/menit (Baik). Pada tes ergometer sepeda Fox didapatkan hasil 65% berkriteria Baik, 25% berkriteria Sedang dan 10% berkriteria Buruk. Dengan VO_2 maks rata-rata = 45,37 mlO₂/kgBB/menit (Baik). Tes *treadmill* metode Bruce dan Fox berhubungan dengan persamaan garis regresi linier sederhana Bruce = $14.307 + 0.895Fox^{**}$ (p=0.000), dengan koefisien korelasi “r” = 0.549 ** (p=0.000), (hubungan SEDANG).

Kesimpulan: Tingkat kebugaran 40 orang mahasiswa UKM yang diukur dengan tes *treadmill* metode Bruce didapatkan VO_2 maks dengan rata-rata Baik. Pada tes ergometer sepeda Fox didapatkan VO_2 maks dengan rata-rata Baik. Tes *treadmill* metode Bruce dan tes ergometer sepeda Fox mempunyai bentuk hubungan berupa persamaan garis regresi linier sederhana, dengan kekuatan hubungan Sedang.

Kata kunci: kebugaran, *treadmill*, Bruce, tes sepeda, Fox

ABSTRACT
**RELATIONSHIP BETWEEN PHYSICAL FITNESS MEASURED BY
BRUCE TREADMILL METHOD TEST AND FOX ERGOCYCLE TEST**

Vera Viviana Deo Gracia, 2010.

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Backgrounds: Physical fitness can be measured by Bruce treadmill method test and Fox ergocycle test. The result of VO_2 max which is measured by treadmill test is 5-15% higher than result in ergocycle test or step test.

Objectives : The study was to know correlation between Bruce treadmill method test and Fox ergocycle test.

Research Methods: The subject of this study consisted of 40 male student's of Maranatha Christian University and aged between 18-25 years old, minimal height 165 cm. Research design used analytic survey. Physical fitness level measured by the Bruce treadmill method test and Fox ergocycle test.

Results: On Bruce treadmill method test resulted 95% showed Good criterion, 5% showed Moderate criterion, and 0% showed Bad criterion. By average, the students showed VO_2 max = 54.92 mlO₂/kgweight/minute (Good). Furthermore, in Fox ergocycle test, the resulted in 65% students showed Good criterion, 25% students showed Moderate criterion, and 10% students showed Bad criterion. By average, the students showed VO_2 max=45.37 mlO₂/kgweight/minute (Good). Bruce treadmill method test and Fox ergocycle test have correlation as according to equation of simple linear regression line which is $Bruce = 14.307 + 0.895Fox^{**}$ (p=0.000), with correlation coefficient "r" = 0.549 ^{**}(p=0.000.)

Conclusions: The physical fitness level of 40 students of Maranatha Christian University which is tested with Bruce treadmill test can be seen that the average of VO_2 max are Good. Moreover Fox ergocycle test resulted in average of VO_2 max are Good. Therefore, Bruce treadmill test and Fox ergocycle test are linked to a simple linear regression line with Moderate correlation.

Keywords: physical fitness, treadmill, Bruce, ergocycle test, Fox

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