## ABSTRACT

Fara Anindya Savitri. (2021). ***Analysis of the mathematical reasoning ability and self-confidence of high school students through the Problem-Based Instruction (PBI) model.***

Mathematical reasoning ability and self-confidence are important aspects that every student must have in learning mathematics. One of the efforts to develop this capability is by applying the Problem-Based Instruction (PBI) model. This study aims to analyze and describe mathematical reasoning abilities in the implementation of the PBI model, analyze and describe students' self-confidence in the implementation of the PBI model and analyze the correlation between mathematical reasoning abilities and self-confidence in the implementation of the PBI model. The type of research used is a literature study with a qualitative approach. The data sources used are primary data sources and secondary data, namely from research journals which are then collected and a journal summary is made including the name of the researcher, the year of publication of the journal, study design, research objectives, samples, instruments (measurements) and a summary of the results or findings. Primary data and secondary data related to mathematical reasoning abilities are 6 articles and 6 articles, respectively. Primary data and secondary data related to self-confidence are 5 articles and 3 articles, respectively. Primary data and secondary data related to the correlation between mathematical reasoning abilities and students' self-confidence were 5 articles and 3 articles, respectively. The results showed that: (1) the mathematical reasoning ability of students who used the PBI model was better than the mathematical reasoning ability of students who used conventional learning. (2) self-confidence using the PBI learning model is better than the ability using conventional learning. (3) There is a positive correlation between mathematical reasoning ability and self-confidence.



***Keywords****: Mathematical Reasoning, self-confidence (self-confidence), Model Problem-Based Instruction (PBI)*