

ORIGINAL ARTICLE

Adults' Approval and Adolescents' Alcohol Use

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Purpose: To compare adults' approval of adolescents' alcohol use among white, black, and Latino youth and to evaluate the effects of approval on most recent alcohol consumption, past 30-day use and binge drinking.

Methods: A cross-sectional telephone survey of $n = 6245$ adolescents from 242 communities was conducted as part of the National Evaluation of the Enforcing Underage Drinking Laws Program. The survey assessed perceived availability of alcohol, underage alcohol use, and problems related to underage drinking. Ordinary least squares regression modeling was used to test the relationships between adults' approval and most recent consumption. Logistic regression modeling was used to measure the association among approval, past 30-day use and binge drinking.

Results: Perceived consequences, parent and adult relative provision of alcohol, and drinking with a parent were protective of underage drinking. Providing alcohol at a party, however, was associated with a two-fold increase in past 30-day use and binge drinking. There were minimal differences on adults' approval across the three racial/ethnic groups.

Conclusions: Adults' approval of alcohol use is highly correlated with youth drinking behavior and has differential effects on adolescents' alcohol use depending on the social context in which the alcohol is provided.

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Adults play an important role in socialization of children and adolescents on the issue of alcohol use. Providing alcohol to an adolescent explicitly indicates approval of underage alcohol use, whereas disregarding underage drinking may lead to future substance use or abuse [1–3]. Parental approval of underage alcohol use is surprisingly prevalent. Approximately 13% of youth, aged 11 to 17 years, have drunk alcohol with their families, and one in four preteen girls and one in three preteen boys indicate that they are allowed to drink at home [3,4].

Despite increasing peer influences as children age, parents continue to play an important role in shaping alcohol use behavior among adolescents. Protective parental attitudes (e.g., "My mother doesn't want me to drink alcohol") generally deter alcohol use among youth [3]. Additionally, parents who actively monitor children's use and who convincingly convey household rules governing alcohol use are less likely to have children who drink [2,4–8]. Determining whether there is adult supervision at a party may decrease the chances that an adolescent will drink and may lessen the opportunity for alcohol misuse, such as drinking and driving or riding with a drunk driver [5,6]. Although talking to children about drinking has not consistently demonstrated a protective effect on youth drinking and consequent risk-taking behaviors, a lack of communication within the household may be perceived as tacit approval of underage drinking [4,7,8]. Because parents and other adult relatives are the most integrally involved adults in the lives of young people, their approval may be especially important in explaining adolescents' alcohol use.

Approval of underage drinking varies across households, which may partially be explained by cultural variations in the acceptability of alcohol use. Johnson and Johnson argue that black and Hispanic

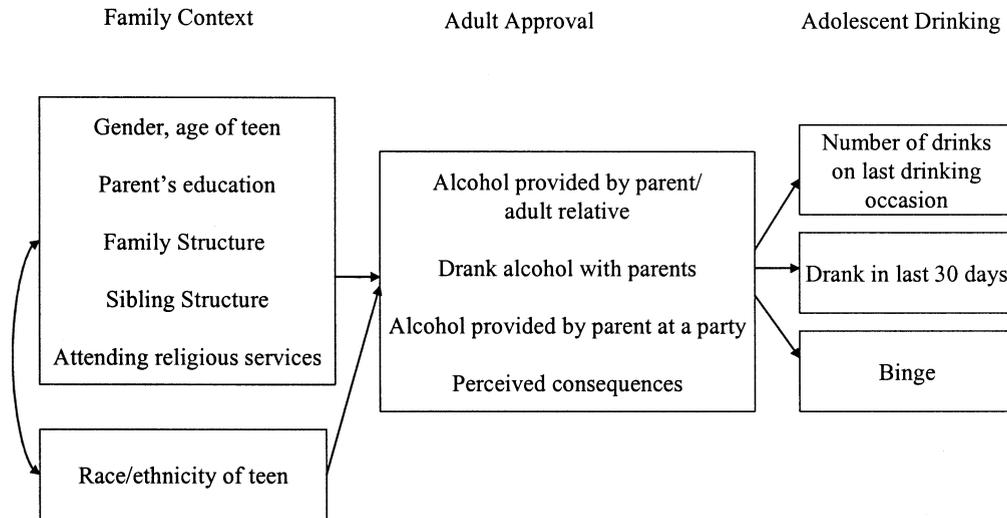


Figure 1. Conceptual model of adult approval and adolescent drinking behavior.

parents are less likely to drink alcohol and more likely to enforce restrictive drinking rules with their teenage children [9]. Minority youth are also more likely to socialize with peers from a similar racial or ethnic background with comparable familial attitudes about alcohol use.

Racial/ethnic differences in adolescents' alcohol use are striking and have been observed consistently across national studies. The 2001 Monitoring the Future studies (MTF) found that past 30-day prevalence of alcohol use was highest among Whites and lowest among African-Americans; Hispanics fell in the middle [10]. Although parental education was also associated with greater lifetime prevalence of alcohol use among 8th graders in this study, the relationship between parental education and alcohol use was attenuated by the time the youth reached the 10th and 12th grades [11]. In the 2001 Youth Risk Behavior Surveillance survey (YRBS), about 80% of white and Hispanic students had ever consumed alcohol, compared with 69% of African-Americans [12]. This racial/ethnic gap in alcohol use remained significant when evaluating past 30-day use and binge drinking.

Racial differences in alcohol use, however, are not maintained into adulthood. Latinos surpass Whites on numerous drinking measures, and although fewer African-Americans drink as adults compared with Whites, more are heavy drinkers [13,14]. These data suggest that minorities "catch up" and often surpass Whites on various drinking outcomes. Adults' disapproval about alcohol use may therefore protect minority adolescents from early substance use.

The primary goal of this study was to evaluate the importance of adults' approval on adolescents' drinking behavior. Adults' approval was first evaluated within the context of the most recent drinking occasion. We then tested whether there were trends in the relationships among adults' approval, past 30-day use, and binge drinking. We hypothesized that a higher level of approval by parents and other adult relatives promote regular and excessive alcohol consumption among teenagers. A secondary goal of this study was to describe parental approval on alcohol use across white, black, and Latino youth. We hypothesized that approval by adults occurs with less frequency in minority households, thus protecting minority youth from early exposure to alcohol use (Figure 1).

Methods

Description of the Study

This study was conducted using youth survey data collected as part of the National Evaluation of the Enforcing Underage Drinking Laws (EUDL) Program, administered by the Office of Juvenile Justice and Delinquency Prevention [15,16]. The EUDL program is the first major federal initiative that focuses exclusively on youth alcohol use. In 1998, each state and the District of Columbia received a block grant of \$360,000 to "support and enhance efforts by States, in cooperation with local jurisdictions, to prohibit the sale of alcoholic beverages to, or the consumption of alcoholic beverages by, minors (persons under age 21)" (Public Law 105-119). In addition, approxi-

mately \$5 million was made available for discretionary awards to selected states to expand the number of communities taking a comprehensive approach to adolescents' alcohol use [15]. In 1999, 2000, 2001, and 2002 Congress again made block grant funding available to each state and the District of Columbia to continue the program. Discretionary funding was also made available on a competitive basis to select states.

Sample

As part of the national evaluation of the EUDL program, a cross-sectional telephone survey of youth aged 16–20 years was conducted annually by the Survey Research Laboratory (SRL) at the University of South Carolina in collaboration with the Wake Forest University School of Medicine. The survey assessed perceived availability of alcohol to youth, underage alcohol use, and problems related to underage alcohol use. The sample included at least 15 youth interviews in all communities that received discretionary funding in 1998 and 1999 and matching sites that had not received funds. Propensity scores were used to identify matching comparison communities within each state using community-level indicators (e.g., population, median income, rate of arrests for liquor law violations) [17,18]. A total of 242 communities were included in the survey between 1999 and 2001; some of the communities were sampled more than once. Thus, 6722 independent youth surveys were conducted between 1999 and 2001 [1999 (n = 1894); 2000 (n = 2521); 2001 (n = 2307)].

Because this article focuses on parents' and adults' approval of adolescent drinking, youth who did not live with at least one parent were excluded from the study (n = 244). The majority of these youth lived alone. Two hundred thirty-three additional cases were dropped because race was not defined as White, Black, or Latino/Hispanic (n = 81 Asian and n = 152 other). The total number of youth in this study was 6245 (93% of the total original sample).

Measures

Three measures of underage alcohol consumption were used in these analyses: number of drinks on the last occasion, past 30-day use, and binge drinking. The goal of using various outcomes was twofold. First, we wanted to assess the relationship between adults' approval and the amount of consumption on the last drinking occasion; most of the covariates

measuring adults' approval were asked specifically about this drinking event. Second, we wanted to evaluate the relationship between adults' approval and underage drinking behavior more generally. By assessing adults' approval on past 30-day use and binge drinking, the results provide an initial assessment of whether adults' approval has consequences on adolescents' drinking *patterns*, thus identifying potential points of intervention. The following drinking outcomes were assessed.

Ever drank alcohol was measured by asking "Think about the first time you had a drink of beer, wine, or liquor when you were not with your parents or other adults in your family. How old were you then?" Persons who responded that they had never consumed alcohol were coded "0." Everyone else was coded "1." This question presumes that any teenager who reported ever drinking had done so at least once without the presence of a parent. Only those who had responded that they had ever drunk alcohol were asked the subsequent questions about alcohol use.

Amount of Alcohol on Last Occasion is a continuous variable that measures how many beers, wine coolers, glasses of wine, or mixed drinks/shots of distilled spirits the respondent had the last time s/he drank. We assumed that each drink was equivalent for analytical purposes, as no attempt was made to assess the actual alcohol content of each drink.

Trends in alcohol consumptions were measured by last 30 days consumption and binge drinking. *Last 30-day consumption* was measured by "When was the last time you drank alcohol?" Respondents who answered in the last 7 days or last 30 days were coded "1." *Binge drinking* was measured by asking the adolescent "Think back over the last two weeks. How many times have you had five or more drinks in a row?" If the respondent said at least once, s/he was considered to have binged within the last 2 weeks. These measures of underage drinking trends are compatible with the Monitoring the Future and Youth Risk Behavioral Surveillance studies, thus allowing for national comparisons [10–12].

There were four measures of adults' approval. The first measure asked "The last time you drank any alcohol, *how did you get the alcohol?*" Responses were categorized as a parent or other adult relative with permission, other adult defined as persons aged 21 and older, and others (e.g., friend, purchased, from a parent's home without permission). These categories are mutually exclusive; when a respondent indicated obtaining alcohol from more than one source, codes were assigned first as parent or other adult relative,

then as other adult, and finally, others. We also asked, "The last time you drank any alcohol, *who were you with?*" If respondents reported that they were with their parents, the item was coded as yes; all other responses were coded no. *Perceived consequences* was measured by asking the adolescent "If your parent(s) or guardian caught you after you had been drinking, what do you think they would do?" The respondent could answer with up to four different responses using an open-ended format, which we coded to the following: parent would do nothing, parent would talk about the consequences of drinking, parent would yell at the adolescent, or parent would punish the adolescent (e.g., ground, take away privileges). Each respondent who answered that their parents would use multiple approaches (e.g., yell and punish) was assigned the most severe consequence that s/he mentioned. Finally, we asked "In the past year, have *your parents or a friend's parents provided alcoholic beverages you drank at a party?*" Responses were coded "yes" (1) or "no" (0).

Sociodemographics and religiosity were included in the analyses as controls and included the following: *age* (16–20 years), *gender* (male = "1," female = "0"), *family structure* (living with mother and father or female and male guardian in the household, mother/female guardian only, or father/male guardian only), *sibling structure* (youngest, oldest, middle, or only child), and *mother's and father's education* (did not graduate from high school, graduated from high school, attended vocational/business school or attended college but did not graduate, graduated from college). *Religious attendance* was measured by asking how often the youth attended religious services in the past 12 months. Attendance was categorized as 2–3 times per month, 2–3 times per year, or never. This categorization was used to establish the protective effects of regular attendance, vs. affiliation with a religious tradition without regular participation, vs. no attendance at all. We also controlled for the length of time the respondent drank on the last drinking occasion for the multivariate analysis on the number of drinks consumed.

Data Analysis

Using analysis of variance, differences among racial/ethnic groups were compared for each covariate for descriptive purposes. Although we hypothesized racial/ethnic differences in adults' approval alcohol use, few differences were observed. Thus, the samples were combined for the multivariate analyses. We computed the associations between adults' ap-

proval and the total number of drinks on the last occasion using ordinary least squares regression (OLS) for each racial/ethnic group, independently. The number of drinks was highly skewed toward the lower end of the distribution [skewness = 2.51, kurtosis = 12.68], thus the data were transformed using log transformation before conducting the regression analysis [skewness = 0.28 ; kurtosis = 2.12]. Past 30-day use and binge drinking were modeled using multivariate logistic regression for each racial/ethnic group, controlling for age, gender, family structure, and religious attendance. Coefficients and *p* values are presented for the OLS model, whereas odds ratios with 95% confidence intervals are presented for the logistic regression models. Standard errors are adjusted for clustering by state and community. Stata 7.0 was used for all statistical analyses [19].

Results

Description of the Sample

The adolescents were predominately white and 16–17 years old. Family and sibling structure varied by racial group, with black youth more likely to live in mother-only households and to be an only child. Regular religious service attendance was highest among black teenagers and lowest among white youth. Additionally, Whites were more likely to report that their parents had graduated from college (Table 1).

Alcohol Consumption and Adults' Approval by Race/Ethnicity: Bivariate Results

Differences in drinking behavior were most evident among the black youth. Only 58% of the sample had ever consumed alcohol, compared with 73% of Whites and 77% of Latinos. They also drank fewer drinks on the most recent drinking occasion and were less likely to have consumed alcohol within the past 30 days or to have binge drunk within the past 2 weeks. In general, Whites and Latinos were similar in terms of alcohol consumption. These findings mirror results observed in the MTF and YRBS data [10,12].

Adults' approval was similar across racial groups, with one exception; black respondents were the least likely to have attended a party where alcohol was supplied by a parent; only 15% responded affirmatively compared with 23% to the sample as whole. Another notable difference concerning adults' ap-

Table 1. Description of White, African-American and Latino Adolescents Surveyed in 1999, 2000, and 2001 for The Enforcing Underage Drinking Laws (EUDL) Program^a

	Total (n = 6245) %	White (n = 5559) %	African- American (n = 364) %	Latino (n = 322) %	<i>p</i>
Demographics					
Age					.17
16	31	31	32	36	
17	32	33	29	27	
18	18	18	18	18	
19	11	11	13	10	
20	7	7	9	7	
Male	51	52	50	43	.004
Family structure					
Mom and Dad	83	85	60	78	<.001
Mom only	13	11	35	18	
Dad only	4	4	5	4	
Sibling structure					
Youngest	44	44	35	45	.001
Oldest	18	18	17	14	
Middle	13	12	17	17	
Only	26	25	30	25	
Mother's education (<i>n</i> = 4368) ^b					
<High school	4	3	9	22	<.001
High school graduate	31	31	29	37	
Some college	23	23	26	16	
4-year college graduate	41	43	37	25	
Father's education (<i>n</i> = 4260) ^b					
<High school	5	4	10	21	<.001
High school graduate	33	33	38	41	
Some college	20	20	20	15	
4-year college graduate	41	43	32	23	
Religious attendance					
2-3 times per month	63	62	70	65	.03
2-3 times per year	26	26	21	26	
Rare/never	12	12	9	10	
Drinking Behavior					
Ever drank alcohol	72	73	58	77	<.001
Number of alcoholic drinks on last occasion of those who ever drank (\times , SD)	4.80 (4.98)	4.88 (5.02)	3.43 (4.11)	4.74 (4.76)	<.001
Drank in last 30 days (of those who have ever drank <i>n</i> = 4491)	54	54	45	49	.01
Binge in last 2 weeks (of those who have ever drank <i>n</i> = 4491)	23	24	6	20	<.001
Adults' Approval					
Alcohol provision					
Other supplier	37	37	34	29	.03
Parent or other adult relative	14	14	14	12	
Nonrelative adult (age 21+ years)	49	49	51	59	
Drank with parents	14	14	12	12	.57
Perceived consequences if parent(s) caught youth after s/he had been drinking					
Nothing	15	15	16	14	.69
Talk	20	20	21	18	
Yell	9	9	11	10	
Take away privileges/punish	56	56	52	58	
Parents/friends' parents provided alcohol beverages at a party	23	23	15	25	.02

^a Analysis of variance (ANOVA) was used to test for differences between racial/ethnic groups.^b Parental education was measured in 2000 and 2001 only.

proval of alcohol was that Latinos were more likely than Whites or Blacks to indicate that they had received alcohol from a nonadult relative the last time s/he drank (59% compared with 49% and 51%, respectively). Although these results are statistically significant, the absolute differences are relatively small. Further, there was no difference across racial/ethnic groups on whether a parent or adult relative had provided alcohol to the underage drinkers.

Most underage drinkers, regardless of race, expected their parents to take away privileges or punish them if the youth were caught drinking. About 14% were with their parents the last time they drank and 14% stated that they had obtained alcohol from their parent or other adult relative with permission the last time s/he drank. Although we expected that youth who had received alcohol from their parents or adult relatives on the last drinking occasion would be the same youth who consumed alcohol with their parents, we did not find a perfect relationship between these two measures. Of the 628 respondents who received alcohol from their parents or another adult relative on the last drinking occasion, only 385 (61%) drank with their parents. In other words, some parents and adult relatives provide alcohol, but do not supervise the adolescents' drinking behavior.

Given that very few differences in adults' approval were observed across racial/ethnic groups in the bivariate analyses, the samples were combined for the multivariate analyses.

Association Between Adults' Approval and Underage Drinking: Multivariate Results

All adults' approval variables were significantly associated with underage drinking, although not always in the hypothesized direction. If youth received alcohol from a parent or other adult relative, the respondents reported consuming fewer drinks on the last drinking occasion and were less likely to report binge drinking within the previous 2 weeks. In contrast, youth who reported that they received alcohol from a nonrelative adult with permission reported significantly higher levels of consumption and recent alcohol use (Table 2).

Further, youth who reported drinking with their parents on the most recent drinking occasion indicated that they drank fewer drinks ($p < .001$). Drinking with parents also appears to have a protective effect on general drinking trends. Respondents who were with their parents were about half as likely to indicate that they had drunk alcohol in the past 30 days and about one-third as likely to report that they

had drunk five or more drinks in a row in the previous 2 weeks.

Perceived consequences for getting caught drinking was also associated with less underage drinking. The relationship between consequences and 30-day use was linear; more severe punishment (as perceived by the adolescent) was associated with lower use. For example, youth who expected that their parents would talk with them if they were caught drinking were almost 1½ times less likely to drink, whereas youth who expected their parents to take away privileges were about two times less likely to drink. The same linear trend was evident with binge drinking.

As we predicted, however, youth who reported that a parent or a friend's parent had provided alcohol at a party within the past year reported more drinks consumed on their last drinking occasion and were twice as likely to have consumed alcohol within the past 30 days and to have engaged in binge drinking. It appears that provision of alcohol from an adult to an adolescent is not necessarily associated with alcohol use and misuse among underage drinkers. Rather, the social setting in which alcohol is provided and whether that adult is a parent or adult relative, appears to affect the sanctioning of unique drinking behavior, and thus have different consequences for underage alcohol use.

We also found that older teens and boys were more likely to drink, yet found no relationship between family and sibling structure on underage drinking. Finally, attending religious services on a regular basis (2–3 times per month) was associated with a significant reduction in adolescents' alcohol consumption on all measures. Affiliation with a religious tradition (attendance 2–3 times per year) was also protective of number of drinks on the last drinking occasion and binge drinking, but was not associated with last 30-day use.

Discussion

We proposed a unilateral relationship between adults' approval and adolescents' alcohol use. Approval, either through actively providing alcohol to a minor, drinking with a minor, or refraining from discipline if the minor were caught drinking, would be associated with increased use of alcohol among adolescents. We also suspected that parents of minority youth would be less likely to approve of adolescents' alcohol use, thus protecting these youth from early alcohol consumption and explaining the

Table 2. The Association Between Adults' Approval and Adolescent Alcohol Use Among 16–20-Year-Olds Who Ever Drank Alcohol Without Their Parents^{a,b}

	Number of Drinks on Last Occasion n = 4195		Drank Last 30 Days n = 4335		Binge in Last 2 Weeks n = 4329	
	<i>b</i>	<i>p</i>	Odds Ratio	95% CI	Odds Ratio	95% CI
Demographics						
Age	0.01	.42	1.18	1.11–1.24	1.18	1.10–1.26
Male	0.32	<.001	1.20	1.05–1.37	2.15	1.86–2.50
Race						
White	1		1		1	
African-American	–0.23	<.001	0.61	0.44–0.83	0.19	0.15–0.35
Latino	–.02	.75	0.77	0.57–1.03	0.75	0.49–1.16
Religious attendance						
2–3 times per month	1		1		1	
2–3 times a year (during holidays)	0.14	<.001	1.45	1.25–1.69	1.48	1.23–1.78
Never attends	0.14	<.001	1.08	0.89–1.31	1.28	1.02–1.61
Family structure						
Mom and Dad			1		1	
Mom only	0.06	.08	1.18	0.99–1.40	1.01	0.79–1.30
Dad only	0.04	.52	0.99	0.70–1.40	0.83	0.56–1.23
Sibling structure						
Youngest child	1		1		1	
Oldest child	0.05	.18	1.08	0.89–1.30	1.13	0.91–1.41
Middle child	0.08	.05	1.05	0.86–1.27	1.14	0.91–1.43
Only child	–0.03	.27	0.94	0.82–1.09	0.93	0.77–1.12
Adults' approval						
Alcohol provision						
Other supplier ^c	1		1		1	
Parent/adult relative	–0.15	0.02	0.90	0.71–1.13	0.52	0.37–0.73
Non-relative adult	0.11	<.001	1.18	1.02–1.36	1.18	1.00–1.38
Drank with parents	–0.38	<.001	0.56	0.45–0.70	0.36	0.26–0.50
Perceived consequences						
None	1		1		1	
Talk	–0.15	<.001	0.69	0.55–0.87	0.63	0.50–0.80
Yell	–0.15	.003	0.68	0.52–0.89	0.64	0.48–0.85
Take away privileges or punish	–0.16	<.001	0.46	0.37–0.57	0.48	0.39–0.60
Parent/friends' parent provided alcohol at a party	0.19	<.001	2.12	1.80–2.50	2.00	1.68–2.39

^a Analysis controls for amount of time spent during last drinking occasion.

^b Parental education was controlled in a subsequent analysis using merged data from 2000 and 2001; data were unavailable for 1999. There was no relationship between parental education and any of the drinking outcomes, and inclusion of parental education did not change the relationships between approval and adolescent drinking behavior.

^c Other suppliers included underage friends or acquaintances (45%), purchased from a business (16%), took from a parent's (8%) or friend's parent's (8%) home without permission, and other (23%). This category was collapsed to distinguish it from the two other categories where alcohol was knowingly provided to an underage drinker by an adult.

racial gap in early drinking behavior. Our findings, however, did not fully support these hypotheses.

Parents who provided alcohol to their adolescent children or drank with them were more likely to have children who neither regularly used nor abused alcohol. Yet, only 14% of the parents of children in this study engaged in such behavior. Although one study demonstrated that easy access to alcohol in the home increased drinking among teenagers, the authors did not take into account whether drinking increased or decreased if parents knew the alcohol

was being consumed [20]. Additionally, children who consume alcohol at home have been shown to drink with greater frequency [4]. It is unclear, however, whether drinking at home with or without permission would have differentially affected the results of this study. This latter study may be tapping into "secretive" drinking among young children, rather than active parental approval of alcohol use. Based on the findings from our study, it is insufficient to argue that parental approval of underage drinking necessarily leads to adolescents' greater

alcohol consumption. There may be some contexts in which parents “teach” responsible drinking behavior within a protected environment, thus sheltering teenagers from risky experimentation and alcohol abuse.

Providing alcohol to teenagers at a party, however, may not be sending the message of responsible drinking behavior that parents want to convey. Parents may perceive that providing alcohol at a party prevents other alcohol risk behaviors (e.g., drinking and driving). We found that such provision of alcohol, however, significantly increased the likelihood of regular and binge drinking and was the strongest predictor of alcohol use and misuse in the multivariate models. One in five teens reported that s/he drank alcohol at a party that was provided by a parent or a friend’s parent. Beck et al found that parents who investigate the presence of other parents at parties are less likely to have an adolescent who drinks [5]. What parents may want to know is whether the friend’s parents plan to provide alcohol for the party. Such active monitoring may reduce alcohol use and will lessen the opportunity for alcohol misuse, such as riding with an alcohol-impaired driver [6].

The final sanctioning variable included in the model was the perceived consequences of getting caught by one’s parents after drinking. Adolescents may perceive that it is acceptable to drink because parents do not articulate their disapproval about alcohol consumption, thus inadvertently approving use through lack of communicated consequences [7]. We found, however, that the perception that parents would punish the adolescent if caught drinking protected the youth from drinking. Although talking with a child about drinking may be beneficial, it is not as effective at reducing regular drinking behavior as the child perceiving more severe consequences. The perception of any consequences appears, however, to be superior to the perception of no consequences.

The second hypothesis of this study was that minority youth would be protected from early alcohol use and misuse owing to greater approval of alcohol use among white and Latino families. Although black youth were less likely to drink and misuse alcohol than Whites, we found little evidence that adults’ approval varied among racial/ethnic households and limited support for the hypothesis that familial disapproval in minority families exclusively protected these adolescents from drinking. There is one caveat, however, that should be noted. Only 1 in 7 black youth reported that they had

attended a party where their parents or a friend’s parents had provided alcohol within the past year compared with 1 in 4 white and Latino respondents. Because providing alcohol to youth at a party appears to have a unique and detrimental effect on underage drinking behavior, black families may be protecting their children and their neighbors’ children from early and risky exposure to drinking by not supplying alcohol to youth in this context.

Although this study was not intended to address nonfamilial adult provision of alcohol, we found that Latino youth were more likely than Whites or Blacks to receive alcohol from a nonrelative adult. We hypothesize that acceptability of underage drinking within the Latino culture and/or extended-age social networks may partially explain the high rates of nonkin adult provision of alcohol to minors. These results, however, should be considered with caution, as they are descriptive and could not be assessed in the multivariate analyses owing to limited sample size. Nonetheless, the finding is novel and may indicate unique needs for interventions among Latino youth.

What may play an especially important role in protecting minority youth from drinking is the emphasis on attending religious services [21]. Because religious attendance was the only nonsociodemographic covariate that was significantly different across racial groups *and* because it was associated with less use and abuse of alcohol in the multivariate analyses, one could argue that the emphasis on regular attendance within the black family protects adolescents from alcohol use. An alternate explanation is that those individuals who are less likely to drink are also more apt to attend religious services. With these repeated cross-sectional data, we are unable to establish the direction of causality.

The evidence is mounting that religiosity, via attendance at religious services or the perceived importance of religion, protects adolescents from alcohol use and may be one of the most important protective mechanisms for underage drinking [20,22]. Mason and Windle found that religiosity was the strongest predictor of change in alcohol use among middle adolescent teenagers and that family influences on alcohol use was mediated by frequent church attendance and high self-rated importance of religion [23]. Teenagers strongly committed to religion experienced greater reductions in drinking over a 12-month period. Religiosity may serve as an important moderator in racial/ethnic minority households, especially given the higher frequency of church attendance

among black families. Predominant religious traditions (e.g., Baptist, Methodist) observed among black families may also have strict norms related to alcohol use, again shielding these youth from early alcohol use. Religious preference was not measured in this study, but would be useful to include in studies on religiosity and alcohol use.

Limitations

Although this study has attempted to address gaps in the literature concerning adults' approval and adolescents' alcohol use, there are several limitations. First, the question that was used to decide who had ever drunk alcohol was couched in the context of having ever drunk *without* parents. Because of this statement, it is impossible to know the full effect of parental approval on adolescents' alcohol use. Although this is a concern, it likely conservatively biases our findings rather than leading to erroneous conclusions. Second, we relied exclusively on adolescents' perceptions of adults' approval. Parent surveys could be used in the future to corroborate the reports of underage drinkers and provide greater depth on adults' approval and opinions regarding adolescents' alcohol use. It would be especially helpful to know the full context surrounding parental alcohol provision to a minor. *Was the alcohol provided for a special celebration or occasion or during a meal? Do these parents set limits regarding how often and how much alcohol can be consumed at home?* Third, although we had a large enough sample to evaluate racial/ethnic differences, the sample used in this study is predominately white. Future studies should oversample minority youth to ensure equitable sample sizes across groups. Finally, we did not control for type of alcohol consumed (e.g., beer, wine, malt liquor). Alcohol type and brand preferences have not received much attention in the literature, especially as they relate to ethnic differences in alcohol consumption patterns.

Parents have a vested interest in their children's behavior, yet relatively little research has actively pursued questions related to adults' approval, the family context, and alcohol use among teenagers [4,6]. Jackson's study, which evaluated the role of perceived legitimacy on teen substance use, demonstrated not only that adolescents affirm parental authority regarding alcohol use, but also showed that such affirmation protects young teenagers from alcohol use [24]. Even fewer studies have explored the relationship between ethnicity and adults' ap-

proval surrounding use. Our study attempted to address both gaps in the literature.

To build upon this study, we believe that family-oriented studies should be undertaken, with an explicit goal of understanding the family context of alcohol use. Specifically, we believe that when, how, and under what circumstances parents and other adult relatives supply alcohol to underage youth needs considerably more attention. Such studies should pay particular attention to parents who try to engage adolescents in "responsible" drinking behavior and the protective factors within families that discourage risky alcohol consumption. We also believe that additional research is needed in how parents respond to youth drinking, beyond simple discrete measures of talking, yelling, and punishing the adolescent. It is likely that parental responsiveness is more complicated and nuanced than is presented here. With such information, effective public health interventions may be developed that focus on the familial context of adolescents' drinking.

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