

COMPARISON OF *JOGGING* AND *MASSAGE* AGAINST LACTIC ACID LEVELS DECREASE IN STUDENTS ACADEMY FUTSAL EMBRYO INDONESIA

Akhbar S S
Faculty Of Sports Science Of The University Of Jakarta

ABSTRACT

The study entitled "a comparison of *Jog* and *Massage* against lactic acid levels decrease in students Academy Futsal Embryo Indonesia" the purpose of this research to prove the influence of jogging and massage against a decline in the levels of lactic acid.

The research method used was experimental pretest-posttest. The population in this research is Embryonic Futsal Academy students Indonesia, 20 people aged 16-18 years. 10 people jogging, group 10 people group massage. Sampling technique used was random sampling and trials t. lactic acid test Instrument use an accutrend lactate and BM strip plus, pluit for jogging and lubricant for massage.

The final test result of lactic acid Levels Group Jog and *Massage* From the end of the test the levels of lactic acid on a group of Jogging and *Massage* acquired difference between the two standards mean ($SE_{m_x m_y}$) = 0.187 value becomes t-female retrieved = 3.690. The calculation results are then examined with a t-chart on the degrees of freedom (dk) = $(n_1 + n_2) - 2 = (10 - 10) - 2 = 18$, and level of trust (α) = 0.05 obtained critical value t-table 2.101 (t-calculate = > 3.690 t-table = 2.101).

Based on the results of the data analysis then H_0 is rejected and H_1 is received so that it can be concluded that there is a significant difference between Jogging and *Massage* against lactic acid levels and Jogging occurs lactic acid levels decrease more than *Massage* on Futsal Academy Students Embryo Indonesia.

Keywords: *Jogging*, *Massage*, lactic acid

PERBANDINGAN *JOGGING* DAN *MASSAGE* TERHADAP PENURUNAN KADAR ASAM LAKTAT PADA SISWA AKADEMI FUTSAL EMBRIO INDONESIA

Akhbar Saputra S
Fakultas Ilmu Olahraga Universitas Negeri Jakarta

ABSTRAK

Penelitian dengan judul “Perbandingan *Joging* dan *Massage* terhadap Penurunan Kadar Asam Laktat pada Siswa Akademi Futsal Embrio Indonesia” tujuan penelitian ini untuk membuktikan pengaruh jogging dan massage terhadap penurunan kadar asam laktat.

Metode penelitian yang digunakan adalah experimental pretest-posttest. Populasi pada penelitian ini adalah siswa Akademi Futsal Embrio Indonesia, 20 orang usia 16-18 tahun. 10 orang kelompok jogging, 10 orang kelompok massage. Teknik pengambilan sampel yang digunakan adalah random sampling dan menggunakan uji t. Instrument tes asam laktat menggunakan strip BM lactate dan accutrend plus, pluit untuk jogging dan pelicin untuk massage.

Hasil Tes Akhir Kadar Asam Laktat Kelompok Joging dan *Massage* Dari tes akhir kadar asam laktat pada kelompok Joging dan *Massage* diperoleh standar perbedaan antara dua mean ($SE_{m_xm_y}$) = 0,187 nilai tersebut menjadi t-hitung diperoleh = 3,690. Kemudian hasil perhitungan tersebut diujikan dengan t-tabel pada derajat kebebasan (dk) = $(n_1 + n_2) - 2 = (10 - 10) - 2 = 18$, dan taraf kepercayaan (α) = 0,05 diperoleh nilai kritis t-tabel 2,101 (t-hitung = 3,690 > t-tabel = 2,101).

Berdasarkan hasil analisa data tersebut maka H_0 ditolak dan H_1 diterima sehingga dapat disimpulkan bahwa terdapat Perbedaan yang signifikan antara Joging dan *Massage* terhadap penurunan kadar asam laktat dan Joging terjadi penurunan kadar asam laktat lebih banyak dari pada *Massage* pada Siswa Akademi Futsal Embrio Indonesia.

Kata kunci: *Jogging*, *Massage*, Asam Laktat