

Drug use patterns and continuous enrollment in college: Results from a longitudinal study

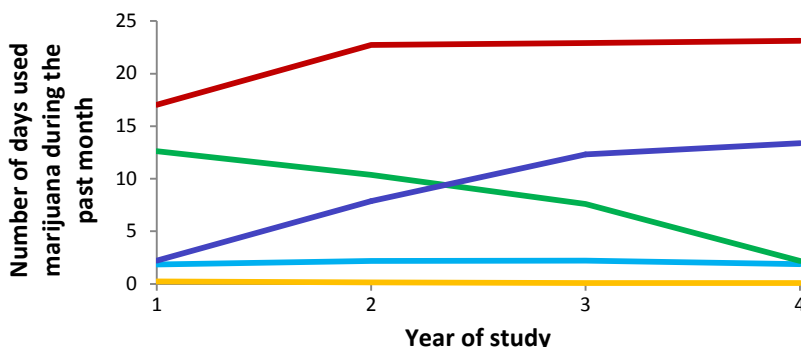
MAJOR FINDINGS:

Researchers followed a group of 1,133 college students over four years to see whether students' drug use patterns were related to the likelihood of or gaps in enrollment in college. Continuous enrollment was defined as attending class every semester for all four years (or until early graduation). After grouping students into five distinct categories based on how many days they had used marijuana each year (see Figure 1), researchers discovered that "chronic/heavy" users of marijuana were twice as likely as minimal users to experience an enrollment gap sometime during their first four years of college. Students whose marijuana use patterns were categorized as "increasing" and "decreasing" were also more likely to have enrollment gaps compared with the "minimal use" group.

Researchers also grouped students based on how many different types of illicit drugs (other than marijuana) and nonmedical prescription drugs each student had used each year, as shown in Figure 2. Students with high levels of drug use were twice as likely as those with minimal use to have an enrollment gap. Enrollment gaps were also significantly more likely for students with low levels of drug use as compared with minimal users.

These findings held true even after adjusting for demographics, high school GPA, personality, and other background factors. This is especially important because personality factors are likely to be related to both drug use and academic performance. In this study students who scored higher on scales of agreeableness and conscientiousness were significantly more likely to remain continuously enrolled and had less drug use, yet this did not account for the association between drug use and enrollment.

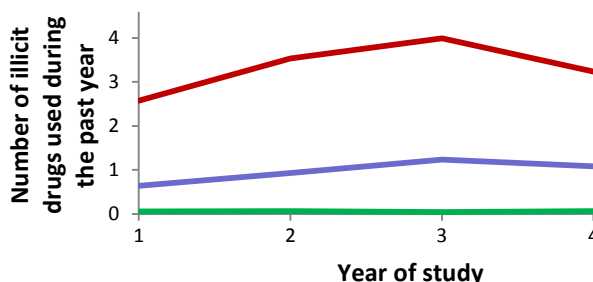
Figure 1. Patterns of marijuana use during four years of college



Group	n	% sample
Chronic/Heavy*	76	6.7
Increasing*	86	7.6
Decreasing*	59	5.2
Infrequent	230	20.3
Minimal	682	60.2

*Risk for enrollment gap compared with the "minimal use" group.

Figure 2. Illicit drug use patterns during four years of college (other than marijuana)



Group	n	% sample
High Use*	139	12.3
Low Use*	332	29.3
Minimal Use	662	58.4

*Risk for enrollment gap compared with the "minimal use" group.

Of major interest to:

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



Practice and Policy Suggestions: These findings have implications for college administrators concerned with improving retention rates. Given the inverse relationship between drug use and continuous enrollment, reducing drug use might be promising for improving college graduation rates. Researchers specifically encourage early screening and intervention, as many alcohol and drug abuse problems typically have their onset in adolescence.

Parents also have an important role in ensuring their child's success in college by being communicative, monitoring for signs of drug use, and intervening when necessary.

Future research is needed to understand whether drug use during college has long-term effects on career development.

The complete publication referenced in this research brief can be found here: Arria, A.M., Garnier-Dykstra, L.M., Caldeira, K.M., Vincent, K.B., Winick, E.R., O'Grady, K.E. (2013). Drug use patterns and continuous enrollment in college: Results from a longitudinal study. *Journal of Studies on Alcohol and Drugs*. 74(1), 71-83.



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.^{1,2} 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 or contact Amelia M. Arria at the University of Maryland School of Public Health at aarria@umd.edu.

¹ 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.

² 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.

This research brief was prepared by Olga Moshkovich.

