ABSTRACT

Hafiza Riviani. (2018). *Improvement of Mathematical Reasoning Ability and Self-Regulated Learning of Junior High School Students through Treffinger Learning Model.*

The low ability of mathematical reasoning and student self-regulated in the learning process is the reason for doing this research. It may have something to do with the learning model used in the learning process. One alternative model of learning that can improve mathematical reasoning ability of students is learning model Treffinger. The research aims to examine the application of Treffinger learning model to improve mathematical reasoning and improve student self-regulated learning. Based on this research method is a quasi-experimental study. The population in this research is all students of class VII SMP Al-Falah Dago Bandung. The sample in this research is the students of class VII D as the experimental class and the students of class VII E as the control class selected by random class. Data analysis of mathematical reasoning ability using Independent Sample t-Test and the next is Scheffe Test as well as self-regulated learning data analysis where data is converted into quantitative data, but because data is still ordinal data then with method of MSI (Methods of Successive Interval) self-regulated learning data is converted into interval data then analyzed using Independent Sample t-Test and the next is Scheffe Test. Based on the data analysis, it can be concluded that: 1) the mathematical reasoning ability of students who gain learning with Treffinger model is better than the students who get the learning of mathematics with saintific learning, 2) Self-regulated learning of students who get the Treffinger learning model is better than the students who received saintific learning; 3) there is correlation between mathematical reasoning ability with students' self-regulated learning with using Treffinger.

Keyword: Mathematical Reasoning Ability, Treffinger Learning Model, Self-Regulated Learning