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Social and Situational Characteristics Associated with Adolescents' Drinking at Party and Non-Party Events

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Abstract

We investigated social and situational characteristics associated with adolescents' drinking at party and non-party events and whether these associations vary by party location (homes versus other locations). Ecological momentary assessment data were obtained over two weekends from 149 adolescents in California (46% female, M age = 16.4 years), using smartphone surveys administered early and late in the evening and the following morning. We assessed whether, where, and with whom adolescents drank alcohol. Social contexts with more people (RRR=1.05, $p \leq .005$) and with mixed gender composition (RRR=3.15, $p \leq .05$) were positively associated with increased risks of alcohol use at parties, but not at non-party events. Conversely, social contexts with friends were positively associated with alcohol use at non-party events (RRR=4.32, $p \leq .005$), but not at parties. Perceived access to alcohol was associated with increased risks for alcohol use at both party and non-party events, but the association was stronger for alcohol use at parties than non-parties (RRR=1.85, $p < .005$ versus 4.01, $p \leq .005$). Additional analyses showed that contexts with mixed gender composition were positively associated with alcohol use at parties not in homes (RRR=11.29, $p \leq .05$), and perceptions of getting caught by parents or police were negatively associated with non-party alcohol use in homes (RRR=0.57, $p \leq .005$). This study identified social-ecological contexts of underage drinking parties, which are high risk settings for heavier drinking and other alcohol-related problems. Findings can inform context-based interventions to target these high-risk settings, whether at homes or other locations.

Keywords

Underage drinking; Parties; Contexts; Ecological Momentary Assessments; Ambulatory Assessment

1. INTRODUCTION

Adolescent drinking is a costly public health problem (Miller, Levy, Spicer, & Taylor, 2006). Although drinking rates have declined significantly since the 1990s, they have leveled out in recent years and alcohol remains the most commonly used drug among adolescents (13-18 years old), with 61% reporting lifetime, 56% reporting past year, and 33% reporting past

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month alcohol use in 2016 (Miech et al., 2017). Research suggests that different underage drinking contexts (e.g., home location, number of people) are associated with different risks such as violence or increased consumption (Bersamin, Lipperman-Kreda, Mair, Grube, & Gruenewald, 2016; Mair, Lipperman-Kreda, Gruenewald, Bersamin, & Grube, 2015). Parties are important contexts to consider as youth frequently drink at parties (Anderson & Brown, 2010; Degenhardt et al., 2015; Friese & Grube, 2014; Lipperman-Kreda, Mair, Bersamin, Gruenewald, & Grube, 2015) and parties are one of the most commonly reported contexts where youths obtain alcohol (Paschall, Grube, Black, & Ringwalt, 2007). Further, adolescents who drink at parties are more likely to develop riskier drinking over time (Power, Stewart, Hughes, & Arbona, 2005).

Beyond location, the social and situational characteristics of drinking contexts are important to consider as they are associated with drinking behaviors and problems (Freisthler, Lipperman-Kreda, Bersamin, & Gruenewald, 2014; Monk & Heim, 2014). For example, the number of people and gender composition of friends (e.g., same vs opposite gender friends) in a drinking context predict adolescents' alcohol use (Anderson & Brown, 2010). Similarly, a recent study found that the number of people present at a drinking event was associated with an increase in the number of drinks adolescents consumed in home contexts (Bersamin et al., 2016). Moreover, the presence of a responsible adult for girls and having more boys at the drinking event for boys were associated with consuming fewer drinks. Also, when boys perceived greater ease of access to alcohol in a specific context, they reported consuming more drinks in that context. Examining party contexts in home settings, another study found that when parents knew about a party it was less likely for alcohol to be present, although parents' actual presence at home was not associated with the presence of alcohol at parties (Friese & Grube, 2014).

Although research has demonstrated that parties are frequent contexts for adolescent drinking, less is known about the social and situational characteristics associated with adolescents' drinking at party versus non-party events. Further, although underage drinking parties are often hosted in homes (Friese & Grube, 2014; Friese, Grube, & Moore, 2013; Paschall et al., 2007), it is unclear whether and how the social-ecological contexts differ if the party is in homes or other locations. Since a growing number of states and communities are enacting social host (SH) laws to prevent or reduce underage drinking in private settings (Paschall, Lipperman-Kreda, Grube, & Thomas, 2014), understanding context characteristics associated with underage drinking in private settings can inform SH policies or efforts to prevent drinking in these risky contexts.

To address these gaps, this study investigated (a) the social and situational characteristics (e.g., number of people, presence of friends, and adult supervision) that contribute to adolescents' drinking at parties, and (b) whether these contextual characteristics vary by party location (i.e., homes versus other locations). We used longitudinal Ecological Momentary Assessment (EMA) to collect data from adolescents over two weekends to assess social and situational characteristics of reported alcohol use events. We then compared context characteristics associated with alcohol use at party events, alcohol use at non-party events, and no alcohol use events to better understand how context characteristics are uniquely related to alcohol use at parties. Findings from this study will help identify the

mechanisms by which social and situational contexts influence drinking at parties. Moreover, the findings can help identify possible points of intervention for prevention, including informing SH policies to prevent or reduce underage drinking in private settings.

2. MATERIALS AND METHODS

2.1 Sample

2.1.1 Sample of cities and adolescents—Data for the current study were drawn from a larger research project (Bersamin et al., 2016; Lipperman-Kreda, Gruenewald, Grube, & Bersamin, 2017). The current study uses data collected from adolescents (15 to 18 years old) in 12 midsized California cities that were randomly assigned to the control condition of a randomized trial conducted in 24 midsized California cities to evaluate effects of environmental strategies to reduce community alcohol problems. A total of 1,217 adolescents from the 24 cities participated in a baseline survey and the estimated response rate was 42%. The selection of cities and sample recruitment have been described elsewhere (Bersamin et al., 2016).

2.1.2 Recruitment of EMA sample—Using baseline data, we created a list of 252 potential participants in the 12 control sites for the EMA study. Specifically, we included all participants who self-reported past month drinking (N=126) and matched them with non-past month drinking participants by age, gender, race (non-White versus White) and ethnicity (non-Hispanic versus Hispanic). Potential participants were invited to take part in a study about alcohol and young people using their personal smartphone. They were told that the study involved 12 brief text prompted online surveys across two weekends and that they could receive up to $80 for participating. A postcard invitation was mailed to households followed by a telephone contact to obtain parental consent and youth assent. Institutional review board approval was obtained prior to implementation of the study.

2.1.3 EMA sample—Of the 252 eligible youths, we recruited 154 adolescents (51% past month drinkers) to participate in the EMA study (61% cooperation rate). Participants represented all 12 cities. The number of participants per city ranged from 5 to 19. For the current study, we used data from 149 participants who provided complete data for all measures *in each assessment*. This sample included 46% females (n = 69), 15% Hispanics (n = 22) and 80% Whites (n = 119). The average age at baseline was 16.4 years (SD = .90).

2.2 EMA methods

2.2.1 Timing of EMA surveys—We restricted EMA data collection to the weekends to minimize respondent burden, but capture the maximum number of drinking events, which typically occur on weekends for adolescents (Kauer, Reid, Sanci, & Patton, 2009). Surveys were conducted Friday evening through Sunday morning over two weekends (12 assessments). Participants received text messages with links to the surveys each day at 8pm, 11pm, and the following morning at 11am for a total of 6 surveys per weekend. At 8pm, adolescents reported about contexts and their behaviors from 5-8pm and at 11pm they reported about contexts and their behaviors from 8-11pm. The morning surveys asked about alcohol use and contexts between 11pm and bedtime as well as problems that happened to

them or others the previous night. Participants received two reminders to complete the surveys and responses were only accepted within a 6-hour window. On average, participants completed the surveys within 35 minutes after receiving the first reminder. Each survey took approximately five minutes to complete. EMA data collection continued for 10 months with 7-8 adolescents participating every 2 weekends. The current study includes 1,249 surveys collected from the 149 participants.

2.2.2 Incentives—Participants received a visa card, which initially had no value. Incentives were electronically wired to the participants' cards on the Monday morning after each weekend. Participants received $5 for each completed survey and a $10 bonus if all 6 surveys were completed each weekend. On average, participants responded to 9.94 of the 12 assessments (83%). The number of completed surveys per participant ranged from 2 to 12.

2.3 Outcome Measures

2.3.1 Alcohol use and alcohol use at a party events—At each survey, we asked adolescents whether they drank alcohol during the past 3 hours. The timeframe at each survey was specified for respondents (e.g., between 8-11pm), and response options were yes or no. Participants who reported drinking were then asked about the last place they drank alcohol or the last place where they were within each timeframe, including whether the context was a party (yes or no). For the analyses, we used an event-level multinomial outcome measure with no alcohol use as the reference category (0), alcohol use not at a party (1), and alcohol use at a party (2).

2.4 Independent Measures

2.4.1 Event home location—At each survey, participants who reported drinking alcohol were asked to indicate where they were when they had their last drink within the timeframe. Those who did not report alcohol use were asked to indicate the last place where they were within the timeframe. Event location was coded as home versus other locations.

2.4.2 Social context characteristics—At each survey, we asked respondents to indicate how many people were with them (number), whether the people there were friends (yes or no) and/or immediate family (yes or no). Values for numbers of people were winsorized to the 97th percentile (i.e., 100 people or more) to reduce the influence of a small number of extreme outliers (e.g., at concert venues). We also asked whether the people there were mostly girls, mostly boys, or about half girls and about half boys (with other response options of "I Don't Know" or "I was alone," which were coded as missing). This variable was recoded to indicate whether the event was mixed gender (1) or not (0).

2.4.3 Situational context characteristics—At each survey, we asked respondents whether there was any adult supervision at the place where they were (yes or no) and how unlikely or likely they thought it was that someone their age would get caught by parents, adults, or police for drinking at that place (a 4-point scale from very unlikely to very likely). We also asked them how easy it was for someone their age to get alcohol at that place (a 4-point scale from very easy to very difficult). We recoded the response values for this item so a higher value represented easier perceived access.

2.4.4 Demographics—Youths reported their gender, age in years, race (White versus non-White) and ethnicity (non-Hispanic versus Hispanic) in the baseline survey.

2.5 Data analysis

We conducted two sets of analyses using Stata v.14 (StataCorp, 2015). To account for the clustering of assessments within adolescents, we used cluster robust standard errors in all analyses. We also controlled for adolescents' demographics (i.e., age at baseline, gender, Hispanic, White). In the first analyses, we used multinomial logistic regression to examine associations of home locations, social context characteristics, and situational context characteristics with alcohol use at parties (2), alcohol use not at parties (1), and no alcohol use (0). All predictors were entered simultaneously. Second, we repeated these analyses stratified by home versus non-home locations to investigate whether these contextual characteristics varied by party location (i.e., home versus other locations).

3. RESULTS

3.1 Descriptive statistics

Of the 1,249 assessments included in this study, most events (87.0%) did not include alcohol use, 7.1% included non-party alcohol use, and 5.9% included alcohol use at parties. Descriptive statistics including 95% CIs for context characteristics by the outcome category (i.e., no alcohol use, alcohol use not at parties, and alcohol use at parties) are displayed in Table 1. A few differences between party and non-party alcohol use events should be noted. First, party alcohol use occurred at homes in 50.0% assessments (95% CIs=38.7, 61.2) whereas non-party alcohol use occurred at home in 75.3% assessments (95% CIs=65.2, 83.1). The mean number of people at alcohol use party events was significantly larger than at non-party alcohol use events (42.4, 95% CIs=35.2, 49.6 versus 7.3, 95% CIs=4.1, 10.5), and the presence of immediate family members occurred in 4.1% (95% CIs=1.3, 11.9) of party alcohol use events compared to 20.2% (95% CIs=13.1, 29.9) of the non-party alcohol use events. The likelihood of an event having people of mixed-gender was significantly greater at party alcohol use events (82.4%, 95% CIs=72.0, 89.6) than at non-party alcohol use events (39.3%, 95% CIs=29.7, 49.9). Finally, adult supervision was significantly greater at no alcohol use events (73.5%, 95% CIs=70.8, 76.0) compared with both party (31.1%, 95% CI = 21.5, 42.6) and non-party alcohol use events (43.8%, 95% CI = 33.9, 54.3).

3.2 Context characteristics and underage drinking at parties

Results of the multinomial logistic regression analysis are displayed in Table 2. Focusing on social context characteristics, contexts with larger numbers of people (RRR=1.05, 95% CIs=1.02, 1.07) and with mixed gender composition (RRR=3.15, 95% CIs=1.31, 7.57) were associated with increased risks of alcohol use at parties, but not at non-party events. Conversely, the presence of friends was associated with increased risk of alcohol use at non-party events (RRR=4.32, 95% CI=1.62, 11.51) but not at parties.

Focusing on situational context characteristics, perceived risk of getting caught by parents, adults, or police was associated with a reduction in the risk of alcohol use at non-party events only (RRR=0.58, 95% CI=0.43, 0.78). Although perceived alcohol availability was

associated with increased risks of alcohol use at both non-party and party events, the association was significantly stronger for alcohol use at parties (RRR=4.01, 95% CI=2.28, 7.04) than non-parties (RRR=1.85, 95% CI=1.45, 2.36). Adult supervision was not uniquely associated with alcohol use at either non-party or party events.

3.3 Context characteristics and underage drinking at parties stratified by location

Results of the multinomial logistic regression analysis stratified by home location vs other locations (e.g., bars, outdoor) are displayed in Table 3. Focusing on social context characteristics, the associations between greater numbers of people and increased risks of alcohol use remained significant for both home parties (RRR=1.11, 95% CI=1.04, 1.18) and parties in other locations (RRR=1.03, CI=1.01, 1.05). Similarly, the presence of friends was associated with increased risks of alcohol use at non-party events either in homes (RRR=4.16, 95% CI=1.13, 15.34) and other locations (RRR=3.92, 95% CI=1.20, 12.79). However, contexts with mixed gender compositions were associated with increased risks of alcohol use at parties in other locations only (RRR=11.29, CI=1.58, 80.45).

Focusing on situational context characteristics, perceived risk of getting caught by parents, adults, or police was associated with a reduction in the risk of alcohol use but only at non-party events in homes (RRR=0.57, CI=0.40, 0.82). Perceived alcohol availability was associated with increase in the risks of alcohol use at party or non-party events across all locations (i.e., home or other locations), although stronger associations were observed at party events. Adult supervision was not uniquely associated with alcohol use at non-party or party events either at homes or elsewhere.

4. DISCUSSION

Youth parties are a high risk setting for underage drinking and concomitant problems (Degenhardt et al., 2015; Friese & Grube, 2014; Mair et al., 2015; McCabe, West, Veliz, Frank, & Boyd, 2014). Using EMA data collected from adolescents over two weekends, we identified social and situational context characteristics that are uniquely associated with underage drinking at parties. Moreover, by comparing alcohol use at parties with alcohol use in non-party contexts, the current study provides a distinct perspective about how these behaviors differ with respect to youths' social-ecological contexts. Results showed that social contexts with larger numbers of people were associated with increased risks of alcohol use at parties but not at non-party events. In contrast, social contexts with friends were associated with drinking alcohol at non-party events, but not at parties. These results suggest the importance of distinguishing between influence of close friends (peer networks) and the influence of others (affiliative networks) at a drinking event. These results are similar to those from another study that compared the influence of close friends and affiliation-based peers (e.g., teammates) on substance use within the context of school-sponsored organized activities (Fujimoto & Valente, 2013). Affiliation-based peers had a significant influence on adolescent drinking beyond that of close friends. However, this affiliation-based peer influence differed by type of organized activity. It was stronger for club activities than for sports, suggesting that the importance of affiliative and friendship social influence may vary by context. Our results suggest that the influence of close friends

may be less important at party events in the presence of greater numbers of non-friends and where there is greater access to alcohol. However, little research has differentiated these types of influences in studying underage drinking. A better understanding of the effects of close and more distal affiliative groups on drinking and other substance use may provide insight into key points of intervention.

Results of the current investigation also showed that social contexts that involved similar numbers of males and females (i.e., mixed gender) were associated with alcohol use at parties, but not at non-party events. Whereas adolescents' close friends are typically those of the same gender, during adolescence mixed gender friendships become more salient (Poulin & Pedersen, 2007). The unique effect of mixed-gender contexts at parties may be because party events represent social contexts that provide opportunities for the development and influence of opposite-gender relationships, which have been associated with increased risk of adolescent alcohol use (Poulin, Denault, & Pedersen, 2011). Our results suggest that prevention efforts to modify and control opportunities for underage drinking should focus on social contexts that involve parties with larger numbers of people of mixed gender.

We also found that perceived access to alcohol was associated with increased risks for alcohol use at both party and non-party events. However, a stronger association was observed for alcohol use at parties. Surprisingly, adult supervision was not uniquely associated with drinking at non-party or party events. Associations between adult supervision and drinking, however, were found in the descriptive analysis. Possibly, adult supervision was confounded in the multivariate analyses with the presence of immediate family members, perceptions of getting caught by parents, adults, or police for drinking alcohol, alcohol availability, or the number of people present. In a previous study, for example, we found that having a responsible adult present was associated with females consuming fewer drinks in the home (Bersamin et al., 2016).

Underage drinking parties are often hosted in homes (Friese & Grube, 2014; Friese et al., 2013; Paschall et al., 2007) and a growing number of states and communities are enacting SH laws to prevent or reduce underage drinking in private settings (Paschall et al., 2014). In the current study, we found that contexts with greater numbers of people and greater perceived alcohol availability increased risks for alcohol use at home parties. Although perceived alcohol availability was associated with increased risks for alcohol use both at party and non-party events across home and non-home locations, the strongest association was observed for alcohol use at home parties, followed by somewhat weaker associations for alcohol use at parties in other places and alcohol use at non-party events at home and in other locations. These results suggest the importance of educating parents about their teens' access to alcohol in the home and potential measures, including SH laws, to prevent underage drinking and related problems.

Presence of friends at an event was associated for alcohol use at non-parties, regardless of whether it was home or other locations. However, social contexts of mixed gender were associated with underage drinking at parties in other locations, but not in the home. Possibly, parties at non-home locations involve people the youths do not necessarily know well and

therefore more likely to be of both genders. Results suggest that prevention efforts should also consider non-home party events as risky contexts for underage drinking.

A primary limitation of the current study relates to issues associated with defining party events. In the EMA surveys we asked participants where they were and whether it was a party, relying on their self-definition. Parties may be perceived differently by youths and represent different social-ecological contexts (Friese et al., 2013). In addition, although the EMA data collected in this study allowed us to link contexts to underage drinking events, we cannot definitively determine the direction of causality. Lastly, there are also limitations in the generalizability of the findings to mid-sized communities in California.

5. CONCLUSIONS

The current study identified the social-ecological contexts of underage drinking parties, which are high risk settings for heavier drinking and other alcohol-related problems. Findings can inform context-based interventions to target these high-risk settings, whether at homes or other locations. Effective strategies to target these risky settings may include social host laws that discourage underage drinking parties in private settings or educating parents about measures to limit access to alcohol in the homes. Outside of homes, parents and policy makers should be informed that large, mixed gender events may be especially high-risk settings for underage drinking. Targeted enforcement in these settings may help to reduce underage drinking and problems. At non-party events, the focus can be shifted to the presence of close friends and the potential effectiveness of perceptions of getting caught by parents or police for alcohol use. Identifying these situational and social contexts associated with underage drinking at parties is an important step in developing prevention interventions to target specific contexts that contribute to underage drinking and problems.

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Table 1

Descriptive statistics, *N*=1,249

	% (95% CIs) or Mean (95% CIs)		
	No alcohol use	**Non-party alcohol use**	**Party alcohol use**
Being at home	74.4 (71.7, 76.9)	75.3 (65.2, 83.1)	50.0 (38.7, 61.2)
Social characteristics			
Number of people	6.1 (5.3, 6.8)	7.3 (4.1, 10.5)	42.4 (35.2, 49.6)
Presence of friends	44.3 (41.4, 47.3)	83.2 (73.8, 89.6)	89.2 (79.7, 94.5)
Immediate family member/s	53.3 (50.3, 56.3)	20.2 (13.1, 29.9)	4.1 (1.3, 11.9)
About half boys and half girls	49.0 (46.0, 52.0)	39.3 (29.7, 49.9)	82.4 (72.0, 89.6)
Situational characteristics			
Adult supervision	73.5 (70.8, 76.0)	43.8 (33.9, 54.3)	31.1 (21.5, 42.6)
Perceived getting caught	2.6 (2.5, 2.7)	1.7 (1.5, 1.8)	1.7 (1.6, 1.9)
Perceived alcohol availability	2.3 (2.2, 2.4)	3.3 (3.1, 3.5)	3.7 (3.6, 3.9)

Table 2

Associations between location, social and situational context characteristics and underage drinking at parties, multinomial logistic regression analyses with cluster robust standard errors (Relative Risk Ratio, 95% CIs)

	Alcohol use, not at parties[1]	Alcohol use at parties[1,2]
Assessments (*N*=1,249)		
Being at home	1.34 (0.63, 2.83)	1.48 (0.58, 3.77)
Social characteristics		
Number of people[3]	1.00 (0.98, 1.02)	1.05 (1.02, 1.07) **
Presence of friends	4.32 (1.62, 11.51) **	1.43 (0.25, 8.30)
Presence of immediate family member/s	1.15 (0.42, 3.13)	0.19 (0.22, 1.58)
Mixed gender[4]	0.87 (0.45, 1.65)	3.15 (1.31, 7.57) *
Situational characteristics		
Adult supervision	0.96 (0.51, 1.82)	0.80 (0.28, 2.33)
Perceived getting caught	0.58 (0.43, 0.78) **	0.70 (0.40, 1.21)
Perceived alcohol availability	1.85 (1.45, 2.36) **	4.01 (2.28, 7.04) **
Individuals (*N*=149)		
Age at baseline	1.14 (0.76, 1.70)	0.89 (0.50, 1.59)
Female	0.94 (0.45, 1.95)	1.10 (0.39, 3.86)
Hispanic	0.97 (0.37, 2.54)	2.64 (0.38, 18.55)
White	1.68 (0.72, 3.89)	1.13 (0.15, 8.62)

[1] Compared with no alcohol use.

[2] A sensitivity analysis with “alcohol use, not at parties” as the reference category yielded similar results in terms of associations and relative magnitude such that the number of people, gender composition, and perceived alcohol availability were associated with greater risks of alcohol use at parties than non-party events.

[3] Winsorized ≥ 100 = 100

[4] About half boys and half girls

* $p \leq .05$

** $p \leq .005$

Table 3

Associations between social and situational context characteristics and underage drinking at parties stratified by home locations, multinomial logistic regression analyses with cluster robust standard errors (Relative Risk Ratio, 95% CIs), N=

	Home locations		Other locations	
	Alcohol use, not at parties[1]	**Alcohol use at parties[1]**	**Alcohol use, not at parties[1]**	**Alcohol use at parties[1]**
Events	*n*=912		*n*=337	
Social characteristics				
Number of people[2]	0.99 (0.95, 1.03)	1.11 (1.04, 1.18) **	1.01(0.99, 1.03)	1.03 (1.01, 1.05) *
Presence of friends	4.16 (1.13, 15.34) *	3.80 (0.72, 20.12)	3.92 (1.20, 12.79) *	0.47 (0.07, 3.11)
Immediate family member/s	1.02 (0.26, 4.02)	0.24 (0.05, 1.10)	1.56 (0.25, 9.83)	0.64 (0.08, 5.12)
Mixed gender [3]	0.91 (0.43, 1.91)	1.20 (0.49, 2.92)	0.70 (0.22, 2.26)	11.29 (1.58, 80.45) *
Situational characteristics				
Adult supervision	1.14 (0.51, 2.53)	1.49 (0.48, 4.64)	0.38 (0.11, 1.25)	0.25 (0.05, 1.37)
Perceived getting caught	0.57 (0.40, 0.82) **	0.60 (0.28, 1.27)	0.61(0.37, 1.02)	0.65 (0.33, 1.28)
Perceived alcohol availability	2.07 (1.48, 2.87) **	5.40 (2.10, 13.89) **	1.66 (1.11, 2.48) *	3.75 (1.50, 9.37) **
Individual	*n*=142		*n*=103	
Age at baseline	1.22 (0.75, 2.00)	0.77 (0.39, 1.54)	0.94 (0.45, 1.94)	0.93 (0.44, 1.95)
Female	1.35 (0.62, 2.95)	0.74 (0.17, 3.31)	0.31 (0.10, 1.22)	1.11 (0.29, 4.32)
Hispanic	0.95 (0.25, 3.61)	0.49 (0.49, 4.72)	0.41 (0.10, 2.22)	2.10 (0.38, 11.44)
White	1.23 (0.39, 3.98)	0.11 (0.01, 1.05)	4.93 (0.95, 25.49)	0.83 (0.18, 5.02)

[1] Compared with no alcohol use

[2] Winsorized ≥ 100 = 100

[3] About half boys and half girls

* $p \leq .05$

** $p \leq .005$