

**PENGARUH PELATIHAN SENAM OTAK TERHADAP PENINGKATAN
KEMAMPUAN MATEMATIKA OPERASI HITUNG PECAHAN PADA
SISWA KELAS V SEKOLAH DASAR**

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ABSTRAK

Penelitian eksperimen ini bertujuan untuk mengetahui pengaruh pelatihan senam otak terhadap kemampuan matematika pada siswa sekolah dasar. Desain penelitian adalah *non-randomized pretest-posttest control group design*. Subjek penelitian adalah 72 orang siswa kelas 5 SD Negeri 18 Muara Enim. Subjek dibagi menjadi 2 kelompok, yaitu siswa kelas VB sebagai kelompok eksperimen ($n=36$) dan siswa kelas VC sebagai kelompok kontrol ($n=36$). Kelompok eksperimen mendapatkan pelatihan senam otak selama 10 hari berturut-turut, sedangkan kelompok kontrol tidak mendapat perlakuan. Kemampuan matematika siswa diukur dengan tes matematika. Tes matematika berisi 40 soal dengan materi operasi hitung pecahan yang dilaksanakan selama 70 menit. Penelitian ini menggunakan teknik analisis *independent sample t-test*. Hasil analisis data menunjukkan uji t pada data gain score memiliki nilai t sebesar 11,053 dengan $p=0,00$ ($p<0,05$). Hasil perhitungan menunjukkan *gain score* pada kelompok eksperimen dan kelompok kontrol berbeda secara signifikan. Pelatihan senam otak berpengaruh dalam meningkatkan kemampuan matematika tentang operasi hitung pecahan pada siswa kelas V sekolah dasar.

Kata kunci : senam otak, kemampuan matematika, siswa sekolah dasar

**THE EFFECT OF BRAIN GYM TRAINING ON MATHEMATICS
ABILITY OF FRACTION COMPUTATION IN FIFTH GRADE
ELEMENTARY SCHOOL**

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ABSTRACT

This experimental study aimed to determine the effect of brain gym training on the ability of mathematics in elementary school students. The study design was non-randomized pretest-posttest control group design. The subjects were 72 students in fifth grade students of SD Negeri 18 Muara Enim. They were divided into two groups, namely VB graders as experimental group ($n = 36$) and VC grades as a control group ($n = 36$). The experimental group received brain gym training for 10 consecutive days, while the control group did not receive any treatment. Student's math ability was measured by math test. Math test contains 40 problems fractional arithmetic operations. The test was performed in 70 minutes. This study used analysis techniques of independent sample t-test. The result showed a value of t score is 11.053 with $p = 0.00$ ($p < 0.05$). This shows that gain score in the experimental group and the control group differing significantly. Brain gym training has significant effect to improve mathematics ability in fifth grade elementary school students.

Keywords: brain gym, mathematics ability, elementary school students