

CORRELATION BETWEEN HIGH SCHOOL STUDENTS' SUCCESS IN MATHEMATICS AND STUDYING STRATEGIES

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Abstract: Students' academic success is influenced by four fundamental factors, namely the students themselves, their social environment, physical conditions and education. The factors stemming from the students themselves comprise three sub-factors, namely mental competence, affective/emotional properties and study habits. Students' affective/emotional properties, variations in personality features also reflect on study habits, methods and techniques which interact with mental competences. Consequently, study strategies play a role as one of the defining factors students' success. The study strategies of students should also have a powerful influence on success in mathematics, which is the lowest scoring subject of student success in Turkey.

The study has been conducted with randomly selected high school students among Suleymanpasa and Cerkezkoy districts in Tekirdag province during the 2016-2017 spring term. The data collection tool was the "Scale of Study Strategies" prepared by Ergin (2017). The scale comprises 30 items each with 4 grades. To determine sub-dimensions as scale development statistics, the varimax rotated exploratory factor analysis has been used. Internal consistency has been determined by calculating item-total correlation coefficient and item-remainder correlation coefficient individually for each sub-dimension. Similarly, the distinctive effect of items has been determined by applying the t-test in upper quarter and lower quarters. The Cronbach and Rulon coefficients have been calculated for the scale and its sub-dimensions to determine reliability. Through statistical processing, it has been established that the scale is applicable, reliable and usable. Furthermore, the survey prepared by the researchers, involving 13 questions has been used to gather data on certain demographic characteristics of students. According to the findings of this study, the students' success in mathematics is correlated with their study strategies.

Keywords: Study Strategies, mathematics, academic success

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