

**ANALYSIS OF THE SECOND SEMESTER MATHEMATICS STUDENTS'
METACOGNITIVE SKILL IN SOLVING MATHEMATICS
PROBLEMS AT STATE UNIVERSITY OF MEDAN**

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ABSTRACT

The type of this research is descriptive research that use mixed method. The objective of this research was to know the second semester Mathematics students' metacognitive skill in solving Mathematics problems at State University of Medan, to know the students' metacognitive (scaffolding) questions if given Mathematics problems and to know the relationship of metacognitive skill with students' learning outcomes. This research was held in Mathematics laboratory at State University of Medan. Subject of this research was Mathematics students in second semester who are taking Calculus II course which consist of 40 students. Object of this research was Mathematics students' metacognitive skill in solving problems. Instrument of this research was researcher itself who are guided by metacognitive questionnaire which adapted from Metacognitive Awareness Inventory (MAI), test which has been validated by experts and interview guidelines. Technique of data analyzing is consisted of descriptive statistics such as data service by table/figure, mean calculation, percentage calculation and correlation analysis. Based on questionnaire, the percentage of students' metacognitive skill is 73.78%. Based on test, the percentage of students' metacognitive skill is 73.84%. It means the average of the second semester Mathematics students' metacognitive skill is in medium category. In addition, based on interview got that in the medium category, students understand the problem but technically as it determines the time, set the time and think the achievement of goals was not so aware of and also still less in explaining the way of the problem solving smoothly. For metacognitive (scaffolding) question got that the strategic question is the most often to give by students in solving problems. For all indicators of metacognitive skill got $r = 0.42$ which means the correlation is medium. It means metacognitive skill has a good influential enough toward students' learning outcomes in this study.

Keywords: *Metacognition, Metacognitive Skill, Metacognitive Scaffolding, Problem Solving, Learning Outcomes*