



**THE EFFECT OF VIDEO GAME PLAYING ON
MATHEMATICAL ACHIEVEMENT AND OVERALL
ACHIEVEMENT OF HIGH SCHOOL STUDENTS**

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Abstract

This study is conducted on high school students, comparing the mathematical mean grade point averages (GPAs) and cumulative GPAs of students who do play video games with those who do not play video games. Students are given a survey asking how many hours they played video games per week, the gaming system they used, the category of games they played, the number of years they had been playing games, the location of the gaming system, and whether they played the game alone or with another player. These categories are analyzed and compared to the student's cumulative GPA and GPA in mathematics courses. Students who reported not playing video games had a higher mean mathematical GPA and a higher mean cumulative GPA. However, the differences are not statistically significant. The percentage of males who played video games is significantly higher than the percentage of females who played video games. Both the mathematical GPA and cumulative GPA of students who play video games is negatively correlated to the numbers of hours spent playing video games and also the number of years spent playing video games. However, these results are not statistically significant.

Keywords and phrases: video game playing, mathematical GPA, overall cumulative GPA, academic achievement, *t*-test, correlation.

