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Growing Up in a Permissive Household: What Deters At-Risk Adolescents from Heavy Drinking?

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Abstract

Objective—This study identified psychosocial factors that may deter adolescents living in permissive households from heavy drinking in grades 9 and 11.

Method—Longitudinal data were obtained from 710 youth who completed surveys from grade 7 to 11. *Permissive household* was defined based on adolescent reports of whether the parents would approve of their substance use, knew their whereabouts when away from home, and set curfews. *Frequency of heavy drinking* in the past month was the number of days the adolescent had at least three alcoholic drinks.

Results—Three-quarters of adolescents from permissive households reported heavy drinking at grade 9, with less frequent heavy drinking among those who concurrently reported less exposure to peer and adult drinking, less peer approval of drinking, weaker positive beliefs about drinking, a stronger academic orientation, higher resistance self-efficacy, and less delinquency. Further, social influences and alcohol beliefs predicted the frequency of heavy drinking two years later among adolescents from permissive households. Although most of these factors were also relevant for adolescents from non-permissive households, social influences, alcohol beliefs and resistance self-efficacy were stronger predictors of heavy drinking at grade 9 among youth from permissive households.

Conclusions—Growing up in a permissive household is associated with heavy drinking. Nonetheless, several psychosocial factors were associated with less frequent heavy drinking even within this at-risk population. Alcohol prevention programs that target pro-drinking peer and adult influences, positive attitudes toward drinking, and resistance self-efficacy may be particularly important in detering heavy drinking among adolescents living in permissive households.

To understand the determinants of adolescent alcohol use, researchers have often turned their attention to parental attitudes and behaviors as potentially salient and potent sources of influence. This is understandable, given the strong role that parents typically play in shaping their children's development. Studies have variously examined whether and why adolescent drinking is related, for example, to parental involvement and support (Wills et al., 2004), monitoring of the adolescent's behavior (Barnes et al., 2006), parenting and discipline styles (Blackson & Tarter, 1994), the parents' own alcohol use (White et al., 2000), and parental provision of alcohol and home alcohol accessibility (Komro et al., 2007).

Among these various parental characteristics, monitoring is one of the strongest correlates of the adolescent's lesser engagement in risk behavior (e.g., Griffin et al., 2000b; Patterson & Stouthamer-Loeber, 1984). Parental monitoring is conceptualized as active surveillance and tracking by parents of their child's whereabouts and other activities (although some work has suggested that its measurement may also capture the child's willingness to disclose

information to their parents; see Stattin & Kerr, 2000). Parental monitoring has been associated with both a delay in the initiation of alcohol use (Oxford et al., 2001; see also Steinberg et al., 1994) and lower likelihood that the adolescent will transition to heavier drinking (Reifman et al., 1998). Even among at-risk youth, such as those using drop-in centers, greater parental monitoring is associated with less alcohol use (Shillington et al., 2005). Further, the effects of parental monitoring appear to be maintained over time, with one study reporting that highly monitored adolescents were less likely to be drinking 12 months later after controlling for baseline alcohol use (Beck et al., 2004).

In addition to monitoring the adolescent's behavior, parents may also deter alcohol use by clearly communicating that their child's substance use will not be tolerated. Adolescents who believe that their parents would not be upset or would not care if they used alcohol tend to engage in heavier alcohol use compared to adolescents who worry that their parents would react negatively if they found out (Nash et al., 2005; Tucker et al., 2003). This appears to be true even among adolescents who have already formed positive expectations about alcohol use. Among sixth graders with positive drinking expectancies, one study found that those who believed their parents would not be upset by their drinking were 2.6 times more likely to start drinking by the end of the school year compared to those who thought that their parents would be upset (Simons-Morton, 2004). Perhaps even more deleterious than parents conveying the idea that they would not be upset by their child's substance use is when this tacit approval occurs in the context of low parental monitoring – in this situation, low parental monitoring might present greater opportunities for adolescents to obtain alcohol, while low parental expectations might encourage them to take advantage of these opportunities to drink because they would not be concerned about getting into trouble at home.

Given that three-quarters of adolescents experiment with alcohol use at some point by the end of high school (Johnston et al., 2007), it seems almost inevitable that adolescents growing up in this type of permissive household will do so. An important goal for prevention efforts is identifying intrapersonal or contextual factors that may deter these at-risk teens from transitioning to heavy or problematic drinking. In general, adolescents are less likely to use and/or abuse alcohol if they have limited exposure to peers and adults who approve of substance use (Fergusson et al., 1995; Tucker et al., 2003), feel less positive about alcohol use or better able to resist social pressures to drink (Ellickson et al., 2001; Griffin et al., 2000a), have stronger ties to school (Chen et al., 2004), and refrain from delinquent behavior (Chen et al., 2004; Tucker et al., 2003). However, we are not aware of prior studies examining whether these factors might be effective deterrents from alcohol use for at-risk adolescents who are living in a highly permissive household environment.

The goal of this longitudinal study was to identify factors that protect adolescents growing up in permissive households from engaging in heavy drinking. We first compared adolescents from permissive and non-permissive households at grade 9 on a wide range of psychosocial and behavioral factors: their exposure to alcohol use by peers and important adults, bonds with school, beliefs about alcohol use, and delinquent behavior. Compared to adolescents from permissive households, it was expected that those from non-permissive households would have a relatively low-risk profile (e.g., less exposure to pro-drinking social influences, stronger school bonds, less delinquency). We then examined whether these psychosocial and behavior factors were associated with the frequency of heavy drinking both concurrently at grade 9 and two years later at grade 11. Because these factors were chosen for their demonstrated relevance to youth alcohol use, we expected that most of them would be significantly associated with heavy drinking among adolescents from non-permissive households. Thus, the main goal of this study was to identify which of these factors, if any, might also be important deterrents of heavy drinking among the higher-risk

group of adolescents being raised in a permissive household. We note that this is one of multiple papers derived from the same data set, but there is no conceptual overlap with these other papers.

Method

Participants

Participants in the original baseline sample were 4,689 students recruited from 48 South Dakota schools at grade 7 (1997–1998), with follow-up assessments conducted in grades 8, 9, 10, and 11 (2001–2002). These adolescents participated in a study to evaluate the effectiveness of an enhanced version of Project ALERT (ALERT Plus) that augments the original drug prevention curriculum with booster lessons during grades 9 and 10 (Ellickson et al., 2003). The schools were chosen to represent a variety of community environments (small towns and outlying rural areas, large towns and cities), and include five schools with a substantial population of Native Americans. Students in these schools were assigned to one of three conditions: Project ALERT, ALERT Plus, or control. The effects on substance use did not persist at 9th grade in either program condition for the overall sample; however, ALERT Plus participation curbed weekly alcohol use, at-risk drinking, and alcohol use resulting in negative consequences among at-risk girls (Longshore et al., 2007). Thus, we control for ALERT condition (i.e., Project ALERT, ALERT Plus, or control) in all analyses that predict heavy drinking at grades 9 and 11.

The analytic sample excludes 1,002 students who did not complete both the grade 9 and 11 assessments, and an additional 2,977 students who did not meet the definition of living in a “permissive” household or “non-permissive” household, as defined below. This resulted in an analytic sample of 710 adolescents. There was a small amount of missing data on some of the variables, so the sample sizes for particular analyses range from 694 to 706.

Measures

Heavy drinking at grades 9 and 11—Participants indicated the number of days in the last month (30 days) when they had 3 or more alcohol drinks: 0 = *none*; 1 = *1 day*; 2 = *2–4 days*; 3 = *5–8 days*; 4 = *more than 8 days*.

Household permissiveness at grade 9—This variable was assessed with four items. Two items assessed parental permissiveness toward substance use by asking how would the adolescent’s parents/guardians feel if they found out that the adolescent drank alcohol or used marijuana sometimes (1 = *not at all upset* to 4 = *very upset*). The other two items assessed parental permissiveness in terms of lax monitoring of the adolescent’s behavior (“When you are away from home, how often do your parents/guardians know where you are?”) and curfew-setting (“When you go out with your friends, how often do your parents/guardians tell you what time to be home?”). These latter two items were rated on a 5-point scale (0 = *never* to 4 = *all of the time*). Non-permissive households were defined as a combination of the parents being “very upset” to know that their child drank alcohol, being “very upset” to know that their child used marijuana, knowing “all of the time” where to find their child, and telling the child “all of the time” what time to be home. Permissive households were defined as having at least three of the following four characteristics: parents being “not at all” or “a little” upset to know that their child drank alcohol, being “not at all” or “a little” upset to know that their child used marijuana, knowing “sometimes” or less often their child’s whereabouts, and telling the child “sometimes” or less often what time to be home.

Social influences at grade 9—Peer drinking was measured with two items, which were standardized and averaged: does your best friend sometimes drink alcohol (0 = *yes*, 1 = *no*) and how often are you with kids who are drinking (0 = *often* to 3 = *never*). Perceived peer approval of alcohol use was assessed with a single item (1 = *they would approve* to 4 = *they would disapprove and stop being my friends*), as was the frequency of alcohol use by the adult who is most important to the respondent (0 = *4–7 days a week* to 3 = *never*). In each case, a higher score indicates weaker pro-drinking social influences.

School bonds at grade 9—The measures of school bonds included liking for school and academic orientation. Liking for school was assessed with 3 items ($\alpha = .72$). A sample item is: “Do you look forward to going to school most mornings?” (1 = *definitely no* to 4 = *definitely yes*). Academic orientation is a composite of two items ($\alpha = .64$): self-reported grades in school (1 = *mostly F’s* to 5 = *mostly A’s*); and academic aspirations (1 = *I may not finish high school* to 5 = *I plan to go to graduate school or professional school*). For each measure, a higher score indicates stronger bonds.

Alcohol beliefs at grade 9—Positive and negative non-health beliefs were each assessed with 3 items [positive beliefs ($\alpha = .84$): e.g., drinking lets you have more fun; negative beliefs ($\alpha = .81$): e.g., drinking gets you into trouble]. These items were rated on a 4-point scale (1 = *strongly disagree* to 4 = *strongly agree*). Low resistance self-efficacy was assessed with four items asking what the respondent would do if s/he did not want to drink in the following situations: best friend is drinking, date is drinking, bored at a party, friends at a party are drinking (1 = *would definitely not drink* to 4 = *would definitely drink*; $\alpha = .97$). Single items assessed perceptions of how much kids their age might harm themselves if they drank occasionally (1 = *a lot* to 4 = *not at all*) and whether they might become dependent if they drank every weekend (1 = *strongly agree* to 4 = *strongly disagree*), with higher scores indicating weaker beliefs in the potential for harm and dependence from drinking alcohol.

Delinquency at grade 9—This measure is the mean frequency of engaging in each of these behaviors during the past year: skipping school, breaking into a house or other property, damaging something on purpose that did not belong to them, stealing from a store, being sent out of the classroom, and cheating on a test (1 = *not at all* to 6 = *20 or more times*; $\alpha = .82$).

Analytic Approach

Extensive tracking allowed us to retain 79% of the baseline sample at both the 9th and 11th grade follow-ups. Participants who could not be located or dropped out of the study were more likely to have exhibited early behavioral problems compared to those who were retained. All reported results are adjusted for nonresponse and clustering within school. We used a series of regression models to test for differences between adolescents from permissive and non-permissive households on the psychosocial predictor variables at grade 9. A series of linear regression analyses were then conducted to examine associations of each grade 9 predictor variable with heavy drinking frequency at grades 9 and 11. These analyses were conducted separately for those from permissive and non-permissive households. To determine whether the association of each predictor variable with heavy drinking differed for the two groups of adolescents, a final series of linear regression analyses were conducted with the full sample, predicting heavy drinking from each predictor variable, type of household (permissive vs. non-permissive), and a Predictor Variable X Type of Household interaction term. In addition to adjusting for nonresponse and clustering within school, these analyses additionally adjusted for gender, race/ethnicity, parental education, whether the adolescent had an intact nuclear family (i.e., lived with both biological parents), and ALERT condition.

Results

Heavy Drinking By Household Permissiveness

By our definitions of household permissiveness, 313 adolescents were classified as living in a permissive household and 397 were classified as living in a non-permissive household [10.2% and 10.3% (weighted), respectively, of the adolescents who participated in both assessments]. For adolescents living in permissive households, 75.6% reported heavy drinking during the past month at the grade 9 assessment (mean frequency [SD] = 1.90 [1.74]) and 73.5% had engaged in heavy drinking in the past month at the grade 11 assessment (mean frequency [SD] = 1.84 [1.78]). For adolescents from non-permissive households, heavy drinking during the past month was reported by only 8.4% of adolescents at grade 9 (mean frequency [SD] = 0.16 [0.65]) and 26.6% of adolescents at grade 11 (mean frequency [SD] = 0.54 [1.11]).

Comparing Adolescents from Permissive and Non-Permissive Households at Grade 9

Adolescents from permissive households had a higher risk profile compared to adolescents from non-permissive households (see Table 1): those from permissive households reported greater exposure to pro-drinking peer and adult influences; weaker bonds with school; stronger pro-alcohol beliefs and lower resistance self-efficacy; and greater engagement in delinquent behavior (all $p < .001$). In terms of demographics, adolescents from permissive households were less likely to be female, marginally more likely to be non-white ($p = .054$), less likely to have an intact nuclear family, and had more highly educated parents.

To better illustrate the magnitude of some of the group differences on psychosocial characteristics, we dichotomized the single-item measures (weighted percentages presented). Adolescents from permissive households were more likely than those from non-permissive households to report drinking by their best friend (88.4% vs. 40.6%, respectively) and the adult who was most important to them (75.8% vs. 46.6%, respectively). In terms of academic performance, 42.6% of adolescents from permissive households reported earning good grades (As and Bs) compared to 78.1% of those from non-permissive households. Finally, a higher percentage of adolescents from permissive than non-permissive households indicated that occasional alcohol use was “not at all” harmful (18.5% and 3.9%, respectively), and “strongly disagreed” that they might become dependent on alcohol if they drank every weekend (30.8% and 6.9%, respectively).

Predictors of Less Frequent Heavy Drinking in Grade 9 and Grade 11

For adolescents from permissive households, the following predictor variables were significantly associated with less frequent heavy drinking at grade 9 (see Table 2): less exposure to peer drinking, greater peer disapproval of alcohol use, less drinking by the most important adult, a stronger academic orientation, less positive non-health beliefs about alcohol use, higher resistance self-efficacy, and less involvement in delinquent behavior. Four of these grade 9 factors were persistent predictors of less frequent heavy drinking two years later at grade 11: less exposure to peer drinking, less drinking by the most important adult, greater peer disapproval of alcohol use, and less positive non-health beliefs about alcohol use.

It is important to note that these significant predictors of heavy drinking were not unique to adolescents from permissive households; indeed, most of them were associated with heavy drinking among adolescents from non-permissive households as well. However, in several cases the strength of these associations significantly differed for the two groups of adolescents. Less exposure to pro-drinking peers and important adults, less positive beliefs about alcohol use, and higher resistance self-efficacy were more strongly associated with

less frequent heavy drinking at grade 9 among adolescents from permissive than non-permissive households. However, there was a stronger association between academic orientation at grade 9 and less frequent heavy drinking at grade 11 among adolescents from non-permissive than permissive households.

Discussion

Despite common wisdom (and the message of numerous public health campaigns) that good parenting can discourage adolescent substance use, we found that a sizable minority of adolescents were living in permissive households at grade 9. Among those who completed the 9th and 11th grade assessments, one in every 10 adolescents (weighted) reported that their parents did not usually keep track of their whereabouts or give them a curfew, and would not be particularly upset to find out that they were drinking or using marijuana. It is not surprising that the heavy drinking rate among these adolescents was far higher than for teens from non-permissive households; however, the magnitude of this difference was striking, with adolescents from permissive households being about 9 times more likely to drink heavily at grade 9, and nearly 3 times more likely to drink heavily at grade 11 (weighted). Furthermore, the adolescents from permissive households appeared worse off by grade 9 than those from non-permissive households in terms of their greater exposure to pro-drinking social influences, weaker school bonds, stronger pro-alcohol beliefs and attitudes, and greater involvement in delinquent behavior.

Given the context of these adolescents' lives, the goal of this study was to determine whether key psychosocial and behavioral factors known to be important to adolescent alcohol use, particularly those amenable to change through substance use prevention programs, predicted the frequency of heavy drinking in this at-risk group. Results from this study identified several of these factors. Adolescents from permissive households engaged in less heavy drinking at grade 9 if they had less exposure to peer drinking, perceived greater peer disapproval of drinking, had less exposure to drinking by important adults, felt a stronger commitment to school, were less inclined to believe that alcohol use can have positive consequences, felt that they could resist peer pressure to drink, and were less involved in delinquent behavior. As expected, most of these factors were also significant predictors of heavy drinking among adolescents from non-permissive households; however, in certain cases the concurrent associations with heavy drinking at grade 9 were significantly stronger for adolescents from permissive households compared to those from non-permissive households. These stronger associations among adolescents from permissive households may be partly due to a less restricted range (i.e., greater variability) on the heavy drinking variable for the permissive household group at grade 9. However, it may also be the case that a lack of strong parenting at home makes adolescents even more inclined to look elsewhere for guidance as they make decisions about their alcohol use – toward the attitudes and behaviors of friends and important adults, as well as their own beliefs about the potential benefits of drinking and their ability to resist social pressures to drink – and to be more strongly influenced by these external and internal resources.

This correlational study cannot determine whether these grade 9 factors have an influence over time in deterring adolescent heavy drinking; however, results from the prospective analyses are an initial step in better understanding whether this might be the case. Of the grade 9 psychosocial variables that we examined, four of them predicted how frequently adolescents from permissive households would engage in heavy drinking two years later: exposure to peer drinking, peer disapproval of drinking, exposure to adult drinking, and positive non-health beliefs about alcohol. School bonds, alcohol resistance self-efficacy, and involvement in delinquent behavior at grade 9 did not predict the frequency of heavy drinking at grade 11 among adolescents from permissive homes.

It is somewhat surprising that school bonds and lower resistance self-efficacy did not predict future heavy drinking in light of other evidence indicating that these factors are associated with adolescent alcohol use even during late adolescence (Chen et al., 2004; Watkins et al., 2006), as well as results from this study showing that both are significant predictors of grade 11 heavy drinking among adolescents from non-permissive households. One possible explanation is that adolescents from permissive households become increasingly disengaged from school or less able to resist social pressures to drink during the high school years and thus these protective factors become less of a deterrent to heavy drinking over time. Although we found little evidence for this idea in the case of school bonds, which remained relatively stable from grade 9 to 11, alcohol resistance self-efficacy did weaken among adolescents from permissive households over time (but, interestingly, strengthened among those from non-permissive households; results not shown). The lack of a prospective association between delinquency and heavy drinking may reflect the more general pattern of less co-occurrence among problem behaviors during late adolescence than middle adolescence (see review by Guilamo-Ramos et al., 1995).

Among the various psychosocial variables to emerge as significant predictors of heavy drinking over time, one of the most noteworthy is adolescents' positive non-health beliefs about alcohol use. Although it is standard practice for adolescent prevention programs to target beliefs about substance use, greater emphasis is sometimes placed on the potential negative consequences of use (e.g., physical harm, getting into trouble) than the positive beliefs that may entice adolescents to initiate and maintain substance use (e.g., it relaxes you, helps you get away from your problems, lets you have more fun). However, this study indicates that believing that alcohol use will have a positive effect on one's life may be a more powerful determinant of heavy drinking than concern about undesirable social or health consequences, a finding that echoes our earlier work focusing on younger adolescents (Orlando et al., 2005). A greater emphasis of prevention programs on addressing and dispelling perceptions about the positive consequences of alcohol use may be warranted, particularly given that these positive expectations tend to increase from childhood to adolescence (Dunn & Goldman, 1998; Schell et al., 2005).

This study has a number of strengths including its unique focus on the determinants of heavy drinking among adolescents from permissive households, a large sample that allowed us to identify a sufficient number of adolescents in this at-risk, yet understudied group, and a prospective design that afforded the opportunity to examine predictors of heavy drinking over a two-year period. However, some study limitations should be noted as well. The sample is comprised exclusively of South Dakotan youth and attrition occurred during the study period. Both of these factors may limit the generalizability of our findings. In addition, it is a weakness of the study that we had to rely on the adolescents' self-reports of household permissiveness, heavy drinking, and psychosocial and behavioral characteristics. In the case of household permissiveness, it would have been ideal to base this measure on a combination of both parental and adolescent reports.

Adolescents living in a permissive household may need additional support to avoid heavy drinking given the lax parental guidance that they receive at home. Results of this study suggest that components of school-based alcohol and drug prevention programs that target pro-drinking peer and adult influences, positive attitudes toward drinking, and resistance self-efficacy may be particularly important (at least in the short term) in deterring heavy drinking among these adolescents. Indeed, such variables have been shown to mediate prevention effects for at-risk girls in high school (Longshore et al., 2007). Increasing parental monitoring of the adolescent's behavior and teaching parents to convey appropriate expectations about their child's substance use is also important. Incorporating a parental involvement component into school-based interventions has been a promising approach

(Cuijpers, 2002; Flay, 2000). Others have suggested intervening with parents through pediatric health care settings (Beck et al., 2004). In general, parent training programs can improve parental monitoring and communication skills, and these changes in parental behaviors are associated over time with less adolescent drinking and other risk behavior (e.g., Dishion et al., 2003; Wu et al., 2003). An important direction for future research is to evaluate whether such training programs are also effective for adolescents who have spent much of their formative years growing up in a permissive household.

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Table 1

Comparison of Adolescents from Permissive and Non-permissive Households

Variable	Permissive Household (n = 313)	Non-permissive Household (n = 397)
Social influences at grade 9	Mean (SD)	Mean (SD)
Less drinking by peers	0.37 (0.63)	1.34 (0.72)
Peer disapproval of use	1.59 (0.76)	2.64 (0.97)
Less adult drinking	1.59 (1.31)	2.35 (0.92)
School bonds at grade 9		
Liking for school	2.25 (0.86)	2.97 (0.68)
Academic orientation	3.33 (1.22)	4.16 (0.76)
Alcohol beliefs at grade 9		
Positive non-health beliefs	2.99 (1.12)	1.62 (0.92)
Lower negative non-health beliefs	2.06 (1.09)	1.37 (0.86)
Lower resistance self-efficacy	3.10 (1.26)	1.52 (0.96)
Lower harm beliefs	2.48 (1.25)	1.61 (0.90)
Lower dependence beliefs	2.65 (1.38)	1.54 (0.96)
Delinquency at grade 9	1.25 (1.50)	0.23 (0.49)
Demographics		
Parental education	2.30 (1.08)	1.86 (0.94)
	%	%
Female	35.5	59.4
Non-white	18.6	14.1
Nuclear family	41.9	71.4
Heavy drinking at grade 9	75.6	8.4
Heavy drinking at grade 11	73.5	26.6

Note. Weighted percentages are presented for gender, race/ethnicity, and nuclear family; otherwise, weighted means are presented. Sample size varies slightly across measures due to small amounts of missing data. Groups differ at $p < .001$ in all cases except for non-white ($p = .054$).

Table 2

Grade 9 Variables Predicting Frequency of Past Month Heavy Drinking at Grade 9 and Grade 11 for Adolescents from Permissive vs. Non-permissive Households (Regression Coefficients Are Displayed)

Grade 9 variable	Grade 9 heavy drinking			Grade 11 heavy drinking		
	Permissive Household	Non-permissive Household	Interaction $p =$	Permissive Household	Non-permissive Household	Interaction $p =$
Social influences						
Less peer drinking	-.166 [‡]	-.42 [‡]	<.001	-.59 [‡]	-.40 [‡]	
Peer disapproval of use	-.62 [‡]	-.22 [‡]	.005	-.38 [*]	-.22 [‡]	
Less adult drinking	-.26 [‡]	-.07	.056	-.14 [*]	-.16 [*]	
School bonds						
Liking for school	-.18	-.20 [*]		-.02	-.34 [‡]	
Academic orientation	-.26 [‡]	-.15		.01	-.21 [‡]	.03
Alcohol beliefs						
Positive non-health beliefs	.63 [‡]	.24 [‡]	<.001	.20 [*]	.29 [‡]	
Lower negative non-health beliefs	.06	.15 [‡]		-.04	-.08	
Lower resistance self-efficacy	.60 [‡]	.23 [‡]	<.001	.19	.37 [‡]	
Lower harm beliefs	.05	.05		-.03	.16 [*]	
Lower dependence beliefs	.12	.09		.00	.08	
Delinquency	.44 [‡]	.44 [*]		.10	.34	

Note. Unstandardized regression coefficients are from separate models, each controlling for gender, race/ethnicity, nuclear family, parental education, and ALERT. The possible range of scores for heavy drinking is 0 = none to 4 = more than 8 days. Interaction p-value denotes significance of the test of Predictor Variable X Type of Household interaction.

* $p < .05$.

[‡] $p < .01$.

[‡] $p < .001$.