

Research Article

Recent Alcohol Use and Episodic Heavy Drinking among Hispanic Youth

Keith A. King and Rebecca A. Vidourek

ABSTRACT

Background: A sizeable percentage of Hispanic youth are affected by alcohol use. Research is needed to identify specific factors placing Hispanic youth at elevated risk. Purpose: This study examined whether recent alcohol use (past 30 days) and frequent episodic heavy drinking among 7th - 12th grade Hispanic students (N = 946) in Greater Cincinnati schools differed based on perceived harm of use, ease of access and parent/peer disapproval of use. Methods: The PRIDE national survey for grades 6-12 was administered to youth in their school classrooms. Results: One-in-four (24.5%) recently used alcohol and one-in-seven (15.2%) frequently (often/a lot) engaged in episodic heavy drinking. Students at highest risk for recent alcohol use and frequent episodic heavy drinking were those who felt use was not harmful/somewhat harmful, felt alcohol access was fairly easy/very easy and had parents/peers who did not disapprove of use. Discussion: These results should be considered when developing and implementing alcohol prevention efforts for Hispanic youth. Ongoing parent-child communication, rule-setting and rule enforcement should be encouraged. Translation to Health Education Practice: Findings can assist health educators to more thoroughly understand how perceived harm, ease of access and parent/peer disapproval affect recent alcohol use and episodic heavy drinking among Hispanic youth.

King KA, Vidourek RA. Recent alcohol use and episodic heavy drinking among Hispanic youth. Am J Health Educ. 2010;41(4):231-243. This paper was submitted to the Journal on November 10, 2009, revised and accepted for publication on February 4, 2010.

BACKGROUND

Despite numerous prevention efforts, a sizeable percentage of Hispanic youth continue to be affected by alcohol use. Nearly half (47.6%) of Hispanic high school students have used alcohol in the past 30 days, compared to 47.3% of white and 34.5% of African American youth. One-in-four Hispanic males (28.3%) and females (25.3%) report engaging in current episodic heavy drinking, defined as drinking five or more alcoholic beverages within a few hours.

Hispanic youth begin drinking at an earlier age than white youth³ with 29.0% of Hispanic youth drinking alcohol before the age of 13, compared to 21.5% of white youth.²

Early age of first use is associated with increased risk of suicide, violence, delinquency and alcohol abuse.⁴⁻⁷ Those who drink before age 14 are four times more likely to develop alcohol abuse and dependence than those who begin drinking at age 21.⁸

Perceived harm of alcohol use affects individuals' intention to use alcohol.⁹ However, the majority of students do not perceive alcohol use as harmful. Data from the most recent Monitoring the Future Study revealed that 14.9% of 8th graders, 11.6% of 10th graders and 8.3% of 12th graders drinking alcohol was harmful.¹ Despite this research, little is specifically known regarding Hispanic youth's perceptions regarding

harm of alcohol use and how such perceived harm may impact recent use and episodic heavy drinking.

Similarly, whereas ease of access to

Keith A. King is a professor in the Health Promotion & Education Program, College of Education, Criminal Justice and Human Services, University of Cincinnati, ML 0068, 526 TC, Cincinnati, OH 45221-0068; E-mail: keith. king@uc.edu. Rebecca A. Vidourek is an assistant professor in the Health Promotion & Education Program, College of Education, Criminal Justice and Human Services, University of Cincinnati, Cincinnati, OH 45221-0068.



alcohol has been shown to positively correlate with youth alcohol consumption, ¹⁰ a paucity of studies has specifically examined Hispanic youth perceived ease in obtaining alcohol. Research indicates that youth who are able to obtain alcohol tend to drink more frequently than their counterparts ^{11,12} and tend to have higher levels of alcohol-related problems. ^{13,14} However, studies are needed to investigate the potential effect of perceived accessibility of alcohol on Hispanic youth involvement in recent alcohol use and episodic heavy drinking.

General population studies have found that youth are at elevated risk for alcohol use if there are low levels of parental monitoring and parental involvement¹⁵ and high levels of parental alcohol use.¹⁶ Parental disapproval of youth alcohol use tends to serve as a protective factor against underage drinking.17 Among Hispanic youth, high levels of parental supervision and parental support have been shown to be strong correlates to decreased alcohol use.18-20 Family closeness is an especially important component within the Hispanic community.²¹ Among Hispanic youth, parental respect plays an important role in reducing alcohol initiation.²² Additional research is needed to determine the effect of parental disapproval of alcohol use specifically on recent alcohol consumption and binge drinking frequency among Hispanic youth.

Associating with peers who use alcohol tends to increase youth alcohol use,²³ whereas perceiving few peers as alcohol users and having peers who disapprove of alcohol use tends to reduce use.^{18,24,25} Similar to the research involving parental disapproval, studies are needed that investigate the impact of peer disapproval on recent alcohol use and binge drinking among Hispanic youth.

Whereas risk and protective factors for alcohol have been well established among general youth populations,²⁶ gaps in the research currently exist regarding Hispanic youth. Despite Hispanic youth being at elevated risk for early alcohol initiation, little is actually known regarding specific risk and resiliency factors among this population.²⁷ More information also is needed on

the most common locations and times in which Hispanic youth use alcohol. Much of the research on Hispanic youth involvement in alcohol use has focused on the impact of culture and acculturation.²⁸⁻³¹

PURPOSE

The present study was conducted to address these gaps and assist in providing health professionals with information that can be used when developing prevention efforts for Hispanic youth. The purpose of this study was to examine the relationships among recent alcohol use, frequency of involvement in episodic heavy drinking and perceived harm, ease of alcohol access and parent/peer disapproval for substance use among 7th -12th grade Hispanic youth. In addition, the most common locations and daily times Hispanic youth use alcohol were identified. The following research questions were investigated: (1) What percent of Hispanic youth engage in recent alcohol use and frequent episodic heavy drinking?; (2) What are the most common locations and daily times that Hispanic youth use alcohol?; (3) What percent of Hispanic youth perceive alcohol and other drug use as harmful?; (4) What percent of Hispanic youth perceive alcohol and other drugs as easy to access?; (5) Does perceived harm and ease of access differ based on parental communication, rule-setting and rule enforcement regarding substance use?; (6) What percent of Hispanic youth feel their parents and peers disapprove of youth alcohol and other drug use?; (7) Do perceived harm, ease of access and parent/ peer disapproval differ based on sex?; and (8) Do recent alcohol use and frequency of episodic heavy drinking among Hispanic youth differ based on perceived harm, ease of access and parent/peer disapproval of alcohol and other drug use?

METHODS

Participants

Participants of this study were Hispanic students in 7^{th} through 12^{th} grades (N = 946) in public and private schools within the Greater Cincinnati area. Schools were recruited by the Coalition for a Drug Free

Greater Cincinnati. School and student participation was voluntary. If parents did not wish to have their child participate, then the child was excluded from the survey. All responses were anonymous and confidential. Students self-identified themselves as Hispanic.

Procedures

Surveys were administered to students of all ethnic groups in participating schools in their homerooms during regular school hours. Prior to survey administration, students were informed of the study purpose, voluntary nature of the survey and confidentiality of responses. Students were instructed to refrain from answering items that they did not wish to answer. Once surveys were completed, students placed them in an envelope that was subsequently given to the office staff and then sent out for data analysis. Students who self-identified as Hispanic were included in the analysis for this study. Approval for this study was granted by the Institutional Review Board.

Instrument

The following sections/items of the PRIDE Survey for Grades 6-12 were used in this study: (1) Personal/family information; (2) Perceived harm of alcohol and other drug use; (3) Perceived ease in accessing alcohol and other drug use; (4) Perceived parent/ peer disapproval of substance use; (5) Parent communication/rules/enforcement; and (6) Frequency of alcohol use. The Perceived Harm subscale consisted of eight items and required students to rate how harmful they felt that using alcohol and other drugs was to their health via a four-point scale (1 = not harmful; 2 = somewhat harmful; 3 = harmful; 4 = very harmful). The Perceived Ease of Access subscale consisted of four items and required students to rate how easy it was for them to get alcohol and other drugs via a five-point scale (1 = very easy; 2 = fairly difficult; 3 = fairly difficult; 4 = very difficult; 5 = cannot get). The Perceived Parent/Peer Disapproval subscale consisted of eight items and required students to rate how wrong their parents or friends feel it would be for them to use alcohol and other drugs (1 = not wrong at all; 2 = a little wrong;



3 = wrong; 4 = very wrong). Three items were used to assess parent communication, rule-setting and rule enforcement regarding alcohol and other drug use. Students used a five-point scale (1 = never; 2 = seldom; 3 = sometimes; 4 = often; 5 = a lot) to rate how often their parents talked to them about the dangers of alcohol and other drug use, set clear rules about using alcohol and other drugs and punished them when they broke alcohol use rules.

This survey is written in English and has been previously tested for validity and reliability and used throughout the U.S. Stability reliability was established by distributing the survey to a sample of students (N=631) on two occasions one week apart, resulting in Pearson correlation coefficients ranging from .814 to .851.³² The survey has also been shown to be valid and reliable with percent agreements of greater than 80% on most variables.³³ Results of this survey tend to be similar to those found by the Monitoring the Future survey.³⁴ Table 1 displays the alpha coefficients and survey items for each of the

Perceived Harm, Ease of Access and Parent/ Peer Disapproval indices.

Data Analysis

The SPSS statistical software package was used to analyze all data. Frequency distributions (ranges, means, standard deviations) were performed to determine student demographics, frequency of involvement in recent alcohol use and episodic heavy drinking, most common locations and times of use as well as perceived harm of use, ease of accessing substances and perceived parent/peer disapproval of use. According to distributions, responses on each criterion variable were categorized according to the median split (high, low). Odds ratios were computed to determine whether recent alcohol and episodic heavy drinking differed based on perceived harm, ease of access and parent/peer disapproval. The alpha level of significance was set at 0.05.

RESULTS

A response rate of 77.4% was achieved for all students in the Greater Cincinnati

school districts that completed the survey. Of this total sample, 946 students selfidentified as Hispanic. The sample was equally distributed across grades 7 through 12 with 17.0% in 7th grade, 16.7% in 8th grade, 18.1% in 9th grade, 18.0% in 10th grade, 15.1% in 11th grade, and 15.1% in 12th grade. Regarding sex, 51.5% were male and 48.5% were female. The majority lived with the mother and father (58.8%), whereas 15.4% lived with their mother only, 2.7% lived with their father only, 12.0% lived with their mother and stepfather, 2.4% lived with their father and stepmother, and 8.7% lived with another individual. One in four (24.5%) reported that they had used alcohol in the past month, and 15.2% reported that they frequently (often/a lot) drank five or more alcoholic beverages within a few hours (episodic heavy drinking). Results indicated that 7.7% of junior high school students reported using alcohol in the past month compared to 31.7% of high school students. Similarly, 5.1% of junior high school students reported frequent episodic

Variable	Number of Items	α	Survey Items
Perceived Harm in Using Substances	8	.928	How harmful do you feel the following are to your health: drinking beer; drinking coolers, breezers, or hard lemonade; drinking liquor; smoking cigarettes; smoking cigars; using smokeless tobacco; smoking marijuana, using other illicit drugs?
Perceived Ease in Accessing Sub- stances	4	.893	How easy is it to get: beer wine, liquor or other alcohol products; cigarettes, smokeless tobacco, cigars; marijuana; other illicit drugs?
Perceived Parent Disapproval of Substance Use	4	.874	How wrong would your parents feel it would be for you to: use alcohol; use tobacco; use marijuana; use other illicit drugs? (not wrong at all, a little wrong, wrong, very wrong)
Perceived Peer Disapproval of Substance Use	4	.905	How wrong would your friends feel it would be for you to: use alcohol; use tobacco; use marijuana; use other illicit drugs? (not wrong at all, a little wrong, wrong, very wrong)



heavy drinking compared to 19.5% of high school students. Concerning sex, 26.9% of males and 21.2% of females reported using alcohol in the past month, whereas 16.6% of males and 12.9% of females reported frequent episodic heavy drinking.

Most Common Locations and Times of Alcohol Use among Hispanic Students

Students who reported drinking alcohol were asked to report where they usually drank. Results showed that students most frequently drank beer, wine coolers, and liquor at a friends' house (19.5%, 16.0%, 15.8%, respectively) or at home (11.4%, 9.9%, 9.5%, respectively), whereas they least frequently drank in a car (4.1%, 3.2%, 3.5%, respectively) or at school (4.8%, 3.5%, 4.2%, respectively). Students were also requested to report the time of the day in which they usually drank alcohol. Results indicated that students most commonly drank beer, wine coolers and liquor on the weekends (24.2%, 19.5%, 20.9%, respectively) and on weeknights (6.6%, 5.2%, 5.5%, respectively). The least common drinking times for beer, wine and liquor were before school (3.1%, 2.9%, 3.2%, respectively), during school (3.8%, 3.7%, 3.6%, respectively) and after school (4.8%, 3.9%, 3.9%, respectively).

Perceived Harm of Alcohol Use

Results indicated that 67.7% of students felt it was harmful/very harmful to their health to drink any type of alcohol. Regarding specific alcoholic beverages, about half felt it was harmful/very harmful to drink beer (51.8%) and wine coolers, breezers, hard lemonade, etc. (50.8%), whereas nearly two-thirds felt it was harmful/very harmful to drink liquor (62.8%). Females and junior high school students were significantly more likely than males and high school students to feel that overall substance use was harmful to their health (Table 2). Students with parents who talked to them often/a lot about the dangers of substance use (P < 0.001), who set clear rules about substance use (P < 0.001), and who punished them when they broke substance use rules (P = 0.010), were more

likely to feel that alcohol use was harmful/ very harmful.

Perceived Ease of Access to Alcohol and Other Drugs

Slightly less than half (45.3%) felt that it was easy/very easy to access to alcohol or tobacco products (41.1%), while one-third felt it was easy/very easy to access marijuana (32.4%) and one-fourth felt it was easy/very easy to access other illicit drugs (22.9%). Ease of access to substances did not differ based on sex but did differ based on grade, with high school students reporting easier access (Table 2). Students with parents who talked to them often/a lot about the dangers of substance use (P < 0.001) and who set clear substance use rules often/a lot (P < 0.001) were significantly less likely to feel that alcohol was fairly easy/very easy to access.

Perceived Parent/Peer Disapproval of Alcohol and Other Drugs

Most students reported that their parents felt it was wrong/very wrong for them

Verieble	:	Sex	Gr	ade
Variable	Male	Female	Junior High	High School
Perceived Harm	N (%)	N (%)	N (%)	N (%)
Low	231 (54.5)	172 (43.0)	113 (37.9)	324 (54.5)
High	193 (45.5)	228 (57.0)***	185 (62.1)	270 (45.5)***
Perceived Ease in Accessing Substances				
Low	204 (49.5)	203 (51.7)	201 (70.0)	245 (42.0)
High	208 (50.5)	190 (48.3)	86 (30.0)	338 (58.0)***
Perceived Parent Disapproval of Use				
Low	191 (47.0)	147 (37.9)	88 (31.3)	193 (68.7)
High	215 (53.0)	241 (62.1)*	277 (48.1)	299 (51.9)***
Perceived Peer Disapproval of Use				
Low	202 (51.0)	143 (37.6)	77 (28.6)	192 (71.4)
High	194 (49.0)	237 (62.4)***	299 (52.5)	271 (47.5)***

N = 946; Percents refer to valid percents; Missing values excluded.

^{***} P < 0.001; * P < 0.05



to use alcohol (78.0%), tobacco, (85.1%), marijuana (86.9%), or illicit drugs (88.0%). Females and high school students were more likely than males and junior high school students to feel that their parents disapproved of substance use (Table 2). Less than half reported that their friends felt it was wrong/very wrong to use alcohol (47.4%), while greater than half reported that their friends felt it was wrong/very wrong to use tobacco (58.5%), marijuana (61.5%), or illicit drug use (70.8%). Females and junior high school students were significantly more likely than males and high school students to report that their friends feel it is wrong to use substances.

Recent Alcohol Use and Episodic Heavy Drinking by Perceived Harm of Use, Ease of Access and Parental/Peer Disapproval of Use

Logistic regression was used to calculate odds ratios and determine whether recent alcohol use and frequent episodic heavy drinking differed significantly based on perceived harm, ease of access and parental/peer disapproval of substance use. Results indicated that students who felt substance use was harmful, who felt access was difficult, and who had parents/peers who disapproved of substance use were at decreased odds for recent alcohol use and frequent episodic heavy drinking (Table 3). Such findings held true for both males and females (Tables 4-5) and junior high school and high school students (Tables 6-7) with one exception--parent disapproval of substance use was not a significant predictor of frequent episodic heavy drinking for junior high school students.

DISCUSSION

Results from this study can be used to assist health educators and prevention specialists in more thoroughly understanding the psychosocial factors associated with Hispanic youth involvement in recent alcohol use and episodic heavy drinking. In turn, the findings can aid professionals in developing effective prevention programs and efforts for this population. The present study found that 24.5% of Hispanic students in 7th -12th

grades reported using alcohol in the past 30 days and 15.2% reported frequently (often/a lot) engaging in episodic heavy drinking. Such rates are alarming especially since early alcohol initiation is associated with increased risk for future substance abuse and dependence.^{8,35} Hispanic students continue to be affected by alcohol use.1 Regarding the most common locations and times students use alcohol, students reported that they most frequently drank alcohol at a friends' house or at home on the weekends and weeknights. The least common drinking locations were in a car or at school and the least common drinking times were before, during and after school. Such information should be used when planning alcohol prevention and intervention efforts with Hispanic youth.

Contrary to general population studies which show that most youth do not perceive alcohol use to be harmful, the present study found that two-thirds (67.7%) of Hispanic students felt using any type of alcohol was harmful/very harmful to their health. This finding is important since perceived harm of alcohol use is associated with individuals' intention to use alcohol.9 In this study most Hispanic youth were aware of the dangers of alcohol and other drug use. Similar to other ethnic groups, Hispanic females were significantly more likely than Hispanic males to feel that drinking alcohol was harmful. Perhaps this difference in perceived harm can help to explain why Hispanic male youth report higher levels of recent alcohol use than Hispanic female youth.³⁶ Because alcohol use is a way that masculinity is commonly expressed among males in the Hispanic community,³⁷⁻³⁹ perhaps males offset the potential harm of use with the potential acquisition of enhanced machismo. Studies have shown that many Hispanic youth feel it is culturally appropriate for males to drink alcohol while females are expected to abstain.27 Other studies have also noted gender socialization differences perceived by Hispanic youth.40

Nevertheless, much concern should be raised in lieu of the fact that a sizeable percentage of Hispanic youth did not perceive alcohol use as harmful. The present study found that increased perceived harm of alcohol use as well as that of all other drug use was associated with decreased odds for both recent use and frequent involvement in episodic heavy drinking. This was true regardless of sex or grade. Previous research among general youth populations has similarly revealed a strong correlation between perceived risk and youth substance use. 41-44 Continued educational and awareness campaigns are needed to increase the percentage of youth who understand the dangers associated with underage drinking.

Parental communication, rule-setting and enforcement of rules regarding substance use were found to be significantly associated with perceived harm of use. Students most likely to perceive substance use as harmful were those with parents who frequently talked to them about the dangers of substance use, set clear rules about use and who punished them when they broke alcohol use rules. General studies have shown that youth with parents who do not consistently set and enforce clear rules regarding substance use tend to feel that occasional alcohol use is not harmful and cannot lead to dependence or abuse.⁴⁵ The present study adds to the literature in showing the association between parental communication on harm of use and youth alcohol use as well as supporting the key elements of authoritative parenting.46 However, caution should be exercised in attempting to generalize the findings of this study since it involves a cross-sectional design and therefore is unable to determine cause-and-effect relationships. Nevertheless, most youth state they would value increased parent-child discussion regarding substance use.47 Open and ongoing communication between parents and children is an effective method to assist youth in developing a sensible relationship with alcohol48,49 and has been recommended by several researchers.⁵⁰ Setting clear rules and enforcing such rules are correlated with decreased youth alcohol consumption.⁵¹⁻⁵³

Among the Hispanic population, research has established the critical nature of the family as a protective factor against youth involvement in risky behaviors.^{21,54,55}



		Tab by Perc	Table 3. Odd by Perceived Hari	s Ratios fc m, Ease of	or Recent A f Access, ar	Icohol Us nd Perceiv	se and Epis ved Parent	Is Ratios for Recent Alcohol Use and Episodic Heavy Drinking rm, Ease of Access, and Perceived Parent/Peer Disapproval of Use	Drinking oroval of U	lse		
	Did Not Use in Past Month	Used in Past Month		90 %0 %0 %0			Infre- quent Episodic Heavy Drinking	Frequent quent Episodic Heavy Drinking				
ltem	(%) N	(%) N	OR	(S) (D)	χ^2	Ь	(%) N	(%) N	OR	(15% CI)	χ^2	Ь
Perceived Harm												
Low ^a	268 (60.4)	176 (39.6)	1.0				287 (74.5)	98 (25.5)	1.0			
High	408 (89.7)	47 (10.3)	.175	(.123,	101.933	<.001	403 (94.2)	25 (5.8)	.182	(.114,	60.722	<.001
Perceived Ease of Access	. Access											
Low ^a	399 (97.1)	12 (2.9)	0.1				399 (97.1)	12 (2.9)	0.1			
High	273 (71.7)	108 (28.3)	10.747	(7.046, 16.394)	154.405	<.001	273 (71.7)	108 (20.3)	13.154	(7.105, 24.353)	99.431	<.001
Perceived Parent Disapproval of Use	Disapproval	of Use										
Low ^a	226 (61.1)	144 (38.9)	1.0				251 (77.1)	75 (23.0)	1.0			
High	425 (86.6)	66 (13.4)	.244	(.175, .340)	74.265	<.001	416 (91.2)	40 (8.8)	.322	(.213,	30.707	<.001
Perceived Peer Disapproval of Use	isapproval of	Use										
Low ^a	212 (55.5)	170 (44.5)	1.0				233 (70.4)	98 (29.6)	1.0			
High	427 (92.2)	36 (7.8)	.105	(.071,	151.162	<.001	420 (96.1)	17 (3.9)	960:	(.056,	97.837	<.001
^a Indicates Referent ^b All categories do not total 946 due to missing data	ıt total 946 due	to missing data										



		by Ferceived natin, Ease of Access, and Ferceived Farentifeer Disapproval of Ose		, , , , , , , , , , , , , , , , , , , ,								
ltem	Did Not Use in Past Month N [%]	Used in Past Month N [%]	OR	(95%) (1)	χ^2	٥	Did Not Use in Past Month N [%]	Used in Past Month N (%)	OR	(12 %56)	χ^2	Р
Perceived Harm												
Low ^a	138 (60.8)	89 (39.2)	1.0				104 (61.5)	65 (38.5)	1.0			
High	408 (89.7)	25 (13.1)	.234	(.142, .384)	35.673	<.001	206 (91.2)	20 (8.8)	.155	(.089, .270)	50.205	<.001
Perceived Ease of Access	of Access											
Low ^a	185 (90.7)	19 (9.3)	1.0				191 (96.0)	8 (4.0)	1.0			
High	112 (55.7)	89 (44.3)	7.737	(4.473, 13.385)	63.294	<.001	113 (60.4)	74 (39.6)	15.635	(7.271, 33.621)	72.832	<.001
Perceived Pare	Perceived Parent Disapproval of Use	of Use										
Low ^a	113 (60.8)	73 (39.2)	1.0				92 (63.9)	52 (36.1)	1.0			
High	178 (84.0)	34 (16.0)	. 296	(.185, .473)	27.151	<.001	211 (88.7)	27 (11.3)	.226	(.134,383)	33.548	<.001
Perceived Peer	Perceived Peer Disapproval of Use	f Use										
Low ^a	110 (56.1)	86 (43.9)	1.0				79 (55.6)	63 (44.4)	1.0			
High	176	17 (8.8)	.124	(.070,	61.435	.001	218 (93.2)	16 (6.8)	260.	(.050,	74.995	<.001

^b All categories do not total 946 due to missing data



		Table 5 by Percei	5. Odds Raven	atios for E , Ease of /	pisodic H	eavy Drii Id Percei	Table 5. Odds Ratios for Episodic Heavy Drinking among Males and Females by Perceived Harm, Ease of Access, and Perceived Parent/Peer Disapproval of Use	ig Males an Peer Disapբ	d Females oroval of U	se		
			Males						Females	ıles		
	Infre- quent Episodic Heavy Drinking	Frequent Episodic Heavy Drinking		%56J			Infre- quent Episodic Heavy Drinking	Fre- quent Episodic Heaw Drinking				
ltem	(%) N	(%) N	OR	(D	χ^2	Ь	(%) N	(%) N	OR	(12 %56)	χ^2	Ь
Perceived Harm												
Low ^a	149 (75.3)	49 (24.7)	1.0				110 (74.8)	37 (25.2)	1.0			
High	165 (93.2)	12 (6.8)	.221	(.113, .432)	22.151	<.001	207 (95.4)	10 (4.6)	.144	(.069, .300)	32.949	<.001
Perceived Ease of Access	of Access											
Low ^a	177 (96.2)	7 (3.8)	1.0				188 (97.9)	4 (2.1)	1.0			
High	128 (70.7)	53 (29.3)	10.470	(4.610, 23.780)	43.117	<.001	123 (75.0)	41 (25.0)	15.667	(5.474, 44.839)	42.065	<.001
Perceived Parent Disapproval of Use	t Disapproval o	ıf Use										
Low ^a	125 (76.7)	38 (23.3)	1.0				105 (80.8)	25 (19.2)	1.0			
High	175 (90.2)	19 (9.8)	.357	(.197, .649)	12.066	<.001	207 (92.0)	18 (8.0)	.365	(.191, .699)	9.76	.002
Perceived Peer Disapproval of Use	Disapproval of L	Jse										
Low ^a	124 (72.1)	48 (27.9)	1.0				87 (70.7)	36 (29.3)	1.0			
High	170 (95.5)	8 (4.5)	.122	(.056,	35.676	<.001	217 (96.4)	8 (3.6)	680.	(.040,	47.603	<.001
^a Indicates Referent ^b All categories do not total 946 due to missing data	oot total 946 due t	o missing data										



		Junior Hi	igh School	Junior High School (7th – 8th Grade)	rade)			Higl	h School (9t	High School (9th – 12th Grade)	(e)	
	Did Not Use in Past Month	Used in Past Month		0,000			Did Not Use in Past Month	Used in Past Month				
ltem	(%) N	(%) N	OR	G (D	χ^2	Д	(%) N	(%) N	OR	(95% CI)	χ^2	Д
Perceived Harm												
Low ^a	92 (86.0)	15 (14.0)	1.0				172 (53.4)	150 (46.6)	1.0			
High	176 (95.7)	8 (4.3)	.279	(.114,	8.693	.003	229 (85.8)	38 (14.2)	.190	(.127, .286)	70.303	<.001
Perceived Ease of Access	of Access											
Low ^a	190 (96.4)	7 (3.6)	1.0				222 (91.4)	21 (8.6)	1.0			
High	(80.5)	16 (19.5)	6.580	(2.593, 16.699)	19.495	<.001	175 (52.6)	158 (47.4)	9.544	(5.809, 15.681)	98.768	<.001
Perceived Parer	Perceived Parent Disapproval of Use	f Use										
Low ^a	69 (83.1)	14 (16.9)	1.0				153 (55.8)	121 (44.2)	1.0			
High	181 (95.3)	9 (4.7)	.245	(.101, .592))	11.018	.001	241 (81.1)	56 (18.9)	.294	(.202, .428)	42.668	<.001
Perceived Peer	Perceived Peer Disapproval of Use	Jse										
Low	63 (84.0)	12 (16.0)	1.0				147 (49.8)	148 (50.2)	1.0			
High	183	7 (3.7)	.201	(.076,	12.255	<.001	239	29 (10.8)	.121	(.077,	100.922	<.001

 $^{^{\}rm a}$ Indicates Referent $^{\rm b}$ All categories do not total 946 due to missing data



	Table	Table 7. Odds Ratios for by Perceived Harr		pisodic He , Ease of A	avy Drink ccess, and	ing amor 1 Perceiv	Episodic Heavy Drinking among Junior High and High School Students n, Ease of Access, and Perceived Parent/Peer Disapproval of Use	ligh and Hi	gh School roval of Us	Students		
		Junior H	igh School	Junior High School (7th – 8th Grade)	'ade)			Higl	1 School (9th	High School (9th – 12th Grade)	(c)	
	Infre- quent Episodic Heavy Drinking	Frequent Episodic Heavy Drinking		%56)			Infre- quent Episodic Heavy Drinking	Fre- quent Episodic Heavy Drinking				
ltem	(%) N	(%) N	OR	(D	χ^2	Ь	(%) N	(%) N	OR	(15 %56)	χ^2	Р
Perceived Harm												
Low ^a	87 (89.7)	10 (10.3)	1.0				196 (70.3)	83 (29.7)	1.0			
High	166 (97.6)	4 (2.4)	.210	(.064,	7.869	.005	234 (92.1)	20 (7.9)	.202	(.120, .341)	40.809	<.001
Perceived Ease of Access	of Access											
Low ^a	179 (97.8)	4 (2.2)	1.0				217 (96.4)	8 (3.6)	1.0			
High	65 (86.7)	10 (13.3)	6.885	(2.087, 22.716)	12.882	<.001	204 (68.9)	92 (31.1)	12.233	(5.794, 25.827)	62.445	<.001
Perceived Parent Disapproval of Use	t Disapproval c	of Use										
Low ^a	70 (90.9)	7 (9.1)	1.0				177 (73.4)	64 (26.6)	1.0			
High	169 (96.6)	6 (3.4)	.355	(.115, 1.094)	3.504	.061	244 (88.4)	32 (11.6)	.363	(.228, .578)	19.047	<.001
Perceived Peer Disapproval of Use	Disapproval of I	Use										
Low ^a	57 (87.7)	8 (12.3)	1.0				174 (67.4)	84 (32.6)	1.0			
High	175 (98.3)	3 (1.7)	.122	(.031, .476)	12.431	<.001	240 (94.5)	14 (5.5)	.121	(0.66,	60.494	<.001
^a Indicates Referent ^b All categories do not total 946 due to missing data	: 10t total 946 due t	to missing data										



Increased parent-child closeness and family connectedness tend to reduce the risk for alcohol use among Hispanic youth. As parental control in the Hispanic family increases, involvement in alcohol use decreases. ⁵⁴ Therefore, specific attention to parent communication rule-setting, rule-enforcing patterns should be components included in prevention efforts aimed toward Hispanic youth. Since youth alcohol use can be strongly influenced by parental communication, parents should be encouraged to regularly talk to their children about the harmful effects of alcohol use. ⁵⁶

The present study also found that nearly half (45.3%) felt it was easy/very easy to access to alcohol. In addition, Hispanic students who felt it was easy/very easy to access alcohol were at increased odds recent alcohol use and frequent episodic heavy drinking. Recent research has shown increased youth alcohol availability and access to be associated with elevated rates of underage drinking.10,57 Research has identified the existence of both formal and informal channels to access alcohol and found that each is associated with increased use among youth. 13,14 Students with parents who set clear substance use rules and frequently talked to them about the dangers of alcohol and other drug use felt access was more difficult than their counterparts. Such findings underscore the importance of parental communication and ongoing monitoring as a means to reduce youth alcohol acquisition and potential use.

Three-fourths of students in the current study (78.0%) reported that their parents felt it was wrong/very wrong for them to use alcohol. Perceived parent disapproval of alcohol use was significantly associated with decreased odds for recent alcohol use and frequent episodic heavy drinking. Previous studies have indicated that parent disapproval of alcohol use is correlated with reduced youth alcohol use. 17,58-60 For instance, a study of 6th graders found that students were more than twice as likely to drink alcohol if they felt their parents would not be angry. 1 This study corroborated such findings and showed them to be present

among Hispanic youth in grades 7-12. Interestingly, Simons-Morton and Chen⁶² found that parental involvement, monitoring and expectations over time provided direct protective effects against early adolescent drinking progression and offered indirect effects by limiting increases in the number of friends who drink. The authors also revealed that effective parenting behavior resulted in a greater indirect protective effect than a direct effect on youth substance use. Such findings illustrate the positive ripple effect and importance of ongoing positive parenting practices.

Less than half (47.4%) reported that their friends felt it was wrong/very wrong to use alcohol. Students with peers who felt it was wrong/very wrong for them to use alcohol and other drugs were significantly less likely to have drunk in the past 30 days and to frequently engage in episodic heavy drinking. Interestingly, research has shown youth alcohol use to be more closely associated with perceived peer approval of use than perceived approval among other youth their age, family and schools. 63-65 This study revealed that the same held true for Hispanic youth. Perceived peer disapproval of use was a stronger protective factor against recent alcohol use and frequent episodic heavy drinking than was perceived parent disapproval. It should be noted however, that research has found a dynamic and reciprocal relationship to be at work with respect to peer influence on youth substance use. Whereas friendships with peers who use substances tends to increase the likelihood of individual substance use, increases in individual use also tends to be associated with increased growth of friends over time who use.⁶⁷ Thus, the impact of peer and social norms should be extensively addressed in substance use prevention programs for youth.

Limitations

The limitations to this study should be noted. First, the sample consisted Hispanic youth in 7th through 12th grades in Greater Cincinnati schools. Caution should be exercised in attempting to generalize these findings to youth in other schools and locations. Second, the study involved a survey of

self-reported responses, thus some students may have responded in socially desirable ways. Third, causal relationships could not be determined since data were crosssectional in nature.

TRANSLATION TO HEALTH EDUCATION PRACTICE

Several risk- and protective-factors for alcohol use have been identified among general youth populations.²⁶ However, gaps in the research currently exist regarding the specific factors associated with Hispanic youth alcohol consumption.²⁷ Findings from the present study can be used to address some of these gaps and assist health educators to more thoroughly understand how the issues of perceived harm, ease of access and parent/peer disapproval affect recent alcohol use and episodic heavy drinking among Hispanic youth. The results of this study should be considered when developing and implementing alcohol prevention efforts for Hispanic youth. Ongoing parent-child communication, rule-setting and rule enforcement should be encouraged. Future studies should seek to identify additional risk and protective factors within the Hispanic community that can specifically help to prevent youth alcohol use among this population.

REFERENCES

- 1. Johnston LD, O'Malley PM, Bachman JG, et al. Monitoring the Future national results on adolescent drug use: Overview of key findings, 2007. NIH Publication No. 08-6418, Bethesda, MD: National Institute on Drug Abuse; 2008.
- 2. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2007. MMWR Morb Mortal Wkly Rep. 2008;57(SS-4):1-136.
- 3. Johnston LD, O'Malley PM, Bachman JG, et al. Monitoring the Future national results on adolescent drug use: Overview of key findings, 2006. NIH Publication No. 07-6202, Bethesda, MD: National Institute on Drug Abuse; 2007.
- 4. Hingson RW, Heeren T, Winter MR. Age at drinking onset and alcohol dependence: Age at onset, duration, and severity. *Arch Pediatr Adolesc Med.* 2006;160:739-746.



- 5. McGue M, Iacono WG, Legrand LN, Elkins I. The origins and consequences af age at first drink. I Associations with substance-use disorders, disinhibitory behavior and psychopathology, and P3 amplitude. *Alcoholism: Clin Exp Res.* 2001a;25:1156–1165.
- 6. Swahn MH, Bossarte RM. Gender, early alcohol use, and suicide ideation and attempts: Findings from the 2005 Youth Risk Behavior Survey. *J Adolesc Health*. 2007;41:175-181.
- 7. Wu P, Hoven CW, Liu X, et al. Substance use, suicidal ideation, and attempts in children and adolescents. *Suicide Life Threat Behav*. 2004;34:408-420.
- 8. Grant BF, Dawson DA. Age of onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey. *J Subst Abuse*, 1997;9:103-110.
- 9. Stephens PC, Sloboda Z, Stephens RC, et al. Universal school-based substance abuse prevention programs: Modeling targeted mediators and outcomes for adolescent cigarette, alcohol, and marijuana use. *Drug Alcohol Depend*. 2009;102:19-29.
- 10. Lipperman-Kreda S, Paschall MJ, Grube JW. Perceived local enforcement, personal beliefs, and underage drinking: An assessment of moderating and main effects. *J Stud Alcohol Drugs*. 2009;70(1):64-69.
- 11. Treno AJ, Lee J P, Freisthler B, et al. Association of evidence-based approaches to community interventions. In Stockwell T, Gruenewald PJ, Toumbourou JW, Loxley W, eds. *Preventing Harmful Substance Use: The Evidence Base for Policy and Practice*. Chichester, West Sussex, England: John Wiley & Sons, Ltd.; 2005:177–189.
- 12. Treno AJ, Gruenewald PJ, Lee JP, et al. The Sacramento neighborhood alcohol prevention project: Outcomes from a community prevention trial. *J Stud Alcohol Drugs*. 2007;68:197-207.
- 13. Foley KL, Altman D, Durant RH, et al. Adults' approval and adolescents' alcohol use. *J Adolesc Health*. 2004;35(4):345.e17-345.e26.
- 14. Treno AJ, Grube JW, Martin SE. Alcohol availability as a predictor of youth drinking and driving: A hierarchical analysis of survey and archival data. *Alcoholism: Clin Exper Res.* 2003;27:835-840.
- 15. Coatsworth JD, Pantin H, Szapocznik J. Familias Unidas: A family-centered ecodevelop-

- mental intervention to reduce risk for problem behavior among Hispanic adolescents. *Clin Child Fam Psychol Rev.* 2002;5(2):113-132.
- 16. Wickrama K, Conger R, Wallace L, et al. The intergenerational transmission of health-risk behaviors: Adolescent lifestyles and gender moderating effects. *J Health Soc Behav.* 1999;40:258-272.
- 17. Ellickson EL, Hays RD. Antecedents of drinking among young adolescents with different alcohol histories. *J Stud Alcohol*. 1991:52:398-408.
- 18. Bossarte RM, Swahn M. Interactions between race/ethnicity and psychosocial correlates of preteen alcohol use initiation among seventh grade students in an urban setting. *J Studies Alcohol Drugs*. 2008;69(5):660-665.
- 19. Brook JS, Whiteman M, Gordon AS, et al. Onset of adolescent drinking: A longitudinal study of intrapersonal and interpersonal antecedents. *Adv Alcohol Subst Abuse*. 1985;5(3):91-110.
- 20. Griffin KW, Botvin GJ, Scheier LM, et al. Parenting practices as predictors of substance use, delinquency, and aggression among urban minority youth: Moderating effects of family structure and gender. *Psychol Addict Behav.* 2000;14:174-184.
- 21. Sale E, Sambrano S, Springer JF, et al. Family protection and prevention of alcohol use among Hispanic youth at high risk. *Am J Community Psychol.* 2005;36(3/4):195-205.
- 22. Gil AG, Wagner EF, Vega WA. Acculturation, familism, and alcohol use among Latino adolescent males: Longitudinal relations. *J Community Psychol.* 2000;28:443-458.
- 23. Pettit GS, Bates JE, Dodge KA, et al. The impact of after-school peer contact on early adolescent externalizing problems is moderated by parental monitoring, perceived neighborhood safety, and prior adjustment. *Child Dev.* 1999;70(3):768-778.
- 24. D'Amico EJ, McCarthy DM. Escalation and initiation of younger adolescent's substance use: The impact of perceived peer use. *J Adolesc Health.* 2006;39:481-487.
- 25. Hawkins JD, Graham JW, Maruin E, et al. Exploring the effects of age of alcohol use initiation and psychological risk factors on subsequent alcohol misuse. *J Stud Alcohol*. 1997;58:280-290.

- 26. Hawkins JD, Catalano RR, Miller JY. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance-abuse prevention. *Psychol Bulletin*. 1992;112(1):64-105.
- 27. Torres Stone RA, Meyler D. Identifying potential risk and protective factors among non-metropolitan Latino youth: Cultural implications for substance use research. *J Immigrant Health*. 2007;9:95-107.
- 28. Fisher DG, Reynolds GL, Moreno-Branson CM, et al. Drug treatment needs of Hispanic drug users in Long Beach, California. *J Drug Issues*, 2004;34(4):879-894.
- 29. Stoil MJ. Immigration and behavioral healthcare. *Behav Healthcare*. 2006;26(7):8-9.
- 30. Vega WA, Alderete E, Kolody B, et al. Adulthood sequela of adolescent heavy drinking among Mexican Americans. *Hispanic J Behav Sci.* 2000;22:254–67.
- 31. Vega WA, Gil A, Wagner E. Cultural adjustment and Hispanic adolescents. In Vega WA, Gil A, eds. *Drug Use and Ethnicity in Early Adolescents*. New York: Plenum Press; 1998.
- 32. Metze L. The PRIDE questionnaire for grades 6-12. Validity and reliability study, 2000. Available at: http://www.pridesurveys.com/supportfiles/tr99612.pdf. Accessed October 25, 2009.
- 33. Craig JR, Emshoff J. The PRIDE questionnaire for grades 6-12. Developmental study, 1987. Available at: http://www.pridesurveys.com/supportfiles/tr99612.pdf. Accessed October 25, 2009.
- 34. Adams RD. The PRIDE questionnaire for grades 6-12. 2nd developmental study, 1994. Available at: http://www.pridesurveys.com/supportfiles/tr99612.pdf. Accessed October 22, 2009.
- 35. Chambers RA, Taylor JR, Potenza MN. Developmental neurocircuitry of motivation in adolescence: A critical period of addiction vulnerability. *Am J Psychiatry*. 2003;160:1041-1052.
- 36. King KA, Vidourek RA. (unpublished). Psychosocial factors associated with recent alcohol use among Hispanic youth.
- 37. Brusco E. *The Reformation of Machismo. Evangelical Conversion and Gender in Colombia.* Austin, TX: University of Texas Press; 1995.
- 38. Caetano R, Kaskutas LA. Changes in drinking patterns among whites, blacks and Hispanics,



- 1984-1992. J Stud Alcohol. 1995;56:558-65.
- 39. Casas JM, Wagenheim B, Banchero R, et al. Hispanic masculinity: Myth or psychological schema meriting clinical consideration. *Hispanic J Behav Sci.* 1994;16:315–31.
- 40. Raffaelli M, Ontai LL. Gender socialization in Latino/a families: Results from two retrospective studies. *Sex Roles*. 2004;50:287-299.
- 41. Danesco ER, Kingery PM, Coggeshall MB. (1999). Perceived risk of harm from marijuana use among youth in the USA. *Sch Psychol Int.* 1999;20:39-56.
- 42. Morgan M, Hibell B, Andersson B, Bjarnason T, Kokkevi A, Narusk A. The ESPAD study: Implications for prevention. *Drugs: Education*, *Prevention and Policy*. 1999;6(2):243-256.
- 43. Novak SP, Reardon SF, Buka SL. How beliefs about substance use differ by socio-demographic characteristics, individual experiences, and neighborhood environments among urban adolescents. *J Drug Educ.* 2002;32(4):319-342.
- 44. Smith A, Rosenthal D. Adolescents' perception of their risk environment. *J Adolesc.* 1995;18:229-245.
- 45. Tucker JS, Ellickson PL, Klein DJ. Growing up in a permissive household what deters at-risk adolescents from heavy drinking? *J Stud Alcohol Drugs*. 2008;69(4):528-534.
- 46. Baumrind D. Parental disciplinary patterns and social competence in children. *Youth Soc.* 1978;9:239-276.
- 47. Coleman LM, Cater S. (2005). Underage 'binge' drinking: A qualitative study into motivations and outcomes. *Drugs: Education, Prevention and Policy*, 2005;12:125-136.
- 48. Brody GH, Ge X. Linking parenting processes and self-regulation to psychological functioning and alcohol use during early adolescence. *J Fam Psychol.* 2001;15(1):82-94.
- 49. O'Sullivan LF, Jaramillo BMS, Moreau D, et al. Mother-daughter communication about

- sexuality in a clinical sample of Hispanic girls. *Hispanic J Behav Sci.* 1999;21:447-469.
- 50. Barnes GM, Reifman AS, Farrell MP, et al. The effects of parenting on the development of adolescent alcohol misuse: A sixwave latent growth model. *J Marriage Fam.* 2000;62:175-186.
- 51. Barnes GM, Farrell MP. Parental support and control as predictors of adolescent drinking, delinquency, and related problem behaviors. *J Marriage Fam.* 1992;54:763-776.
- 52. Beinart S, Anderson B, Lee S, et al. Youth at Risk? A National Survey of Risk Factors, Protective Factors and Problem Behaviour among Young People in England, Scotland and Wales. London: Communities that Care; 2002.
- 53. Newburn T, Shiner M. Teenage kicks? Young people and alcohol: A review of the literature. Joseph Rowntree Foundation; 2001. Available at: http://www.jrf.org.uk/publications/teenage-kicks-young-people-and-alcohol-review-literature. Accessed May 9, 2010.
- 54. Mogro-Wilson C. The influence of parental warmth and control on Latino adolescent alcohol use. *Hispanic J Behav Sci.* 2008;30(1):89-105.
- 55. Sabogal F, Marin G, Otero-Sabogal R, et al. Hispanic familism and acculturation: What changes and what doesn't? *Hispanic J Behav Sci.* 1987;9(4):397-412.
- 56. Henry KL, Slater MD, Oetting ER. Alcohol use in early adolescence: The effect of changes in risk taking, perceived harm and friends' alcohol use. *J Stud Alcohol.* 2005;66:275-283.
- 57. Kuntsche E, Kuendig H, Gmel G. Alcohol outlet density, perceived availability and adolescent alcohol use: A multilevel structural equation model. *J Epidemiol Community Health*. 2008;62:811-816.
 - 58. Ary DV, Tildesley E, Hops H, et al. The

- influence of parent, sibling and peer modeling and attitudes on adolescent use of alcohol. *Int J Addiction*. 1993;28:853–880.
- 59. Elickson PL, Tucker JS, Klein D, et al. Prospective risk factors for alcohol misuse in late adolescence. *J Stud Alcohol*. 2001;62:773–782.
- 60. Monshouwer K, Smit F, De Zwart WM, et al. Progress from a first drink to first intoxication: Age of onset, time-windows and risk factors in a Dutch national sample of secondary school students. *J Subst Use.* 2003;8:155–163.
- 61. Simon-Morton B. Prospective association of peer influence, school engagement, drinking expectancies, and parent expectations with drinking initiation among sixth graders. *Addictive Behav.* 2004;29(2):299-309.
- 62. Simons-Morton B, Chen R. Latent growth curve analyses of parent influences on drinking progression among early adolescent. *J Stud Alcohol.* 2004;66:5-13.
- 63. Thombs DL, Ray-Tomasek J, Osborn CJ, et al. The role of sex-specific normative beliefs in undergraduate alcohol use. *Am J Health Behav.* 2005;29:342-351.
- 64. Borsari B, Carey KB. Peer influences on college drinking: A review of the research. *J Subst Abuse*. 2001;13(4):391-424.
- 65. Lewis MA, Neighbors C. Social norms approaches using descriptive drinking norms education: A review of the research on personalized normative feedback. *J Am Coll Health*. 2006;54(4):213-218.
- 66. Simons-Morton B. Social influences on adolescent substance use. *Am J Health Behav*. 2007;31(6):672-684.
- 67. Prado G, Szapocznik J, Maldonado-Molina MM, et al. Drug use/abuse prevalence, etiology, prevention, and treatment in Hispanic adolescents: A cultural perspective. *J Drug Issues*. 2008;38(1):5-36.