



CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s) Bryan A. Roth; Marc J. Weintraub	Project Number <div style="text-align: right;">22817</div>
Project Title If Einstein Had Watched More TV, Would We Have E=mc² TV?	
<div style="text-align: center;">Abstract</div> <p>Objectives/Goals Our objective was to determine if there is a negative correlation between TV watching and grade point average amongst 6th, 7th, and 8th grade students.</p> <p>Methods/Materials We developed a survey to collect data about students' GPA and the hours of TV they watch per week. Four hundred forty-one 6th, 7th, and 8th grade students completed the survey. The breakdown by grade level was: 58 6th graders, 234 7th graders, and 149 8th graders. Based on the survey, we calculated the GPA for each student who responded, and we entered each GPA into a spreadsheet for their grade level. Within each grade level, we grouped the individual GPAs into the corresponding groups of #hours of TV watched. These groups were: 0-1 hours, 2-3 hours, 4-5 hours, 6-8 hours, and 9+ hours of TV watched. Then, we calculated the mean GPA for each group, and graphed the results.</p> <p>Results In seventh grade, for 9+ hours of TV watching per week, the mean GPA was 2.22, the lowest GPA in that grade. By contrast, the 0-1 hours group had a mean GPA of 3.04. In eighth grade, the lowest mean GPA, 2.38, was associated with 9+ hours of TV per week. In comparison, the 0-1 hour group had a mean GPA of 3.07. Finally, in sixth grade, the lowest GPA, 2.83, was associated with watching TV for 6-8 hours per week, but the second lowest GPA, 3.08, was associated with watching 9+ hours of TV per week. By comparison, the mean GPA of those who watched 0-1 hours was 3.46. For both 7th and 8th grade students, as the amount of TV watched per week increased, the mean GPt decreased. Though the correlation was not as obvious for the 6th graders, they generally followed this trend, in that the lowest mean GPA was generated by those who watched many hours of TV per week.</p> <p>Conclusions/Discussion Our hypothesis appears to be correct in two of the three grades. For 7th and 8th graders, the more TV that they watched, the lower their grade point averages. For 6th graders, we saw the same relationship, except for the group that watched nine or more hours of TV per week. For that group, the grade point averages were higher than predicted.</p>	
Summary Statement Four hundred forty 6th, 7th, and 8th grade students were surveyed to determine if there is a negative correlation between TV watching and grade point average.	
Help Received parents reviewed work	