Risk factors for gambling and substance use among recent college students

MAJOR FINDINGS:

Gambling among college students overlaps with alcohol, marijuana, and other drug use. Little is known about the extent to which this relationship can be explained by commonalities in pre-existing risk factors for both gambling and substance use, such as gender, family history, mental health problems, and impulsivity.

This study used data from a sample of young adults (*n*=1,019) who were interviewed annually since college entry to 1) document the prevalence of gambling activities and 2) examine the relationships between gambling, substance use, and risk factors (demographics, parental substance use and mental health history, behavioral disinhibition, mental health, and extracurricular involvement). Gambling behaviors and tobacco, alcohol, and other drug use were measured in Year 5 of the study when the majority of participants were 22; many of the risk factors were measured in earlier study years.

Results showed that 60% of the sample gambled during the past year (see Figure 1), with only 6% gambling weekly or more. Participants who gambled were more likely to be male, athletes, and involved in Greek life during college, and gambling was more frequent at higher levels of behavioral dysregulation. A small number of risk factors accounted for the majority of the variance in gambling frequency. The main predictors of gambling were sex, race, behavioral dysregulation, and extracurricular involvement.

Greek affiliation and athletics involvement had independent, direct effects on both gambling and substance use, while the direct effects of sex, race/ethnicity, sensation-seeking, and behavioral dysregulation on gambling and substance use were partially or completely explained by shared variance between these two outcomes. Childhood conduct problems, anxiety symptoms, parental mental health problems, and parental alcohol problems were all directly associated with substance use but did not display an effect on gambling. The finding that few risk factors were exclusively associated with gambling highlights the overlap between risk factors for both gambling and substance use.

Figure 1. Prevalence and frequency of seven different gambling activities during the past year (*n*=1,109).
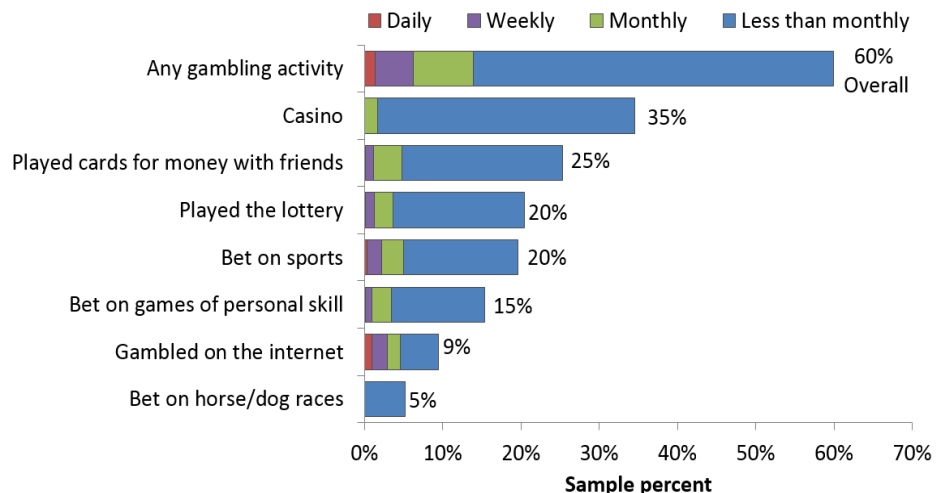
Of major interest to:

☑ **College Administrators**

☑ **Parents**

☑ **Educators**

☑ **Health Professionals**

☑ **Students**

☐ **Law and Policy Makers**

Practice and Policy Suggestions:

The results of this study highlight the interrelatedness of gambling and substance use, and this relationship is partially attributable to a shared set of risk factors. Future research is needed to better understand the direction of the relationship between gambling and substance use and whether involvement in one behavior might contribute to an escalation of the other. Given frequent co-occurrence of gambling and substance use, these behaviors could be addressed simultaneously through prevention activities. However, differing risk factors for gambling and substance use suggest a need for unique prevention and intervention approaches.

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. doi:10.1080/08897070802418451; PMC2614283

[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. doi:10.5172/mra.2012.6.1.56; PMC3255097

This research brief was prepared by Hannah Allen.

The Center on Young Adult Health and Development
University of Maryland School of Public Health
www.cyahd.umd.edu