

ABSTRAK

Santi Liawati (1212050158), “Peningkatan Kemampuan Pemecahan Masalah Matematis Dan *Self-Efficacy* Melalui *Game-Based Learning* Dengan Media Monopoli”.

Game-based learning merupakan pendekatan inovatif yang meningkatkan keterlibatan dan pemahaman siswa dalam pembelajaran matematika melalui aktivitas bermain yang terstruktur. Penelitian ini menggunakan pendekatan kuantitatif dengan *desain quasi experiment nonequivalent control group*, melibatkan tiga kelas VIII dari dua sekolah di Kabupaten Bogor. Kelas eksperimen 1 menggunakan *game-based learning* dengan media monopoli, kelas eksperimen 2 tanpa media, dan kelas kontrol dengan pembelajaran konvensional. Instrumen yang digunakan adalah tes kemampuan pemecahan masalah matematis dan angket *self-efficacy*. Analisis data memakai uji *Kruskal-Wallis* karena data tidak berdistribusi normal dan tidak homogen, dilanjutkan uji *Dunn-Bonferroni*. Hasil penelitian menunjukkan bahwa: (1) desain *game-based learning* berbasis monopoli dapat diimplementasikan secara sistematis untuk meningkatkan kemampuan pemecahan masalah dan *self-efficacy* siswa; (2) keterlaksanaan pembelajaran efektif sesuai rancangan; (3) terdapat perbedaan signifikan peningkatan kemampuan pemecahan masalah antar kelompok, dengan kelas monopoli tertinggi; dan (4) terdapat peningkatan signifikan *self-efficacy* siswa, terutama pada kelompok monopoli. Temuan ini mengindikasikan bahwa monopoli memperkuat efektivitas *game-based learning* serta berpotensi menjadi alternatif strategi pembelajaran matematika yang menyenangkan, interaktif, dan mendorong kepercayaan diri siswa.

Kata Kunci: *Game-Based Learning*, Pemecahan Masalah Matematis, *Self-Efficacy*

ABSTRACT

Santi Liawati (1212050158), "Improving Mathematical Problem-Solving Skills and Self-Efficacy Through Game-Based Learning Using Monopoly Media".

Game-based learning is an innovative approach that increases student engagement and understanding in mathematics learning through structured play activities. This study used a quantitative approach with a quasi-experimental nonequivalent control group design, involving three eighth grade classes from two schools in Bogor Regency. Experimental class 1 used game-based learning with monopoly media, experimental class 2 without media, and the control class with conventional learning. The instruments used were a mathematical problem solving ability test and a self-efficacy questionnaire. Data analysis used the Kruskal-Wallis test because the data were not normally distributed and not homogeneous, followed by the Dunn-Bonferroni test. The results of the study showed that: (1) the monopoly-based game-based learning design can be implemented systematically to improve students' problem-solving abilities and self-efficacy; (2) the implementation of effective learning according to the design; (3) there was a significant difference in the improvement of problem-solving abilities between groups, with the monopoly class having the highest; and (4) there was a significant increase in students' self-efficacy, especially in the monopoly group. These findings indicate that monopoly strengthens the effectiveness of game-based learning and has the potential to be an alternative mathematics learning strategy that is fun, interactive, and boosts students' self confidence.

Keywords: Game-Based Learning, Mathematical Problem Solving, Self-Efficacy

