

## ABSTRACT

Gita Ananda Putri. (2023). *Improving Mathematical Problem Solving Ability and Self-regulated Learning of Junior High School Students through Problem-based Learning with Kahoot Assistance.*

*This research aims to: (1) Knowing the mathematical problem-solving abilities of students who received problem-based learning model with Kahoot assistance were higher than the mathematical problem-solving abilities of students who received conventional learning models. (2) Knowing that the self-regulated learning of students who get the problem-based learning model with Kahoot assistance is better than the self-regulated learning of students who get the conventional learning model. (3) Knowing the positive correlation between mathematical problem solving abilities and self-regulated learning of students who get problem-based learning mode with Kahoot Assistance. (4) Knowing that learning using problem-based learning model with Kahoot Assistance is effective for students' problem-solving abilities and self-regulated learning. The method used in this study was a quasi-experimental research design with a non-equivalent control group design, the study sample consisted of two classes. Class VIII B as the experimental class was treated used problem-based learning model with Kahoot assistance and class VIII E as the control class was treated with conventional learning models. This study used instruments in the form of test questions on mathematical problem-solving abilities and self-regulated learning questionnaires. The data that has been collected is then processed using IBM SPSS 23.0 software for Windows 10. The result of the research show that: (1) The increase in the problem-solving abilities of students who received problem-based learning model with Kahoot assistance was higher than the mathematical problem-solving abilities of students who received conventional models. (2) Self-regulated learning of students who get problem-based learning model with Kahoot Assistance is better than students who get conventional learning models. (3) There is a positive correlation between the mathematical problem solving ability with the self-regulated learning of students who get problem-based learning model with Kahoot Assistance. (4) Learning using problem-based learning model with Kahoot assistance is effective on students' problem-solving abilities and self-regulated learning.*

**Keywords:** *Mathematical Problem Solving Ability, Self-regulated learning, Problem-based Learning, Kahoot*