



HIGHER EDUCATION UPDATE

Academic Performance, Retention, and Alcohol Use

Overview

Multiple factors can have a profound impact on a student's academic performance. These include income, family obligations, and student readiness for higher education. Research into higher education performance and retention also implicates student alcohol use. The study "[Assessing drinking and academic performance among a nationally representative sample of college students](#)" (2016) showed that:

- Students with lower GPAs consume a greater number of drinks compared with those with higher GPAs.
- Number of drinks consumed was the strongest predictor of academic performance.
- The likelihood of being an A student decreased with each drink consumed.
- The likelihood of being an A student decreased as binge drinking increased.

The authors of the study concluded, "The dynamic, interdependent relationship between alcohol and GPA documented herein confirms previous research, which delineates reduced academic performance as a function of alcohol consumption" (p. 347).

Data from the National Institute on Alcohol Abuse and Alcoholism's seminal report [A Call to Action: Changing the Culture of Drinking at U.S. Colleges](#) (2002) has been corroborated by recent [University of Minnesota research](#) (2015) that shows about 25 percent of high-risk student drinkers (those who consume five or more standard drinks¹ at a sitting) report academic consequences of their drinking, including missing class, doing poorly on exams or homework assignments, and receiving lower grades overall. Indeed, a [nationally representative sample of college and university students](#) in the United States found that alcohol use was rated as one of the top ten contributors to low academic performance.

The Effect of Alcohol on Retention and Graduation

The effect of alcohol use on retention and graduation rates has gained attention in recent years. In the study "[Is alcohol consumption associated with poor academic achievement in university students?](#)" (2013), the authors concluded that alcohol misuse is very likely to negatively impact academic performance, and that "... students who drink excessively tend to spend less time studying and skip more of their classes..." resulting in "... lower grades, dropping out, and being unemployed after college" (p. 7).

Reduced consumption coincides with improved academic performance. A two-year longitudinal study,

¹ In the United States, one "standard" drink contains roughly 14 grams of pure alcohol, which is found in:

- 12 ounces of regular beer, which is usually about 5% alcohol
- 5 ounces of wine, which is typically about 12% alcohol
- 1.5 ounces of distilled spirits, which is about 40% alcohol

[“Longitudinal influence of alcohol and marijuana use on academic performance in college students”](#) (2017), concluded that “...when students curtailed their substance use over time they had significantly higher academic GPA compared to those who remained stable in their substance use patterns over the two year period.”

[“Is heavy drinking really associated with attrition from college? The alcohol–attrition paradox”](#) (2008), includes the important perspective that student attrition at colleges across the United States poses a significant problem for students and families, institutes of higher education, and the nation's workforce competing in the global economy. Although the researchers found that heavy drinking² *contributes to* attrition, they also show that “there is little evidence that [heavy drinking] is a reliable predictor of attrition.” The authors conclude that interventions aimed at decreasing attrition should include a focus on reducing instances or occasions of heavy drinking, such as fraternity parties.

Evidence-Based Strategies

Colleges and universities recognize the role that alcohol can play in undermining student success and have taken measures to address high-risk drinking to increase retention and graduation rates. The authors of the study [“Does alcohol consumption reduce human capital accumulation? Evidence from the College Alcohol Study”](#) (2002) reported: “In addition to reducing other adverse outcomes associated with drinking ... policies to reduce college students' drinking can be expected to improve the quality of human capital they accumulate. The immediate benefits of this include reducing the likelihood of students dropping out of college because of poor grades and improving the likelihood of entrance into graduate programs (which is based largely on college GPA). The long-term consequences of improved academic performance include greater labor market participation and higher earnings.”

The journal article [“Magnitude and prevention of college drinking and related problems”](#) (2010) describes various evidence-based policies and programs to reduce college students' drinking. For example, a sizable base of scientific literature demonstrates that individually oriented approaches, such as screening and brief motivational interventions, can reduce drinking among students who volunteer for these programs and those mandated to receive counseling because of alcohol-related disciplinary actions.

However, these interventions do not reach a sizeable portion of college students with problematic drinking behavior. Moreover, community conditions and the availability of alcohol to those under 21 contributes to college drinking problems. In response, the article recommends that colleges and surrounding communities work together to implement multifaceted programs. The authors advise, “Collectively, [these programs] need to involve multiple departments of city government as well as concerned private citizens and organizations and multiple sectors of the college community, presidents, deans, other administrators, campus security, residence counselors, health service providers, alumni, faculty, and students if they want to most effectively reduce harmful drinking³ and the myriad of health and social problems linked to harmful drinking.”

² SAMHSA defines [heavy alcohol use](#) as binge drinking on 5 or more days in the past month. NIAAA defines [binge drinking](#) as a pattern of drinking that brings blood alcohol concentration (BAC) levels to 0.08 g/dL. This typically occurs after 4 drinks for women and 5 drinks for men—in about 2 hours.

³ [Harmful drinking](#) is defined as a pattern of alcohol consumption causing health problems directly related to alcohol.

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) offers [CollegeAIM](#), a Web-based tool to help campuses identify effective alcohol interventions and address harmful and student drinking.

What Colleges and Universities Are Doing

Higher education campuses, in partnership with community stakeholders—including municipal government, police, retailers, residential and civic organizations—can pursue evidence-based measures to mitigate adverse consequences associated with student drinking. A recent example of this strategy includes [Frostburg State University](#).

Related Resources

- [Center for the Study of College Student Retention](#)—This center provides researchers and practitioners with a comprehensive resource for finding information on college student retention and attrition.
- [Journal of College Student Retention: Research, Theory & Practice](#)—This journal is dedicated exclusively to college student retention issues.
- [Promising and Practical Strategies to Increase Postsecondary Success](#)—This website offers promising and practical strategies, practices, programs, and activities that have improved rates of postsecondary success, transfer, and graduation.
- [Campus Drug Prevention](#)—The Drug Enforcement Administration provides institutions of resources to prevent drug problems, including alcohol-related, among college students.
- [National Center for Campus Public Safety](#)—Department of Justice support for campus officials in creating safer and stronger campus communities.

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