CORRELATION BETWEEN STUDENTS' SUCCESS IN THE MATHEMATICS AND AFFINITY TOWARDS MATHEMATICS SUBJECT

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Abstract: It has been established by local and international assessments that the success level in science subjects at all levels and all types in formal education and particularly in mathematics subject is very low in Turkey. Unfortunately, this phenomenon of the lack of success also displays temporal continuity. Although numerous studies have been conducted on the cognitive and educational reasons on the students' lack of success in mathematics, solutions to alleviate the issue have not yet been produced adequately. Since humans are not merely cognitive, but have an affective aspect, it is natural that the concept of success is also closely related with our affective qualities.

In their study, Ergin & Ergin (2017) revealed a strong correlation between success in mathematics and affective approach to mathematics (affinity or no affinity) towards mathematics. The same study also found that the reasons of favoring or not favoring the mathematics class are influential in regressing success in mathematics. Determining the characteristics of students influencing positive or negative emotional approaches to mathematics will be an important piece of information on the path to success in mathematics.

The aim of the study is to determine the emotional approaches to the mathematics subject as the underlying reasons of anxiety in mathematics which leads to failure of students and to establish which of the reasons of affinity or no affinity towards this class are higher. It also includes seeking to answer the questions of by which demographic characteristics these reasons vary. The study has been conducted with randomly selected secondary and high school students in Tekirdağ province during the spring term of 2016-2017 academic term. The data collection tool was the scale prepared by Ergin, Demirkol and Ergin (2017) involving a total of 35 questions with 18 on disliking and 17 on liking with 5-level grading. Furthermore, a survey of 5 questions for demographic characteristics has been used. The T test and variant analysis for statistical analysis of data and LSD methods for Post hoc analysis to determine the source of variation have been used.

Keywords: Mathematics, affinity, anxiety, success

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