

ABSTRACT

Risya Fadilah. (2021). *Analysis of Mathematical Critical Thinking Ability and Learning Motivation of High School Students in the Implementation of Problem Based Learning Model.*

Mathematical critical thinking ability is one of the abilities of students who use the brain in thinking, where critical thinking activates students' abilities in analyzing and evaluating information received in everyday life. In addition to mathematical critical thinking skills, learning motivation is also important for students to have. High learning motivation affects the cognitive abilities of students. With high learning motivation, students have the desire to achieve goals by following and completing learning. One of the efforts to improve mathematical critical thinking skills and learning motivation of high school students is to implement a problem based learning model. The purpose of this study is to analyze and describe: (1) the mathematical critical thinking ability of high school students whose learning applies a problem based learning model; (2) the learning motivation of high school students whose learning applies a problem based learning model; (3) the relationship between mathematical critical thinking skills and learning motivation. The method used in this research is a qualitative research method with the type of literature study research. Data analysis techniques used are inductive, interpretative and historical. Sources of data used in this study in the form of primary data and secondary data. Primary data and secondary data related to mathematical critical thinking skills are 16 articles and 12 articles, respectively. Primary data and secondary data related to learning motivation are 15 articles and 8 articles, respectively. Primary data and secondary data related to the relationship between mathematical critical thinking skills and learning motivation are 16 articles and 15 articles, respectively. The results showed that: (1) the mathematical critical thinking skills of high school students increased in the implementation of the problem based learning model; (2) the learning motivation of high school students increases in the implementation of the problem based learning model; (3) there is a relationship between mathematical critical thinking skills and high school students' learning motivation in implementing a positive problem based learning model.

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