

## Teacher-student relationship and mathematical problem solving ability: Mediating roles of self-efficacy and math anxiety

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This study examined the link between teacher-student relationship and mathematical problem solving ability via self-efficacy to math anxiety with 1667 fifth graders from the middle district of China. Student-reported questionnaires measure mathematical problem solving, teacher-student relationship, self-efficacy and math anxiety, the data of which were collected in October 2017. The findings indicated that (1) teacher-student relationship existed a direct and positive effect on students' mathematical problems solving ability; (2) the positive link between teacher-student relationship and mathematical problem solving ability was partially mediated by self-efficacy; (3) teacher-student relationship could affect students' mathematical problem solving ability from self-efficacy to math anxiety, but the effect of self-efficacy on math anxiety is lower. In addition, educational implications and limitations were also discussed.