ABSTRAK

Yulan Sari Dalimunthe, NIM 4193311028 (2023), Pengaruh Model Pembelajaran Berbasis Masalah Berbantuan Media *Geogebra* Terhadap Kemampuan Koneksi Matematis Siswa SMP N 35 Medan.

Penelitian ini bertujuan untuk mengetahui apakah terdapat pengaruh yang signifikan model pembelajaran berbasis masalah berbantuan media *Geogebra* terhadap kemampuan koneksi matematis siswa SMP N 35 Medan. Jenis penelitian yang digunakan adalah *quasi experiment* dengan desain *two group pre test – post test*. Populasi yang digunakan dalam penelitian ini adalah seluruh siswa kelas VII SMP N 35 Medan. Kelas VII-4 sebagai kelas eksperimen diberikan perlakuan model pembelajaran berbasis masalah berbantuan media *Geogebra*, sedangkan kelas VII-5 sebagai kelas kontrol diberikan perlakuan menggunakan pembelajaran konvensional. Berdasarkan hasil pengolahan data yang telah dilakukan, nilai rata-rata pre test kelas eksperimen diperoleh 54,64 dan nilai rata-rata pre test kelas kontrol 50,52. Nilai rata-rata post test kelas eksperimen diperoleh 67,5 dan nilai post test kelas kontrol diperoleh 60. Berdasarkan hasil uji hipotesis menggunakan uji t dengan dk = 62 dan $\alpha = 0,05$ diperoleh nilai uji t post test t_{hitung} 2,372 > t_{tabel} 1,669, sehinggga dapat disimpulkan bahwa terdapat pengaruh yang signifikan model pembelajaran berbasis masalah berbantuan media *Geogebra* terhadap kemampuan koneksi matematis siswa SMP N 35 Medan.

Kata Kunci : Pembelajaran Berbasis Masalah, Media *Geogebra*, Kemampuan Koneksi Matematis

ABSTRACT

Yulan Sari Dalimunthe, NIM 4193311028 (2023), *The Effect of Problem-Based Learning Models Assisted by Geogebra Media on the Mathematical Connection Ability of Students of SMP N 35 Medan.*

This study aims to determine whether there is a significant influence of the problem-based learning model assisted by Geogebra media on the mathematical connection abilities of students of SMP N 35 Medan. The type of research used was a quasi experiment with a two group pre test – post test design. The population used in this study were all class VII students of SMP N 35 Medan. Class VII-4 as the experimental class was treated with a problem-based learning model assisted by Geogebra media, while class VII-5 as the control class was given treatment using conventional learning. Based on the results of data processing that has been done, the average pre-test score for the experimental class was 54.64 and the average pre-test for the control class was 50.52. The average value of the post-test for the experimental class was 67.5 and the post-test for the control class was 60. Based on the results of the hypothesis test using the t-test with dk = 62 and α = 0.05, the post-test tcount was 2.372 > ttable 1.669, so that it can be concluded that there is a significant influence of the problem-based learning model assisted by Geogebra media on the mathematical connection abilities of SMP N 35 Medan students.

Keywords: Problem Based Learning, Geogebra Media, Mathematical Connection Ability