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Cultural Influences on Substance Use Among Hispanic Adolescents and Young Adults: Findings From Project RED

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Abstract

Hispanic adolescents represent a growing segment of the U.S. population. In addition to the typical stressors encountered during adolescence, Hispanic adolescents may experience acculturative stress, perceived discrimination, and conflicts with parents about acculturation, which can lead to maladaptive behaviors such as substance use. Personal cultural resources may help Hispanic youth cope with cultural stressors and avoid substance use, but little is known about how such factors affect decisions about substance use. In 2005, my research group began studying a group of Hispanic adolescents in Los Angeles. The participants completed surveys annually about cultural issues such as acculturation, ethnic identity, and perceived discrimination; family and peer relationships; and use of alcohol, tobacco, and marijuana. We found that Hispanic adolescents' perceptions that they were discriminated against put them at greater risk for substance use, and that Hispanic orientation protected the youth from substance use. The findings can inform the development of culturally relevant prevention interventions for Hispanic adolescents and emerging adults.

Keywords

acculturation; Hispanic; adolescence; emerging adulthood; cigarette smoking; tobacco; alcohol; marijuana

Hispanics represent 16% of the population of the United States (Ennis, Rios-Vargas, & Albert, 2011) and a larger proportion of the population of students in many urban public schools. Hispanic adolescents in the United States experience numerous challenges as they attempt to navigate multiple cultures (Phinney, 1990; Schwartz, Unger, Zamboanga, & Szapocznik, 2010; Szapocznik, Prado, Burlew, Williams, & Santisteban, 2007). Most Hispanic adolescents handle these challenges effectively and become well-adjusted, productive members of society. But some turn to maladaptive behaviors such as substance use. Hispanic adolescents are more likely than their White American and African American counterparts to use nearly all classes of drugs (Johnston, O'Malley, Bachman, & Schulenberg, 2012). Given their growing numbers and susceptibility to substance use, we need to understand the risk and protective factors for substance use among these youth. In this article, I describe theoretical models that explain Hispanic adolescents' substance use, review research on culture-related risk and protective factors, and summarize findings from my longitudinal study of Hispanic adolescents in Los Angeles.

Theoretical Models

Several theoretical models are relevant to substance use among Hispanic adolescents, each of which brings a unique perspective to understanding this phenomenon. Social ecological models (Bronfenbrenner, 1996) posit that risk and protective factors exist within, and interact across, multiple systems surrounding the individual, ranging from the micro systems of family and peers to the macro systems of the larger cultural, economic, and political context. Ecodevelopmental theory (Szapocznik et al., 2007) builds on this notion by specifying the social contexts (e.g., family, school, neighborhood) that surround adolescents and influence their development and behavior. Because developing identity is a central task of adolescent development, and ethnic identity development is a salient issue for immigrants and minorities, theories of identity are also relevant. Social identity theory (Tajfel & Turner, 1979) posits that people identify with selected ingroups and compare themselves socially with outgroups to enhance their self-esteem. Oppositional identity theory (Ogbu, 1991) adds that people in minority or lower-status groups whose opportunities are limited by social inequality may adopt oppositional identities that involve rejecting the norms of the dominant culture.

Together, these theoretical models contain numerous constructs, many of which overlap conceptually. Although it is unfeasible to include measures of all of those constructs in survey-based studies, we can identify constructs that are similar across theories and evaluate their associations with substance use in smaller, testable models. Although numerous psychological and sociological theories have attempted to explain the development of substance use among Hispanics and other minority groups, fewer empirical studies have tested whether the constructs specified by the theories actually predict substance use. Empirically, most of the risk and protective factors for substance use identified among Hispanics are similar to those identified among other ethnic groups, including peer influences, parental monitoring, and bonding with prosocial mentors and institutions (summarized by Szapocznik et al., 2007). Other risk and protective factors for Hispanics, unique to immigrant and/or minority groups, are described in the next section.

Risk and Protective Factors

Acculturation: U.S. orientation and Hispanic orientation

Early theories of acculturation assumed that immigrants replace their heritage culture with a new culture. Modern acculturation theories (Berry, 1980; Schwartz et al., 2010) propose that individuals can adopt aspects of the new culture but still identify strongly with the heritage culture. Hispanic adolescents who assimilate into U.S. culture without maintaining a connection to Hispanic culture are at greater risk of substance use (De La Rosa, 2002) than Hispanic adolescents who maintain their Hispanic cultural orientation—especially those who participate in U.S. culture and maintain ties with Hispanic culture simultaneously (Bacallao & Smokowski, 2005; Szapocznik et al., 2007).

Acculturation discrepancies between parents and children

Immigrant children typically learn and adopt a new culture more rapidly than their parents do (Portes & Rumbaut, 2001). Children of immigrants grow up immersed in the receiving culture and are exposed to the heritage culture only secondhand. If families and communities do not maintain and support attributes of the heritage culture, adolescents might reject, forget, or never learn about their culture of origin, leading to acculturation discrepancies between adolescents and parents (Portes & Rumbaut, 2001). *Parentification* (Titzmann, 2012) occurs when parents rely on their children for instrumental and emotional support in navigating U.S. culture. This can increase children's self-efficacy, but also

undermine parental authority and place excessive stress on children, and it can boost youth's risk of involvement in problem behaviors such as substance use (Portes & Rumbaut, 2001; Szapocznik et al., 2007; Titzmann, 2012).

Ethnic identity

This includes knowing about one's ethnic group, perceiving the value and emotional significance of that membership, and feeling that one belongs and is committed to the ethnic group (Phinney, 1990). A strong ethnic identity sometimes protects against substance use (Brook, Zhang, Finch, & Brook, 2010; Marsiglia, Kulis, Hecht, & Sills, 2004), but this association has been inconsistent (Kulis, Marsiglia, Kopak, Olmsted, & Crossman, 2012; Zamboanga, Schwartz, Jarvis, & Van Tyne, 2009). Therefore, the role of ethnic identity in preventing or encouraging substance use remains unclear.

Cultural values

These attitudes and priorities are emphasized and encouraged by members of a culture. Certain cultural values might be protective against substance use (e.g., obedience to parents, not ingesting intoxicating substances, regarding one's body as sacred), while other cultural values might increase the risk of substance use (e.g., glamorization of adolescent individualism and rebelliousness, expectations of intoxication in certain social contexts). The Hispanic cultural value of *familism* emphasizes the interdependency of family members (Cuellar, Arnold, & Gonzalez, 1995). *Respeto* emphasizes a child's duty to respect and obey parents and other authority figures (Garcia, 1996). Gender role values such as *machismo* condone risk-taking behaviors for men but not for women (Cuellar et al., 1995). *Familism* and *respeto* protect against substance use, while *machismo* is a risk factor for boys and protective among girls (Unger, Ritt-Olson, Teran, Huang, Hoffman, & Palmer, 2002; Unger, Shakib, Gallaher, Ritt-Olson, Mouttapa, Palmer, & Johnson, 2006).

Discrimination

Differential treatment based on one's membership in a minority or lower-status group includes overt acts such as violence, harassment by police, or discourteous treatment by store clerks, as well as more subtle aggressions such as condescending speech (Williams, Neighbors, & Jackson, 2008). Perceived discrimination can cause emotional distress, and repeated experiences with discrimination can deplete coping resources and increase the attractiveness of avoidant coping strategies such as substance use (Kreiger, 2000). Perceived discrimination by the dominant culture also can signal to minority group members that they will be blocked from opportunities, which may lead them to identify with oppositional subcultures with antisocial norms (Ogbu, 1991). Perceptions of discrimination have been associated with the use of tobacco, alcohol, and other drugs (Okamoto, Ritt-Olson, Soto, Baezconde-Garbanati, & Unger, 2009), as well as with depression (Greene, Way, & Pahl, 2006).

Project RED

Cultural phenomena such as acculturation, cultural values, ethnic identity, and perceived discrimination influence adolescent substance use, but few studies have investigated these influences longitudinally. To fill this gap, my colleagues and I started surveying a group of Hispanic adolescents in the Los Angeles area in 2005. The participants in Project RED (*Reteniendo y Entendiendo Diversidad para Salud*—Retaining and Understanding Diversity for Health) were attending seven high schools in Los Angeles and completed surveys in ninth, tenth, and eleventh grades (in 2005, 2006, and 2007), and again 3 to 4 years after high school (in 2011–2012). The students' mean age in ninth grade was 14, and the group was approximately half male and half female (see Table 1).

Measures

The survey assessed substance use (over the adolescent's lifetime and in the past month of alcohol, tobacco, marijuana, and other drugs), cultural variables (acculturation to the United States and to the culture of origin; Cuellar, Arnold, & Maldonado, 1995), perceived discrimination (Gyll, Matthews, & Bromberger, 2001), ethnic identity development (Phinney, 1992), family and peer characteristics, psychological variables, and demographic characteristics.

Key Findings

Does exposure to the U.S. culture increase the risk of substance use, is the Hispanic culture protective against substance use, or both?—The *immigrant paradox* (Franzini, Ribble, & Keddle, 2001) posits that immigrants have good health behaviors when they arrive in the United States, but their health and behaviors deteriorate as they acculturate. Over time, this is thought to lead to rises in substance use, obesity, diabetes, depression, and adverse childbirth outcomes among second-generation Hispanic Americans, compared with Hispanic immigrants. This implies that exposure to U.S. culture is harmful to health, and suggests that immigrants should shield their children from being tainted by U.S. culture. However, the relevant risk factor may not be exposure to U.S. culture, but losing the protective elements of Hispanic culture (Schwartz et al., 2010). In Project RED, acculturation to the United States generally was not directly associated with substance use, but Hispanic acculturation was protective against substance use (Unger, Ritt-Olson, Soto, & Baezconde-Garbanati, 2009; Unger, Ritt-Olson, Wagner, Soto, & Baezconde-Garbanati, 2009). This suggests that although Hispanic adolescents growing up in the United States are at risk for substance use, this risk can be mitigated by emphasizing enculturation—teaching youth about their cultures of origin and encouraging them to maintain a strong connection with the positive practices and values of those cultures.

How do parent-child acculturation patterns influence substance use?

Acculturation discrepancy theory (Szapocznik et al., 2007) predicts that discrepancies in cultural orientation between adolescents and their parents increase adolescents' risk for behavior problems such as substance use. Although financial constraints prevented us from surveying the parents, we tested this hypothesis by asking the adolescents about their parents' acculturation. Because adolescents typically acquire U.S. culture (and forget or reject the culture of origin) more quickly than their parents do, most acculturation discrepancies between parents and children took the form of the adolescent being more oriented to the United States than the parents and/or the parents being more oriented to Hispanic culture than the adolescent. In a cross-sectional analysis of the ninth grade data (Unger et al., 2009a), parent-child discrepancy in U.S. orientation (child was more U.S.-oriented than parent) was associated with a greater likelihood of smoking, alcohol use, and marijuana use. Parent-child discrepancy in Hispanic orientation (parent was more Hispanic-oriented than child) was associated with a greater likelihood of alcohol and marijuana use. U.S. acculturation discrepancy was associated with lower family cohesion, which in turn was associated with more substance use. In cross sectional (Pokhrel, Unger, Wagner, Ritt-Olson, & Sussman, 2008) and longitudinal analyses (Lac, Unger, Basanez, Ritt-Olson, Soto, & Baezconde-Garbanati, 2011), supportive parent-child relationships protected against substance use. In longitudinal analyses (Unger et al., 2009b), adolescents who reported that the gap in Hispanic acculturation between themselves and their parents widened between ninth and tenth grade had an increased risk of substance use in tenth grade. These findings are consistent with the view that adolescents are at risk when their acculturation differs from their parents' acculturation.

What changes with acculturation?—Our analyses suggest several possible ways that changes during acculturation increase or decrease adolescents' risk of substance use, though researchers need to replicate these pathways and examine others. One potential pathway involves the erosion of traditional differentiated gender roles. In longitudinal analyses (Lorenzo-Blanco, Unger, Baezconde-Garbanati, Ritt-Olson, & Soto, 2012; Lorenzo-Blanco, Unger, Ritt-Olson, Soto, & Baezconde-Garbanati, 2013), U.S. orientation in ninth grade was associated with lower levels of endorsement of differentiated gender roles in tenth grade. Less endorsement of differentiated gender roles in tenth grade, in turn, was associated with lower levels of family cohesion among girls in tenth grade. Although lower family cohesion in tenth grade was not associated with smoking in eleventh grade (Lorenzo-Blanco et al., 2012), it was associated with more symptoms of depression in eleventh grade (Lorenzo-Blanco et al., 2013), and depression is a well-recognized predictor of substance use (Hasin & Kilcoyne, 2012).

This pattern of results suggests one potential pathway from acculturation to problem behaviors: Hispanic girls who adopt U.S. culture may discard traditional gender role norms, which could impair their relationships with more traditional family members, ultimately leading to symptoms of depression and participation in risky behaviors. Because traditional gender roles for boys emphasize risk-taking, endorsement of these gender roles is not likely to protect boys against substance use. Additional research is needed to gain insights into these mechanisms.

Another potential pathway from acculturation to risky behaviors involves maintenance of Hispanic cultural values such as *respeto*. Hispanic orientation in ninth grade was associated with more *respeto* in tenth grade (Lorenzo-Blanco et al., 2012; 2013). More *respeto* in tenth grade was associated with less family conflict and more family cohesion in tenth grade. Again, family conflict and lack of cohesion in tenth grade were associated with symptoms of depression, but not smoking, in eleventh grade. However, in cross-sectional analyses of the ninth grade data (Soto, Unger, Ritt-Olson, Soto, Black, & Baezconde-Garbanati, 2011) *respeto* was associated with a lower likelihood of cigarette, alcohol, and marijuana use. This pattern of results suggests that adolescents who maintain their Hispanic orientation are likely to maintain more *respeto*, which in turn may produce more harmonious and protective family relationships. However, because the associations with substance use were cross-sectional and the longitudinal analyses showed associations with symptoms of depression but not with substance use, additional evidence is needed for this pathway.

How does perceived discrimination influence substance use?—In a cross-sectional analysis of the ninth grade data (Okamoto et al., 2009), adolescents who perceived more discrimination were at increased risk of using tobacco, alcohol, marijuana, and inhalants. In a longitudinal analysis (Basáñez, Unger, Soto, Crano, & Baezconde-Garbanati, 2012), perceived discrimination in ninth grade significantly predicted symptoms of depression and a composite measure of substance use in eleventh grade. In another analysis (Lorenzo-Blanco et al., 2013), perceived discrimination in tenth grade was associated with a higher risk of smoking in the past month in eleventh grade. In short, evidence converges on the conclusion that perceived discrimination is a risk factor for Hispanic adolescents.

Which cultural variables predict substance use trajectories from adolescence to emerging adulthood?—Emerging adulthood (Arnett, 2000), a developmental stage between 18 and 25 years of age, is a transitional period during which people can explore various options in love, work, and education before making firm commitments to specific roles and responsibilities. Emerging adulthood also can be a high-risk period for substance use (Arnett, 2000). It is unknown whether the cultural phenomena that influence Hispanic substance use during adolescence (e.g., U.S. orientation, Hispanic orientation, ethnic

identity, and perceived discrimination) continue to influence substance use in emerging adulthood. We sought to determine which of the cultural variables measured in high school continued to influence substance use after high school, examining participants' trajectory of substance use from ninth grade to emerging adulthood, and identifying variables (in ninth grade) that predict the intercept (initial level) and linear slope of the growth trajectory. The prevalence of past-month tobacco, alcohol, and marijuana use increased over time, especially after high school (see Figure 1). Prevalence of substance use in Project RED participants was comparable to that of high school students (CDC, 2012) and emerging adults ages 20 to 21 (SAMHSA, 2013) in the United States. Greater initial level of perceived discrimination was significantly associated with a greater intercept (initial level) of tobacco, alcohol, and marijuana use. Greater initial level of Hispanic acculturation was significantly associated with a lower slope of tobacco, alcohol, and marijuana use. U.S. acculturation and ethnic identity were not associated with either the intercept or the slope of any substance use variables. This suggests that perceived discrimination increases the risk of early experimentation with substance use (i.e., before ninth grade), while Hispanic orientation prevents escalation of substance use during late adolescence and emerging adulthood.

Conclusions

Hispanic American adolescents vary in their patterns of adoption of the U.S. culture, retention of their cultures of origin, development of ethnic identity, perceptions of discrimination, and other cultural characteristics. Understanding how these cultural characteristics shape adolescents' psychosocial adjustment and substance use will help in the development of effective and culturally relevant programs to prevent substance use. Project RED has provided insights about the risk and protective factors for substance use among Hispanic adolescents. By studying Hispanic adolescents from ninth grade through emerging adulthood, we have demonstrated the importance of encouraging adolescents to learn about and appreciate their cultures of origin. This does not imply that they should avoid learning the U.S. culture because familiarity with the U.S. culture will help them succeed in this country. Rather, an appreciation of both cultures can help adolescents access protective cultural values and coping strategies from both cultures. We also have shown how perceived discrimination can influence substance use. Interventions are needed to help minority adolescents cope with perceived discrimination without resorting to substance use, while continuing to educate all groups about tolerance to reduce the incidence of discrimination.

The findings from Project RED and other studies point to new areas for research. Researchers need to understand whether these findings hold for adolescents from other heritage cultures living in other locations with different contexts of reception. Researchers need to understand the family, school, neighborhood, and community characteristics that help adolescents maintain, learn about, and appreciate the strengths of their heritage cultures; these strengths may help them make healthier choices about substance use and may buffer the adverse effects of perceived discrimination. We also need to develop culturally relevant and appropriate prevention interventions and health communications to minimize substance use and its adverse consequences among Hispanic American adolescents and emerging adults. Today's Hispanic adolescents comprise a considerable proportion of tomorrow's citizens, workers, and parents. It is important to help them avoid maladaptive patterns of substance use so they can achieve their potential.

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Figure 1.

Past-Month Substance Use Among the Project RED Sample and U.S. National Samples

Note: U.S. high school data are from the 2011 Youth Risk Behavior Surveillance Survey.

U.S. data for 20–21-year-olds are from the 2012 National Survey of Drug Use and Health.

Table 1

Self-reported Demographic Characteristics of Hispanic/Latino Students (N = 2,722 Hispanic Students Surveyed at One or More Time Points)

	%
Age in ninth grade (years)	
12–13	12
14	79
15–16	9
Gender	
Female	47
Male	53
Generation in the United States	
1 (Student and parents born outside United States)	16
2 (Student born in United States, both parents born outside United States)	60
3 (Student and at least one parent born in United States)	24
Countries of origin ¹	
Mexico	84
United States	29
El Salvador	9
Guatemala	6
Honduras	1

¹ Respondents could select more than one country of origin.