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Who Needs Liquor Stores When Parents Will Do? The importance of social sources of alcohol among young urban teens

Mary O. Hearst, MPH[1], **Jayne A. Fulkerson, Ph.D.**[2], **Mildred M. Maldonado-Molina, Ph.D.**[3], **Cheryl L. Perry, Ph.D.**[1], and **Kelli A. Komro, M.P.H., Ph.D.**[1,3]

1 *Division of Epidemiology and Community Health, School of Public Health, University of Minnesota, Minneapolis, MN, USA*

2 *School of Nursing, University of Minnesota, Minneapolis, MN, USA*

3 *Department of Epidemiology & Health Policy Research and Institute for Child Health Policy University of Florida, College of Medicine, Gainesville, FL, USA*

Abstract

Objectives—Examine sources of alcohol over time in a large, ethnically-diverse adolescent population from a poor, urban environment.

Methods—Surveys were administered at four time points (6^{th}–8^{th} grades) assessing demographic characteristics, past year alcohol use, and sources of alcohol to youth in Chicago, Illinois 2003–2005. Growth curve analysis was used to examine alcohol access trends among all alcohol using youth and consistent alcohol users. Interactions by race and gender were tested.

Results— Social sources of alcohol were the most prevalent source over time. Parents were the primary source of alcohol, but their prominence significantly decreased over time. Taking alcohol from home, and getting alcohol from other adults, individuals under age 21, and commercial sources significantly increased as sources of alcohol over time. Males were significantly more likely than females to get alcohol from commercial sources and friends' parents.

Conclusions—Greater attention for reducing social access to alcohol, particularly among parents, is needed for alcohol prevention efforts prior to and during middle school.

Keywords

adolescents; urban; diverse; race/ethnicity; alcohol; prevention; intervention; group randomized trial; Project Northland Chicago; commercial; alcohol sources; social access; growth curve modeling

Introduction

Early initiation of alcohol use has been associated with many negative health effects during adolescence, and the earlier the initiation, the greater the subsequent problems (Stueve and O'Donnell 2005). National surveys estimate that while alcohol use among 8^{th} and 10^{th} graders has steadily declined since 1991,(Johnston, O'Malley et al. 2004) a large proportion of youth still drink and experience negative consequences because of their drinking (Greenblatt

Correspondence concerning this article should be addressed to Mary O. Hearst, MPH, Division of Epidemiology and Community Health, School of Public Health, University of Minnesota, Minneapolis, MN 55455. Electronic mail may be sent via the internet to onei0085@umn.edu, phone: 612-624-5723, fax: 612-624-0315.

2000;Hingson, Jamanka et al. 2001;Subramanian 2002). One strategy to ameliorate alcohol use by youth (Wagenaar and Perry 1994;Williams and Perry 1998;Perry, Komro et al. 2000;Komro, Perry et al. 2001;Komro and Toomey 2002;Perry, Williams et al. 2002;Wagenaar, Murray et al. 2002;Perry, Komro et al. 2003) focuses on reducing or eliminating the primary sources of alcohol access,(Dent, Grube et al. 2005) largely targeting commercial access among underage drinkers (Preusser and Williams 1992;Forster, McGovern et al. 1994;O'Leary, Gorman et al. 1994;Grube 1997;Wagenaar, Murray et al. 2002;Freisthler, Gruenewald et al. 2003). Eliminating commercial sources of alcohol for youth is necessary; however, previous cross-sectional research indicates that social access is a primary source of alcohol for teenagers, particularly among young drinkers (Forster, McGovern et al. 1994;Forster, Murray et al. 1995;Wagenaar, Toomey et al. 1996;Jones-Webb, Toomey et al. 1997;Harrison, Fulkerson et al. 2000;Hussong 2000).

A common social source of alcohol among underage youth is adults over the age of 21 years (Wagenaar, Toomey et al. 1996;Jones-Webb, Toomey et al. 1997). Access sources do appear to differ by age, with younger adolescents (6^{th} grade) reporting accessing alcohol from family, parties and at home, and older adolescents (9^{th}–12^{th} grade) accessing alcohol from friends (Harrison, Fulkerson et al. 2000). Male and female adolescents may also access alcohol in different ways, with females more likely than males to use social sources,(Harrison, Fulkerson et al. 2000) particularly family (Hussong 2000). The National Longitudinal Study of Adolescent Health (Add Health) surveyed a nationally representative sample of 7–12^{th} graders on the ease of access to alcohol in the home and found that 28% of youth reported the home as an easily accessible location. Thus, although older adolescents appear to access alcohol from commercial sources more often than younger adolescents,(Wagenaar, Toomey et al. 1996) these primarily cross-sectional surveys indicate that young adolescents are predominantly obtaining alcohol from friends, young adults, and family.

While compelling evidence exists that social sources of alcohol are important, studies to date have been largely limited to cross-sectional associations and predominantly racially homogenous samples, particularly for early drinkers. Williams and Mulhall's cross-sectional sample is the exception with a sample that included 62% urban youth, 33% minority youth and nearly one-fourth of the sample eligible for free and reduced lunch. Ethnically-diverse adolescents in urban settings may be at an increased risk for alcohol and other drug use given their disadvantaged economic environments (Crum, Lillie-Blanton et al. 1996) and higher density of alcohol outlets in poor and minority urban neighborhoods (Gorman and Speer 1997;LaVeist and Wallace 2000;Duncan, Duncan et al. 2002). In addition, previous cross-sectional research has not been able to examine longitudinally how sources of alcohol may change over time as youth mature nor how youth who initiate alcohol use at a young age (i.e., age 12) may have a unique pattern of alcohol access over time.

The purpose of this study is to contribute to the published research literature by examining sources of alcohol by young adolescents over time in a large ethnically-diverse population of mostly poor urban youth. The primary hypotheses are: 1) social sources of alcohol will be the most prevalent among this sample of young adolescents, 2) sources will change as adolescents age, and 3) sources of alcohol among the entire sample of alcohol users and consistent alcohol users will follow a similar pattern. Secondarily, we will explore whether there are any differences by gender or ethnicity. We hypothesize that sources of alcohol may vary by race and gender with females more likely to use social sources than males (as two previous studies suggest), and minority youth more likely to use commercial sources than white youth (because of the higher density of outlets in poor and minority urban neighborhoods (Gorman and Speer 1997;LaVeist and Wallace 2000;Duncan, Duncan et al. 2002)). No other studies have examined access trends over time in such a large racially diverse, young adolescent population, nor examined the patterns of alcohol access among young consistent alcohol users as they

mature. Understanding patterns of alcohol access will be critical for more targeted prevention efforts.

Methods

Study design

The data used in this study are from four waves of Project Northland Chicago (PNC), a multi-component, group randomized trial for the prevention of adolescent alcohol use, involving 63 schools and their surrounding neighborhoods in Chicago (Komro, Perry et al. 2004;Komro, Perry et al. 2006). All Chicago public schools that included grades 5 through 8, had relatively low mobility rates (< 25%), and were larger schools (at least 30 students per grade) were selected for recruitment. Schools were geographically clustered into units, and the units were randomly assigned to three years of the adapted PNC intervention (from sixth to eighth grade) (Komro, Perry et al. 2004) or the control condition. This study used data from the 58 PNC schools that participated in all four data collection points. Surveys were administered in the classroom at four time points: (1) fall, 2002 at the beginning of 6^{th} grade (Time 1: T1); (2) spring, 2003 at the end of 6^{th} grade (T2); (3) spring, 2004 at the end of 7^{th} grade (T3), and (4) spring, 2005 at the end of 8^{th} grade (T4). All students enrolled in the participating schools and grades were eligible for the surveys. Details of survey administration and consent procedures are available elsewhere (Komro, Perry et al. 2006). Survey response rates were high for each wave (T1: 91%, T2: 94%, T3: 95%, T4: 96%).

Study Population

Demographic variables such as gender, race/ethnicity, grade, and age were collected. For this study, we limited the sample to African American/Black (40%), White (14%), and Hispanic/Latino (31%) youth as these three racial/ethnic groups represent the overwhelming majority (85%) of the students in the study, and made racial/ethnic comparisons possible. Over the four data collection points, an average of 69.5% of students reported receiving free or reduced cost lunch, an indicator of poverty.

Alcohol Users—Students who completed a school survey at any of the four data collection time periods (T1 n=4164; T2 n=4137; T3 n=3710; T4 n=3709), reported consuming alcohol in the past year, and self-identified as Hispanic/Latino, African American or White were included. The sample of alcohol using students was 578 at T1, 825 at T2, 978 at T3, and 1328 at T4. The average age was T1=11.8; T2=12.3; T3=13.3; and T4=14.3 years. As shown in Table 1, almost half of the sample at each data collection point is African American/Black.

Consistent users—To assess if consistent users have unique alcohol access patterns over time, a subsample of youth who reported consistent alcohol use over time was identified. A consistent user was defined as a student who reported past year drinking at three or four of the four data collection points. These youth may be particularly at risk because of their early alcohol initiation and consistent use at a critical time of adolescent development.

Loss to follow-up (LTF)—For the entire study cohort, the follow-up rate from T1 to T2 was 89%, T1 to T3 was 67%, and T1 to T4 was 61%. LTF was primarily due to two schools closing and student mobility. The follow-up rate was similar to those reported in a meta-analysis of school-based substance use prevention studies (Hansen, Tobler et al. 1990). Comparing alcohol use rates at T1 between those who remained in the study and those LTF shows students who were LTF were more likely to be baseline users (18%) than those not LTF (15%) ($F=4.05$, $df_{n:d}=1:4067$, $p=0.04$).

Measures

The complete self-report survey instrument consisted of 89 items, including items related to alcohol behavior, attitudes, and perceptions. Identical surveys were given at each data collection period, with the exception of a few items not related to these analyses. Questions were drawn from D.A.R.E. Plus and previous Project Northland studies (Perry, Williams et al. 1993;Williams, Toomey et al. 1995;Komro, Perry et al. 2004;Komro, Perry et al. 2004).

Alcohol use in the past year was measured with the question "During the last 12 months, on how many occasions, or times, have you had alcoholic beverages to drink?" Response options included 0 occasions, 1–2 occasions, 3–5 occasions, 6–9 occasions, 10–19 occasions, 20–39 occasions, and 40 or more occasions. The seven category response was dichotomized to "no occasions" (0) versus "one or more occasions" (1). A definition of an alcohol drink preceded, stating "a bottle or can of beer; a bottle or can of malt liquor; a glass of wine or wine cooler; flavored alcohol drink, SIPS DON'T COUNT." There was additional visual cue half-way through the section stating, "Remember, sips don't count."

Access to alcohol was addressed in one question, "If you have ever had an alcoholic drink, think back to the last time you drank. How did you get the alcohol?" Response options included: "You've never had an alcohol drink"; "Your parent or guardian gave it to you"; "Another adult over 21 gave it to you"; "Someone under 21 gave it to you"; "You took it from home"; "You took it from a friend's house"; "You bought it at a grocery or convenience stores"; "You bought it at a liquor store"; "You bought it at a bar or restaurant"; "You got it some other way…How did you get it?" Commercial sources (bar, liquor store, convenience store, gas station, and grocery store) were collapsed into one category due to low frequencies (< 2%) in each category.

Analysis

To assess the changes in alcohol sources over time, we used generalized linear mixed modeling. Analyses were conducted using SAS PROC GLIMMIX (SAS Version 9.1), which allows for a correlated data structure where the response is not necessarily normally distributed. This statistical procedure also allows adjusting for the effects of several covariates and can handle missing data by properly aligning observations according to time. Autoregressive and nested error structures were used to account for correlation within individual's responses over time and for individual responses within schools, respectively. Each of the outcome variables (parents, friend's parent, another adult >21, someone <21, took it from home, took it from friend's home, and commercial sources of alcohol) was regressed on time, treatment condition, gender, ethnicity, time by ethnicity and time by gender interactions. A linear slope for each outcome variable was estimated. Interaction terms (time*ethnicity and time*gender) that failed to achieve significance at $\alpha = 0.10$ were subsequently excluded from the final models. Models were tested for the entire sample of alcohol users and then within a sub-sample of consistent alcohol users (those who reported alcohol use in the past year in at least three or four waves of data). Because the probability of Type I error increases as more tests are performed (Ott and Longnecker 2001), we used Bonferonni correction ($p<.05/2 =.025$).

Results

As shown in Table 2, at the beginning of 6th grade, parents/guardians were by far the most common source of alcohol (32.7%), followed by another adult >21 (15.7%) and someone <21 (9.7%). By the end of 8th grade, accessing alcohol from another adult >21 (22.7%) surpassed parents/guardian (18.9%) as the most prevalent source reported. Consistent users followed a similar pattern to the entire sample, with social sources dominating commercial sources. Over time, student reports of taking alcohol from home or a friend's home, receiving alcohol from a friend's parent or guardian, and purchasing alcohol from commercial sources were lower in

prevalence compared to accessing alcohol from parents or guardians, another adult >21, or someone <21.

As shown in Table 3, among the entire sample of alcohol users, increases over time were observed across the following sources of alcohol: another adult >21 ($p<.001$), someone < 21 ($p=.008$), took it from home ($p<.001$), and commercial ($p<.001$). Parents as a source of alcohol use decreased over time ($p<.001$). No significant time effects were observed for alcohol taken from a friend's home or receiving it from a friend's parent. Similar results were observed among the sub-sample of consistent alcohol users, with the exception of a nonsignificant finding for getting alcohol from someone <21. Results also suggested that males were more likely to get alcohol from commercial sources ($p=.020$), although this result was not observed among consistent users. Among consistent users, males who engaged in consistent alcohol use were more likely than females to get alcohol from a friend's parent. No racial/ethnic differences (white vs. minority youth) were observed across sources of alcohol use over time, with one exception. Results suggested that among consistent users, minority youth were more likely than white adolescents to take alcohol from home ($p=.025$), although this difference does not reach our conservative statistical criterion (i.e. p=.025).

Discussion

The purpose of this study was to examine sources of alcohol by young adolescents over time in a large, ethnically-diverse population of mostly poor, urban youth. The present study findings support our primary hypotheses that social sources were the most prevalent sources of alcohol, and sources of alcohol changed over time for all alcohol users and the sub-sample of consistent users. Specifically, parents and guardians surpassed all other sources of alcohol initially, but significantly decreased by the end of 8th grade. Both accessing alcohol from another adult >21 and someone <21 significantly increased over time, with another adult >21 becoming the most common source of alcohol at the end of 8th grade. Accessing alcohol from someone <21 did not significantly increase for consistent users. Finally, taking alcohol from home and commercial access increased significantly over the study time period. Our secondary hypotheses regarding gender and ethnic differences were only partially supported as few gender and no statistically significant racial/ethnic differences were found among sources of alcohol.

Our findings that the predominant source of alcohol for young teens is parents underscores the importance of educating parents regarding provision of alcohol to their children and children's friends. Parental education about the need to eliminate, lock up and/or monitor alcohol in the home may be necessary to prevent youth from having easy access to alcohol in a convenient location, particularly as taking alcohol from home also significantly increased over time. Parents who provide their children with alcohol on special occasions or religious events may want to consider all subsequent effects, including increased acceptance of alcohol at a young age, in addition to the perceived religious or bonding benefits. Interventions should target and enhance known methods for alcohol prevention/reduction at the family level, such as improving parent-child relationships, parental monitoring and communication, consistent rule-setting and enforcement, and family skills training (Komro and Toomey 2002).

The present study's findings that the primary source of alcohol shifts with age from parents to other adults and youth <21 highlight the need for alcohol prevention efforts to address these social sources of alcohol, particularly before high school; a major challenge for alcohol prevention efforts (Komro and Toomey 2002). Community-level interventions that provide alcohol free community events and settings for youth, may deter alcohol initiation and decrease youth's reliance on young adults as a source of alcohol access.

Our findings indicate that commercial sources are not primary outlets for youth access, but that they increase in importance as youth age (Wagenaar, Toomey et al. 1996;Harrison, Fulkerson et al. 2000). This increase extends the previous cross-sectional research illustrating that older adolescents use commercial sources to obtain alcohol more often than younger adolescents. While young adolescents may not be purchasing alcohol illegally, legal purchases by adults or illegal purchases by minors may filter to underage youth, particularly in areas with high alcohol outlet density. Hence, social sources of alcohol to youth flow from easy community access (Wagenaar, Toomey et al. 1996). Strategies for reducing access to minors identified in previous cross-sectional studies include continued monitoring and enforcement of underage sales and drinking laws, increased vigilance regarding keg registration, increasing the price of alcohol, and enforcement of laws prohibiting buying alcohol for minors. Although limiting commercial access of alcohol to underage youth should continue to be emphasized in the community in general, the primary focus for this age group should be on reducing social sources.

Our findings showed that males were more likely than females to use commercial sources and social sources were equally used by males and females. While this finding appears to be in contrast to previous research that has shown a greater reliance on social sources among young females (Harrison, Fulkerson et al. 2000;Hussong 2000), perhaps the prevalence of social sources among females increases in later adolescence as they begin to socialize and date older males.

The present study is unique as no other study, to the authors' knowledge, has followed young, racially-diverse, poor urban youth over a two and a half year period, observing patterns of social and commercial alcohol access in this manner. Particularly unique to this study was our ability to follow a sub-sample of consistent drinkers who initiated alcohol use at a young age and continued drinking, and assess if their patterns of access were unique. The present study provides an important extension to research on commercial access (Wagenaar, Toomey et al. 1996;Jones-Webb, Toomey et al. 1997;Harrison, Fulkerson et al. 2000;Dent, Grube et al. 2005) by showing that social access is particularly salient for young, racially-diverse adolescents (6–8th grade) and prominent among consistent and early initiating alcohol users.

The present study has limitations. Only a minority of youth were using alcohol at the beginning of sixth grade (17%) which limited the sample size because alcohol access could only be asked among users. However, the study was conducted with a rigorous study design and the sample size increased over time, providing a greater understanding of how adolescents as young as 12 years of age access alcohol. Another limitation is that some students may have counted small amounts of alcohol as "drinks." Although, the students were given visual cues and reminders on the survey that sips of alcohol do not count as having consumed alcohol in the past 12 months, it is possible that some of the students reported drinking alcohol in the past year when they consumed a very small amount. These adolescents could have received small amounts of alcohol from their parents at dinner or religious events which could account for the predominance of parental access in the earliest time points. However, if parents were providing alcohol under these circumstances, we would expect these patterns to continue over time. Instead, the prevalence of parental access decreases over time. Lastly, our analysis of those lost to follow-up showed that those lost were at higher risk for alcohol use, thus our findings are likely attenuated.

This study also has many strengths, including the large, ethnically-diverse sample and the longitudinal design of the study. This study is relevant for intervention development emphasizing the importance of social access when the target population is young and when intervening in an urban area. The research literature and prevention efforts will benefit if future studies develop items that can assess the motivation of individuals for providing alcohol to youth. Prevention of early onset of alcohol is a critical component of ensuring the short- and

long-term health and safety of our youth (Greenblatt 2000;Hingson, Jamanka et al. 2001;Subramanian 2002;Stueve and O'Donnell 2005) as well as deterring legal troubles. Recognizing the importance of social sources of alcohol and how social sources change as children age offers an ideal opportunity for primary prevention.

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Table 1

Demographic characteristics of alcohol users[a] and a sub-sample of consistent users[b].

Alcohol Users	**2002 6th grade Mean age = 11.8 (n= 578)**	**2003 6th grade Mean age=12.3 (n= 825)**	**2004 7th grade Mean age=13.3 (n=978)**	**2005 8th grade Mean age=14.3 (n= 1328)**
Race	N (%)	N (%)	N (%)	N (%)
African American	261 (45.3)	387 (47.1)	383 (39.2)	569 (42.9)
Hispanic	221 (38.4)	337 (40.1)	441 (45.1)	522 (39.3)
White	94 (16.3)	97 (11.8)	154 (15.7)	236 (17.8)
Gender				
Male	330 (57.3)	445 (54.0)	483 (49.4)	643 (48.4)
Female	246 (42.7)	379 (46.0)	495 (50.6)	685 (51.6)
Consistent Users	**(n=217)**	**(n=321)**	**(n=329)**	**(n=327)**
Race				
African American	81 (37.3)	116 (36.3)	112 (34.0)	110 (36.6)
Hispanic	100 (46.1)	161 (50.3)	166 (50.5)	161 (49.2)
White	36 (16.6)	43 (13.4)	51 (15.5)	56 (17.2)
Gender				
Male	126 (58.1)	173 (53.9)	176 (53.5)	172 (52.6)
Female	91 (41.9)	148 (46.1)	153 (46.5)	155 (47.4)

Source: Project Northland Chicago, Chicago, Illinois, 2002–2005

[a] self-reported past year alcohol users

[b] past year alcohol use reported during at least 3 of 4 surveys

Table 2

Sources of alcohol over time for entire sample of alcohol users and sub-sample of consistent alcohol users.

Source	Fall 2002 (6th grade)	Spring 2003 (6th grade)	Spring 2004 (7th grade)	Spring 2005 (8th grade)
Alcohol Users				
N[a]	(578)	(825)	(978)	(1328)
Parents/guardian (%)	32.7	30.6	24.4	18.9
Friend's parent or guardian (%)	4.1	3.0	4.0	4.5
Another adult over 21 (%)	15.7	17.1	16.8	22.7
Someone under 21 (%)	9.7	12.2	18.4	16.4
Took it from home (%)	3.6	6.7	9.2	8.9
Took from friend's house (%)	2.6	3.0	4.0	6.2
Commercial source (%)	2.4	2.6	3.2	5.6
Consistent Users				
N[b]	(217)	(321)	(329)	(327)
Parents/guardian (%)	38.0	34.6	23.4	18.7
Friend's parent or guardian (%)	4.6	3.4	4.0	2.7
Another adult over 21 (%)	16.1	17.1	16.1	25.1
Someone under 21 (%)	8.8	13.1	23.7	17.3
Took it from home (%)	2.8	8.1	12.1	11.9
Took from friend's house (%)	2.3	3.7	3.7	4.6
Commercial source (%)[c]	2.8	1.9	3.3	6.7

Source: Project Northland Chicago, Chicago, Illinois, 2002–2005

[a] Sample size increases over time because alcohol use (past year) increases with age.

[b] Sample size generally increases over time because the sub-sample includes those who reporting drinking three out of four time periods rather than all four.

[c] Bar, liquor store, convenience store, gas station, grocery store

Table 3

Sources of alcohol use among the entire sample of alcohol users and consistent alcohol users over time.

Source		Alcohol Users				Consistent Alcohol Users			
		Slope	SE	F-value	p-value	Slope	SE	F-value	p-value
Parents									
	Time	−0.191	0.052	13.62	<0.001**	−0.277	0.616	20.13	<0.001**
	Treatment	0.010	0.129	0.01	0.941	−0.054	0.198	0.07	0.789
	Gender	0.088	0.090	0.97	0.326	0.104	0.115	0.82	0.366
	Ethnicity	−0.045	0.129	0.12	0.735	−0.303	0.183	2.73	0.099
Friend's Parent									
	Time	−0.120	0.160	0.52	0.470	−0.052	0.622	0.08	0.780
	Treatment	−0.399	0.360	1.23	0.280	−0.336	0.185	0.56	0.463
	Gender	0.699	0.330	4.60	0.032	1.100	0.449	5.81	0.016**
	Ethnicity	0.129	0.395	0.11	0.750	−0.007	0.521	0.00	0.988
Another adult> 21yr									
	Time	0.197	0.058	11.60	<0.001**	0.194	0.076	6.49	0.011**
	Treatment	0.106	0.123	0.74	0.398	0.138	0.157	0.77	0.392
	Gender	−0.142	0.117	1.47	0.225	−0.138	0.151	0.84	0.361
	Ethnicity	−0.272	0.175	2.42	0.120	−0.390	0.239	2.65	0.104
Someone< 21yr									
	Time	0.190	0.072	7.06	0.008**	0.169	0.088	3.68	0.056
	Treatment	−0.096	0.186	0.27	0.610	0.009	0.205	0.00	0.965
	Gender	−0.140	0.147	0.90	0.344	−0.124	0.179	0.48	0.490
	Ethnicity	0.006	0.217	0.00	0.977	0.072	0.247	0.09	0.769
Took it from Home									
	Time	0.366	0.099	13.62	<0.001**	0.431	0.128	11.32	<0.001**
	Treatment	−0.076	0.272	0.08	0.784	−0.328	0.297	1.22	0.283
	Gender	−0.111	0.211	0.28	0.597	−0.284	0.253	1.26	0.263
	Ethnicity	0.354	0.272	1.70	0.193	0.660	0.294	5.03	0.025**
Took it from Friend's Home									
	Time	0.195	0.147	1.75	0.186	0.247	0.184	1.79	0.181
	Treatment	0.154	0.339	0.21	0.654	0.248	0.383	0.042	0.526
	Gender	0.141	0.308	0.21	0.648	−0.157	0.367	0.18	0.669
	Ethnicity	0.443	0.358	1.53	0.216	0.452	0.426	1.13	0.289
Commercial									
	Time	0.865	0.306	11.28	<0.001**	1.210	0.492	5.64	0.018**
	Treatment	0.648	0.510	1.60	0.218	0.603	0.471	1.64	0.215
	Gender	2.261	0.970	5.44	0.020**	2.320	1.681	1.91	0.168
	Ethnicity	−0.978	1.145	0.73	0.393	1.250	1.340	0.87	0.351
	Time*gender	−0.699	0.350	3.96	0.047	−0.076	0.551	1.92	0.166
	Time*ethnic	0.487	0.403	1.43	0.233	−0.259	0.485	0.29	0.593

Source: Project Northland Chicago, Chicago, Illinois, 2002–2005

** $p < .025$

We explore social versus commercial access to alcohol by young teens in a diverse, urban environment. Social sources dominated all years for alcohol users (n=1328) and consistent users (n=329).