

Making the Connection: Physical Activity and Sedentary Behaviors and Academic Grades

Data from the 2015 National Youth Risk Behavior Survey (YRBS) show that students with higher grades are more likely to engage in physical activity behaviors compared to students with lower grades. Students with higher grades are also less likely to engage in sedentary behaviors (e.g., watching television or playing video games) compared to students with lower grades. It is important to remember that these associations do not prove causation. School health professionals, school officials, and other decision makers can use this fact sheet to better understand the connection between physical activity and sedentary behaviors and grades and reinforce policies and practices that support physical activity in schools.

Key findings

Compared to students with lower grades, **students with higher grades are**

more likely to:

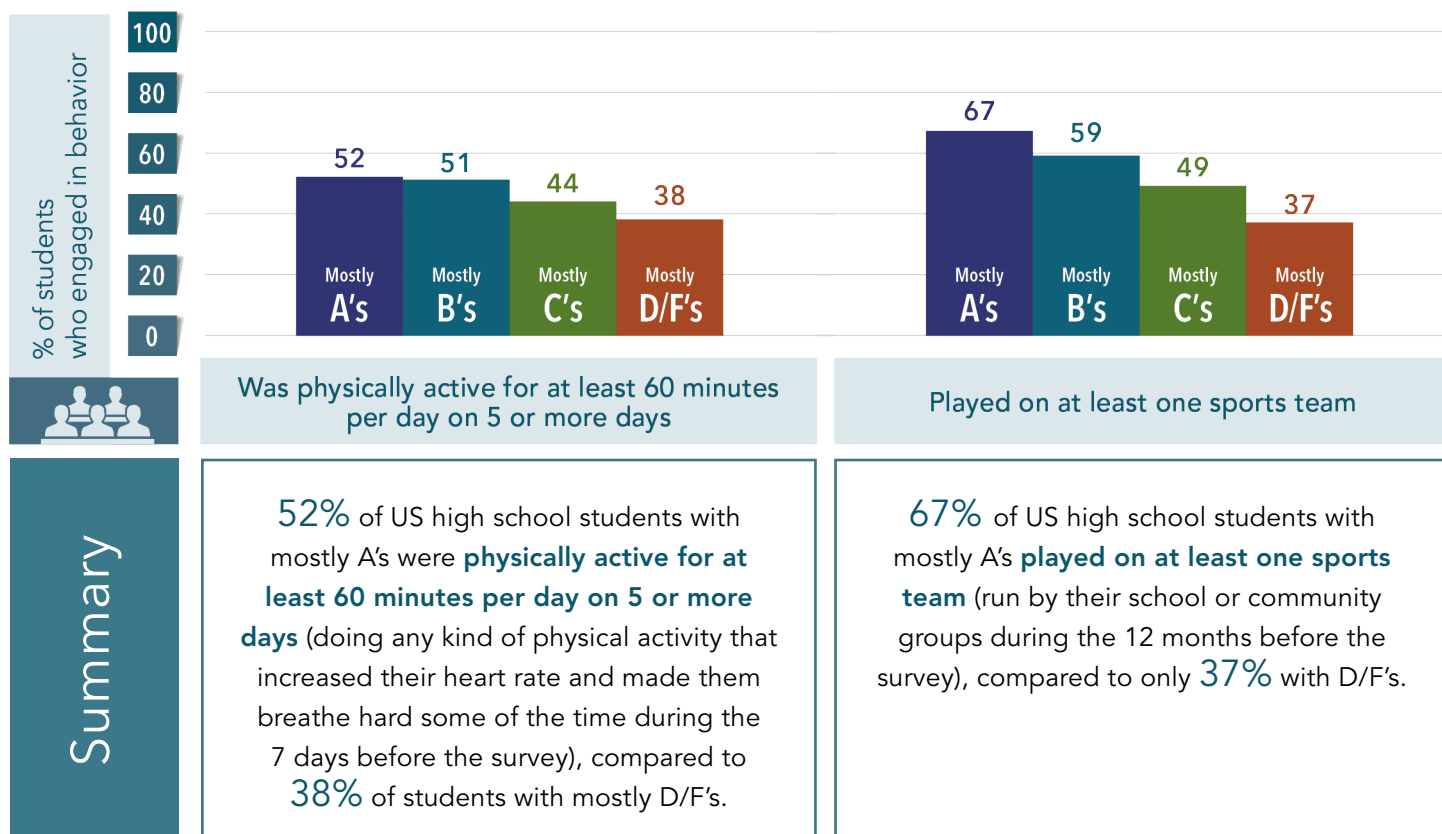
- Engage in physical activity for at least 60 minutes per day on 5 or more days.
- Play on at least one sports team.

less likely to:

- Watch television for 3 or more hours per day.
- Play video games or use a computer 3 or more hours per day.

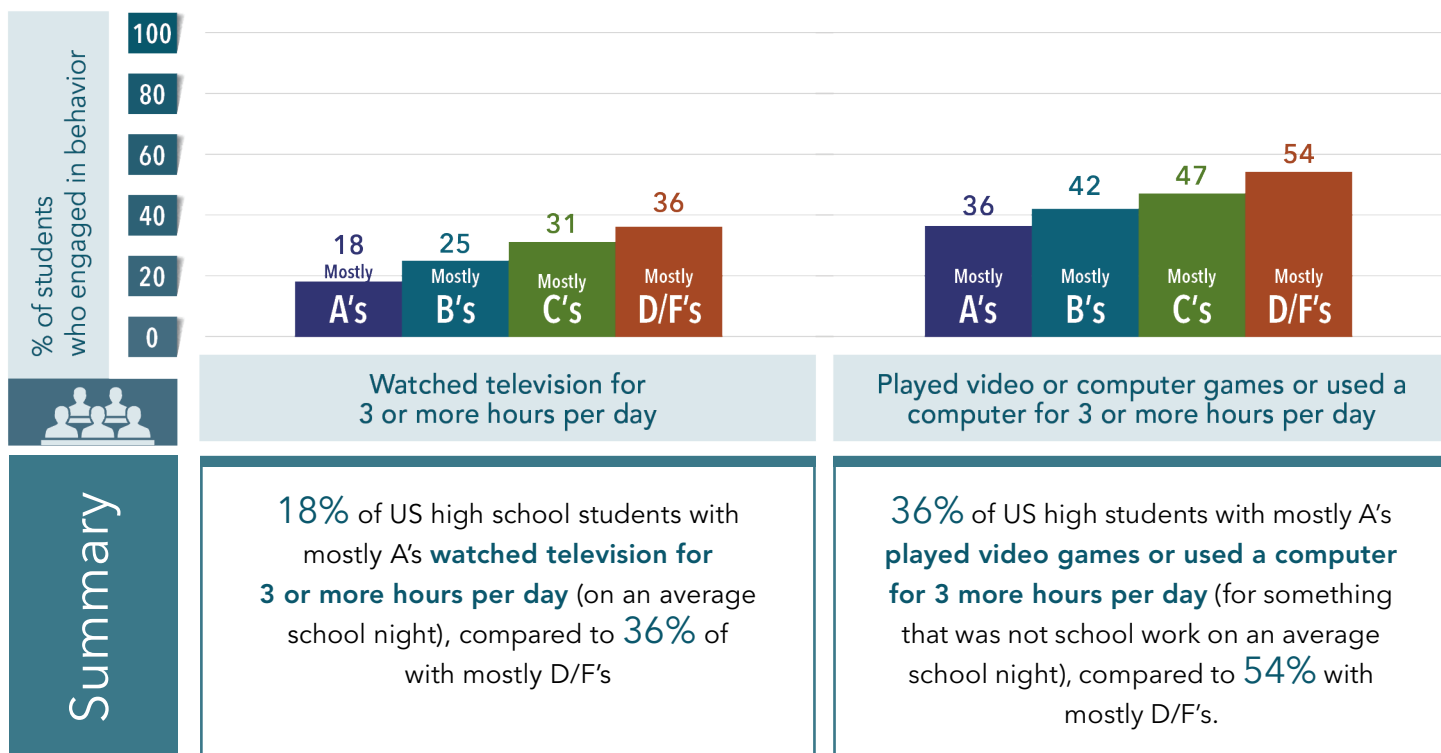
FIGURE 1^A

Physical Activity Behaviors, by type of academic grades earned
- United States, Youth Risk Behavior Survey, 2015



*Figure 1^A and Figure 1^B illustrate the percentage of students who engaged in each risk behavior, by type of grades mostly earned in school (mostly A's, B's, C's, D's/F's) (row proportions). The percentage of students who did not engage in each risk behavior are not shown. However, the percentages of students who did and did not engage in each risk behavior, by type of grades mostly earned in school, sum to 100%. Logistic regression analyses (not shown) controlling for sex, race/ethnicity, and grade in school confirmed a significant association between physical activity and academic grades. You can also view data from other [2015 YRBS physical activity and sedentary behavior variables](#).

FIGURE 1B Sedentary Behaviors, by type of academic grades earned
- United States, Youth Risk Behavior Survey, 2015



Conclusions

The results from the YRBS survey provide evidence of a significant association between physical activity behaviors and academic grades. Further research is warranted to determine whether higher grades in school lead to physical activity behaviors, if physical activity behaviors lead to higher grades, or some other factors lead to these physical activity behaviors.

There is a close relationship between health and education. By working together, education and health agencies, parents, and communities can ensure that students are healthy and ready to learn in school.

About the Data

The National YRBS monitors priority health-risk behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults in the United States. It is conducted every 2 years during the spring and provides data representative of 9th through 12 grade students in public and private schools throughout the nation. In 2015, students completing the YRBS were asked, "During the past 12 months, how would you describe your grades in school?" and given seven response options (Mostly A's, Mostly B's, Mostly C's, Mostly D's, Mostly F's, None of these grades, Not sure). In 2015, 32% of students received mostly A's, 38% received mostly B's, 20% received mostly C's, 6% received mostly D's or F's, and 4% reported receiving none of these grades or not sure.

For more information, visit the [CDC's Healthy Schools website](https://www.cdc.gov/healthyschools/), or call 800-CDC-INFO (800-232-4636).



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