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Brief Report: Tailgating as a unique context for parental modeling on college student alcohol use

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Abstract

Little attention has been directed toward potential differential effects of the various contexts in which parents model alcohol use. The present study examined college football tailgating as a potential context in which parental modeling may be more or less risky. 290 college freshmen were assessed for perceptions of their parents' drinking and tailgating behaviors, individual alcohol use and consequences. Hierarchical multiple regressions were performed and results revealed that parental tailgating accounted for a significant increase in the variance explained in each of the student drinking measures. Parental drunkenness at tailgates predicted college student drinking and negative consequences, over and above the influence of typical parental heavy episodic drinking. The specific context in which students perceive their parents as drinking heavily may impact their own drinking. Tailgating at sporting events appears to be one such context where students perceive alcohol behaviors which they later model.

Keywords

College Students; Alcohol Use; Parental Influence

Research over the past decade has examined numerous ways in which parents may impact college student alcohol use (Abar, Abar, & Turrisi, 2009; Abar & Turrisi, 2008; Patock-Peckham & Morgan-Lopez, 2006; Wood, Read, Mitchell, & Brand, 2004). Parental modeling of alcohol use, in particular, has been identified as a strong influence on student alcohol use and related negative consequences (e.g., White, Johnson, & Buyske, 2000).

The processes by which social influence factors, such as parental modeling, contribute to college drinking have been described using Social Learning Theory (SLT) (Bandura, 1977, 1982; Larimer, Irvine, Kilmer, & Marlatt, 1997; Read, Wood, & Capone, 2005; Wood, Read, Palfai, & Stevenson, 2001), such that students are thought to observe parental alcohol use and, as a result, imitate these modeled behaviors. Implicit in SLT is that modeling occurs within a given context. Previous research on contextual influences on alcohol use have focused either on more macro-contexts of development, such as neighborhood crime, family poverty, and/or family size (Chuang, Ennett, Bauman, & Foshee, 2005; Pedersen &

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McCarthy, 2008; Reifman et al., 1998), or on more micro-contexts, such as fraternity parties, known drinking holidays, and/or spring break (Greenbaum et al., 2005; Martinez, Sher, & Wood, 2008; Mattila et al., 2001). The current study examined a specific micro-context in which parental modeling of alcohol use tends to occur: tailgating events on college campuses.

Tailgating on college campuses has been shown to be high risk in terms of alcohol misuse (Coons, Howard-Hamilton, & Waryold, 1995; Neighbors, Oster-Aaland, Bergstrom, & Lewis, 2006). Neal and Fromme (2007) found that student drinking rates at tailgates were roughly equivalent to those endorsed on known risky drinking days, such as New Year's Eve and Halloween. At many universities with large athletic programs, tailgating before sporting events has become not only a student ritual (Neal & Fromme, 2007; Neighbors et al., 2006) but also a multi-generational family tradition. This is particularly true at the university where this study was conducted, such that over 100,000 people attend football games and a large portion tailgates before and/or after the games. Given this relatively common practice, the current study investigated the potential impact on college student drinking behaviors that parents might have through participation in this context. Specifically, the present study examined whether parental modeling of alcohol use in the context of tailgating was predictive of student alcohol use and consequences, over and above the effects of general reports of alcohol modeling.

Method

Participants

As part of a larger study, a random sample of 500 freshmen students at a large, Mid-Atlantic, public university was invited to complete a survey regarding student alcohol use and parent characteristics. Two-hundred and ninety (58% response rate) students consented and completed the entire survey during the fall of their freshman year (i.e., during tailgating season). To participate, students had to have been at least 18 years-old ($M = 18.6$, $SD = .50$). Roughly 61% was female, most self-identified as White (88.9%), and lived on campus (97.2%).

Measures

Paternal and Maternal Heavy Episodic Drinking (HED)—Students reported on parental HED in the past year using a single item: “How often do you think that your father/mother has had five or more drinks in a two hour period (9-point scale; 0 = not at all, to 8 = everyday)?”

Parental Tailgating Behaviors—Three single-item measures indexed parental tailgating. Students responded on a 5-point scale (never to always) to the following statements: “My parent(s) tailgate at football games,” “My parent(s) drink alcohol when they tailgate at football games,” and, “My parent(s) get drunk when they tailgate at football games?”

Student Drinking Behaviors—Weekend drinking was the sum of two items: “How many drinks do you have on a typical Friday?” and “How many drinks do you have on a typical Saturday?” ($r = .93$, $p < .001$). Student frequency of drunkenness was indexed by a single item: “During the past month, how many times have you gotten drunk, or very high from alcohol (6-point scale; 0 = Never to 5 = 9 + times)?”

Negative Consequences of Alcohol Use—A subset of 26 items pertaining to negative consequences of one's own use in the past year was adapted from the Young Adult Alcohol Problems Screening Test (Hurlbut & Sher, 1992) (Cronbach's $\alpha = .88$).

Results

Approximately 27% of mothers and 48% of fathers were perceived as engaging in HED in the past year, with ~19% and ~31%, respectively, perceived as having engaged in this behavior between 1 and 11 times in the past year. In addition, 42% of students reported that their parents tailgated, 38% reported that their parents drank at tailgates, and 21% reported that their parents got drunk at tailgates. In terms of student drinking, the average number of drinks consumed across a typical Friday and Saturday was 9.14 (S.D. = 7.98), and students got drunk from alcohol an average of 1.86 times in the past month (S.D. = 1.65). The mean level of experienced negative consequences was 18.90 (S.D. = 16.44).

Bivariate correlations indicated that gender and parental HED were consistently associated with student outcomes (see Table 1). Males drank more and experienced greater consequences than females. In addition, higher parental HED and drunkenness at tailgates were associated with higher student drinking, drunkenness, and negative consequences.

Three hierarchical multiple regressions were performed predicting student outcomes. Step 1 controlled for student gender and socioeconomic status. Step 2 added maternal and paternal HED, and Step 3 added parental tailgating measures.

Results indicated that student demographics (Step 1) accounted for significant variance in student weekend drinking, drunkenness, and consequences (see Table 2). The inclusion of step 2 was shown to account for a small yet significant amount of variance in each of the student outcomes over and above student demographics (ΔR^2 's between .06 and .08). When holding all other predictors constant, higher typical paternal HED was associated with higher student drinking, frequency of drunkenness, and experienced consequences. Finally, the inclusion of step 3 accounted for an additional small yet significant amount of variance in each outcome over and above steps 1 and 2 (ΔR^2 's between .04 and .10). When holding all other predictors constant, more frequent parental drunkenness at tailgates was associated with higher student weekend drinking, frequency of drunkenness, and experienced consequences. Colinearity diagnostics were performed in order to explore potential multi-colinearity concerns. Diagnostics indicated that the variance inflation factors (VIFs) and tolerances were acceptable for each predictor (VIFs < 2.85 and tolerances > .35; O'Brien, 2007), implying limited multi-colinearity.

Discussion

The present study examined whether parental modeling of alcohol use in the context of tailgating at college football games predicted college student alcohol use and related negative consequences, over and above the influence of more typical parental modeling. Results indicated that parental drunkenness at tailgates was a potential risk factor for college student alcohol misuse, such that perceiving one's parent(s) as drunk in a collegiate, athletic, and public context appeared to have a modest unique effect on college student alcohol use. Due to the relatively frequent endorsement of this behavior (~21%), further research is warranted to better understand why this context, in particular, is predictive of student alcohol use. For example, by perceiving their parents to be drunk at tailgates, students may learn to associate social or sporting events with heavy drinking. It is also possible that perceptions of parental drunkenness on campus are more salient than more typical modeling, making them easier to recall when making alcohol-related decisions. Understanding these

potential mechanisms may help enhance existing parent-based interventions (e.g., Turrisi et al., 2001) by providing parents with specific information about how their own alcohol use in particular contexts may impact student use.

There are several limitations of the current study. First, the cross-sectional nature of the study limited our ability to imply directionality and draw causal inferences. Future work should seek to examine the impact of parental modeling context using longitudinal and/or experimental designs. Second, the current study relied on student perceptions of parental behaviors at tailgates. While these perceptions were predictive, future work should seek to incorporate either (a) explicit measures of student observations of parent behaviors or (b) parent reports of their own behaviors. Third, since differential effects of parental HED were found, it may be important to examine the impact of parent-specific drunkenness at social events. Fourth, other common contexts in which students perceive their parents drink alcohol should be studied in order to explore the potential uniqueness of the tailgating context. Finally, the current sample was largely homogeneous, such that replication/expansion using a more representative sample (e.g., race, SES, family-structure, etc) would increase the generalizability of these results.

It appears the context in which parents model alcohol use may play a role in student alcohol misuse and should be further explored by prevention scientists seeking to provide parents with suggestions on how to decrease college alcohol misuse. Providing more detailed behavioral and contextual prevention guidelines tends to be strongly related to the success of prevention efforts (Domitrovich & Greenberg, 2000).

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Table 1

Bivariate correlations between predictors and outcomes

	1	2	3	4	5	6	7
<i>Predictors</i>							
1. Gender	1						
2. SES	.10	1					
3. Paternal HED	.05	-.03	1				
4. Maternal HED	.09	-.06	.44**	1			
5. Tailgating	.09	.15*	.19*	.13*	1		
6. Drink at Tailgates	.07	.14*	.30**	.20*	.78**	1	
7. Drunk at Tailgates	.12	.09	.34**	.26**	.54**	.63**	1
<i>Teen Outcomes</i>							
Weekend Drinking	.34**	.16*	.27**	.20*	.14*	.12*	.26**
Frequency of Drunkenness	.06	.14*	.26**	.17*	.10	.11	.25**
Negative Consequences	.22**	.09	.30**	.13*	.21*	.22*	.39**

*
 $p < .05$,**
 $p < .001$

Table 2

Standardized Hierarchical regression coefficients predicting college student outcomes

	Weekend Drinking	Frequency of Drunkenness	Negative Consequences
Step 1	$R^2 = .13^{***}$	$R^2 = .03^*$	$R^2 = .06^{**}$
Gender	.33 ^{***}	.03	.23 ^{**}
SES	.13	.18 ^{**}	.08
Step 2	$\Delta R^2 = .06^{***}$	$\Delta R^2 = .08^{***}$	$\Delta R^2 = .07^{***}$
Maternal HED	.08	.09	.00
Paternal HED	.21 ^{**}	.23 ^{**}	.27 ^{***}
Step 3	$\Delta R^2 = .04^{**}$	$\Delta R^2 = .05^{**}$	$\Delta R^2 = .10^{***}$
Tailgating	.07	.04	.07
Drink at Tailgates	-.19	-.17	-.13
Drunk at Tailgates	.25 ^{**}	.27 ^{**}	.38 ^{***}

*
 $p < .05$,**
 $p < .01$,***
 $p < .001$