ABSTRAK

Yusrizal Andika, NIM 4203311035 (2024). Pengaruh Model *Brain Based Learning* Terhadap Kemampuan Pemecahan Masalah Matematis Siswa SMP Swasta Al-Fadhli Medan.

Brain based learning mempunyai beberapa tahapan seperti pra-pemaparan, persiapan, inisiasi dan akuisisi, elaborasi, inkubasi dan memasukkan memori, serta verifikasi dan pengecekan keyakinan. Indikator kemampuan pemecahan masalah matematis ialah memahami masalah, merencanakan penyelesaian masalah, menyelesaiakan masalah, dan memeriksa kembali. Tujuan penelitian ini adalah untuk mengetahui perbedaan kemampuan pemecahan masalah matematis siswa dari pengaruh model *brain based learning* dan model pembelajaran konvensional yang diajarkan kepada siswa SMP Swasta Al-Fadhli Medan dan untuk mengetahui ketuntasan klasikal siswa yang diajarkan dengan model *brain based learning* lebih baik daripada siswa yang diajarkan dengan model pembelajaran konvensional terhadap kemampuan pemecahan masalah matematis. Jenis penelitian yang digunakan adalah eksperimen semu. Teknik pengambilan sampel dengan *cluster sampling*. Hasil penelitian berdasarkan *post-test* didapatkan nilai rata-rata kelas eksperimen adalah 85,66 dan nilai rata-rata kelas kontrol adalah 80,28. Berdasarkan ketuntasan klasikal didapat nilai kelas ekperimen sebesar 96,15 dengan 25 siswa yang tuntas KKM dan nilai kelas kontrol sebesar 80,76 dengan 21 siswa yang tuntas KKM. Berdasarkan hasil tersebut menunjukan bahwa model *brain based learning* lebih baik dibandingkan model pembelajaran konvensional.

Kata Kunci: *Brain Based Learning,* Kemampuan Pemecahan Masalah Matematis,

ABSTRACT

Yusrizal Andika, NIM 4203311035 (2024). The Effect of the Brain Based Learning on the Mathematical Problem Solving Ability of Students at Al-Fadhli Private Middle School in Medan.

Brain based learning has several stages such as pre-exposure, preparation, initiation and acquisition, elaboration, incubation and memory entry, as well as verification and checking beliefs. Indicators of mathematical problem solving abilities are understanding the problem, planning to solve the problem, resolving the problem, and checking again. The purpose of this research is to determine the differences in students' mathematical problem solving abilities from the influence of the brain based learning model and the conventional learning model taught to Al-Fadhli Medan Private Middle School students and to determine the classical mastery of students taught with the brain based learning model better than students who taught using conventional learning models for mathematical problem solving abilities. The type of research used is quasi-experimental. The sampling technique is cluster sampling. The results of the research based on the post-test showed that the average score for the experimental class was 85.66 and the average score for the control class was 80.28. Based on classical completion, the experimental class score was 96.15 with 25 students completing the KKM and the control class score was 80.76 with 21 students completing the KKM. Based on these results, it shows that the brain based learning model is better than conventional learning models.

Keyword: Brain Based Learning, Mathematical Problem Solving Ability.