

Original article

# How Collegiate Fraternity and Sorority Involvement Relates to Substance Use During Young Adulthood and Substance Use Disorders in Early Midlife: A National Longitudinal Study

ADOLESCENT HEALTH

JOURNAL OF

www.jahonline.org



# Sean Esteban McCabe, Ph.D. <sup>a,b,\*</sup>, Philip Veliz, Ph.D. <sup>a,b</sup>, and John E. Schulenberg, Ph.D. <sup>c</sup>

<sup>a</sup> University of Michigan, Center for the Study of Drugs, Alcohol, Smoking and Health, School of Nursing, Ann Arbor, Michigan

<sup>D</sup> University of Michigan, Institute for Research on Women and Gender, Ann Arbor, Michigan

<sup>c</sup> University of Michigan, Institute for Social Research, Department of Psychology, Ann Arbor, Michigan

*Article history:* Received March 10, 2017; Accepted September 15, 2017 *Keywords:* Adolescence; Young adulthood; Males; Substance use; Social fraternity; Epidemiology

#### ABSTRACT

**Purpose:** To assess how social fraternity involvement (i.e., membership and residence) in college relates to substance use behaviors and substance use disorder symptoms during young adult-hood and early midlife in a national sample.

**Methods:** National multi-cohort probability samples of US high school seniors from the Monitoring the Future study were assessed at baseline (age 18) and followed longitudinally via selfadministered surveys across seven follow-up waves to age 35. The longitudinal sample consisted of 7,019 males and 8,661 females, of which 10% of males and 10% of females were active members of fraternities or sororities during college.

**Results:** Male fraternity members who lived in fraternity houses during college had the highest levels of binge drinking and marijuana use relative to non-members and non-students in young adulthood that continued through age 35, controlling for adolescent sociodemographic and other characteristics. At age 35, 45% of the residential fraternity members reported alcohol use disorder (AUD) symptoms reflecting mild to severe AUDs; their adjusted odds of experiencing AUD symptoms at age 35 were higher than all other college and noncollege groups except non-residential fraternity members. Residential sorority members had higher odds of AUD symptoms at age 35 when compared with their noncollege female peers.

**Conclusions:** National longitudinal data confirm binge drinking and marijuana use are most prevalent among male fraternity residents relative to non-members and non-students. The increased risk of substance-related consequences associated with fraternity involvement was not developmentally limited to college and is associated with higher levels of long-term AUD symptoms during early midlife.

© 2017 Society for Adolescent Health and Medicine. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

#### IMPLICATIONS AND CONTRIBUTION

The present study provides new evidence that fraternity residence is associated with heavy substance use among young adult males well beyond the college years, resulting in greater odds of alcohol use disorder symptoms in early midlife. These findings reinforce the importance of selective and indicated substance use prevention efforts among fraternity males during and after college.

**Conflicts of Interest:** The authors have no conflicts of interest to disclose. **Disclaimer:** Publication of this article was sponsored by the Society for Adolescent Health and Medicine through an unrestricted educational grant from Merck. The opinions or views expressed in this article are those of the authors and do not necessarily represent the official position of the funders.

\* Address correspondence to: Sean Esteban McCabe, Ph.D., University of Michigan, Institute for Research on Women and Gender and Center for the Study of Drugs, Alcohol, Smoking, and Health, 204 S. State St., Ann Arbor, MI 48109.

*E-mail address:* plius@umich.edu (S.E. McCabe).

Previous research has shown that college students who belong to social fraternities or sororities have considerably higher rates of substance use than their college peers who do not join such organizations, as a result of both selection and socialization effects [1–6]. Selection and socialization effects often work in conjunction: for example, individuals who are heavy drinkers before starting college may select specific

1054-139X/© 2017 Society for Adolescent Health and Medicine. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/ licenses/by-nc-nd/4.0/). fraternities and sororities with a reputation for heavy drinking, being a member of such fraternities or sororities serving to increase their heavy drinking [4–7]. The college subculture that promotes substance use appears to be strongest among college males who belong to and reside in social fraternities [1–4,7,8]. For instance, nearly nine in every 10 social fraternity male members who reside in fraternity houses reported binge drinking in the past two weeks [8], relative to 32.4% of college young adults and 28.7% of noncollege young adults [9]. Longitudinal research has shown that greater cumulative exposure to the social Greek system leads to increased heavy drinking during the college years, particularly among college males who belonged to and resided in fraternities [1,4].

A key developmental question is the extent to which this increased risk of substance-related consequences among those involved in the social Greek system continues beyond the college years. Binge drinking tends to decline after college [9–11], with some evidence that this is true as well for those who had been involved in social fraternities and sororities [1,6]. However, questions remain regarding the ongoing relative risk associated with social Greek membership compared with the general population as these individuals transition into adulthood. To date, relevant longitudinal studies have not extended beyond age 30 and have not examined whether the heightened rates of substance use among social Greek members are associated with higher rates of substance use disorder (SUD) symptoms in adulthood. The present study is designed to address this gap using national longitudinal data extending through young adulthood and age 35.

Substance use during and after college: The prevalence trends of some substance use behaviors such as binge drinking and nonmedical prescription stimulant use is higher among college young adults relative to their noncollege peers [9,11–14]. In contrast, trends in past-year marijuana use are somewhat similar between college and noncollege youth, whereas monthly cigarette smoking is more prevalent among noncollege youth [9,14]. Notably, binge drinking and nonmedical prescription stimulant use tend to be more prevalent among college males than in females [9,13,14]. Several studies have shown that binge drinking and other substance use behaviors often decline as young adults graduate from college and assume post-college responsibilities, whereas their noncollege peers do not experience the same levels of declines during the same time period [9,11,12].

Fraternity and sorority substance use after college: At least two previous longitudinal studies from the same university have demonstrated that fraternity or sorority involvement was associated with heavy drinking levels during college, but these differences were no longer present three years after college [1,6]. Prior research has concluded that additional longitudinal research is needed to examine if these findings extend to other substances, substance-related consequences, national samples, and further into adulthood [1,4,6].

Based on sex differences in substance use behaviors, another important question is whether substance use levels following college track differently for males involved in fraternities than for females involved in sororities [1,3,4,6,7]. There is some evidence that socialization effects for substance use during college are more powerful for men than for women [2,5,7]. For instance, undergraduate men tend to increase their substance use more than do women over the course of their college careers, and evidence suggests strong socialization effects of fraternity membership on substance use during college [2,5,7]. Prior studies examining the effects of collegiate fraternity and sorority involvement on substance use are limited by multiple factors. Most have been cross-sectional and examined a limited range of substance use behaviors; the extant longitudinal studies tend to begin with college and end by age 30. Furthermore, several studies have focused on samples drawn from single institutions and cohorts; this limits the potential generalizability of the findings to college students nationally because previous research has found wide variation between individual colleges in prevalence of substance use [2,15]. Finally, most prior work has excluded individuals not attending college. The present study is designed to address these gaps.

In the present study, there is clear evidence that social fraternity and sorority involvement is associated with heightened substance use and alcohol-related problems during college [1,4,6,8]. It is less clear, however, the extent to which substance use behaviors and SUDs continue beyond the college years, and particularly past young adulthood. That is, to what extent is this experience a developmental disturbance with limited lingering effects versus a sensitive period experience that sets the stage for long-term difficulties [16–19]? The present study, which draws on US national panel data from the Monitoring the Future (MTF) project, includes multiple cohorts of high school seniors followed through young adulthood to age 35 to provide needed evidence regarding potential long-term effects of social fraternity and sorority involvement on subsequent substance use behaviors and SUD symptoms. Based on the notable sex differences in substance use observed in past studies [1,4,6,9,14], we examined the effects of social fraternity or sorority involvement separately for males and females in our main analyses. We hypothesized that college students involved with fraternities or sororities, particularly those who are residential members, are at greater risk of ongoing substance use across young adulthood and adult SUD symptoms when compared with their college and noncollege peers; furthermore, we hypothesize that among all groups, residential fraternity males are at the greatest risk of ongoing substance use and adult SUD symptoms.

### Methods

## Study design

This prospective study used national panel data from the MTF study [9,19,20]. Based on a three-stage sampling procedure, MTF surveys nationally representative samples of approximately 17,000 US high school seniors each year using questionnaires administered in classrooms. Approximately 2,400 high school seniors are randomly selected for biennial follow-ups each year and surveyed biennially using mailed questionnaires through age 30 and at age 35.

The study period for respondents at age 35 was between 2005 and 2013 (12th grade cohorts 1988–1996). The survey items regarding active membership in fraternities and sororities were added in 1990. The response rates at baseline ranged from 83% to 86% during the study period; almost all of non-response was because of the given student being absent from school the day of survey administration (about 1% refused to participate on the day of survey administration). The MTF panel oversamples drug users from the 12th grade sample to secure a population of drug users to follow into adulthood (appropriate panel weights are then used to best approximate population estimates in the followup). The overall response rate for the longitudinal sample from Download English Version:

https://daneshyari.com/en/article/7516792

Download Persian Version:

https://daneshyari.com/article/7516792

Daneshyari.com