ABSTRAK

Agustina Hariani Panjaitan. Perbedaan Kemampuan Berpikir Kritis Matematis dan *Self-Efficacy* Siswa yang Memperoleh Model *Discovery Learning* dengan Pembelajaran Biasa di SMP. Tesis. Medan: Program Studi Pendidikan Matematika, Pascasarjana Universitas Negeri Medan. 2021.

Penelitian ini bertujuan untuk menganalisis: (1) perbedaan kemampuan berpikir kritis matematis siswa yang memperoleh model *discovery learning* dengan pembelajaran biasa, (2) perbedaan kemampuan berpikir kritis matematis siswa yang memiliki kemampuan awal matematis tinggi, sedang dan rendah, (3) pengaruh interaksi antara model pembelajaran dan kemampuan awal matematis terhadap kemampuan berpikir kritis matematis siswa, (4) perbedaan *self-efficacy* siswa yang memperoleh model *discovery learning* dengan pembelajaran biasa, (5) perbedaan *self-efficacy* siswa yang memiliki kemampuan awal matematis tinggi, sedang dan rendah, (6) pengaruh interaksi antara model *discovery learning* dan kemampuan awal matematika terhadap *self-efficacy* siswa. Penelitian ini merupakan penelitian kuantitatif dengan metode eksperimen semu. Populasi dalam penelitian ini adalah seluruh siswa SMP Negeri 1 Tambangan pada semester ganjil tahun pelajaran 2019/2020 berjumlah 160 siswa dalam 6 kelas. Teknik pengambilan sampel dalam penelitian ini menggunakan teknik Probability Sampling. Jenis pengambilan sampel adalah Simple Random Sampling. Sampel penelitian dipilih dari dua kelas, yaitu kelas VIII-1 yang terdiri dari 26 siswa memperoleh model *discovery learning* dan kelas VIII-2 yang terdiri dari 26 siswa memperoleh pembelajaran biasa. Instrumen penelitian menggunakan tes kemampuan berpikir kritis matematis dan angket *self-efficacy*. Uji statistik data menggunakan Uji ANAVA dua jalur. Hasil penelitian menunjukkan bahwa: (1) terdapat perbedaan kemampuan berpikir kritis matematis siswa yang memperoleh model *discovery learning* dengan siswa yang memperoleh pembelajaran biasa, (2) terdapat perbedaan kemampuan berpikir kritis matematis siswa yang memiliki kemampuan awal matematis tinggi, sedang dan rendah, (3) tidak terdapat pengaruh interaksi antara model pembelajaran dan kemampuan awal matematis terhadap kemampuan berpikir kritis matematis siswa, (4) terdapat perbedaan *self-efficacy* siswa yang memperoleh model *discovery learning* dengan siswa yang memperoleh pembelajaran biasa, (5) terdapat perbedaan *self-efficacy* siswa yang memiliki kemampuan awal matematis tinggi, sedang dan rendah, (6) tidak terdapat pengaruh interaksi antara model pembelajaran dan kemampuan awal matematis terhadap *self-efficacy* siswa.

Kata Kunci: Model *Discovery Learning*, Pembelajaran Biasa, Kemampuan Berpikir Kritis Matematis, *Self-Efficacy*, Kemampuan Awal Matematis.

ABSTRACT

Agustina Hariani Panjaitan. Differences in The Mathematical Critical Thinking Skills and Self-Efficacy of Students Who Get the Discovery Learning Models With Ordinary Learning in Junior High School. Thesis. Medan: Mathematics Education Study Postgraduate Program State University of Medan. 2021

This study aims to analyze: (1) differences in the mathematical critical thinking skills of students who get discovery learning models with ordinary learning, (2) differences in the mathematical critical thinking skills of students who have high, medium and low early mathematical ability, (3) the effect of the interaction between the learning model and early mathematical ability on students' mathematical critical thinking skills, (4) differences in the self-efficacy of students who get discovery learning models with ordinary learning, (5) differences in the self-efficacy of students who have high, medium and low early mathematical ability, (6) the effect of the interaction between discovery learning models and early mathematics ability on students' self-efficacy. This research is a quantitative study a quasi-experimental method. This study's population were all SMP Negeri 1 Tambangan in the odd semester of the 2019/2020 school year, totaling 160 students in 6 classes. The sampling technique in this study uses Probability Sampling techniques. The type of sampling is Simple Random Sampling. The sample in this study was selected by students from two classes, namely VIII-1 which consisted of 26 students who obtained the discovery learning model and clas VIII-2 which consisted of 26 students who obtained ordinary learning. The research instrument used a mathematical critical thinking skills test and questionnaire of self-efficacy. Statistical test of data using Two-Way ANOVA Test. The results showed that: (1) there is a differences in the mathematical critical thinking skills of students who get the discovery learning model with students who get ordinary learning, (2) there is a differences in the mathematical critical thinking skills of students who had high, medium and low early mathematical ability, (3)) there is no interaction effect between the learning models and early mathematical ability on students' mathematical critical thinking skills, (4) there is a difference in the self-efficacy of students who get discovery learning model with students who get ordinary learning, (5) there is a differences in the self-efficacy of students who have high, medium and low early mathematical ability, (6) there is no interaction effect between the learning models and early mathematical ability on students' self-efficacy.

Keywords: Discovery Learning Model, Ordinary Learning, Mathematical Critical Thinking Skills, Self-Efficacy, Early Mathematical Ability