# **ABSTRAK**

**Aris Fitriyanto**. (2018). Pengaruh Model Pembelajaran *Problem Based Learning* terhadap Kemampuan Penalaran Matematis dan Berpikir Kritis serta Motivasi Belajar Siswa SMP.

Penelitian ini dilatarbelakangi oleh rendahnya kemampuan matematis siswa di Indonesia khususnya siswa SMP kelas VIII dibandingkan dengan siswa di negara lain, dilihat dari hasil studi internasional *Programme for International Student Assessment* (PISA) dan *Trend in International Mathematics and Science Study* (TIMSS). Tujuan dari penelitian ini adalah untuk menganalisis Pengaruh Model Pembelajaran *Problem Based Learning* terhadap kemampuan penalaran matematis dan berpikir kritis serta motivasi belajar siswa SMP. Metode penelitian yang digunakan dalam penelitian ini adalah penelitian campuran (*mixed method*) dengan tipe *embedded desaign*. Populasi dalam penelitian ini adalah seluruh siswa SMPN Unggulan Sindang kelas VIII tahun pelajaran 2017/2018, sedangkan sampel yang diambil dalam penelitian ini yaitu kelas VIII D dan VIII E. Hasil penelitian menunjukkan bahwa: (1) peningkatan kemampuan penalaran matematis dan kemampuan berpikir kritis siswa yang memperoleh pembelajaran dengan model *problem based learning* lebih baik daripada siswa yang memperoleh pembelajaran konvensional; (2) motivasi belajar siswa yang memperoleh pembelajaran dengan model *problem based learning* lebih baik daripada siswa yang memperoleh pembelajaran konvensional; (3) terdapat korelasi antara kemampuan penalaran matematis, kemampuan berpikir kritis, dan motivasi belajar siswa; (4) terdapat pengaruh positif motivasi belajar terhadap kemampuan penalaran matematis dan kemampuan berpikir kritis.

**Kata kunci :** *Problem Based Learning,* Kemampuan Penalaran Matematis, Kemampuan Berpikir Kritis, Motivasi Belajar

# **ABSTRACT**

**Aris Fitriyanto**. (2018). The Influence of Mathematics Learning with Problem Based Learning Learning Models on Mathematical Reasoning and Critical Thinking Abilities and Learning Motivation of Middle School Students.

This research is motivated by the low mathematical ability of students in Indonesia, especially VIII grade junior high school students compared to students in other countries, seen from the results of the International Study Program for International Student Assessment (PISA) and the Trend in International Mathematics and Science Study (TIMSS). The purpose of this study was to analyze the influence of mathematics learning with Problem Based Learning learning models on mathematical reasoning skills and critical thinking as well as learning motivation of junior high school students. The research method used in this research is mixed method with embedded desaign type. The population in this study were all students of SMPN Unggulan Sindang class VIII 2017/2018 academic year, while the samples taken in this study are class VIII D and VIII E. The results showed that: (1) the improvement of mathematical reasoning ability and critical thinking skills of students who obtained learning with problem based learning models were better than students who received conventional learning; (2) learning motivation of students who obtain learning with problem based learning models is better than students who obtain conventional learning; (3) there is a correlation between mathematical reasoning ability, critical thinking skills, and student learning motivation; (4) there is a positive influence on learning motivation on mathematical reasoning ability and critical thinking skills.

**Keywords**: Problem Based Learning, Mathematical Reasoning Ability, Critical Thinking Ability, Learning Motivation