

# Abstract

## **Birth cohort effects on adolescent alcohol use: The influence of social norms from 1976-2007**

Keyes, K. M., Schulenberg, J. E., O'Malley, P. M., Johnston, L. D. , Bachman, J. G., Li, G., & Hasin, D.

**Context** The substantial changes in adolescent alcohol use prevalence over time suggest that population-level environmental factors are important determinants of use, yet the potential influence of such environmental factors is inadequately understood.

**Objective** To investigate whether adolescents in birth cohorts and/or time periods characterized by restrictive social norms toward alcohol were at decreased risk for alcohol use and binge drinking, controlling for individual attitudes (disapproval) toward use.

**Design, Setting, and Participants** In 32 annual national surveys of US high school students, a total of 967 562 students contributed outcome data from 1976 through 2007.

**Main Outcome Measures** Frequency of past-year alcohol use and any instance of binge drinking ( $\geq 5$  drinks) in the past 2 weeks, analyzed using multilevel models clustering individuals within periods and birth cohorts. Period- and cohort-specific social norm scores (indicating the proportion disapproving of weekend binge drinking) were modeled as predictors, controlling for individual attitudes and demographic characteristics.

**Results** Individuals who matured in birth cohorts with more restrictive social norms were less likely to use alcohol compared with individuals who matured in cohorts with more permissive norms; each 5% increase in the cohort-specific disapproval was associated with a 12% decrease in the odds of past-year alcohol use (odds ratio = 0.88; 99% CI, 0.87-0.89). The effects of cohort-specific disapproval were notably stronger among white adolescents than nonwhite adolescents.

**Conclusions** This study documents the importance of considering time-varying population-level risk factors in the study of adolescent alcohol use and indicates that, even after an individual's personal attitudes are accounted for, risk is shaped by cohort effects whereby the norms within the cohort contribute to the risk of adolescent alcohol use.

*Archives of General Psychiatry*, 69(12), 1304-1313.

[dx.doi.org/10.1001/archgenpsychiatry.2012.787](http://dx.doi.org/10.1001/archgenpsychiatry.2012.787)