

FACTORS AFFECTING MATHEMATICAL PROBLEM SOLVING COMPETENCE OF UNDERGRADUATE STUDENTS IN FACING COMPETITIVE EXAMINATIONS

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ABSTRACT

Promoting the ability of mathematics problem-solving is an important task. The Institute for the Promotion of Teaching Science and Technology (IPST 1997) is stated that studying mathematics plays a very important role in developing human thinking to be more creative, reasonable and able to analyze problems and to forecast the future. Examination relies mostly on memorization of knowledge and that results in drawbacks like students' low capability in thinking, analyzing, synthesizing, innovating and problem-solving. Students' competence can be measured by observing their performance in terms of task finalization based on their expertise. Student competence can be predisposed by many factors. These influences can come from teachers as instructors, students as learners and the environment as an enthusiast. In Tamil Nadu, undergraduate students' mathematical problem-solving competence and their achievement in competitive examinations are a critical issue as an enormous number of students, especially undergraduate students studying in arts and science. The authors of this article discuss the factors that impact on students' problem-solving competence and describe a research framework, based on a literature review, which might contribute to improving the students' mathematical problem-solving competence. Ultimately, they decide to focus on some specific factors: attitude towards mathematics, mathematics anxiety and interest inmathematics.

KEYWORDS: Mathematical Problem Solving, Competence, Attitude, Interest, Anxiety, Mathematics Education