

Evaluating the Hispanic Paradox in the Context of Adolescent Risky Sexual Behavior: The Role of Parent Monitoring

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Abstract

Objective In the United States, Hispanic adolescents are at elevated risk for negative outcomes related to risky sexual behavior. To evaluate potential protective factors for this group, we examined the fit of the Hispanic Paradox for sexual behavior among high-risk youth and the moderating role of parent monitoring. **Method** We enrolled 323 justice-involved Hispanic youth (73% male; mean age 16 years), and measured generational status, parent monitoring (monitoring location, who children spend time with outside of school, family dinner frequency), and sexual risk behavior. **Results** There were no main effects for generational status on sexual behavior. Parent monitoring of location moderated the relationship between generational status and sexual behavior, such that greater monitoring of location was associated with less risky sexual behavior, but only for youth second generation and above. **Conclusions** Rather than direct evidence supporting the Hispanic Paradox, we found a more nuanced relationship for generational status in this sample.

Key words: adolescents; at risk youth; HIV/AIDS; parents; race/ethnicity; risk behaviour; sexually transmitted diseases.

Although infection rates for the human immunodeficiency virus (HIV) in the United States have remained stable in recent years (Centers for Disease Control and Prevention [CDC], 2012a), HIV infection among adolescents continues to be on the rise. Specifically, 25.7% of new HIV infections occur among youth aged 13–24 years, and 59% of youth in this age-group are unaware of their infection status; in terms of public health and treatment implications, this represents the highest level of unawareness of any age-group surveyed (CDC, 2012b). At present in the United States, the Hispanic population is rapidly growing, and is projected to soon be the largest minority group (U.S. Census Bureau, 2012a).

Importantly, the U.S. Hispanic population is relatively young compared with other racial/ethnic groups, as over half of Hispanic Americans are <29 years of age (U.S. Census Bureau, 2012b). In terms of sexual risk, in 2012, Hispanic individuals were twice as likely as Whites to have a sexually transmitted infection (STI; CDC, 2012c), with Hispanic youth continuing to be at elevated risk for HIV infection (CDC, 2012b).

In terms of taking concrete steps to address and resolve existing health disparities, it is important to look to juvenile justice-involved populations, where Hispanic youth are significantly overrepresented, particularly in the American southwest (Feldstein

Ewing, Venner, Mead, & Bryan, 2011). Compared with nonminority youth, racial/ethnic minority youth involved in the justice system engage in higher rates of sexual risk behaviors (e.g., inconsistent and incorrect condom use, multiple partners), subsequently incurring more serious and persistent negative health consequences such as unintended pregnancy and STI/HIV infection (Teplin, Mericle, McClelland, & Abram, 2003). Hispanic youth are currently underrepresented in health risk evaluation research (e.g., Guilamo-Ramos, Bouris, Jaccard, Lesesne, & Ballan, 2009), and there is a paucity of information about which factors may protect Hispanic youth against engaging in risky sexual behaviors and related health consequences.

One possible avenue for understanding and reducing health disparities for this population involves exploring the “Hispanic Paradox,” which refers to the finding that more recently immigrated Hispanic adults (i.e., first-generation individuals) exhibit *better* health status compared with both White individuals and Hispanic individuals who have lived in the United States for several generations (i.e., those who are second generation or above) (Franzini, Ribble, & Keddie, 2000). Notably, the Hispanic Paradox has gained support across a wide array of adult health behaviors and outcomes, including substance use, body mass index, and cancer (Abraído-Lanza, Chao, & Flórez, 2005; Clark & Hofsess, 1998; Markides & Coreil, 1986; Schwartz et al., 2014; Schwartz, Unger, Zamboanga, & Szapocznik, 2010; Vega & Amaro, 1994).

In pediatric samples, the fit of the Hispanic Paradox is less clear. The literature has been relatively sparse regarding high-risk Hispanic adolescents, yet the existing body of work suggests an interplay between individual-level factors (e.g., immigration, stress) in the experience of health disparities and related access to and involvement in U.S. health care systems (e.g., Koinis-Mitchell et al., 2011; Prado, Pantin, Schwartz, Lupei, & Szapocznik, 2006). For example, in the context of pediatric asthma, research has not supported the Hispanic Paradox (Koinis-Mitchell et al., 2011). Further, to date, many of the studies examining the impact of generational status on adolescent health risk behaviors have focused on substance use (e.g., Afable-Munsuz & Brindis, 2006; Vincent Guilamo-Ramos, Jaccard, Pena, & Goldberg, 2005). In contrast to the wider pediatric literature, empirical studies have generally supported adult findings, as youth from *more recently* immigrated families show less substance use compared with youth whose families have lived in the United States for several generations (Gil, Wagner, & Vega, 2000; Peña et al., 2008; Wahl & Eitle, 2010).

Similarly, in one of the only published studies on this topic with adolescent sexual risk, Guarini et al. (2011) found that first-generation Hispanic youth

(i.e., youth and their parents born outside of the United States), as compared with their second- and third-generation peers, reported much safer sexual behaviors (greater condom use, less substance use before sexual intercourse, and later age of sexual debut) (Guarini, Marks, Patton, & Coll, 2011). Among females, being first generation was even shown to be protective against pregnancy (Guarini, Marks, Patton, & García Coll, 2013). However, we could find no published peer-reviewed studies examining the relationship between generational status and sexual behavior among high-risk youth, such as those involved in the juvenile justice system. The one edited volume on this topic (Coll & Marks, 2012) lends support to the idea that youth sexual behavior varies across immigrant generations in accordance with what would be predicted by the Hispanic Paradox (i.e., sexual risk increases with greater generational time in the United States; Raffaelli, Kang, & Guarini, 2012), and also indicates a similar link between adolescent delinquency and generation status (Bui, 2012).

The overarching conceptual model for our work follows the ecodevelopmental theory (Szapocznik & Coatsworth, 1999), as applied in work with high-risk Hispanic youth in the southeast United States (Pantin, Schwartz, Sullivan, Prado, & Szapocznik, 2004). This work suggests that interactive risk and protective factors are present across multiple levels of the social environment, and that these systems interact to influence youth risk behavior. According to this model, strengthening the positive connections between the social contexts in which an adolescent participates directly (which include family, school, and peer relationships) can be an effective intervention for protecting against risk behavior (Pantin et al., 2003). Importantly, parental involvement is an especially salient factor (King & Vidourek, 2010; Mongro-Wilson, 2007; Ozer, Flores, Tschann, & Pasch, 2011) which cuts across social systems. For instance, parental monitoring of peer activities contributes to decreasing sexual risk (Luster & Small, 1994; Miller, Forehand, & Kotchick, 1999), and parental involvement within the school can reduce the risk of poor academic performance (Hill & Taylor, 2004), which is also predictive of unsafe sexual behavior (Manlove, 1998). Given the numerous inherent stressors associated with being an Hispanic adolescent in the United States (i.e., the challenges of accommodating to bicultural demands of the family and Hispanic community vs. broader society, along with the more general adolescent stressors associated with developing emergent autonomy in the world), parent monitoring may play an especially important role for reducing risk behavior among Hispanic youth across multiple contexts (for review see Salvador, De Vargas, & Feldstein Ewing, 2015). Indeed, studies have shown that for Hispanic families,

parent involvement and monitoring are highly risk protective (e.g., Borawski, Ievers-Landis, Lovegreen, & Trapl, 2003; Huang, Murphy, & Hser, 2011).

However, some debate continues about what constitutes parental monitoring and how it should be measured. Many studies have evaluated parent monitoring via how often parents know where their children are, with whom their children spend time, and what their children are doing (see Shillington et al., 2005). These “supervisory” measures of parent monitoring focus on parents’ knowledge of their children’s whereabouts and often do not consider the source of that knowledge (i.e., whether information on whereabouts is disclosed by the adolescent) or whether parents are engaging in active surveillance of their children (Smetana, 2008; Stattin & Kerr, 2000). Nonetheless, numerous studies have shown that the supervisory aspect of parent monitoring shows a robust protective relationship against risk-taking (Buhi & Goodson, 2007; DiClemente et al., 2001). Additionally, parent monitoring has been examined as time spent together during family dinners (Hair, Moore, Garrett, Ling, & Cleveland, 2008), which may provide an opportunity for parents to monitor their children’s activities, whereabouts, and moods (Eisenberg, Neumark-Sztainer, Fulkerson, & Story, 2008; Fulkerson et al., 2006), while simultaneously allowing opportunities for child disclosure (Griffin, Botvin, Scheier, Diaz, & Miller, 2000). Family dinner frequency has been inversely correlated with youth risk taking (Fulkerson et al., 2006), with particularly robust outcomes for girls (Griffin et al., 2000).

Ultimately, despite studies indicating the application of the Hispanic paradox in the broader health literature and health disparity examinations in this area, we could find no studies examining the influence of generational status on the sexual behavior of high-risk, Hispanic youth. Further, we could find no studies examining the potential interaction between generational status and parent monitoring as a predictor of sexual risk behavior. Thus, we sought to address this critical gap in the literature with an eye toward gathering requisite data to improve health risk programming for Hispanic youth (Feldstein Ewing, Wray, Mead, & Adams, 2012). We hypothesized that first-generation Hispanic youth (defined as those who had at least one parent born outside the United States) would report lower rates of sexual risk behavior as compared with Hispanic youth for whom both parents were born within the United States. In addition, because adolescence is a high-risk period, and Hispanic adolescents tend to face further stressors related to economic difficulties, language barriers, and discrimination (Cabassa, 2003), we hypothesized that parental behavior may be protective against sexual risk taking in our sample. We explored the potential contribution of parent monitoring as assessed via three approaches

(i.e., monitoring of location, with whom adolescents are spending time outside of school, family dinner frequency). In line with the Hispanic Paradox, we hypothesized that youth who were second generation and above would show a stronger association between risky sexual behavior and parent monitoring compared with first-generation youth.

Method

Participants

This study is part of a larger evaluation of health disparities for high-risk and underserved youth (NIAAA R01; PI: last author). For this evaluation, youth were recruited from juvenile justice programs (e.g., youth probation, alternative to incarceration) in the southwest to participate in a study aimed at improving health programs for youth. To recruit participants, trained research staff introduced the project at various juvenile justice programs, informing youth that study participation was voluntary and would not affect their treatment within the juvenile justice system. All components of the study were available to youth and parent/guardians in English and Spanish. Written assent was directly obtained from participants. Similar to prior work with high-risk youth (e.g., Schmiede, Broaddus, Levin, & Bryan, 2009), parent/guardian informed consent was obtained via telephone following youth assent. All consent conversations were audio-recorded and logged for proof of consent. A copy of all consent forms was mailed to the parents in their preferred language. All study procedures were conducted with approval from the participating institutional review board and with a federal Certificate of Confidentiality.

To be eligible, youth had to be 13–18 years of age, currently involved with one of several juvenile justice programs (e.g., probation, diversion, or alternative to incarceration), and a regular alcohol or cannabis user, defined as using alcohol or cannabis at least once per month for the past 6 months (e.g., Chung & Martin, 2001; Maisto, Martin, Pollock, Cornelius, & Chung, 2002; Wagner, Lloyd, & Gil, 2002). All 18-year-old participants provided their own consent. Exclusion criteria included evidence of active psychosis, mental retardation, a neurodevelopmental disorder, and/or severe medical illness. All eligible youth were invited to participate in this research. Participants received \$20 for completing this component of the study.

Of the 547 eligible youth, 41 were unable to continue further participation within the study ($n=4$ withdrew; $n=37$ were unable to be scheduled within 30 days from enrollment). Of the remaining youth, 323 self-identified as Hispanic, including Mexican American (48.3%), Spanish (32.5%), Mixed (9.9%), Mexican National (7.4%), Central American (0.9%), and South American (0.9%). Thus, data from these 323 Hispanic youth were included in all analyses herein. Reflective of the representation at the broader

collaborating juvenile justice center, this sample was predominantly male (73.4%), approximately age 16.07 years ($SD = 1.23$). Consistent with this geographical region, most youth within this sample were born in the United States (92%), and of the foreign-born youth in this sample, the majority (58.3%) had lived in the United States for >10 years. Almost half (40%) described themselves as first-generation youth (defined here as having one or both foreign-born parents). In terms of substance use, 65.9% reported being a regular alcohol user, and 99.1% reported being a regular cannabis user. Additional sample characteristics are presented in Tables I and II.

Measures

All youth completed measures addressing participant general demographics (age, gender, and ethnicity), generational status, and parent monitoring and risky sexual behavior over the previous 30 days. Data relevant for the present analyses were collected during the larger study's baseline assessment.

Generational Status

This variable was determined by parent birth place (Cuellar, Harris, & Jasso, 1980). Specifically, youth were considered to be first generation if either of their parents were foreign-born (born outside of the United States). This approach is consistent with several previous studies (Berg et al., 2012; Pierce, Singleton, & Hudson, 2011), and is most congruent with the demographic composition of youth in New Mexico, where most Hispanic youth are born in the United States, but often have at least one parent born outside the United States. To best characterize the difference of growing up in a family with a newly immigrated parent versus a family that had been in the United States for at least two generations, we sought to compare the first-generation children of at least one immigrant parent ("first generation") to children whose both parents were born in the United States ("second generation and above; 2+ generation").

Parent Monitoring

Following the literature (i.e., DiClemente et al., 2001; Shillington et al., 2005), parent monitoring was assessed via three constructs. Parent monitoring of location was assessed with the query: "How often do your parents know where you are?" Parent monitoring of who children are spending time with was assessed with the query: "How often do your parents know who you are with when you are not at school and away from home?" For each of these two items, response options include a Likert-type scale ranging from *never* (1) to *almost always* (5). Finally, parent monitoring of family dinner frequency was assessed with: "In an average week, how many times do you

Table I. Demographic Characteristics of Participating Sample ($N = 323$)

Characteristic	Mean (SD) or number (%)	
Age	16.07 (1.23)	
Gender (male)	237 (73.4%)	
Self-reported Hispanic origin Highest grade completed	Mexican American	156 (48.3%)
	Spanish ^b	105 (32.5%)
	Mixed	32 (9.9%)
	Mexican national	24 (7.4%)
	Central American	3 (0.9%)
	South American	3 (0.9%)
	5th grade or less	4 (1.2%)
	6th grade	4 (1.2%)
	7th grade	15 (4.6%)
	8th grade	63 (19.5%)
	9th grade	79 (24.5%)
	10th grade	71 (22.0%)
11th grade	59 (18.3%)	
	12th grade or more	
	25 (7.8%)	
	Missing or unknown	
Place of birth	3 (0.9%)	
	United States	297 (92.0%)
	Outside of the United States	24 (7.4%)
Non-U.S. born youth time resided in the United States	Missing or unknown	
	2 (0.6%)	
	3–10 years	10 (41.7%)
Youth's generational status ^a	More than 10 years	
	14 (58.3%)	
	First generation	128 (39.6%)
Past 3 months frequency of intercourse	Higher generation	
	189 (58.5%)	
	Missing or unknown	
	6 (1.9%)	
	None	72 (22.3%)
	Once a month	92 (28.5%)
Past 3 months condom use frequency	Once a week	
	67 (20.7%)	
	2–3 times a week	
	54 (16.7%)	
	4–5 times a week	
	23 (7.1%)	
	Almost everyday	
	14 (4.3%)	
Missing or unknown		
1 (0.3%)		
Never	67 (20.7%)	
	Almost never	
	24 (7.4%)	
	Sometimes	
	51 (15.8%)	
	Almost always	
50 (15.5%)		
Always		
91 (28.2%)		
No intercourse in past 3 months		
11 (3.4%)		
Missing or unknown		
29 (9.0%)		

^aYouth generational status defined as first generation if mother or father was born outside of the United States; generational status defined as higher generation if both parents were born in the United States.

^bReflective of the cultural composition of the region in which this study was conducted, wherein a third of Hispanic families directly emigrated from Spain to the geographic region that is now New Mexico (see Salvador et al., 2015 for more details).

and your parents (or guardians) eat dinner together?" Response options ranged from 0 times (0) to 7 times, eat together every night (7) (Barrera, Biglan, Ary, & Li, 2001; Fulkerson et al., 2006). Correlations among the three parent monitoring variables ranged from $r = .20$ to $r = .56$ (average $r = .33$); the moderate magnitude of these correlations supports examining these items as three separate constructs.

Table II. Demographic and Behavioral Variables by Generational Status ($N = 317$)

Characteristic	First generation Mean (SD) or Number (%)	Higher generation Mean (SD) or Number (%)	Test statistic (t value or Yates's chi-square, and effect size) ^a	p value
Gender (male)	106 (82.8%)	127 (67.2%)	$\chi^2(1, N = 317) = 8.77, V = 0.17$.003
Age (years)	16.09 (1.14)	16.11 (1.27)	$t(315) = 0.14, d = 0.02$.89
Parental monitoring of location ^b	3.63 (1.21)	3.72 (1.18)	$t(315) = 0.73, d = 0.08$.46
Parental monitoring of school attendance ^b	3.35 (1.42)	3.33 (1.28)	$t(315) = -0.15, d = 0.02$.88
Parental monitoring of family dinner frequency ^c	3.79 (2.21)	3.46 (2.45)	$t(315) = -1.22, d = 0.14$.22
Risky sexual behavior index ^d	4.15 (4.82)	4.39 (4.90)	$t(314) = 0.44, d = 0.05$.66

^aCramer's V for Yates chi-square test effect size indicated by V and Cohen's d for independent samples t -test effect size indicated by d .

^bMeasured on a Likert-type scale ranging from *never* (1) to *almost always* (5).

^cMeasured from 0 (0 times per week) to 7 (every night).

^dPotentially ranges from 0 (no sexual intercourse) to 20 (frequent unprotected sexual intercourse).

Risky Sexual Behavior

To assess risky sexual behavior among youth, a multiplicative combination of frequency of intercourse and condom use index was used (Bryan, Schmiege, & Broaddus, 2007; Fisher et al., 2006; Schmiege et al., 2009; Schmiege, Ewing, Hendershot, & Bryan, 2011). This index provides meaningful sexual risk information regardless of sexual history, while properly adjusting for the frequency of both sexual intercourse and condom use. This index is calculated as the product of two measures of sexual risk: frequency of intercourse, "In the past 3 months, how often have you had sexual intercourse," scored from *never* (0) to *almost every day* (5), and frequency of condom use, "In the past 3 months, how often have you used condoms when you've had sexual intercourse", reverse scored from *never* (5) to *always* (1). Higher risky sex index values represent those who frequently engaged in sexual intercourse and never used a condom, while lower risky sex index values represent individuals who never had sexual intercourse along with sexually active youth who frequently used condoms. For example, if youth indicated that in the past 3 months they engaged in sexual intercourse *once a week* (2) and *always used condoms* (1), their risky sex index score would be 2. On average, youth reported engaging in sexual intercourse between once a month and once a week in the past 3 months ($M = 1.71, SD = 1.39$). Additionally, the youth reported sometimes or almost always using condoms when engaging in sexual intercourse in the past 3 months ($M = 2.26, SD = 1.56$). The risky sexual behavior index ranged from 0 to 25 ($M = 4.31, SD = 4.97$). Test-retest reliability was performed using the current sample from baseline to the 3-month follow-up ($r = .48, p < .0001$). Further, in line with expectations, the sexual risk index had a significant positive association with pregnancy history ($r = .27, p < .0001$).

Data Analysis Plan

All analyses were conducted using SAS Studio Version 9.4. (Cary, NC: SAS Institute). For descriptive

analyses, independent samples t tests and Yates chi-square tests were run on demographic variables, parent monitoring variables, and the measure of sexual risk behavior to look for differences by generational status (see Table II). Three separate regression models were estimated to test whether the effect of generational status on risky sexual behavior was moderated by each of the three parent monitoring variables. For each model, risky sexual behavior was regressed on the main effects for generational status and the parent monitoring variable and their interaction terms. A significant interaction signified a differential relationship between generational status and risky sexual behavior by level of parent monitoring. Significant interactions were interpreted according to Aiken and West (1991), by examining the effect of parent monitoring on risky sexual behavior at each level of generational status and by examining the simple slopes of generational status on risky sexual behavior at different levels of parent monitoring.

Results

Generational Status

Differences across generational status are detailed in Table II. In contrast to expectations, we found no evidence of differences by generational status for youth across any of the queried parent monitoring variables or risky sexual behavior. Meaning, on its own, we did not find support for main effects for generational status on risky sexual behavior for this sample.

As shown by the significant chi-square value in Table II, youth did differ in generational status by gender, whereby more males were first generation (vs. 2+ generation) relative to females. Given this, we explored gender as a potential moderator of generational status on risky sexual behavior. We found no evidence that gender moderated the effect of generational status on risky sexual behavior ($p = .31, \eta^2 = .003$). In addition, we found no main effects of gender on risky sexual behavior ($p = .74, \eta^2 = .0003$).

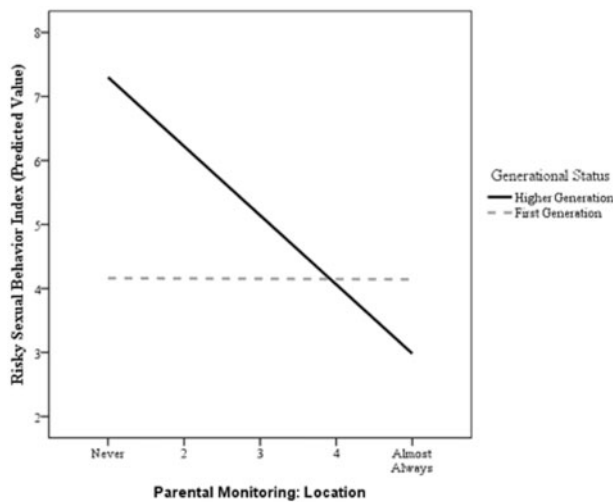


Figure 1. Plot of interaction between generational status and parent monitoring of location on youths' risky sexual behavior.

We also explored including gender as a covariate in the evaluation of the moderational role of the three parent monitoring variables; gender did not influence results when included as a covariate, and was therefore not considered further in the regression modeling.

Moderator Analysis

We examined three parent monitoring variables (location, who children are spending time with, and family dinner frequency). We found no significant interactions between generational status and parent monitoring of who children are spending time with (unstandardized $b = 0.59$, 95% CI $[-0.22, 1.40]$, standardized $b = 0.23$, $t(315) = 1.43$, $p = .15$; Model $R^2 = .01$), or family dinner frequency (unstandardized $b = 0.34$, 95% CI $[-0.14, 0.82]$, standardized $b = 0.16$, $t(315) = 1.40$, $p = .16$; model $R^2 = .04$). In contrast, there was a significant interaction between generational status and parent monitoring of location on youth risky sexual behavior (unstandardized $b = 1.05$, 95% CI $[0.14, 1.95]$, standardized $b = 0.42$, $t(315) = 2.27$, $p = .02$; model $R^2 = .04$).

Interpretation of this interaction showed that parent monitoring of location was particularly relevant for 2+ generation youth (unstandardized $b = -1.05$, 95% CI $[-1.63, -0.47]$, standardized $b = -0.25$, $p < .001$), but was unrelated to risky sexual behavior for first-generation youth (unstandardized $b = -0.00$, 95% CI $[-0.71, 0.69]$, standardized $b = -0.00$, $p = .99$). Meaning, for first-generation youth, there was no relationship of parent monitoring of location on the risky sexual index. However, for 2+ generation youth, the more parents were aware of youths' location, the lower the risky sex index behavior. As depicted in Figure 1, the predicted values of

risky sexual behavior among 2+ generation youth decreased from 7.30 to 2.98 as parent monitoring of location increased, but were limited in range from 4.14 to 4.16 among first-generation youth across levels of parent monitoring. As an alternative way of interpreting the interaction, we also examined the effect of generational status on risky sexual behavior at three levels of parent monitoring of location (one standard deviation above the mean, one standard deviation below the mean, and at the mean). There was an effect of generational status at low levels of parent monitoring of location (i.e., 1 SD below the mean) where 2+ generation youth reported significantly higher risky sexual behavior than first-generation youth (unstandardized $b = -1.55$, 95% CI $[-3.08, -0.03]$, standardized $b = -0.16$, $p < .05$). The effect of generational status on risky sexual behavior did not differ at high levels of parent monitoring (unstandardized $b = 0.96$, 95% CI $[-0.58, 2.49]$, standardized $b = 0.09$, $p = .22$).

Discussion

Currently, the literature strongly supports the existence of the Hispanic Paradox among adults across a variety of health behaviors (Abraído-Lanza et al., 2005; Markides & Coreil, 1986; Schwartz et al., 2010). Mixed outcomes have been observed regarding the Hispanic Paradox and pediatric illness (Koinis-Mitchell et al., 2011), though emerging data support the application of the Hispanic Paradox to youth sexual risk behavior (e.g., Guarini et al., 2011, 2013). Owing to the elevated STI/HIV risk behavior among justice-involved youth (Teplin et al., 2003), we sought to examine this paradigm in a sample of high-risk youth, anticipating that we would find support for the Hispanic Paradox. We also aimed to deconstruct the role of parent monitoring.

Study findings demonstrate that among this sample of high-risk, justice-involved Hispanic youth, generational status on its own was not a robust protective factor against risky sexual behavior. Rather, a more nuanced relationship emerged, wherein parent monitoring (only in the form of knowledge of youth's location) conferred protection, but only among 2+ generation youth. No significant relationships emerged involving any other parent monitoring variables. Moreover, the protective effect of parent monitoring on sexual risk behavior was not observed in first-generation youth.

Although family dinner frequency has been associated with better treatment outcomes for Hispanic and other underserved youth in the substance use literature (e.g., DeVargas, Montanaro, Bryan and Feldstein Ewing, under review), our results build on recent work, suggesting that there is not a direct link between

certain family involvement factors (e.g., family dinner frequency; Griffin et al., 2000) and sexual risk for Hispanic youth, but that other variables including youths' age, gender, and relationship factors may modulate this association (Prado et al., 2007, 2012).

While some might argue that the differences we observed could reflect higher baseline rates of family involvement among first-generation versus 2+ generation Hispanic youth, we did not find evidence for that within this sample. Instead, parent monitoring of location (i.e., youths' perception of their parents' evaluation of their whereabouts) was particularly important for 2+ generation youth. Arguably, this effect may be especially salient for youth as the protective benefits of recent immigration erode and the family faces more stressors, including economic difficulties, language barriers, and discrimination (Cabassa, 2003; Dillon, De La Rosa, & Ibañez, 2013; Koinis-Mitchell et al., 2011; Leong, Park, & Kalibatseva, 2013). In that respect, adolescents' beliefs that parents are invested and attending to them, potentially via frequently querying their whereabouts, may be particularly important in 2+ generation Hispanic youth (e.g., Becker et al., 2014; Forster, Grigsby, Soto, Schwartz, & Unger, 2015). Alternately, our findings may reflect a more involved, cohesive, and hands-on parenting style for first-generation parents (Domenech Rodriguez, Donovan, & Crowley, 2009; Miranda, Estrada, & Firpo-Jimenez, 2000), for whom protective interactions *are already occurring*.

Future Clinical and Research Directions

One important question might be how these findings fit in the broader conception of health disparities research. Concretely, for justice-involved Hispanic youth, the present findings highlight several critical questions that may inform future clinical and research efforts in this area. Perhaps the most important question is how to bolster and sustain the positive benefits of family factors (Smith-Morris, Morales-Campos, Alvarez, & Turner, 2012; Szapocznik, Muir, Duff, Schwartz, & Brown, 2013) for justice-involved, 2+ generation Hispanic youth. Continuing work with recently immigrated families to better understand this issue from a qualitative and quantitative perspective could yield powerful data to unravel this critical question.

The present study builds on prior research examining the compelling protective interactions and relationships between family factors, Hispanic ethnicity, and adolescent health risk behavior among justice-involved youth (Feldstein Ewing, Filbey, Loughran, Chassin & Piquero, 2015). These results support the continued need to explore the mechanisms behind the protective features of Hispanic race/ethnicity and the role of family factors (i.e., supervisory parent

monitoring, family communication, and time spent with parents) in influencing adolescent risk behavior. This work also highlights the importance of having programming that is tailored specifically to high-risk Hispanic adolescents to ensure that these underserved youth have the resources available to get their lives back on track, post-arrest (Prado & Pantin, 2011), and ultimately prevent the incidence and/or recurrence of risky behaviors.

One possible route for reducing health disparities among Hispanic youth may be through actively implementing and evaluating youth programming that promotes the involvement of family members such as parents or grandparents (e.g., Feldstein Ewing et al., 2012; Gallo, Penedo, Espinosa de los Monteros, & Arguelles, 2009; Viets, 2007). Further, efforts to incorporate prevention programming while youth are still involved with the justice system might be useful, given that once youth are released back into the community, they are less likely to participate in prevention or intervention programming (e.g., Romero et al., 2007). However, every effort should be made to do this in a way that invites community participation and reflects community needs, to ensure the absorption of such programs within Hispanic communities.

This type of intervention may be particularly important for 2+ generation, justice-involved youth, given that, with increasing time in the United States, Hispanic youth and families may drift away from *allocentric* ways (the dedication to the needs, goals, and values of the community over and above oneself). Thus, clinical research and prevention efforts should consider using culturally congruent or culturally attentive approaches that strengthen *allocentrism* (Carpenter & Radhakrishnan, 2002; La Roche, D'Angelo, Gualdron, & Leavell, 2006) and intra-family bonds (Cordova, Huang, Pantin, & Prado, 2012; Rodríguez, Baumann, & Schwartz, 2011; Santisteban, Coatsworth, Briones, Kurtines, & Szapocznik, 2012). In line with work employing qualitative and quantitative methods to deconstruct issues in family functioning within minority communities (e.g., Cordova, Huang, Lally, Estrada, & Prado, 2014; Cordova, Parra-Cardona, et al., 2014; Walls, Johnson, Whitbeck, & Hoyt, 2006; Whitbeck, Walls, & Welch, 2012), we advocate integrative efforts to explicitly work from *within* Hispanic communities to accommodate and strengthen these areas of bicultural and generational asynchrony.

Limitations

Despite the notable strengths of this work, including the large sample of traditionally underserved and underrepresented youth, study findings should be interpreted in light of several limitations. First, the present findings may be specific to this particular research

population (i.e., juvenile-justice-involved youth). Further, the study's geographical setting likely influenced the results. In particular, our definition of first generation (i.e., children of at least one immigrant parent) was informed by the demographic composition of the region in which the study was conducted; thus, as with the caveats inherent in cross-cultural research, this may reduce the comparability of our study findings with youth from other regions. For this reason, the impact of generational status on health behaviors should be examined among Hispanic adolescents throughout the United States, to delineate specific socio-cultural and environmental factors are most likely to influence health behaviors in this population. Relatedly, the present study did not collect information about age of immigration of either youth or their parents. Given that individuals who immigrate at a younger age have experiences more similar to second-generation youth (Rumbaut, 2004), age of immigration and acculturation (including acculturative stress) would be important variables to include in future work. In addition, it should be noted that the present study is a cross-sectional examination, and therefore inferences about causality cannot be made. It is also possible that the 2+ generation, sexually active youth in this study were more likely to report low parent monitoring, when an assessment of the parents themselves might demonstrate different findings. Thus, future research should employ longitudinal designs and administer assessments of parent monitoring to both adolescents and their parents.

Finally, there may be something about the nature of the justice-involved population that limits the application of the Hispanic Paradox to this community. This is a critical consideration, as families of justice-involved youth often must contend with additional stressors, including neighborhood problems, peer delinquency, youth psychiatric problems, and gun exposure (e.g., Abram, Choe, Washburn, Romero, & Teplin, 2009; Teplin et al., 2014; Teplin, Welty, Abram, Dulcan, & Washburn, 2012). Thus, the impact of generational status might be overwhelmed by the influence of persistent, academic, occupational, and functional issues for justice-involved youth.

In summary, the present study provides preliminary insight into the relationship between generational status and youth sexual behavior, including the salient role of parent monitoring. However, to ultimately develop more effective interventions targeting this group, research will need to examine the converging influence of numerous biopsychosocial variables, including neurobiological and genomic characteristics, in addition to the psychosocial (e.g., family) variables examined here (Feldstein Ewing, Karoly, & Hutchison, 2014; Hutchison, 2010; Karoly, Harlaar, & Hutchison, 2013).

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References

- Abraído-Lanza, A. F., Chao, M. T., & Flórez, K. R. (2005). Do healthy behaviors decline with greater acculturation?: Implications for the Latino mortality paradox. *Social Science and Medicine*, *61*, 1243–1255. doi:10.1016/j.socscimed.2005.01.016
- Abram, K. M., Choe, J. Y., Washburn, J. J., Romero, E. G., & Teplin, L. A. (2009). Functional impairment in youth three years after detention. *Journal of Adolescent Health*, *44*, 528–535. doi:10.1016/j.jadohealth.2008.10.005
- Afable-Munsuz, A., & Brindis, C. D. (2006). Acculturation and the sexual and reproductive health of Latino youth in the United States: A literature review. *Perspectives on Sexual and Reproductive Health*, *38*, 208–219. doi:10.1363/3820806
- Barrera, M., Biglan, A., Ary, D., & Li, F. (2001). Replication of a problem behavior model with American Indian, Hispanic, and Caucasian youth. *The Journal of Early Adolescence*, *21*, 133–157. doi:10.1177/0272431601021002001
- Becker, D., Thing, J. P., Baezconde-Garbanati, L., Schwartz, S. J., Soto, D. W., & Unger, J. B. (2014). Cultural measures associated with sexual risk behaviors among Latino youth in Southern California: A Longitudinal Study. *Perspectives on Sexual and Reproductive Health*, *46*, 193–201. doi:10.1363/46e1514
- Berg, C. J., Kirch, M., Hooper, M. W., McAlpine, D., An, L. C., Boudreaux, M., & Ahluwalia, J. S. (2012). Ethnic group differences in the relationship between depressive symptoms and smoking. *Ethnicity and Health*, *17*, 55–69. doi:10.1080/13557858.2012.654766
- Borawski, E. A., Ievers-Landis, C. E., Lovegreen, L. D., & Trapl, E. S. (2003). Parental monitoring, negotiated unsupervised time, and parental trust: The role of perceived parenting practices in adolescent health risk behaviors. *Journal of Adolescent Health*, *33*, 60–70. doi:10.1016/S1054-139X(03)00100-9
- Bryan, A., Schmiede, S. J., & Broaddus, M. R. (2007). Medial analysis in HIV/AIDS research: Estimating multivariate path analytic models in a structural equation modeling framework. *AIDS and Behavior*, *11*, 365–383. doi: 10.1007/s10461-006-9150-2
- Buhi, E. R., & Goodson, P. (2007). Predictors of adolescent sexual behavior and intention: A theory-guided systematic

- review. *Journal of Adolescent Health*, 40, 4–21. doi:10.1016/j.jadohealth.2006.09.027
- Bui, H. N. (2012). Immigrant generational status and delinquency in adolescence: Segmented assimilation and racial-ethnic differences. In C. Garcia & A. K. Marks (Eds.), *The Immigrant paradox in children and adolescents: Is becoming American a developmental risk?* (pp. 135–158). Washington, DC: American Psychological Association.
- Cabassa, L. J. (2003). Measuring acculturation: Where we are and where we need to go. *Hispanic Journal of Behavioral Sciences*, 25, 127–146. doi: 10.1177/0739986303025002001
- Carpenter, S., & Radhakrishnan, P. (2002). The relation between allocentrism and perceptions of ingroups. *Personality and Social Psychology Bulletin*, 28, 1528–1537. doi:10.1177/014616702237580
- Centers for Disease Control and Prevention (2012a). National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention. *New HIV Infections in the United States*. Retrieved from <http://www.cdc.gov/hiv/>
- Centers for Disease Control and Prevention. (2012b). Youth risk behavior surveillance survey. *MMWR*, 61, 971–976.
- Centers for Disease Control and Prevention (2012c). *Sexually transmitted disease surveillance*. Retrieved from <http://www.cdc.gov/std/>
- Chung, T., & Martin, C. S. (2001). Classification and course of alcohol problems among adolescents in addictions treatment programs. *Alcoholism: Clinical and Experimental Research*, 25, 1734–1742. doi:10.1111/j.1530-0277.2001.tb02184.x
- Clark, L., & Hofsess, L. (1998). Acculturation. In S. Loue (Ed.), *Handbook of immigrant health* (pp. 37–59). New York, NY: Plenum Press.
- Cordova, D., Huang, S., Lally, M., Estrada, Y., & Prado, G. (2014). Do parent-adolescent discrepancies in family functioning increase the risk of Hispanic adolescent HIV risk behaviors? *Family Process*, 53, 348–363. doi:10.1111/famp.12067
- Cordova, D., Huang, S., Pantin, H., & Prado, G. (2012). Do the effects of a family intervention on alcohol and drug use vary by nativity status?. *Psychology of Addictive Behaviors*, 26, 655. doi:10.1037/a0026438
- Cordova, D., Parra-Cardona, J. R., Blow, A., Johnson, D. J., Prado, G., & Fitzgerald, H. E. (2014). ‘They don’t look at what affects us’: The role of ecodevelopmental factors on alcohol and drug use among Latinos with physical disabilities. *Ethnicity and Health*, 20, 66–86. doi:10.1080/13557858.2014.890173
- Cuellar, I., Harris, L. C., & Jasso, R. (1980). An acculturation scale for Mexican American normal and clinical populations. *Hispanic Journal of Behavioral Sciences*, 2, 199–217.
- DiClemente, R. J., Wingood, G. M., Crosby, R., Sionean, C., Cobb, B. K., Harrington, K., ... Oh, M. K. (2001). Parental monitoring: Association with adolescents’ risk behaviors. *Pediatrics*, 107, 1363–1368. doi:10.1542/peds.107.6.1363
- Dillon, F. R., De La Rosa, M., & Ibañez, G. E. (2013). Acculturative stress and diminishing family cohesion among recent Latino immigrants. *Journal of Immigrant and Minority Health*, 15, 484–491. doi:10.1007/s10903-012-9678-3
- Domenech Rodriguez, M. M., Donovan, M. R., & Crowley, S. L. (2009). Parenting styles in a cultural context: Observations of “protective parenting” in first-generation Latinos. *Family Process*, 48, 195–210. doi:10.1111/j.1545-5300.2009.01277.x
- Eisenberg, M. E., Neumark-Sztainer, D., Fulkerson, J. A., & Story, M. (2008). Family meals and substance use: Is there a long-term protective association? *Journal of Adolescent Health*, 43, 151–156. doi:10.1016/j.jadohealth.2008.01.019
- Feldstein Ewing, S. W., Filbey, F. M., Loughran, T. A., Chassin, L., & Piquero, A. R. (2015). Which matters most? Demographic, neuropsychological, personality, and situational factors in long-term marijuana and alcohol trajectories for justice-involved male youth. *Psychology of Addictive Behaviors*, 29, 603–612. doi:10.1037/adb0000076.
- Feldstein Ewing, S. W., Karoly, H., & Hutchison, K. E. (2014). Commentary on Culverhouse et al.(2014): How genomics can bring us towards health equity. *Addiction*, 109, 823–824. doi:10.1111/add.12529
- Feldstein Ewing, S. W., Venner, K. L., Mead, H. K., & Bryan, A. D. (2011). Exploring racial/ethnic differences in substance use: A preliminary theory-based investigation with juvenile justice-involved youth. *BMC Pediatrics*, 11, 71–80. doi:10.1186/1471-2431-11-71
- Feldstein Ewing, S. W., Wray, A. M., Mead, H. K., & Adams, S. K. (2012). Two approaches to tailoring treatment for cultural minority adolescents. *Journal of Substance Abuse Treatment*, 43, 190–203. doi:10.1016/j.jsat.2011.12.005
- Fisher, J. D., Fisher, W. A., Cornman, D. H., Amico, R. K., Bryan, A., & Friedland, G. H. (2006). Clinician-delivered intervention during routine clinical care reduces unprotected sexual behavior among HIV-infected patients. *Journal of Acquired Immune Deficiency Syndromes*, 41, 44–52. doi:10.1097/01.qai.0000192000.15777.5c
- Forster, M., Grigsby, T., Soto, D. W., Schwartz, S. J., & Unger, J. B. (2015). The role of bicultural stress and perceived context of reception in the expression of aggression and rule breaking behaviors among recent-immigrant Hispanic youth. *Journal of Interpersonal Violence*, 30, 1807–1827. doi:10.1177/0886260514549052
- Franzini, L., Ribble, J. C., & Keddie, A. M. (2000). Understanding the Hispanic paradox. *Ethnicity and Disease*, 11, 496–518.
- Fulkerson, J. A., Story, M., Mellin, A., Leffert, N., Neumark-Sztainer, D., & French, S. A. (2006). Family dinner meal frequency and adolescent development: Relationships with developmental assets and high-risk behaviors. *Journal of Adolescent Health*, 39, 337–345. doi:10.1016/j.jadohealth.2005.12.026
- Gallo, L. C., Penedo, F. J., Espinosa de los Monteros, K., & Arguelles, W. (2009). Resiliency in the face of disadvantage: Do Hispanic cultural characteristics protect health outcomes? *Journal of Personality*, 77, 1707–1746. doi:10.1111/j.1467-6494.2009.00598.x
- Garcia Coll, C., & Marks, A. (Eds.). (2012). *The immigrant paradox in children and adolescents: Is becoming American a developmental risk?* Washington, DC: American Psychological Association. doi:10.1037/13094-000

- Gil, A. G., Wagner, E. F., & Vega, W. A. (2000). Acculturation, familism, and alcohol use among Latino adolescent males: Longitudinal relations. *Journal of Community Psychology, 28*, 443–458. doi:10.1002/1520-6629(200007)28:4<443::AID-JCOP6>3.0.CO;2-A
- Griffin, K. W., Botvin, G. J., Scheier, L. M., Diaz, T., & Miller, N. L. (2000). Parenting practices as predictors of substance use, delinquency, and aggression among urban minority youth: moderating effects of family structure and gender. *Psychology of Addictive Behaviors, 14*, 174–184. doi:10.1037/0893-164X.14.2.174
- Guarini, T. E., Marks, A. K., Patton, F., & Coll, C. G. (2011). The immigrant paradox in sexual risk behavior among Latino adolescents: Impact of immigrant generation and gender. *Applied Developmental Science, 15*, 201–209. doi:10.1080/10888691.2011.618100
- Guarini, T. E., Marks, A. K., Patton, F., & García Coll, C. (2013). The Immigrant Paradox in pregnancy: explaining the first-generation advantage for Latina adolescents. *Journal of Research on Adolescence, 25*, 14–19. doi:10.1111/jora.12096
- Guilamo-Ramos, V., Bouris, A., Jaccard, J., Lesesne, C., & Ballan, M. (2009). Familial and cultural influences on sexual risk behaviors among Mexican, Puerto Rican, and Dominican youth. *AIDS Education Prevention, 21*, 61–79. doi:10.1521/aeap.2009.21.5_suppl.61
- Guilamo-Ramos, V., Jaccard, J., Pena, J., & Goldberg, V. (2005). Acculturation-related variables, sexual initiation, and subsequent sexual behavior among Puerto Rican, Mexican, and Cuban youth. *Health Psychology, 24*, 88–95. doi:10.1037/0278-6133.24.1.88
- Hair, E. C., Moore, K. A., Garrett, S. B., Ling, T., & Cleveland, K. (2008). The continued importance of quality parent–adolescent relationships during late adolescence. *Journal of Research on Adolescence, 18*, 187–200. doi:10.1111/j.1532-7795.2008.00556.x
- Hill, N. E., & Taylor, L. C. (2004). Parental school involvement and children's academic achievement pragmatics and issues. *Current Directions in Psychological Science, 13*, 161–164. doi:10.1111/j.0963-7214.2004.00298.x
- Huang, D. Y., Murphy, D. A., & Hser, Y. I. (2011). Parental monitoring during early adolescence deters adolescent sexual initiation: Discrete-time survival mixture analysis. *Journal of Child and Family Studies, 20*, 511–520. doi:10.1007/s10826-010-9418-z
- Hutchison, K. E. (2010). Substance use disorders: Realizing the promise of pharmacogenomics and personalized medicine. *Annual Review of Clinical Psychology, 6*, 577–589. doi:10.1146/annurev.clinpsy.121208.131441
- Karoly, H. C., Harlaar, N., & Hutchison, K. E. (2013). Substance use disorders: A theory-driven approach to the integration of genetics and neuroimaging. *Annals of the New York Academy of Sciences, 1282*, 71–91. doi:10.1111/nyas.12074
- King, K. A., & Vidourek, R. A. (2010). Psychosocial factors associated with recent alcohol use among Hispanic youth. *Hispanic Journal of Behavioral Sciences, 32*, 470–485. doi:10.1177/0739986310372234
- Koinis-Mitchell, D., Sato, A. F., Kopel, S. J., McQuaid, E. L., Seifer, R., Klein, R., . . . Canino, G. (2011). Immigration and acculturation-related factors and asthma morbidity in Latino children. *Journal of Pediatric Psychology, 36*, 1130–1143. doi:10.1093/jpepsy/jsr041
- La Roche, M. J., D'Angelo, E., Gualdrón, L., & Leavell, J. (2006). Culturally sensitive guided imagery for allocentric Latinos: A pilot study. *Psychotherapy: Theory, Research, Practice, Training, 43*, 555–560. doi:10.1037/0033-3204.43.4.555
- Leong, F., Park, Y. S., & Kalibatseva, Z. (2013). Disentangling Immigrant Status in Mental Health: Psychological Protective and Risk Factors Among Latino and Asian American Immigrants. *American Journal of Orthopsychiatry, 83*, 361–371. doi:10.1111/ajop.12020
- Luster, T., & Small, S. A. (1994). Factors associated with sexual risk-taking behaviors among adolescents. *Journal of Marriage and the Family, 56*, 622–632.
- Maisto, S. A., Martin, C. S., Pollock, N. K., Cornelius, J. R., & Chung, T. A. (2002). Nonproblem drinking outcomes in adolescents treated for alcohol use disorders. *Experimental and Clinical Psychopharmacology, 10*, 324–331. doi:10.1037/1064-1297.10.3.324
- Manlove, J. (1998). The influence of high school dropout and school disengagement on the risk of school-age pregnancy. *Journal of Research on Adolescence, 8*, 187–220. doi:10.1207/s15327795jra0802_2
- Markides, K. S., & Coreil, J. (1986). The health of Hispanics in the southwestern United States: An epidemiologic paradox. *Public Health Reports, 101*, 253–265.
- Miller, K. S., Forehand, R., & Kotchick, B. A. (1999). Adolescent sexual behavior in two ethnic minority samples: The role of family variables. *Journal of Marriage and the Family, 61*, 85–98.
- Miranda, A. O., Estrada, D., & Firpo-Jimenez, M. (2000). Differences in family cohesion, adaptability, and environment among Latino families in dissimilar stages of acculturation. *The Family Journal, 8*, 341–350. doi: 10.1177/1066480700084003
- Mongro-Wilson, C. (2007). The influence of parental warmth and control on Latino adolescent alcohol use. *Hispanic Journal of Behavioral Sciences, 30*, 89–105. doi:10.1177/0739986307310881
- Ozer, E. J., Flores, E., Tschann, J. M., & Pasch, L. A. (2011). Parenting style, depressive symptoms, and substance use in Mexican American adolescents. *Youth & Society, 45*, 365–388. doi:10.1177/0044118X11418539
- Pantin, H., Coatsworth, J. D., Feaster, D. J., Newman, F. L., Briones, E., Prado, G., . . . Szapocznik, J. (2003). Familias Unidas: The efficacy of an intervention to promote parental investment in Hispanic immigrant families. *Prevention Science, 4*, 189–201. doi:10.1023/A:1024601906942
- Pantin, H., Schwartz, S. J., Sullivan, S., Prado, G., & Szapocznik, J. (2004). Ecodevelopmental HIV prevention programs for Hispanic adolescents. *American Journal of Orthopsychiatry, 74*, 545–558. doi:10.1037/0002-9432.74.4.545
- Peña, J. B., Wyman, P. A., Brown, C. H., Matthieu, M. M., Olivares, T. E., Hartel, D., & Zayas, L. H. (2008). Immigration generation status and its association with suicide attempts, substance use, and depressive symptoms among Latino adolescents in the USA. *Prevention Science, 9*, 299–310. doi:10.1007/s11121-008-0105-x

- Pierce, W. J., Singleton, S. M., & Hudson, R. E. (2011). Ethnic identity and propensity for practice among African-descended MSW students. *Journal of Social Work Education, 47*, 403–421. doi:10.5175/JSWE.2011.200900079
- Prado, G., & Pantin, H. (2011). Reducing substance use and HIV health disparities among Hispanic youth in the USA: The Familias Unidas program of research. *Psychosocial Intervention, 20*, 63–73. doi:10.5093/in2011v20n1a6
- Prado, G., Pantin, H., Briones, E., Schwartz, S. J., Feaster, D., Huang, S., . . . Lopez, B. (2007). A randomized controlled trial of a parent-centered intervention in preventing substance use and HIV risk behaviors in Hispanic adolescents. *Journal of Consulting and Clinical Psychology, 75*, 914–926. doi:10.1037/0022-006X.75.6.914
- Prado, G., Pantin, H., Huang, S., Cordova, D., Tapia, M. I., Velazquez, M.-R., . . . Villamar, J. (2012). Effects of a family intervention in reducing HIV risk behaviors among high-risk Hispanic adolescents: A randomized controlled trial. *Archives of Pediatrics & Adolescent Medicine, 166*, 127–133. doi:10.1001/archpediatrics.2011.189
- Prado, G., Pantin, H., Schwartz, S. J., Lupei, N. S., & Szapocznik, J. (2006). Predictors of engagement and retention into a parent-centered, ecodevelopmental HIV preventive intervention for Hispanic adolescents and their families. *Journal of Pediatric Psychology, 31*, 874–890. doi:10.1093/jpepsy/31/046
- Raffaelli, M., Kang, H., & Guarini, T. (2012). Exploring the immigrant paradox in adolescent sexuality: An ecological perspective. In C. Garcia, & A. K. Marks (Eds.), *The Immigrant paradox in children and adolescents: Is becoming American a developmental risk?* (pp. 109–134). Washington, DC: American Psychological Association.
- Rodríguez, M. M. D., Baumann, A. A., & Schwartz, A. L. (2011). Cultural adaptation of an evidence based intervention: From theory to practice in a Latino/a community context. *American Journal of Community Psychology, 47*, 170–186. doi:10.1007/s10464-010-9371-4
- Romero, E. G., Teplin, L. A., McClelland, G. M., Abram, K. M., Welty, L. J., & Washburn, J. J. (2007). A longitudinal study of the prevalence, development, and persistence of HIV/sexually transmitted infection risk behaviors in delinquent youth: Implications for health care in the community. *Pediatrics, 119*, 1126–1141. doi:10.1542/peds.2006-0128
- Rumbaut, R. G. (2004). Ages, life stages, and generational cohorts: Decomposing the immigrant first and second generations in the United States. *International Migration Review, 38*, 1160–1205. doi:10.1111/j.1747-7379.2004.tb00232.x
- Salvador, J. G., DeVargas, E. C., & Feldstein Ewing, S. W. (2015). Who are Hispanic youth? Considerations for adolescent addiction clinical research and treatment. *Alcoholism Treatment Quarterly, 33*, 348–362.
- Santisteban, D. A., Coatsworth, J. D., Briones, E., Kurtines, W., & Szapocznik, J. (2012). Beyond acculturation: An investigation of the relationship of familism and parenting to behavior problems in Hispanic youth. *Family Process, 51*, 470–482. doi:10.1111/j.1545-5300.2012.01414.x
- Schmiege, S. J., Broaddus, M. R., Levin, M., & Bryan, A. D. (2009). Randomized trial of group interventions to reduce HIV/STD risk and change theoretical mediators among detained adolescents. *Journal of Consulting and Clinical Psychology, 77*, 38–50. doi:10.1037/a0014513
- Schmiege, S. J., Ewing, S. W. F., Hendershot, C. S., & Bryan, A. D. (2011). Positive outlook as a moderator of the effectiveness of an HIV/STI intervention with adolescents in detention. *Health Education Research, 27*, 432–462. doi:10.1093/her/cyq060
- Schwartz, S. J., Unger, J. B., Des Rosiers, S. E., Lorenzo-Blanco, E. I., Zamboanga, B. L., Huang, S., . . . Pattarroyo, M. (2014). Domains of acculturation and their effects on substance use and sexual behavior in recent Hispanic immigrant adolescents. *Prevention Science, 15*, 385–396. doi:10.1007/s11121-013-0419-1
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *American Psychologist, 65*, 237–251. doi:10.1037/a0019330
- Shillington, A. M., Lehman, S., Clapp, J., Hovell, M. F., Sipan, C., & Blumberg, E. J. (2005). Parental monitoring: Can it continue to be protective among high-risk adolescents? *Journal of Child & Adolescent Substance Abuse, 15*, 1–15. doi:10.1300/J029v15n01_01
- Smetana, J. G. (2008). “It’s 10 o’clock: Do you know where your children are?” Recent advances in understanding parental monitoring and adolescents’ information management. *Child Development Perspectives, 2*, 19–25. doi:10.1111/j.1750-8606.2008.00036.x
- Smith-Morris, C., Morales-Campos, D., Alvarez, E. A. C., & Turner, M. (2012). An anthropology of familismo: On narratives and description of Mexican/immigrants. *Hispanic Journal of Behavioral Sciences, 35*, 35–60. doi:10.1177/0739986312459508
- Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development, 71*, 1072–1085. doi:10.1111/1467-8624.00210
- Szapocznik, J., & Coatsworth, J. D. (1999). An ecodevelopmental framework for organizing the influences on drug abuse: A developmental model of risk and protection. In M. Glanz & C. Hartel (Eds.), *Drug abuse, origins and interventions* (pp. 331–366). Washington, DC: American Psychological Association. doi:10.1037/10341-014
- Szapocznik, J., Muir, J. A., Duff, J. H., Schwartz, S. J., & Brown, C. H. (2013). Brief strategic family therapy: Implementing evidence-based models in community settings. *Psychotherapy Research, 25*, 121–133. doi:10.1080/10503307.2013.856044
- Teplin, L. A., Jakubowski, J. A., Abram, K. M., Olson, N. D., Stokes, M. L., & Welty, L. J. (2014). Firearm homicide and other causes of death in delinquents: A 16-year prospective study. *Pediatrics, 134*, 63–73. doi:10.1542/peds.2013-3966
- Teplin, L. A., Mericle, A. A., McClelland, G. M., & Abram, K. M. (2003). HIV and AIDS risk behaviors in juvenile detainees: Implications for public health policy. *American Journal of Public Health, 93*, 906–912. doi:10.2105/AJPH.93.6.906
- Teplin, L. A., Welty, L. J., Abram, K. M., Dulcan, M. K., & Washburn, J. J. (2012). Prevalence and persistence of

- psychiatric disorders in youth after detention: A prospective longitudinal study. *Archives of general psychiatry*, 69, 1031–1043. doi:10.1001/archgenpsychiatry.2011.2062
- United States Census Bureau. (2012a). *National population projections*. Retrieved from <http://www.census.gov/population/projections>
- United States Census Bureau. (2012b). *The Hispanic population in the United States*. Retrieved from <http://www.census.gov/population/hispanic>
- Vega, W. A., & Amaro, H. (1994). Latino outlook: Good health, uncertain prognosis. *Annual Review of Public Health*, 15, 39–67. doi:10.1146/annurev.pu.15.050194.000351
- Viets, V. L. (2007). CRAFT: Helping Latino families concerned about a loved one. *Alcoholism Treatment Quarterly*, 25, 111–123. doi:10.1300/J020v25n04_08
- Wagner, E. F., Lloyd, D. A., & Gil, A. G. (2002). Racial/ethnic and gender differences in the incidence and onset age of DSM-IV alcohol use disorder symptoms among adolescents. *Journal of Studies on Alcohol and Drugs*, 63, 609–619.
- Wahl, A.-M. G., & Eitle, T. M. (2010). Gender, acculturation and alcohol use among Latina/o adolescents: A multi-ethnic comparison. *Journal of Immigrant and Minority Health*, 12, 153–165. doi:10.1007/s10903-008-9179-6
- Walls, M. L., Johnson, K. D., Whitbeck, L. B., & Hoyt, D. R. (2006). Mental health and substance abuse services preferences among American Indian people of the northern Midwest. *Community Mental Health Journal*, 42, 521–535. doi:10.1007/s10597-006-9054-7
- Whitbeck, L. B., Walls, M. L., & Welch, M. L. (2012). Substance abuse prevention in American Indian and Alaska Native communities. *The American Journal of Drug and Alcohol Abuse*, 38, 428–435. doi:10.3109/00952990.2012.695416