

## ABSTRAK

Syahir Sasri Habibi, NIM 4193111040 (2019). Pengaruh Model Pembelajaran *Brain Based Learning* (BBL) Berbantuan *Brain Gym* Terhadap Kemampuan Komunikasi Matematis Siswa Kelas VIII SMP.

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *brain based learning* berbantuan *brain gym* terhadap kemampuan komunikasi matematis siswa kelas VIII. Desain penelitian ini menggunakan *quasi-experimental designs* berjenis *nonequivalent control group designs* dan dilaksanakan pada 22 Mei s.d. 31 Mei 2023 di SMP Swasta Islam Setia Nurul Azmi. Dalam penelitian ini terdapat dua sampel, yaitu kelas VIIIA sebagai kelompok eksperimen dan kelas VIIIB sebagai kelompok kontrol. Kelompok eksperimen diberikan perlakuan dengan model pembelajaran *brain based learning* berbantuan *brain gym* sedangkan kelompok kontrol diajarkan dengan model pembelajaran kooperatif tipe jigsaw. Penentuan sampel dilakukan dengan menggunakan teknik *purposive sampling*. Instrumen penelitian yang digunakan berupa soal *pretest* dan *posttest* yang berbentuk uraian yang disesuaikan dengan indikator kemampuan komunikasi matematis. Teknik pengumpulan data pada penelitian ini menggunakan tes. Berdasarkan hasil uji hipotesis dengan menggunakan uji T, diperoleh nilai  $t_{Hitung}$  sebesar 2,491 dan nilai  $t_{Tabel}$  pada taraf signifikansi 0,05 dengan derajat kebebasan 62 sebesar 1,67. Selanjutnya nilai nilai  $t_{Hitung}$  akan dibandingkan dengan  $t_{Tabel}$ . Karena  $t_{Hitung} > t_{Tabel} = 2,491 > 1,67$ , maka  $H_a$  diterima dan  $H_o$  ditolak sehingga disimpulkan bahwa model pembelajaran *brain based learning* berbantuan *brain gym* berpengaruh terhadap kemampuan komunikasi matematis siswa kelas VIII.

**Kata kunci:** Model pembelajaran *brain based learning*, *brain gym*, komunikasi matematis

## ABSTRACT

**Syahir Sasri Habibi, NIM 4193111040 (2019). The Influence of the Brain Gym Assisted Brain Based Learning (BBL) Model on the Mathematical Communication Ability of Class VIII Students of Middle School.**

This study aims to determine the effect of the brain gym-assisted brain based learning model on the mathematical communication skills of class VIII students. The research design used quasi-experimental designs of the nonequivalent control group type and was carried out in 22—31 May at the SMP Swasta Islam Setia Nurul Azmi. In this study there were two samples, namely class VIIIA as the experimental group and class VIIIB as the control group. The experimental group was treated with a brain gym-assisted brain based learning model, while the control group was taught with a jigsaw cooperative learning model. Determination of the sample was carried out using a purposive sampling technique. The research instrument used is in the form of pretest and posttest questions in the form of descriptions adapted to indicators of mathematical communication ability. Data collection techniques in this study used tests. Based on the results of hypothesis testing using the T test, the  $t_{Count}$  value is 2,491 and the  $t_{Table}$  value is at a significance level of 0,05 with 62 degrees of freedom of 1,67. Furthermore, the value of  $t_{Count}$  will be compared with  $t_{Table}$ . Because  $t_{Count} > t_{Table} = 2,491 > 1,67$ , then  $H_a$  is accepted and  $H_o$  is rejected so it is concluded that the brain gym-assisted brain based learning model influences the mathematical communication skills of class VIII students.

**Keywords:** Brain based learning (BBL) learning model, brain gym, mathematical communication