Making the Connection: Alcohol Behaviors and Academic Grades

Data from the 2019 national Youth Risk Behavior Survey (YRBS) show that students with higher grades are less likely to engage in alcohol use behaviors 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 alcohol use behaviors and grades and reinforce policies and practices that discourage alcohol use.

**Key Findings**

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

- Have had their first drink of alcohol before age 13.
- Currently drink alcohol.
- Currently binge drink.

**FIGURE 1**

Alcohol Behaviors, by Type of Academic Grades Earned
- United States, Youth Risk Behavior Survey, 2019

**SUMMARY**

- **12%** of US high school students with mostly A's had their first drink of alcohol (other than a few sips) before age 13 years, compared to **26%** of students with mostly D/F's.
- **27%** of US high school students with mostly A's reported current alcohol use (at least one drink of alcohol on at least 1 day during the 30 days before the survey), compared to **40%** of students with D/F's.
- **13%** of US high school students with mostly A's reported current binge drinking (had four or more drinks of alcohol in a row for females or five or more drinks of alcohol in a row for males, within a couple of hours, on at least 1 day during the 30 days before the survey), compared to **23%** of students with mostly D/F's.

*Figure 1 illustrates the percentage of students who engaged in each health-related 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 health-related behavior are not shown. However, the percentages of students who did and did not engage in each health-related 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 alcohol behaviors and academic grades.*
Conclusions

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

There is a close relationship between health and education. Broader prevention policies for changing the environment in which youths live (e.g., those that reduce the availability of substances) can also be used as part of a comprehensive approach for reducing youth substance use. By working together, education and health agencies, parents, and communities can ensure that students are healthy and ready to learn in school. Find out more about the connection between health and academic achievement on CDC’s Healthy Schools Health and Academics website.

About the Data

The Youth Risk Behavior Surveillance System (YRBSS) monitors priority health-related 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 12th grade students in public and private schools throughout the nation. In 2019, 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 2019, 38.0% of students received mostly A’s, 37.1% received mostly B’s, 16.0% received mostly C’s, 4.6% received mostly D’s or F’s, and 4.3% reported receiving none of these grades or not sure.