

ABSTRAK

Fakhrurrozi, NIM 4163111019 (2023) Pengaruh Peningkatan Kemampuan Representasi Matematika Dengan Menerapkan Pendekatan Matematika Realistik Di SMP Swasta Islam Terpadu Al-Hijrah Deli Serdang.

Penelitian ini bertujuan untuk mengetahui seberapa jauh pengaruh Pendekatan Matematika Realistik (PMR) terhadap kemampuan representasi matematika siswa di SMP Islam Terpadu Al-Hijrah Deli Serdang Tahun Ajaran 2022/2023 dan mengetahui peningkatan kemampuan representasi matematika dengan menerapkan Pendekatan Matematika Realistik (PMR) di SMP Islam Terpadu Al-Hijrah Deli Serdang. Jenis penelitian yang digunakan adalah *Pre Eksperimental* dengan desain penelitian *One-Group Pretest-Posttest Design*, Sampel penelitian ini 32 siswa dari kelas VIII-A dan VIII-B yang dipilih melalui teknik pengambilan sampel *simple random sampling*. Berdasarkan hasil penelitian menunjukkan nilai rata-rata hasil tes kemampuan representasi matematika siswa pada *pretest* sebesar 66,41 dan pada *posttest* sebesar 81,17. Uji hipotesis penelitian menggunakan uji t dengan uji prasyarat yang telah dipenuhi dan sampel berasal dari populasi yang berdistribusi normal. Hasil uji t dengan *analisis regresi* dan pada taraf signifikansi $\alpha = 0,05$ diperoleh harga $t_{hitung} = 8,630$ dengan $t_{tabel} = 1,697$ karena $t_{hitung} > t_{tabel}$ dan $sig. (2-tailed) = 0,000 < 0,05$, maka H_0 ditolak. Maka dapat disimpulkan pembelajaran yang diajarkan dengan Pendekatan Matematika Realistik (PMR) berpengaruh dalam meningkatkan kemampuan representasi matematika siswa. Deskripsi *N-gain* juga menunjukkan perolehan nilai *gain score* = 0,440, maka dari analisis tersebut terdapat peningkatan kemampuan representasi siswa yang diajarkan dengan Pendekatan Matematika Realistik (PMR) dengan kategori sedang. Dengan demikian dapat disimpulkan bahwa kemampuan representasi matematika siswa meningkat ketika diajarkan dengan Pendekatan Matematika Realistik (PMR).

Kata Kunci : Kemampuan Representasi Matematika Siswa, Pendekatan Matematika Realistik (PMR)

ABSTRACT

Fakhrurrozi, NIM 4163111019 (2023) The Effect Improvement Of Mathematical Representation Ability By Applying Realistic Mathematical Approach In SMP IT Al-Hijrah Deli Serdang

This study aims to find out how far the effect of Realistic Mathematics Approach (PMR) on students' mathematical representation skills at Al-Hijrah Integrated Islamic Junior High School Deli Serdang in the 2022/2023 academic year and to find out the improvement of mathematical representation skills by applying Realistic Mathematics Approach (RMA) at Al-Hijrah Integrated Islamic Junior High School Deli Serdang. The type of research used is Pre-Experimental with One-Group Pretest-Posttest Design research design, The sample of this study was 32 students from class VIII-A and VIII-B who were selected through simple random sampling technique. Based on the results of the study showed the average value of students' mathematical representation ability test results on the pretest of 66.41 and on the posttest of 81.17. Test the research hypothesis using the t test with a prerequisite test that has been met and the sample comes from a normally distributed population. The results of the t test with regression analysis and at the level of significance $\alpha = 0.05$ obtained the price of t count = 8.630 with t table = 1.697 because t count > t table and sig. (2-tailed) = 0.000 < 0.05, then H_0 is rejected. So it can be concluded that learning taught with the Realistisk Mathematics Approach (PMR) has an effect in improving students' mathematical representation skills. The N-gain description also shows the acquisition of a gain score value = 0.440, so from this analysis there is an increase in the representation skills of students taught with the Realistic Mathematics Approach (RMA) with a moderate category. Thus it can be concluded that students' mathematical representation skills improve when taught with the Realistic Mathematics Approach (RMA).

Keywords : Students Mathematical Representation Ability, Realistic Mathematics Approach (PMR)