

# Excessive drinking and drug use during college: Prospective associations with graduate school plans and attendance

## MAJOR FINDINGS:

Substance use is associated with decreased odds of college attendance, delayed college graduation, and lower educational goals among adolescents and young adults.<sup>1, 2, 3</sup> However, less is known about how substance use might be related to having plans to attend graduate school and realization of those plans. This study analyzed prospective data to examine the relationship between substance use during college and both plans to attend graduate school and graduate school enrollment.

Undergraduate college students ( $N=980$ ) from a large, mid-Atlantic university were assessed during their first year of college (Year 1) and annually thereafter (Years 2-6). Participants were asked about their plans to attend graduate school during the year in which each participant graduated. Graduate school enrollment was assessed in Years 5 and 6. DSM-IV criteria were used to assess alcohol use disorder at any point during college, and participants were categorized into “no disorder”, “abuse”, and “dependence” groups. Participants were also categorized into four drug use categories based on their use of seven illicit drugs and nonmedical use of three classes of prescription drugs during college: 1) no use, 2) marijuana use only, 3) sporadic use, and 4) persistent use.

Roughly half (54%) of students had “definite” plans to attend graduate school, and 47% of this group enrolled in graduate school by Year 6. After statistical adjustment for demographic characteristics and college GPA, participants who met criteria for alcohol dependence during college were significantly less likely to have definite plans for graduate school than individuals who did not meet criteria for alcohol use disorder. Among students with definite graduate school plans, students who met criteria for either alcohol abuse or dependence during college were significantly less likely to attend graduate school than those who did not meet criteria for alcohol use disorder. Persistent drug use during college was significantly related to not following through with plans to attend graduate school, but this relationship did not retain statistical significance after adjustment for alcohol use disorder and other variables.

### Practice and Policy Suggestions:

Results support and extend prior research on the negative association between heavy alcohol use and academic achievement. Excessive drinking during college might interfere with aspirations to attend graduate school and affect follow-through on plans for attendance. The results of this study provide yet another reason for undergraduate institutions to address excessive drinking and concomitant substance use. Intervening early with at-risk students might help them achieve their academic goals. Future research should continue to examine how college substance use might impact other post-college outcomes.

### Of major interest to:

- College Administrators
- Parents
- Educators
- Health Professionals
- Students
- Law and Policy Makers



## References:

- <sup>1</sup>Arria, A.M., Caldeira, K.M., Bugbee, B.A., Vincent, K.B., O'Grady, K.E. (2015). The academic consequences of marijuana use during college. *Psychology of Addictive Behaviors*. 29(3), 564-575. doi:10.1037/adb0000108
- <sup>2</sup>Patrick, M.E., Schulenberg, J.E., O'Malley, P.M. (2013). High school substance use as a predictor of college attendance, completion, and dropout: A national multicohort longitudinal study. *Youth and Society*. 48(3), 425-447. doi:10.1177/0044118X13508961
- <sup>3</sup>Patte, K.A., Qian, W., Leatherdale, S.T. (2017). Marijuana and alcohol use as predictors of academic achievement: A longitudinal analysis among youth in the COMPASS study. *Journal of School Health*. 87(5), 310-318. doi:10.1111/josh.12498

The complete publication referenced in this research brief can be found here: Arria, A.M., Allen, H.K., Caldeira, K.M., Vincent, K.B., O'Grady, K.E. (2020). Excessive drinking and drug use during college: Prospective associations with graduate school plans and attendance. *Journal of American College Health*. 68(2), 132-138. doi:10.1080/07448481.2018.1535494



## About the College Life Study (CLS)

The CLS is a longitudinal study of 1,253 college students at a large, public, mid-Atlantic university. This study is one of the first large-scale scientific investigations that aims to discover the impact of health-related behaviors during the college experience. Any first-time, first-year student between 17 and 19 years old at the university in the fall of 2004 was eligible to participate in a screening survey. The researchers then selected students to participate in the longitudinal study, which consisted of two-hour personal interviews administered annually, beginning with their first year of college. A full description of the methods used is available.<sup>1,2</sup> Inherent to all self-reporting research methods is the possibility for response bias. Because the sample is from one large university, the ability to generalize the findings elsewhere is uncertain. However, response rates have been excellent and attrition bias has been minimal.

For more information about the study, please visit [www.cls.umd.edu](http://www.cls.umd.edu) or contact Amelia M. Arria at the University of Maryland School of Public Health at [aarria@umd.edu](mailto:aarria@umd.edu).

<sup>1</sup> Arria, A.M., Caldeira, K.M., O'Grady, K.E., Vincent, K.B., Fitzelle, D.B., Johnson, E.P., Wish, E.D. (2008). Drug exposure opportunities and use patterns among college students: Results of a longitudinal prospective cohort study. *Substance Abuse*. 29(4), 19-38. doi:10.1080/08897070802418451; PMC2614283

<sup>2</sup> Vincent, K.B., Kasperski, S.J., Caldeira, K.M., Garnier-Dykstra, L.M., Pinchevsky, G.M., O'Grady, K.E., Arria, A.M. (2012). Maintaining superior follow-up rates in a longitudinal study: Experiences from the College Life Study. *International Journal of Multiple Research Approaches*. 6(1), 56-72. doi:10.5172/mra.2012.6.1.56; PMC3255097

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