



## Child abuse and neglect: Relations to adolescent binge drinking in the national longitudinal study of Adolescent Health (AddHealth) Study

Sunny Hyucksun Shin<sup>a,\*</sup>, Erika M. Edwards<sup>b</sup>, Timothy Heeren<sup>c</sup>

<sup>a</sup> Boston University School of Social Work, United States

<sup>b</sup> Boston University Data Coordinating Center, United States

<sup>c</sup> Boston University School of Public Health, United States

### ARTICLE INFO

#### Keywords:

Childhood maltreatment  
Child abuse  
Binge drinking  
Adolescence

### ABSTRACT

The purpose of this study was to examine the relationship between child maltreatment and adolescent binge drinking. Given that many victimized children have been maltreated in multiple ways, we examine the effects of co-occurrence of multiple types of maltreatment on adolescent binge drinking. We used the National Longitudinal Study of Adolescent Health (AddHealth), which included a nationally representative sample of adolescents ( $n = 12,748$ ). Adolescent binge drinking was defined as five or more drinks in a row at least 2–3 times per month in the past year. Among those reporting any maltreatment, 12.4% reported binge drinking compared to 9.9% among those reporting no maltreatment. Logistic regression models found that child maltreatment is a robust risk factor for adolescent binge drinking controlling for parental alcoholism. In particular, all types of or combinations of types of maltreatment were strongly associated with adolescent binge drinking, controlling for age, gender, race, parental alcoholism and monitoring. Research examining the effect of childhood maltreatment on later alcohol abuse needs to recognize the clustering effects of multiple types of childhood maltreatment on alcohol problems.

© 2008 Elsevier Ltd. All rights reserved.

### 1. Introduction

Adolescent binge drinking, typically defined as the consumption of five or more alcoholic drinks on a single occasion at least once every 2 weeks (Johnston, O'Malley, & Bachman, 2002), is a major public health problem. The National Survey on Drug Use and Health (SAMHSA, 2007) found that among the 10.8 million underage drinkers aged 12 to 20 in 2005, nearly one-fifth (18.8%) were binge drinkers with more males (21.3%) than females (16.1%) reporting participated in heavy episodic drinking in the past 12 months. Not only is adolescent binge drinking prevalent, but excessive consumption of alcohol by adolescents has been associated with a host of immediate and long-term adverse outcomes including obesity and high blood pressure (Oesterle et al., 2004), neurobehavioral and cognitive symptoms (e.g., headaches, difficulty concentrating, trouble remembering, trouble learning; Brook, Finch, Whiteman, & Brook, 2002; Scheier & Botvin, 1995), unwanted and unprotected sexual activity (Fergusson & Lynskey, 1996; Smart, 1996; Thakker, 1998), unsafe driving practices and motor vehicle crashes (Copeland, Shope, & Waller, 1996; Oesterle et al., 2004; Zakrajsek & Shope, 2006), poor academic attainment (Hill, White, Chung, Hawkins, & Catalano, 2000), and adult alcohol disorder (Schulenberg et al., 1996).

Since adolescent binge drinking occurs in an extraordinary period when adolescents experience dramatic changes in their bodies, affects, and social environment, a successful examination of adolescent binge drinking must take into account not only excessive drinking itself but its developmental contexts. The first Call to Action against youth alcohol problems made by the Surgeon General stressed that if underage drinking is to be reduced and prevented, it must be understood in its developmental contexts including individual, family, and environmental influences (US DHHS, 2007). Understanding the effects of adverse childhood experiences such as child abuse and neglect on adolescent binge drinking is one example.

Childhood maltreatment has been linked to alcohol abuse and dependence among an adult population (Anda et al., 2002; Dube, Anda, Felitti, Edwards, & Croft, 2002). In adult literature, a relatively large body of studies has reported that child maltreatment increases an individual's risk for alcohol abuse, although current evidence is not sufficient to support this relationship among male adults who had been victims of childhood maltreatment (Dube et al., 2002; Widom & Hiller-Sturmhofel, 2001). However, few studies have examined the effect of childhood victimization on adolescent binge drinking. Examination of this association is important for understanding the common pattern of alcohol consumption among adolescents with child abuse and neglect. In addition, although researchers and practitioners have long been aware of the co-occurrence of different types of maltreatment on an individual (Banyard, 1999; Benschley, Van Eenwyk, Spieker, & Schoder, 1999; Felitti et al., 1998; McCauley et al., 1997; McGee, Wolfe, Yuen, Wilson, &

\* Corresponding author. 264 Bay State Road, Boston University, School of Social Work, Boston, MA 02215, United States. Tel.: +1 617 353 7912; fax: +1 617 353 5612.

E-mail address: hshin@bu.edu (S.H. Shin).

Carnochan, 1995; Rorty, Yager, & Rossotto, 1994), researchers have rarely examined the joint effect of the co-occurrence of multiple categories of maltreatment on adolescent binge drinking.

Using a nationally representative community sample of adolescents, the current study examines the relations between multiple forms of childhood maltreatment and adolescent binge drinking. The present study will contribute to knowledge about: (1) whether childhood maltreatment is a risk factor for adolescent binge drinking; and (2) how the co-occurrence of multiple categories of maltreatment influences heavy episodic drinking in adolescence.

## 2. Methods

### 2.1. Participants

The Add Health is a national longitudinal study that explored the influence of social environment on health in adolescence (grades 7 through 12). The first wave of data collection was conducted in 1995 with 20,745 adolescents completing in-home interviews (79% response rate). Of these 20,745 adolescents, 18,255 (88%) were interviewed at Wave II in 1996, and 15,197 (73%) were interviewed at Wave III in 2002. The present study uses the 12,748 respondents who were interviewed at all three waves and have a Wave III sampling weight.

### 2.2. Measures

#### 2.2.1. Binge drinking

Respondents were asked, "During the past 12 months, on how many days did you drink five or more drinks in a row?" Adolescent binge drinking was defined as consuming five or more drinks in a row

**Table 1**  
Childhood maltreatment and sample characteristics

	Total	Any maltreatment <i>n</i> =6729	No maltreatment <i>n</i> =6019
<b>Sex***</b>			
Male ( <i>n</i> =5867)	49.6	52.1	46.9
Female ( <i>n</i> =6881)	50.4	47.9	53.1
<b>Age*</b>			
12–14 ( <i>n</i> =3622)	34.6	36.1	32.9
15–17 ( <i>n</i> =7159)	49.6	48.9	50.3
18–21 ( <i>n</i> =1964)	15.8	15.0	16.8
<b>Race/ethnicity**</b>			
Non-Hispanic White ( <i>n</i> =6778)	68.2	67.0	69.6
Black ( <i>n</i> =2501)	15.4	14.8	16.0
Hispanic ( <i>n</i> =2007)	11.9	12.8	10.9
Asian ( <i>n</i> =824)	3.2	3.9	2.5
Other ( <i>n</i> =161)	1.3	1.5	0.9
<b>Parental income<sup>a</sup>**</b>			
0–21,999 ( <i>n</i> =2301)	23.8	24.7	22.8
22,000–39,999 ( <i>n</i> =2434)	25.2	26.1	24.3
40,000–59,999 ( <i>n</i> =2387)	25.1	25.2	25.0
≥60,000 ( <i>n</i> =2578)	25.9	24.0	27.9
<b>Parental education</b>			
Not a high school graduate ( <i>n</i> =1837)	16.1	16.0	16.2
HS graduate/GED ( <i>n</i> =3182)	31.8	31.4	32.3
Technical school or some college ( <i>n</i> =3224)	29.2	30.5	27.7
At least a college graduate ( <i>n</i> =2730)	22.9	22.2	23.8
<b>Parental respondent works outside home</b>			
Yes ( <i>n</i> =8142)	73.4	74.0	72.7
No ( <i>n</i> =2870)	26.6	26.0	27.3
<b>Parental alcoholism***</b>			
Yes ( <i>n</i> =1572)	16.8	19.1	14.3
No ( <i>n</i> =8454)	83.2	80.9	85.8
<b>Consume five or more drinks in a row at least 2–3 times per month***</b>			
Yes ( <i>n</i> =1362)	11.2	12.4	9.9
No ( <i>n</i> =11386)	88.8	87.6	90.1

\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001. *P*-values based on within subgroup analyses.

<sup>a</sup> *N*=9700 (does not include refused or missing).

**Table 2**

Multivariable adjusted odds ratios (OR) and 95% confidence intervals (CI) for adolescent binge drinking using single types of maltreatment

	Consume five or more drinks in a row at least 2–3 times per month OR (95% CI)
<b>Maltreatment</b>	
No maltreatment	1.00
Any neglect	1.15 (0.96, 1.37)
Any physical abuse	1.19 (0.96, 1.47)
Any sexual abuse	1.42 (0.89, 2.25)
<b>Age at Wave 1</b>	
18–21	1.0
15–17	0.57* (0.46, 0.70)
12–14	0.16* (0.11, 0.22)
<b>Sex</b>	
Female	1.0
Male	1.87* (1.52, 2.29)
<b>Race/ethnicity</b>	
Non-Hispanic White	1.0
Black	0.51* (0.33, 0.79)
Hispanic	0.86 (0.63, 1.18)
Asian	0.43* (0.21, 0.91)
Other	0.73 (0.33, 1.62)
<b>Parental alcoholism</b>	
No	1.0
Yes	1.42* (1.29, 1.53)

\* *p*<0.05.

at least 2–3 times per month in the past year at Wave I. The reference category included those who drank less frequently or had never consumed a drink of alcohol in their lives (non-binge drinkers).

#### 2.2.2. Predictor measures

Three measures of childhood maltreatment are from the Wave III interview. The Add Health used a computer-assisted self-interviewing (CASI) method in all maltreatment questions in order to reflect their sensitive nature. The questions include: (1) *sexual abuse* – "by the time you started 6th grade, how often had one of your parents or other adult caregivers touched you in a sexual way, forced you to touch him or her in a sexual way, or forced you to have sexual relations?"; (2) *physical abuse* – "how often had slapped, hit, or kicked you?"; and (3) *neglect* – "how often had not taken care of your basic needs, such as keeping you clean or providing food or clothing or how often had left you home alone when an adult should have been with you?". All three childhood maltreatment responses were dichotomized (1 for one or more times, 0 for never). These responses were combined into a eight-category variable measuring maltreatment, categorized as: no maltreatment, neglect only, physical abuse only, sexual abuse only, neglect and physical abuse, neglect and sexual abuse, physical abuse and sexual abuse, and all three types. No maltreatment is the reference category.

The present study also included socio-demographic characteristics such age, gender, race/ethnicity, parental education and occupation, and family income, which are known to have influence on adolescent binge drinking. Parental alcoholism was examined by responses to whether the biological mother or biological father "has alcoholism," and was dichotomized into "yes, at least one biological parent has alcoholism" and "neither parent has alcoholism." Parental monitoring, measured by whether parents work outside the home or not, was used. Parental alcoholism, education and income were based on parental respondent, not child self-report.

### 2.3. Data analysis

Using chi-square tests, we compared responses to the predictor variables to having experienced any maltreatment versus no maltreatment. Then, we conducted logistic regression analysis to examine the relationship between the six-category maltreatment variable (from the eight-category maltreatment variable, sexual abuse only,

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات