

ABSTRAK

Nama : Rafly Fernanda
Program Studi : Kedokteran Umum
Judul Skripsi : Pengaruh Latihan Jump Rope Terhadap Respiratory
Breaking Point dan Tinjaunnya Menurut Pandangan Islam

Latar Belakang: Kebugaran jasmani dapat meningkatkan status kesehatan yang diasosiasikan dengan penurunan risiko kemunculan penyakit. Kurangnya aktivitas fisik dapat dipenuhi dengan olahraga. Salah satu olahraga yang relatif mudah dilakukan adalah *jump rope*. *Jump rope* termasuk ke dalam olahraga aerobik sehingga oksigen memegang peran penting dalam pembentukan energi. Maka itu, tingkat kebugaran seseorang dapat mempengaruhi nilai *respiratory breaking point*. Penelitian ini bertujuan untuk mengetahui pengaruh *jump rope* terhadap nilai *respiratory breaking point*.

Metode: Penelitian ini menggunakan metode penelitian *non-randomized-pretest-posttest* yang dilakukan tanpa kelompok kontrol pada 30 mahasiswa Fakultas Kedokteran Yarsi yang memenuhi kriteria inklusi. Penelitian ini dilakukan di laboratorium fisiologi FK YARSI sejak 23 November hingga 23 Desember 2020. Latihan *jump rope* dilakukan sebanyak 300 kali lompatan per latihan dengan frekuensi tiga kali seminggu selama empat minggu. Subjek diawasi secara daring oleh peneliti selama masa penelitian. Data yang diperoleh dari hasil pengukuran nilai *respiratory breaking point* kemudian dianalisis menggunakan uji hipotesis *Paired T-Test* dan *Pearson Correlation Test*.

Hasil: Hasil olahan data menunjukkan distribusi normal dengan variasi homogen. Nilai rata-rata *respiratory breaking point* mengalami peningkatan sebesar 15,44% (22,1%) dari nilai rata-rata awal (40,74 detik) dibandingkan dengan nilai rata-rata pasca latihan selama empat minggu (52,3 detik). Uji hipotesis *Paired T-test* menunjukkan peningkatan signifikan antara nilai rata-rata sebelum dan setelah latihan *jump rope* (p value = 0,001), sedangkan uji *Pearson Correlation test* menunjukkan adanya korelasi negatif sedang (persamaan garis $y = -0,3x + 55,01$; $r = -0,298$ dan $p = 0,55$) antara latihan *jump rope* dengan nilai *respiratory breaking point*.

Kesimpulan: Latihan *jump rope* sebanyak 300 kali lompatan dengan frekuensi tiga kali seminggu selama empat minggu dapat meningkatkan nilai *respiratory breaking point* seseorang.

Kata kunci: Nilai *Breaking Point*, *Jump rope*.

ABSTRACT

Name : Rafly Fernanda
Program Studi : Medicine
Judul Skripsi : The Effect of Jump Rope Exercise on Respiratory Breaking Point and Its Review According to the Islamic View

Background: *Physical fitness is associated with health which is associated with a lower risk of developing disease. Lack of physical activity can be reduced by doing sports. An easy sport to do is jump rope. Jump rope is a form of aerobic exercise so oxygen plays an important role in the formation of energy so that a person's fitness level can affect the Breaking Point. The purpose of this study was to determine the effect of a jump rope on the Respiratory Breaking Point score.*

Method: *This study used a non-randomized-pretest-posttest study design that was conducted without a control group at 30 Yarsi medical faculties that met the inclusion criteria. The research was conducted at the Physiology Laboratory of FK YARSI from 23 November to 23 December 2020. The jump rope training which was carried out 300 times each exercise with a frequency of 3 times a week for 4 weeks was monitored courageously. The data obtained from the measurement of breaking point values were analyzed using the Paired T-Test and Pearson Correlation Test hypotheses.*

Results : *The results of the data show that the data are normal distribution and homogeneous variance. At the average breaking point respiratory value before jump rope training was 40.74 seconds, this value increased by 15.44 seconds (22.1%) in the calculation after 4 weeks of training to 52.3 seconds. The Paired T-test hypothesis test showed a significant increase between the average before training and after the jump rope exercise with p value = 0.001 and the Pearson Correlation test showed a moderate negative correlation (line equation $y = -0.3x + 55.01$ $r = -0.298$ and $p = 0.55$) that occurs between the jump rope exercise and the breaking point value.*

Conclusion : *Jump rope training 300 times a jump with a frequency of 3 times a week for 4 weeks can increase and influence a person's breaking point value.*

Keyword : *score Breaking Point, Jump rope.*