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Variation in Family Structure Among Urban Adolescents and Its Effects on Drug Use

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Abstract

Family structure is one factor that can help explain drug use among adolescents. In 2005 a study was conducted with 255 ninth-grade students from an urban, predominantly Latino Los Angeles area high school. Students were 83% Latino, 58% female, and from mostly low SES households. Half of all students reported having ever used alcohol, 30% had ever smoked a cigarette, and 18% had ever used marijuana. Family structure was measured using a single open-ended question and logistic regression was employed to determine the effects of various family structures on the use of alcohol, cigarettes, and marijuana. The presence of older siblings in the home was associated with alcohol and marijuana use, and living with a cousin was associated with marijuana use. Results suggest that influential others, including siblings and cousins, should be included in measures of family structure. Study limitations are noted.

Keywords

drug use; adolescents; acculturation; family structure; siblings; peer influence; Latino; Hispanic

Introduction

Adolescent Drug Use and Family Structure

Adolescent drug use is a significant concern in the United States. Though gradual declines have been observed in recent years, rates of drug use among adolescents remain high. In 2004, 30% of 12- to 17-years olds in the U.S. reported using drugs sometime in their life, including alcohol (42%), tobacco (32.7%), and marijuana (19%; Substance Abuse and Mental Health Services Administration, 2005). Studies have identified racial and ethnic variation in drug use among adolescents; Latino and White youth report higher rates of drug use (11.1% and 10.2%), than African American and Asian youth (9.3% and 6.0%; Substance Abuse and Mental Health Services Administration, 2005). In the National Survey of Families and Households (NSFH), Amey and Albrecht (1998) found that Latino youth initiated marijuana use at rates twice that of Whites (15.7% vs. 8.2%), while they used alcohol and cigarettes at rates similar to or less than their White counterparts. In addition, urban areas are becoming increasingly diverse; in Los Angeles County 47% of residents report Hispanic or Latino ethnicity, compared to 12% nationwide (U.S. Census Bureau, 2004). Between 2003 and 2004, the Latino population growth rate in the U.S. was 3.6%, compared to 1.0% in the total U.S. population (Bernstein, 2005). Despite the fact that Latinos are the most rapidly growing ethnic minority group in the United States, far fewer

studies have been conducted among this ethnic group. Therefore, research into the factors affecting drug use among Latino adolescents is particularly needed.

Family structure has been identified as one factor that may help explain drug use among adolescents. Both variation in the composition of the family (Hoffman and Johnson, 1998) and characteristics of family relationships (Miller and Volk, 2002) have been identified as predictors of drug use among youth. Investigations of family structure usually describe the family in terms of a traditional, nuclear unit consisting of two parents and children and have been mainly concerned with the presence or absence of one or both parents. Jenkins and Zunguze (1998) found that eighth-, tenth-, and twelfth-graders who reported living with a stepparent used more cigarettes, beer, and marijuana than those living with their two biological parents. Students living with only their fathers reported more cigarette, marijuana, and liquor use, while students living with only their mother reported more beer and wine cooler use than students living with their two biological parents. In a large cross-sectional study in the Southeastern United States, Flewelling and Bauman (1990) found that 12–14 year old youth were between 1.5 and 2.3 times as likely to use substances (cigarettes, marijuana, or alcohol) if they lived with a single parent, and between 1.7 and 2.6 times as likely to use substances if they lived with stepparents compared to those living with both parents. Blum and colleagues (2000) concluded that, while Latino adolescents were less likely than Whites to use cigarettes or alcohol, living in single-parent families was associated with both cigarette and alcohol use, after controlling for ethnicity. Eitle (2004) failed to find an association between living with a single parent and use of alcohol or marijuana, but did conclude that single-parent families were associated with cigarette use, after controlling for ethnicity. In sum, the effect of one specific type of family structure (living with a single parent vs. both parents) on adolescent drug use is generally well established and has been borne out in studies with large samples.

A factor limiting the generalizability of existing studies is that the majority of studies discussed here have included primarily White or African American samples and many have controlled for the effects of ethnicity as a covariate or confounder in statistical models, thereby attempting to hold the effect of ethnicity constant in order to examine other factors. In one of the few longitudinal studies of family structure that included a large sample of Latino youth (71%, composed of both U.S.- and foreign-born Latinos), Gil, Vega and Biafora (1998) also found that disruption of the two-parent family structure was associated with initiation of illicit substance use. Among U.S.-born Latino sixth- and seventh-graders, 21% of youth living with both parents reported initiating illicit substance use compared to 29% living with a single mother ($p < .05$), and among foreign-born students 16% living with both parents reported substance use initiation compared to 27% living with a single mother ($p < 0.01$).

There is some evidence that the detrimental effect of disrupted family structure (an arrangement other than two parents) is stronger for White adolescents than others (Flewelling and Bauman, 1990), and that structures other than two biological parents may be protective among other racial or ethnic groups. For example, some have found that the effects of living in a single-mother household appears to be protective against drug use among Black youth while increasing the risk of drug use among Whites and Latinos (Amey and Albrecht, 1998). However, Gil and colleagues (1998) suggested that family structure and family environment were more influential in the initiation of illicit substance use among Latino youth than in either African American or White youth. More information about the role of family structure among various ethnic groups is needed to clarify these findings.

Existing studies may be somewhat limited by their focus on the two-parent household as the normative family structure. As noted by Amey and Albrecht (1998), the measurement of

family structure is complex and may require assessment of more than just the two biological parents, including families composed of stepparents or extended family members. Particularly among Latinos, where cultural values such as *familism* and extended family relationships are often important determinants of behavior (Chong, 2002; Vega, 1990), a limited view of family structure may impede our understanding of the influence of family structure on adolescent behavior. In addition to parents, the presence of other adults in the household should also be considered (Hoffman and Johnson, 1998). In another of the few studies with a substantial sample of Latinos (25% Cuban, 25% other Caribbean basin Hispanic, 25% African American and 25% non-Hispanic White), Barrett and Turner (2006) included less traditionally measured family members such as grandparents, foster and stepparents in a cross sectional study of young South Florida adults by asking participants to remember who they lived with during adolescence. Due to the low number of responses in some categories, however, categories were ultimately collapsed into four family types: both parents, single parents, extended single-parent families (includes at least one additional adult relative) and families with stepparents. The authors conclude that respondents from single-parent families reported more problematic substance use than those from two-parent families, and that the effect of family structure was mediated by association with deviant peers and exposure to stress. Though several studies have identified the influence of older siblings on adolescent drug use including cigarettes (Bricker et al., 2006; Rajan et al., 2003) and multiple substances (Pomery et al., 2005), analyses that investigate the role of family structure on adolescent drug use generally do not include the role of siblings (e.g., Barrett and Turner, 2006; Farrell and White, 1998). The presence of older siblings in the household may serve not only as a source of behavioral influence, but also as a point of access to drugs or as a conduit to association with older, deviant peers, thereby increasing the likelihood that their younger siblings will use drugs.

The Current Study

The current study aimed to describe the variability in family structure reported by urban, predominantly Latino High School students in Los Angeles and to determine cross-sectional associations between family structure and drug use. The current study builds upon existing literature by addressing the role of family structure in adolescent substance use among younger, primarily Latino urban adolescents and expands the family structure categories further by including the presence of related and non-related individuals living in the household, including siblings, cousins, and friends.

Based on U.S. Census data that report ethnic variation in household composition and greater mean size of Latino versus non-Latino households (U.S. Census Bureau, 2006), we expected that students would report a wide variety of household compositions. We hypothesized that the absence of one or both parents would increase the risk of drug use and that the presence of older siblings and/or adults would increase the risk of drug use.

Methods

Setting

This survey was conducted as a pilot study to develop measures for a larger study of acculturation patterns and drug use among Latino adolescents in Southern California. The pilot study was conducted in a single high school with a large proportion of Latino students. During the 2004–2005 school year 80% of the students in this school were Latino, and 38% were classified by the state of California as English Learners (i.e., not sufficiently proficient in English; GreatSchools, 2005). The socioeconomic status of the school was fairly low; 79% of the students participated in the free/reduced price lunch program, and only 49% of the students had parents who were high school graduates (GreatSchools, 2005).

Survey procedure

The survey was conducted in April 2005. All ninth-grade English students in the school were invited to participate in the survey. Trained research assistants entered each classroom and described the study using a standardized script. Research assistants were generally undergraduate or graduate students of mixed gender and ethnicity (there were two Spanish-speaking research assistants). The script included a brief description of the study's aims, including an emphasis on understanding culture, acculturation, and health behaviors including drug use. The concept of confidentiality was explained to the students and they were assured that no one, including their parents or teachers, would see their survey responses. Students were provided with a written parental consent form that described the study in English and Spanish, which they were asked to take home to their parents. Students were allowed to participate if they provided written parental consent and student assent. The informed consent procedure was approved by the university's Institutional Review Board.

On the day of the survey, the data collectors distributed the surveys to all eligible students. Using a standardized script, they reminded the students that their responses were confidential and that they could skip any questions they did not want to answer. The classroom teachers were present during survey administration, but the data collectors instructed them not to participate in the survey process to ensure that they would not inadvertently see the students' responses.

Measures

The survey booklet included an English and a Spanish version of the survey so that students could complete the survey in their preferred language without experiencing any stigma (our previous research suggested that students perceived a stigma associated with being able to read only Spanish). To create the Spanish translations, we first looked for the translated items that were recommended by the scales' authors. If none were available, one translator translated the items from English to Spanish, and then the translation was checked and evaluated by a translation team including bilingual researchers of Mexican, Salvadoran, and Argentinean descent. This procedure was used to ensure that the Spanish translation reflected the idioms that are used among Mexican-Americans and other Latinos living in Southern California. Although English and Spanish versions were available in the same booklet and the other students could not see which version they chose, only two students chose to complete the entire survey in Spanish. However, it may be that some individuals referred to the Spanish version for clarification of terms while completing the English version.

The current study was designed to pilot test items for inclusion in the final survey booklet. As such, the survey included a combination of new items and published, validated items that our research team had used in previous studies. The survey included demographic characteristics, several measures of acculturation, and measures of family and peer characteristics. Demographic characteristics included age, gender, country of origin, and generation in the United States. Socioeconomic status (SES) was estimated as the ratio of the number of rooms to the number of people in the household, which is typically correlated with other SES indicators such as overcrowding and poverty (Bennefield and Bonnette, 2003; Myers et al., 1996). The respondents were asked three questions to ascertain generation in the United States: "*In what country were you born?*"; "*In what country was your mother born?*"; and "*In what country was your father born?*" The response options were "*United States*" and "*Other*." The "*Other*" option included a line for the respondent to write in the name of the country. Generational status was coded as first generation if the student and both parents were born outside the United States, second generation if the student was born in the United States but both parents were born outside the United States,

and third generation if the student and at least one parent was born in the United States. Age moved to the United States was assessed for all students who said that they were not born in the United States.

Family structure was assessed using an open-ended question that asked students to list all the individuals who live with them at least part of the time and whom they consider family. Students were asked to list the initials of the individual, their age, and their relationship to the student (e.g., mother, brother, etc.). Open-ended responses were coded into 38 categories that represented all of the different relationships that students reported with the individuals who they lived with. These categories were then collapsed into eight categories for analysis, including: only mother, only father, older siblings, younger siblings, cousins, non-related individuals, friends, and grandparents. Analytical categories were selected based on their frequency and conceptual importance, by building on those established in the literature (e.g., parents, stepparents, grandparents, non-related adults) and including those mentioned by participants that have not yet been fully examined in the family structure literature (e.g., younger and older siblings, friends).

Drug use was measured using questions that asked how many times the student had used alcohol, cigarettes, and marijuana in their whole life and in the past 30 days. Responses were dichotomized, resulting in a measure of ever having used the drug or never having used it. Because the participants were just starting the ninth grade, ever having used a substance is a reasonable measure of substance use initiation and was used for all logistic regression models.

Acculturation was measured using six questions taken from established acculturation scales that collectively accounted for substantial proportions of the variance in longer acculturation scales including the ARSMA-II and the Oetting/Beauvais Way of Life questionnaire (Unger et al., 2006, 2007). Questions included two about language use preference (e.g., I like to speak English/Spanish at home), two “Way of Life” questions (e.g., Do you live by or follow the Latino or Hispanic/White-American way of life?), and two about music preference (e.g., I like Hispanic or Latino (Spanish-language)/U.S. (English-language) music).

Analysis

All analyses were conducted using SAS version 9.0 (SAS Institute Inc., 2002). Frequencies and other descriptive statistics were calculated for all demographic variables. T-tests and analysis of variance (ANOVA) with Scheffe’s test for multiple comparisons were used to assess differences in acculturation and generation status based on family structure. Multiple logistic regression was used to determine the association between family structure and drug use. Regression models were controlled for age, gender, SES, acculturation, generation and ethnicity. Adjusted odds ratios and confidence intervals are reported for all models.

Results

Of the 386 students who were invited to participate, 379 (98%) provided student assent. Of these, 302 (78%) provided written parental consent and completed the survey. There were 255 students whose family structure data were available for analysis (the remaining students had missing or incomplete family structure data and were therefore excluded from the current analysis). Students who were excluded due to missing data were significantly less likely to have ever used alcohol ($\chi^2 = 7.5, p = 0.006$), but did not differ in their lifetime use of cigarettes ($\chi^2 = 0.9, p = 0.35$) and marijuana ($\chi^2 = 0.008, p = 0.92$) from those who were retained in the analysis.

Demographic data for these students is presented in Table 1. Respondents were mostly female (58%) and mostly Latino (83%). Among the 211 students reporting Latino ethnicity, the majority (92%) reported being of Mexican descent. Other countries of origin included Guatemala ($n = 11$), El Salvador ($n = 9$), Ecuador ($n = 2$), Venezuela ($n = 2$), and Costa Rica ($n = 1$). The students were an average age of 14 years. Only 20% of the sample was born outside the U.S. (first generation). Among the students who were not born in the U.S., 60% immigrated before they were six years old. Second generation students (those with both parents born outside the U.S.) accounted for 65% of the sample, and the remaining 15% were third generation (at least one parent was born in the U.S.). Using the rooms per person ratio (Bennefield and Bonnette, 2003; Myers et al., 1996) as an index for socioeconomic status (SES), 69% of the students were classified as low SES (i.e., less than one room per person in the home).

Drug use is reported in Table 1. Half of all students reported having ever used alcohol, 30% had ever smoked a cigarette, and 19% had ever used marijuana. Drug use in the past 30 days was lower; 25% reported using alcohol, 6% reported smoking a cigarette, and 8% reported using marijuana in the past 30 days.

Descriptive data regarding the composition of the household are presented in Table 2. The number of other people living in the house ranged from 1 to 9, with mean of 4.6 ($SD = 1.8$). Most students lived with their mother ($n = 215$; 84%), and less than 1% reported living with a stepmother. A slightly smaller percentage of students reported living with a father ($n = 175$; 69%), and 6% reported living with a stepfather. The majority of students reported living with both parents ($n = 180$; 71%) and few reported living in single-parent households – 15% ($n = 37$) lived only with their mother and 3% ($n = 8$) lived only with their father. Twelve percent of students ($n = 30$) reported not living with either parent, and of those not living with either parent 26% ($n = 8$) lived with grandparents. Overall, 12% ($n = 31$) of students reported living with grandparents. Older siblings were present in 55% ($n = 141$) of the students' homes, while younger siblings were reported by 84% ($n = 215$). The presence of friends was reported fairly frequently – 12% ($n = 30$) of students reported at least one friend living in the home with them, and 7% ($n = 18$) reported another non-related individual living in the home.

The likelihood of living with a single father varied by generation status ($F = 4.09$, $p = 0.02$). Third generation students were significantly more likely than second generation to live with a single father ($p < 0.05$); no statistical difference existed between first and second or third and first generation students. Third generation students were also significantly more likely to live with grandparents when compared to both first and second generation ($F = 6.19$, $p = 0.002$; multiple comparison $p < 0.05$); no statistical difference was found between first and second generation. Acculturation scores were significantly lower for those students living with cousins (t value = 2.08, $p = 0.04$) versus those not living with cousins, and for those living with non-related individuals (t value = 2.46, $p = 0.02$) versus those not living with non-related individuals. No other significant differences in generation status or acculturation were detected.

Results of the multiple logistic regression analysis are presented in Table 3. Students who lived in single parent households (mother or father only) were no more likely to have ever used drugs as those who lived in two-parent households. Students who lived with older siblings were significantly more likely to have ever used alcohol (AdjOR = 1.9; 95% CI: 1.1–3.6), and were marginally more likely to have ever smoked cigarettes (AdjOR = 2.2; 95% CI: 0.9–5.0) than students who did not live with older siblings. Living with cousins was significantly associated with marijuana use; students who lived with at least one cousin were 2.7 times as likely to have ever used marijuana than students who did not live with any

cousins (95% CI: 1.0–7.0). Acculturation status was not significantly associated with drug use, either bivariate (data not shown) or in the multivariate regression. Generation status was marginally associated with marijuana use (AdjOR = 1.7; 95% CI: 0.9 – 3.0).

Discussion

When compared to family structure reported in the 2000 U.S. Census, the percentage of youth in our predominantly Latino sample who lived with both parents was comparable to the national average (71% vs. 68%). Fewer children in our sample lived with their mother only (15% vs. 20.9%), and fewer individuals in our sample lived with their father only (3% vs. 5.8%). The majority of youth in our sample were born in the United States, which may explain the similarity between the current sample and the national sample in terms of the percentage living in two-parent households. However, the influence of Latino family values and varying rates of acculturation among the parents of our sample may explain the lower rates of single-parent families reported here. Though students reported a wide variety of individuals with whom they lived, it is notable that we were not able to compare our sample with the national census data for any other family structure categories, because only the presence/absence of parents (and other parental figures such as parents' partners) is available in the census report.

The influence of acculturation and generation status on the composition of the family is an important factor in examining the role of family structure on adolescent drug use. It has been suggested that acculturation in Latino families may weaken cultural characteristics that have served to maintain traditional two-parent family structures (e.g., prohibitions against divorce or single motherhood; Warner et al., 2006). In the current sample, family structure varied by both acculturation and generation status. Less acculturated students were more likely to report living with cousins or non-related individuals, perhaps a result of more recently immigrated families living more closely together, or providing temporary or permanent housing for family members and friends. Students who reported being third generation (student and at least one parent born in the U.S.) were more likely to live with single fathers, and more likely to live with grandparents. As families live in the U.S. longer they may be more likely to take on characteristics of American families (disruption of two-parent households due to separation and/or divorce), and grandparents are more likely to be living in the U.S. and are therefore more available to live with students than those from first or second generation families, where the grandparents may still reside in the country of origin.

Data suggest that more acculturated youth use drugs at elevated rates and are at risk for more maladaptive behaviors than their less-acculturated peers (e.g., Epstein et al., 2001). While the mechanisms of the association between acculturation and maladaptive behaviors are not thoroughly understood, it has been suggested that factors such as family conflict and low self-esteem may help explain the relationship (Portes and Rumbaut, 2001). Berry (1998) has described the condition of “acculturative stress,” or stress experienced as a result of reconciling values from two distinct cultural systems, which may also explain elevated rates of substance use or other deviant behavior among acculturating adolescents. In the current study, acculturation was not significantly associated with drug use in our regression models and generation status was only marginally associated with marijuana use. Rates of drug use in our sample approximated what would be expected among Latinos in the general population, with the exception of alcohol. Rates of cigarette, and marijuana use (30%, and 19%, respectively) were similar to those among Latinos in the 2004 National Survey on Drug Use and Health (NSDUH; 29% and 18.7%, respectively; Substance Abuse and Mental Health Services Administration, 2005). However, the rate of alcohol use in our sample was higher (52% vs. 44%). This difference may be attributable to the different age range

captured by the NSDUH (12 to 17 years old) compared to the current study (14 to 18 years old).

The presence of older siblings was found to be a strong correlate of using alcohol and smoking cigarettes, which supports our hypothesis that the presence of older siblings and/or adults would increase the risk of drug use. Living with cousins, too, was found to increase the likelihood that students had ever used marijuana. Disruption of the two-parent family structure was not found to be significantly associated with alcohol use, which does not support our hypothesis that the absence of one or both parents would increase the risk of drug use. Others have found the disruption of the two-parent structure to be associated with drug use among White and Latino youth (Amey and Albrecht, 1998; Gil et al., 1998). In other investigations, father-only families have also been found to increase the risk of drug use among youth to a greater degree than mother-only families or intact two-parent families (Hoffman and Johnson, 1998; Jenkins and Zunguze, 1998), a finding that was not replicated in the current sample. While our findings do not support the hypothesis that the absence of parents would be associated with drug use among predominantly Latino youth, the findings should be interpreted in light of the small overall sample size and low number of single-parent households in the current study. Alternatively, it may be that students in this sample live in neighborhoods where social support and supervision are provided by neighbors or extended family members living nearby, which could mitigate the negative impact of living in a single-parent household.

Importantly, several studies have offered explanations for the association between family structure and adolescent drug use. Barrett and Turner (2006) point out that family structure is merely a marker for other factors that influence adolescent substance use. Peer influence has been posited to interact with family structure (Eitle, 2004; Farrell and White, 1998) or to mediate its effects (along with stress; Barrett and Turner, 2006) on adolescent drug use. It has also been argued that the negative outcomes associated with living in a mother-only household may stem from economic deprivation (Hoffman and Johnson, 1998), however in the current sample SES (as measured by the ratio of rooms per person) was not associated with any drug use outcomes. The lack of a robust association with SES may be attributable to the fact that the sample that was drawn from a single school catchment area, thereby yielding limited diversity in SES.

Our findings are consistent with those from investigations of the role of sibling influence, and it can be argued that cousins who live with adolescents may fulfill some of the same roles as siblings. Research has shown that living with older siblings who smoke increases the risk for smoking (Bricker et al., 2006; Miller and Volk, 2002; Rajan et al., 2003), and that sibling and parent drinking affects adolescent drinking (Epstein et al., 1999). Theories of social influence such as Social Cognitive Theory (Bandura, 1986) and the Theory of Group Socialization (Harris, 1995) offer some explanation for the influence of older siblings in predicting adolescent drug use. The observational learning construct of Social Cognitive Theory (Bandura, 1986) has been used to explain the effects of influential others on adolescent behavior. By observing the rewards or punishments that influential others such as peers, older siblings, or parents receive for drug use, younger adolescents vicariously experience the rewards and punishments. If the influential others are rewarded for their drug use, adolescents are more likely to engage in drug use. Harris's (1995) Group Socialization Theory argues that group norms are transmitted not from parents to children, but between children themselves. Particularly important in the socialization of young children is the influence of slightly older peers and siblings. However, as children enter into adolescence, siblings tend to contrast themselves with their older siblings in an effort to differentiate. The role of older siblings and peers in influencing deviancy in the form of drug use appears to be important, either by directly socializing younger children into drug use or by adolescents

using drugs in an effort to contrast themselves with their older siblings. Particularly if siblings are close in age to the adolescent, their role as peer and role model may strongly influence the behavioral choices of the adolescent.

The increased risk for drug use conferred by the presence of older siblings and cousins in the current study may not be limited to behavioral influence, *per se*. An alternate explanation is that having older siblings or cousins who use drugs increases students' access to substances, regardless of the level of social influence exerted by the older siblings. Or, the increased demands placed on parents with multiple children may create environments where older siblings are required to supervise younger siblings, thereby reducing the amount of adult supervision of younger children.

Study's Limitations

The study's limitations should be considered in evaluating the current findings. First, this study was a pilot study for a larger, longitudinal investigation. Therefore, the sample size was relatively small, particularly in light of the large number of covariates included in the final regression model, and consisted of only a single wave of data. Second, the sample consisted entirely of ninth grade students, who were, on average, 14 years old. Therefore, the current sample consists of primarily of experimental substance users. While rates of substance use were consequently low, this can be seen as a strength of the current study because early experimentation has been shown to be more likely to lead to problem drug use in later adolescence (Everett et al., 1999). Third, our characterization of family structure relied on an open-ended question that asked all students to list the people who live with them that they consider family. It is possible that students inadvertently omitted individuals, or that they included individuals who did not live with them. However, data collectors were trained to provide explicit instructions and to answer students' questions in such a way as to maximize validity of the responses.

The ethical matter of obtaining data from minors who will likely not benefit directly from the product of the research should be considered. In the current study, the only costs to the minors were an hour of their time and the slight risk of embarrassment or loss of confidentiality, which were minimized by the data collection procedures. In our previous studies, we have found that students tend to find this experience interesting and enjoyable. In fact, anecdotal accounts from some research assistants indicated that completing the survey stimulated an interest in research as a career choice for some students. We feel that the slight risk is justified given the potential benefit of creating improved drug prevention programs for future generations of adolescents.

Conclusions

Our findings have implications for the way in which family structure is assessed, and also for the development of family-focused interventions to prevent adolescent drug use. We identified two categories of family members, older siblings and cousins, which are not traditionally assessed in family structure measures, but both of which had significant associations with drug use in the current sample. These findings argue that family structure should be assessed in ways that include all the individuals living in the household, rather than just characterizing it based on the presence or absence of parents. Particularly among Latino youth, future investigations of the role of family structure in adolescent drug use would benefit from a more comprehensive measure of family structure that includes other influential individuals, such as older siblings and other family members. Additionally, the inclusion of measures of both family structure and behavioral influence in the same study could help clarify the relative influence of various factors. Comprehensive behavioral interventions aimed at reducing drug use among Latino adolescents should benefit from the

inclusion of family-focused components, particularly those that use a broad definition of family to include the full range of influential individuals in the household.

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Biographies



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Glossary

Acculturation	The process by which individuals living in a foreign culture acquire or adapt to the values, beliefs, language, customs, and mannerisms of that culture.
English Learner	A student who is identified by the state of California as not sufficiently skilled in the use of English, or who is in need of remedial English instruction (GreatSchools, 2005).
Rooms to people ratio	A measure of socioeconomic status (SES) discussed by Myers, Baer and Choi (1996) and Bennefield and Bonnette (2003). The ratio of rooms per people is generally indicative of overcrowded living conditions (a lower ratio of rooms to people), which are characteristic of lower SES. “Rooms” includes every room in the house, excluding the kitchen and bathrooms.

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Table 1

Selected demographic characteristics (N = 255)

	n	%
Gender (missing = 4)		
Female	145	57.8
Ethnicity		
Latino	211	82.8
Country of Origin (Latinos only, n = 211)		
Mexico	193	91.5
Guatemala	11	0.05
El Salvador	9	0.04
Ecuador	2	0.01
Venezuela	2	0.01
Costa Rica	1	0.01
Age		
14 years	158	62.0
15 years	90	35.3
16 + years	7	2.7
Generation Status		
1st (not born in U.S.)	52	20.4
2nd (parents not born in U.S.)	165	64.7
3rd (≥ 1 parent born in U.S.)	38	14.9
Socioeconomic Status*		
Medium-High	79	31.0
Low	176	69.0
Lifetime drug use		
Alcohol (missing = 3)	132	52.4
Cigarettes	77	30.2
Marijuana (missing = 2)	47	18.6

* Medium-High SES = one room per person; Low SES = < one room per person.

Table 2

Family structure frequencies (N = 255)

	N	%
Living with:		
Mother	215	84.0
Step mother	2	0.8
Adoptive mother	0	–
Foster mother	0	–
Father*	175	68.6
Stepfather	15	5.9
Adoptive father	0	–
Foster father	0	–
Only mother	37	14.5
Only father	8	3.1
Both parents	180	70.6
Neither parent	30	11.8
Grandparents (if not living with parents)	8	26.7
Grandparents	31	12.2
Older siblings	141	55.3
Younger siblings	215	84.3
Cousins	39	15.3
Friends	30	11.8
Non-related individuals	18	7.1
Total number of other people in the house		
1	7	2.8
2	21	8.2
3	47	18.4
4	61	23.9
5	49	19.2
6	29	11.4
7	17	6.7
8	22	8.6
9	2	0.8
Mean number of other people in the house (SD)	4.6 (1.8)	
Median rooms per person (IQR)	0.7 (0.5–1.0)	

* two participants reported living with both a father and step-father.

Table 3

Logistic regression results predicting lifetime drug use

	Alcohol AdjOR (95% CI)	Cigarettes AdjOR (95% CI)	Marijuana AdjOR (95% CI)
Living with:			
only mom *	1.6 (0.7–3.6)	1.1 (0.5–2.5)	1.1 (0.4–2.0)
only dad *	0.6 (0.1–2.9)	1.6 (0.3–8.0)	1.8 (0.3–10.6)
older siblings	1.9 (1.1–3.6)	1.6 (0.8–3.2)	2.2 (0.9–5.0)
younger siblings	0.6 (0.2–1.5)	0.7 (0.3–1.9)	1.1 (0.3–3.9)
cousins	1.4 (0.6–3.0)	1.1 (0.5–2.5)	2.7 (1.0–7.0)
non-related individuals	0.7 (0.2–1.9)	0.9 (0.3–2.7)	1.4 (0.4–5.0)
any friends	0.6 (0.3–1.4)	1.8 (0.8–4.2)	1.5 (0.6–4.0)
grandparents	1.8 (0.7–4.3)	1.0 (0.4–2.4)	0.6 (0.2–1.9)
Female	1.2 (0.7–2.1)	0.7 (0.4–1.3)	0.9 (0.5–1.8)
Age	1.2 (0.8–2.0)	1.1 (0.7–1.8)	1.2 (0.6–2.1)
Latino	1.7 (0.7–4.1)	0.9 (0.4–2.3)	1.8 (0.5–5.8)
SES	1.5 (0.8–2.7)	1.3 (0.7–2.4)	1.2 (0.6–2.6)
Acculturation	0.7 (0.4–1.5)	0.9 (0.5–2.0)	1.4 (0.6–3.3)
Generation	1.1 (0.7–1.8)	1.2 (0.7–1.9)	1.7 (0.9–3.0)

* reference category is living with both parents.