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Cohesion and conflict: Family influences on adolescent alcohol use in immigrant Latino families

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Abstract

This study examines how cohesion and parent-adolescent conflict relate to alcohol use among Mexican-heritage adolescents. The sample consists of 120 adolescents (14 to 18) participants from the Southwest sub-sample of the Latino Acculturation and Health Project. Lifetime and recent alcohol use, and binge-drinking were tested. Results from the logistic regressions identified high and low levels of family cohesion as a risk factor for alcohol use compared to medium levels of cohesion; and parent-child conflict predicted lifetime use and binge drinking. Low and high family cohesion levels appear to be especially problematic among Mexican adolescents who are trying to navigate two different cultural worlds. Although, high cohesion is often a characteristic of Mexican families, Mexican-heritage adolescents may view high family cohesion as a hindrance to their own independence. Unresolved conflict seems to be connected to children's problem behaviors and alcohol misuse could be utilized by youth as a mechanism to reduce emotional distress caused by family tensions.

Keywords

Mexican American adolescents; alcohol use; familism; resiliency; adolescent alcohol use; family cohesion; Latino families

Alcohol and drug abuse constitute an important and complex health disparity among the Latino community in the United States (Alvarez, Jason, Olson, Ferrari, & Davis, 2007). This complexity stems from patterns of consumption that vary by subgroups, nativity, length of time in the United States, levels of acculturation, and family factors. Among all Latino subgroups Mexicans report higher frequency and quantity of alcohol use than others (Zamboanga, Raffaelli & Horton, 2006). U.S.-born Latinos report higher rates of use compared to immigrant Latinos (Ortega, Rosenheck, Alegría, & Desai, 2000). And, there is substance use variation based on years of residence in the U.S. (Vega & Gil, 1998). An explanation of these variations

is based on the idea that the longer an immigrant lives in the U.S. the higher the opportunities to acculturate to the new environment; and, acculturation (the adjustment to a new culture) has been found to be a risk factor for drug and alcohol use (Vega, Alderete, Kolody & Aguilar-Gaxiola, 1998).

Some researchers argue that personal and family factors account to a substantial degree for the association between acculturation with substance use (De La Rosa, 2002). There is no question that families exercise a great deal of influence on adolescent development (Gowers & North, 1999). During this phase in the human life problematic patterns of family functioning may contribute to negative youth behavior. Even though family factors are important when examining adolescent substance use patterns, the level of importance they have received in the prediction of substance use varies widely from one study to another. One family factor that has been studied in relation to substance use is family cohesion. In studies of Latino families, cohesion sometimes has been used as a proxy for familism (Miranda, Estrada & Firpo, 2000), and it has been suggested that cohesion is a global indicator of family functioning (Baer, 2002). Cohesion has been defined as including familial support, affection, and caring for other family members (Barber and Buehler, 1996).

Some studies of the general population have found that high family cohesion protects youth against substance use (Kuendig & Kuntsche, 2006), while others have reported the opposite. Among Latino heritage adolescents, some studies found that family cohesion had an inhibiting effect against alcohol and drug use (Vega & Sribney, 2003), other studies have found no effect of family cohesion on alcohol use (Kelly & Kowalyszyn, 2002), and yet others reported a positive link between high cohesion and high exposure to drugs (Perez-Smith, et al., 2000). One way of accounting for these divergent results is that family cohesion and youth substance use may be related in curvilinear fashion. Sprenkle and Olson (1978) proposed a circumplex model of cohesion with four ranges: the two inner ranges indicate high family functioning (balance) and the outer two ranges indicate low functioning (extreme). Extreme high values of cohesion indicate enmeshment (family is too close) while extreme low values indicate disengagement (there is too little closeness in the family) (Olson, 1994). The potential problem for youth in overly-cohesive, enmeshed families is emotional over-identification with family members to the exclusion of others, while youth in families very low in cohesion are emotionally isolated. In families that are overly-cohesive there is little to no separation between family members, and independence is discouraged. Headman (2003) argued that conflict and poor communication are high in these families. Balanced families in the middle ranges of cohesion are believed to be functioning more effectively. These families encourage independent development but provide support for family members (Headman, 2003). Prevalence of alcohol use have been found to be usually higher among families that are non-cohesive or overly-cohesive (Bray, Baer & Getz, 2000). But, since families are not static, they move through the cohesion ranges as they progress through the family developmental cycle.

Parent-adolescent conflict has also been identified as a family variable that places adolescents at risk for alcohol use (Bray, et al., 2001; Brody & Ge, 2001; Williams, Sanson, Toumbourou & Smart, 2000). Adolescent alcohol use may be either a cause or a consequence of family conflict. Adolescents who don't have positive coping strategies may resort to alcohol and other drug abuse as an inappropriate mechanism to reduce emotional distress caused by family tensions and/or other difficulties (Gómez-Fraguela, Luengo, Romero, & Villar, 2006; Wills & Hirky, 2006). During adolescence it is normative to experience some level of conflict with parents; however among immigrant families this may be aggravated by the process of acculturation, and the linguistic and cultural gaps that may occur between parents and children who acculturate at different pace (Szapocznik & Williams, 2000). The problem is that during this developmental stage when youth are trying to define themselves, a positive parent-adolescent relationship takes special importance. When the parent-adolescent relationship is

poor, adolescents often reject the parent's values and stop emulating healthy behaviors, doing the exact opposite as a form of rebellion (Kuendig and Kuntsche, 2006). In addition, in families experiencing parent-adolescent conflict often times there is a decreased of parent involvement in the adolescent life and a decreased on parental monitoring (Patterson, Reid, & Dishion, 1992).

The present study examines family cohesion and parent-adolescent conflict and how these variables relate to alcohol use in a sample of Mexican heritage adolescents living in a large metropolitan area in the Southwest of the United States. In several ways, this analysis provides valuable contributions to the literature on Latino youth alcohol use and abuse. First, the study examined alcohol use among the largest Latino subgroup in the U.S., and the one that presents the highest rates of alcohol use. Second, utilizing only a Mexican heritage subgroup allowed the researchers to examine the relevance of family cohesion and parent-adolescent conflict without the confusion attributed to inter-group differences that occur when Latino individuals of different national origin are placed together in the same sample. Third, adolescence is a developmental phase in which substance use problems take on special significance, and therefore an important time to examine alcohol use. Fourth, the data collected allowed the researchers to investigate family influences on alcohol use taking into account the number of years the adolescent lived in the U.S., and using that as a proxy of acculturation.

Method

Data

The Latino Acculturation and Health Project examined acculturation and health outcomes among Latino families living in Arizona and North Carolina, with a focus on families impacted by immigration. The present study utilizes data collected from adolescents during the months of January to May 2007 in Arizona. IRB approval for the study was obtained by the Arizona State University Behavioral Institutional Review Board in 2004.

Participants

Participants were recruited from English as a Second Language classes, community centers, churches, and community fairs. Criteria for participation was being a Latino/a, and agreeing that at least one adult and one adolescent (14 to 18 years of age) from each participating family would be interviewed. Participants were informed that participation was voluntary and confidential, and that they were free to leave the study at any time. Those who agreed to participate received \$20 each as a token of appreciation for their time. Parents/guardians gave written consent for their adolescents to participate. The adolescents gave written assent for their participation. Participants were given the choice to answer the questions on their own or to have interviewers read the questions to them. All written materials were available in Spanish and English. The sample included a total of 120 Mexican-heritage adolescents.

Interviewers

Master's level students in social and behavioral sciences fluent in Spanish and English were trained to conduct the interviews at the participant's homes. Participants were given the opportunity to choose to speak in either language during the interview, and 58% of the adolescents chose to conduct the interview in English and 42% in Spanish. Each interview lasted approximately 1.5 to 2 hours per family.

Dependent Variables

Three dependent variables were examined: lifetime alcohol use, alcohol use in the last 30 days, and binge drinking in the last 30 days. All answers were Likert type, but for analytical purposes

were dichotomized due to generally skewed distributions toward non-use. Adolescents were asked to answer how many times they had drunk more than a sip of alcohol in their lifetime. Answers were dichotomized with 0=none and 1=one or more times. Recent alcohol use (conceptualized as use in the last 30 days) was measured utilizing one question “How many times have you drunk more than sip of alcohol in last 30 days?” The dichotomous variable was coded 0=none and 1=one or more times. Binge drinking was captured by asking “during the last 30 days, in how many occasions you had five or more drinks in a row in a period of two hours?” and the dichotomized answers were 0=none and 1=1 or more days.

Independent Variables

Family cohesiveness (conceptualized as the emotional bonding with other family members) was measured with the FACES-II scale (Olson, Russell, & Sprenkle, 1982). This is a twenty item self-report instrument. Cohesion is a FACES-II subscale composed of a series of statements like “our family does things together” and “family members go along with what the family decides to do.” Answers range from 1=Not at all to 5=All the time. The 20 items were summed to create a scale that had high internal consistency; Cronbach’s reliability coefficient was $\alpha=.89$. The mean cohesion score was 36.53 (SD=8.42). This variable was initially analyzed as a continuous scale but was also trichotomized to investigate and display curvilinear effects. Using the criterion of one-half standard deviation above and below the mean to define a middle group, three dummy variables were created: low cohesion (ranging from 0–32), medium cohesion (ranging from 33–41) and high cohesion (ranging from 42–50). This trichotomy produced a distribution with more respondents in the medium cohesion group (37%) than in the low (34% or high (29%) cohesion groups, but with substantial numbers of cases in each group.

Parent-adolescent conflict was measured by using the Conflict Behavior Questionnaire (CBQ; Robin and Foster, 1989). The CBQ measures social competencies at home between the adolescent and caregivers. The scale has a series of true or false statements that adolescents answer. Examples are “my parents don’t understand me” and “my parents criticize me.” The answers were coded 0=false and 1=true. Higher values indicate more parent-adolescent conflict. The scale reliability was $\alpha=.89$.

Socio-demographic variables

We asked adolescents to report their gender, and coded the answers 0=female and 1=male. Age was measured in years. The variable ‘time in U.S.’, a proxy of adolescents’ level of acculturation, was measured with a question asking for the number of years that adolescents had been living in U.S.

Statistical analyses—Analyses began with crosstabulations exploring relationships among time in the U.S., alcohol use, and family cohesion. First, alcohol use patterns were compared among adolescents living 10 years or less, or more than 11 years in United States. Next, bivariate relationships between family cohesion and time in the U.S. were examined. These analyses provided basic information concerning how alcohol use and family cohesion varied according to a proxy for acculturation, time in the U.S..

The final analysis step involved multivariate logistic regressions that were utilized to explore the respective roles of family cohesion and parent-adolescent conflict in predicting alcohol use among Mexican origin adolescents, controlling for each other and for gender, age, and time in the U.S. Dummy variables for low and high cohesion were included, with medium cohesion as the reference category, along with parent-adolescent conflict. Interactions tested whether “time in U.S.” moderated the effects of family cohesion. All predictors were tested for evidence of multicollinearity.

Results

Table 1 compares the group of adolescents living 10 years or less in the U.S. and the group living 11 or more years in the U.S., and provides the prevalence of lifetime and recent alcohol use through a series of crosstabulations. A consistent pattern was found. The group living longer in the United States had significantly higher prevalence of lifetime alcohol use (38%), recent alcohol use (23%), and binge drinking (20%) as compared to those who lived less than 10 years in the U.S (26%, 2%, and 5% respectively). The Chi-square was significant for recent alcohol use ($\chi^2=8.85, p=.03$), and for binge drinking ($\chi^2=5.22, p=.02$); but not for lifetime use ($\chi^2=1.87, p=.17$).

Table 2 compares family cohesion by time living in the United States. Adolescents living in the U.S. for 11 or more years were significantly more likely to report low family cohesion (42%) than those living 10 or less years in the country. Adolescents who were living 10 or fewer years in the U.S. were more likely to report high cohesion than those with more time in the U.S. Finally, the group with medium cohesion was more evenly distributed among those with 10 years or less in the U.S. (36%) and 11 or more years living in the country (24%). The Chi-Square was significant ($\chi^2=5.90, p=.05$).

Table 3 shows logistic regression results of analyses of how family cohesion and parent adolescent conflict predict youth alcohol use. Logistic regressions show that ‘time in U.S.’ is a significant predictor of recent alcohol use ($p<.01$) and binge drinking ($p<.05$), even after cohesion and parent-adolescent conflict were included in the analysis. The results indicate that adolescents who live for a longer time in the U.S. are at more risk for recent alcohol use and binge drinking. On the other hand, gender was not a significant predictor of any of the three outcomes, although it did approach significance ($p=.09$) in predicting recent alcohol use with males being at more risk of drinking than females. Similarly, age approached significance only as a predictor of lifetime alcohol use ($p = .08$). As expected, older youth were more likely than younger ones to report alcohol use in their lifetime.

Adolescents reporting high levels of family cohesion were significantly and substantially more likely to report lifetime and recent alcohol use. A similar pattern approaching significance ($p = .06$) was found for binge drinking. Odds ratios indicated that the high cohesion group was between 4 to 6 times more likely to have engaged in lifetime and recent alcohol use and binge drinking than the reference group that reported medium family cohesion. The low cohesion group was also found to be at somewhat higher risk than the medium cohesion group for lifetime alcohol use, although this relationship only approached statistical significance ($p = .07$). The inclusion of parent-child conflict provided additional insights. This family variable emerged as a significant predictor of lifetime alcohol use and binge drinking.

Finally, interactions between “time in the U.S.” and cohesion were tested to determine whether there was a moderator effect. Time in the U.S. was centered before computing the interaction terms. None of the logistic regressions using interactions showed significant moderator effects, therefore they are not presented. The collinearity diagnostics showed that Variance Inflation Factors were within acceptable ranges (<2.16) indicating no-collinearity among the predictors in any model tested.

Discussion

This study examined how family cohesion and parent-adolescent conflict relate to adolescent’s alcohol use. In response to the increasing need to understand how a growing Latino community responds to these specific family factors, the study focused on a sample of Mexican heritage adolescents living in a large metropolitan area in the Southwest of the United States. In the U.S., alcohol abuse remains an important public health concern, especially among young

people. National trends indicate that adolescent use of alcohol has again been on the rise recently, with nearly half reporting having used alcohol in the last 30 days and a third reporting having been drunk in that time (Johnson, O'Malley, Bachman, & Schulenberg, 2006). What is more, as it has been indicated previously, there is growing evidence that adolescent substance misuse is related to other important health and social problems in youth and adults.

When time living in the United States is used as a proxy for acculturation, more time living in the country implies higher levels of acculturation, and vice versa. In this study, this proxy for acculturation was highly related to the levels of family cohesion and alcohol use reported by adolescents. Those who lived longer in the U.S. reported lower levels of family cohesion than those residing for less time in the country, perhaps an indication that family members were more disengaged. The opposite was true of high family cohesion, which was reported more often among adolescents with less than 10 years living in the U.S., indicating more family connectedness. The high values among the group with less time in the U.S. are congruent with previous characterizations of Latino families (Falicov, 1996), which indicate that members of Latino families, in general, maintain tight bonds and a sense of responsibility for each other. The low values among adolescents with more time in the U.S. are congruent with previous research that indicates that personal and family values, norms, and attitudes may change as acculturation increases (Georgas, Berry, Shaw, Christakopoulou, & Mylonas, 1996). Acculturation is a strenuous process for some immigrant families. Members of the family go through the process of acculturation at different paces, and this is often an added stress to the family relations.

The prevalence of alcohol use was also examined in light of the length of time the adolescent was living in the United States. The results indicate that the group of adolescents living in the United States for longer periods had higher prevalence rates of lifetime and recent alcohol use, and binge drinking. Since time in the U.S. was used here as a proxy for acculturation, there is indirect evidence that more acculturated adolescents had higher prevalence of alcohol use. In general, it is adolescents who adopt the values and beliefs of the host culture faster than their parents, often because they have more opportunities for contact with the dominant culture through schools and various activities with peers. This may lead to conflict, and to problem behaviors including alcohol use.

The multivariate analysis shows that older adolescents were at somewhat higher risk for lifetime alcohol use than younger ones, reflecting developmental factors that tie the risk of alcohol initiation to increasing age. Males seem to be slightly at more risk than females for recent alcohol use. And, the number of years living in the U.S. surfaced as a significant predictor of binge drinking, and a nearly significant predictor of recent alcohol use. The results suggest that Mexican origin youth who lived in the U.S. for more of their lifetime were at higher risk for drinking.

The findings also illuminate some interesting aspects of the relationship between family cohesion, parent-child conflict and adolescent alcohol use. The results suggest that the extreme sides of family cohesion (little or no-cohesiveness and highly-cohesive) may function as risk factors for adolescent alcohol use compared to medium cohesion. The medium cohesion group may be thought of as more balanced regarding family bonding and closeness. Previous studies have shown different results concerning family cohesion. Some researchers viewed high cohesion as an indication of enmeshment, while low cohesion was conceptualized as disengagement among family members. With family cohesion perhaps neither extreme is desirable. Feldman and Gehring (1988) argued that as adolescents grow in age their satisfaction with family cohesion decreases. While this is an issue for adolescents in general, both extremes of cohesion could be especially problematic among Latino adolescents who are trying to move in two worlds. High cohesion is often a characteristic of Latino families. However, Latino

adolescents growing in the U.S. are exposed to different societal values through school and friends. And, although the search for independence is a characteristic of adolescence, for Latino families adolescent's independence may be seen differently, and may still include high bonding with, and responsibility towards family members. In this context, Latino adolescents may view high family cohesion as a hindrance to their own independence. This is a possible explanation of why high family cohesion surfaced as a risk factor for substance use.

As expected, adolescents who experienced conflict with their parents were more likely to report more lifetime alcohol use, and more binge drinking. Today it is widely accepted among researchers that the quality of family affective relationships is crucial for the cognitive and social development of children and adolescents. Recent studies (e.g., Bray et al., 2001; McCuller et al., 2001) have confirmed that adolescents who belong to families characterized by recurrent conflict between parents and children, and the absence or deficiency of affective ties are at risk of developing drug use and other problem behaviors. However, it is not unusual for parents to experience conflict with their adolescent children. Adolescence is a time in which conflict increases as children demand more independence as a way to affirm their identity, and the parents need to adapt their relationship with their adolescents to respond to the new demands. More resilient families will experience less conflict or will be able to live through this phase in such a way that they will minimize long term negative consequences. However, unresolved conflict often leads to problems with children, in this case higher prevalence of alcohol use. Intergenerational conflict resulting from a dissimilar pace of acculturation between parents and adolescents within immigrant Latino families may result in greater family dissatisfaction and adolescent difficulties (Falicov, 1996). Alcohol misuse could then be utilized by adolescents as a mechanism to reduce emotional distress caused by family tensions.

There are certain limitations to this study, including that the data were cross sectional, restricting the ability to draw causal inferences. Longitudinal studies could illuminate how family values, norms and traditions may change for immigrant families over time, and whether these changes have an effect on adolescent problem behaviors. The study uses a non-randomized sample of Latino adolescents. Although findings may not be generalized to other populations, part of the contribution of the study lies precisely in the focus on a sample that highlights the experience of the steadily growing Mexican-American community.

In spite of the limitations stated above, these findings are important in the context of counseling, and for social workers and psychologists working in schools and agencies that serve Latino families. These families may be undergoing not only the natural changes that occur among families with adolescent children but also they may be experiencing added stressors due to the acculturation process which need to be better understood in order to intervene in a culturally competent manner. The Latino community is growing rapidly and one strategy practitioners can use to respond to this growth is by increasing their understanding of the Latino culture's protective and risk factors so they can more effectively support resilience among Latino families.

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Table 1
Prevalence of alcohol use among Mexican origin adolescent in Arizona, by time living in the U.S.

		Time in the United States	
		0–10 years	11+ years
Lifetime alcohol use	No	32 (74%)	44 (62%)
	Yes	11 (26 %)	27 (38 %)
Total		43(100%)	71 (100%)
$\chi^2 = 1.87, df=1, p=.17$			
Recent alcohol use	No	43 (98%)	55 (77%)
	Yes	1 (2 %)	16 (23%)
Total		44 (100%)	71 (100%)
$\chi^2 = 8.85, df=1, p=.03$			
Binge drinking	No	42 (95%)	57 (80 %)
	Yes	2 (5%)	14 (20 %)
Total		44 (100%)	71 (100%)
$\chi^2 = 5.22, df=1, p=.02$			

Table 2
Prevalence of cohesion among Mexican origin adolescent in Arizona, by time living in the U.S.

	0–10 years (n=44)	11+ years (n=71)
Low family cohesion	9 (21 %)	30 (42 %)
Medium family cohesion	19 (43 %)	24 (34 %)
High family cohesion	16 (36%)	17 (24 %)
Total	44 (100%)	71 (100%)
	$\chi^2 = 5.90, df=2, p=.05$	
	Kendall's tau-b= -.201, $p=.02$	

Table 3
 Logistic regression analysis predicting the likelihood of adolescents' lifetime and recent alcohol use, and recent binge drinking

Predictor	Lifetime Alcohol Use			Recent Alcohol Use			Binge Drinking		
	B	S.E.	Odds ratio	B	S.E.	Odds ratio	B	S.E.	Odds ratio
Time in U.S.	.04	.04	1.04	.22**	.09	1.25	.17*	.07	1.18
Gender	-.26	.47	.77	-1.03†	.60	.35	-.88	.62	.42
Age	.29†	.16	1.33	.13	.21	1.14	.24	.22	1.27
Low cohesion	1.19†	.67	3.29	.86	1.0	2.37	.56	1.01	1.75
High cohesion	1.51**	.59	4.55	1.85*	.89	6.41	1.68†	.91	5.36
Parent-adolescent conflict	.19*	.08	1.21	.15	.10	1.16	.23*	.10	1.25
Constant	-7.21*	2.81	.001	-7.93*	3.55	.000	-9.18*	3.71	.000
Pseudo R2 (Nagelkerke)	.28			.32			.31		
N	119			120			120		

**
 $p < .01$

*
 $p < .05$

†
 $p < .10$