HHS Public Access

Author manuscript

Sex Res Social Policy. Author manuscript; available in PMC 2022 August 02.

Published in final edited form as:

Sex Res Social Policy. 2009 March ; 6(1): 56–69. doi:10.1525/srsp.2009.6.1.56.

Relationship Power, Acculturation, and Sexual Risk Behavior Among Low-Income Latinas of Mexican or Puerto Rican Ethnicity

Kathleen Ragsdale,

Department of Anthropology and Middle Eastern Cultures, and the Social Science Research Center, Mississippi State University, 1 Research Blvd, Suite 103, Starkville, MS 39759.

Cheryl Gore-Felton,

Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, 401 Quarry Road, Palo Alto, CA 94304.

Cheryl Koopman,

Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, 401 Quarry Road, Palo Alto, CA 94304.

David W. Seal

Department of Psychiatry and Behavioral Medicine, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226.

Abstract

Young adult Latinas are disproportionately overrepresented among HIV/AIDS incidence cases in the United States, and heterosexual contact has been identified as the primary mode of HIV transmission. This study examined sexual risk behavior among 40 low-income native-born and foreign-born Latinas of Mexican or Puerto Rican ethnicity seeking services at a community-based family planning clinic in a large Midwestern city. Participants were unmarried, noncohabiting Latinas ages 18–29 who were involved in primary heterosexual relationships. Survey data that were collected from participants included sociodemographics, relationship power, acculturation, and unprotected sex with primary and extradyadic partners. After statistically controlling for age and ethnic identity, the authors found that Latinas with less relationship power were significantly more likely to report having unprotected sex with primary partners. These findings suggest that HIV-prevention intervention efforts that focus on relationship power among young heterosexual Latinas in the United States may be effective in reducing sexual risk behavior.

Keywords

ethnically diverse; primary partners; extradyadic partners; HIV/AIDS; unprotected sex

Few women were diagnosed with HIV/AIDS in the United States early in the epidemic, which officially began in 1981 when the first cases were brought to public attention. Today,

Address correspondence: kathleen.ragsdale@ssrc.msstate.edu.

more than one quarter of all new HIV and AIDS diagnoses are among women (Centers for Disease Control and Prevention [CDC], 2008). Although African American women have been affected more severely by HIV/AIDS than women in other ethnic groups, HIV/AIDS is the fourth leading cause of death for Hispanic[1] women ages 35–44 years (CDC, 2007b). Moreover, the estimated rate of HIV/AIDS infection among females age 13 years or older in 2006 was 15.1% for Hispanic women, compared with 2.9% for White women (CDC, 2008). These statistics are of mounting concern because most (69%) of the Hispanic women who are infected with HIV acquire it through high-risk heterosexual contact (CDC, 2007a). Hispanic women's risk for heterosexual HIV transmission has been linked to several intersecting factors, including relationship type, male partners' undisclosed or unacknowledged high-risk behaviors, gendered sexual norms, relationship power dynamics, economic vulnerability, and acculturation dynamics.

Relationship Type

Evidence suggests that Hispanic women in heterosexual *primary relationships* (i.e., ongoing relationships that are characterized by emotional and sexual involvement and commitment) may be at increased risk for HIV infection (Bowleg, Belgrave, & Reisen, 2000; Hirsch, Higgins, Bentley, & Nathanson, 2002; Parrado, Flippen, & McQuiston, 2005). HIV risk within primary relationships complicates HIV-prevention efforts that target women because women's primary relationships often are framed by an *illusion of fidelity* (Hirsch et al.) that places a high value on trust and sexual exclusivity between primary partners. Frequently, intimacy and commitment to the relationship with a primary partner are signified by having unprotected sex with that partner, which can increase exposure to HIV transmission for Hispanic women whose primary partners are high risk (e.g., engage in unprotected extradyadic sex with men or other women, use intravenous drugs, or are already HIV infected). Furthermore, sexual contact may be more frequent within primary relationships and, thus, may pose a greater risk of male-to-female HIV transmission if the male partner is infected. The risk of HIV transmission is exacerbated further when the male partner's high-risk behaviors are undisclosed or go unacknowledged within the relationship.

Undisclosed or Unacknowledged High-Risk Behaviors

Male partners who engage in extradyadic, unprotected sex with multiple female partners, other men, or both, as well as those who are intravenous drug users or are HIV positive, but who do not disclose such information to their primary partners, have been identified as posing considerable heterosexual HIV transmission risk for Hispanic women (Adimora, Schoenbach, & Doherty, 2007; Montgomery, Mokotoff, Gentry, & Blair, 2003; Parrado, Flippen, & McQuiston, 2004; Satcher, Durant, Hu, & Dean, 2007). A study that examined

[1]It is important to note that the terms *Hispanic* and *Latino/a* are used to describe diverse populations that originate from many different countries and cultural backgrounds. The term *Hispanic* was developed by the United States Bureau of the Census to track population changes and trends. Some groups do not like the term *Hispanic;* others do not like the terms *Latino* and *Latina* (Zanner & Stevens, 2001). Our intent is to be respectful and precise in our discussion and analyses. To that end, we will use the term *Hispanic/Latina* when discussing previous research, and we will use the term *Latina* when referring to our sample because the women in our study used this term to describe themselves.

prevalence of concurrent sexual partnerships among a sample of 4,928 male respondents to the 2002 National Survey of Family Growth (Adimora et al.) found that

> [n]on-Hispanic Black and Hispanic men (28% and 18%, respectively) were more likely to have had multiple sexual partners than were non-Hispanic White (13%) and men of other racial/ethnic groups (9%)…and that…6% of men reported ever having had oral or anal sexual intercourse with a man, and 3% of men had at least 1 male sexual partner in the past year. (p. 2232)

In a study of more than 8,000 men and women, Montgomery and colleagues (2003) found that 26% of the Hispanic men who reported male sexual partners also reported female sexual partners. However, only 6% of the Hispanic women in the study reported sexual relationships with bisexual men (Montgomery et al.). Although this research was not a couples-based study, the fact that the percentage of Hispanic men who reported bisexual behavior was higher than the percentage of Hispanic women reporting sexual relationships with bisexual men suggests that Hispanic women may be unaware of their own risk for HIV infection vis-à-vis their partners' bisexuality. Moreover, Satcher and colleagues (2007) examined AIDS-diagnosed cases reported to the Centers for Disease Control and Prevention in 2000–2004 among women age 13 years or older. They concluded that 4.4% of AIDS cases among the Hispanic women in the sample were attributable to having sex with a bisexual man, and that this mode of transmission was likely underreported across all ethnic groups (Satcher et al.).

Gendered Sexual Norms

Adherence to traditional masculine and feminine gender norms is associated with sexual risk among Hispanic women and their male partners (CDC, 2007a; Gómez & Marín, 1996; Marín, 2003; Ragsdale, Anders, & Philippakos, 2007; Santana, Raj, Decker, La Marche, & Silverman, 2006; Suarez-Al-Adam, Raffaelli, & O'Leary, 2000; Ward & Ragsdale, 2004). Traditional feminine gender norms that encourage sexual silence (Gómez & Marín; Marín) and minimize assertiveness among Hispanic women can increase their engagement in unprotected sex and their nonacknowledgment of a partner's high-risk sexual behaviors (CDC, 2007a; Ragsdale et al.; Rojas-Guyler, Ellis, & Sanders, 2005; Ward & Ragsdale). In contrast, traditional masculine gender norms that encourage *machismo* and stigmatize homosexual behavior among Hispanic men can increase their likelihood of having unprotected sex with multiple partners and can exacerbate the nondisclosure of bisexual behavior among non-gay-identified men (CDC, 2007a; Santana et al.). Gendered sexual norms also can reduce the ability of Hispanic women to request condom use—even with partners whom they know or suspect have multiple sexual partners (Parrado et al., 2005; Ragsdale et al.).

Relationship Power Dynamics

Relationship power can be defined as the ability, capacity, skills, or authority to influence or control another person's actions. A number of studies investigating the association between interpersonal power and sexual risk among Hispanic women (Gómez & Marín, 1996; Harvey, Beckman, Browner, & Sherman, 2002; Marín, 2003; Parrado et al., 2005; Pulerwitz,

Amaro, DeJong, Gortmaker, & Rudd, 2002; Raj, Silverman, & Amaro, 2004) have found that less power in sexual relationships is associated with less sexual negotiation and lower self-efficacy regarding condom use. Hispanic women's ability to exert power within sexual relationships is linked not only to interpersonal power dynamics and gendered sexual norms but also to gender-based economic vulnerability and acculturation dynamics.

Economic Vulnerability Among Low-Income Single Mothers

The international and domestic HIV/AIDS epidemic among women is fueled by gender-based economic vulnerability (Gupta, Weiss, & Whelan, 2000). Within the United States, low-income Hispanic women often are forced to make decisions about sexual behaviors within their primary relationships based on power differentials linked to women's relative lack of education and market-able employment skills, as well as to their need to secure financial support for themselves and their dependent children. Pressing economic concerns may override a woman's desire to confront her partner about his risky sexual or drug-use practices, or to negotiate condom use if he is unwilling to engage in protected sex (Raj et al., 2004). What has been described as a *profertility orientation* (Way, Finch, & Cohen, 2006) among many young Hispanic women (i.e., social expectation and desire to have children) also complicates the issue of condom use with primary partners (Way et al.).

An analysis of data collected at a family planning clinic in a large city in the northeastern United States (Heavey, Moysich, Hyland, Druschel, & Sill, 2008) indicated, "Hispanic teens were more than twice as likely to desire pregnancy as African American teens" (p. 130). The 2004 birth rate for Hispanic women ages 15–19 years was more than double the national rate (82.6 and 41.2 per 1,000, respectively), an increase from the 2003 birth rate for this ethnic group (National Campaign to Prevent Teen Pregnancy, 2006). Research (Koniak-Griffin et al., 2008; Lesser, Koniak-Griffin, Gonzalez-Figueroa, Huang, & Cumberland, 2007) has suggested that adolescents and young adult Hispanic women who are pregnant or parenting are at increased risk for male-to-female HIV transmission. Singh, Darroch, and Frost (2001) have noted that nonmarital and premarital pregnancy among low-income, disadvantaged adolescents may be a "rational response to their lack of alternative opportunities" (p. 251). Power differentials within primary sexual relationships may be exacerbated further when adolescent and young adult Hispanic single mothers are emotionally or economically dependent on their children's fathers, regardless of whether the couple cohabits or lives separately.

Acculturation Dynamics

Acculturation is a complex construct that can be defined, at a basic level, as the process by which members of different ethnic groups adopt the beliefs, values, or behaviors of the members of other ethnic groups with whom they are in close and ongoing social contact. Observations have shown that individuals from a socioeconomic minority cultural group often adapt more to the cultural patterns of the socioeconomic majority group than vice versa. In the United States, such adaptive behaviors are exhibited among U.S.-born and immigrant Hispanics, who may experience acculturation as a process by which they often "adopt, internalize, and exhibit behaviors of the host society" (Ebin et al., 2001, p. 63).

Several studies examining the relationship between acculturation and sexual risk behavior (Adam, McGuire, Walsh, Basta, & LeCroy, 2005; Kasirye et al., 2005; Marín, Gómez, & Hearst, 1993; Marks, Cantero, & Simoni, 1998; Rojas-Guyler et al., 2005) found that more acculturated Hispanic women engaged in greater sexual risk behavior. For example, Marín et al. found that greater acculturation was associated with higher self-efficacy (i.e., an individual's belief that she has the ability to produce a desired outcome) regarding condom use, as well as greater sexual risk behavior among Hispanic women. More recently, in a study conducted among a sample of 301 Hispanic women attending a Hispanic center in a large Midwestern city, Rojas-Guyler and colleagues found that greater acculturation was associated with having had more sexual partners in the past 12 months, as well as with a higher level of sexual communication with new partners.

Other studies (Hines & Caetano, 1998; Parrado et al., 2005) have found that less acculturated Hispanic/Latinas may be at greater sexual risk than more acculturated Hispanic women. For instance, Hines and Caetano found that although less acculturated Hispanic women reported fewer sexual partners, they also reported lower self-efficacy regarding condom use and more incidences of unprotected sex. Likewise, in their study, Parrado and colleagues found that the subsample of Hispanic women who had migrated to the United States reported lower relationship control and sexual negotiation power within their primary relationships than did the subsample of nonmigrant Hispanic women.

These findings contrast with research by Adam and colleagues (2005), who conducted a study among Hispanic young adults and found that after controlling for other social and cultural factors, low acculturation was a significant protective factor for abstaining from sexual risk behavior (Adam et al.). Such inconclusive findings on the relationship between acculturation and sexual risk behavior among Hispanic females may be associated with methodological issues that include the use of different acculturation and relationship power measurements, diverse sampling strategies, and culturally unique populations with various immigration patterns. Taken together, however, these inconclusive findings suggest that the effect of acculturation on sexual risk behavior among Hispanic women in the United States warrants further study. The variations in these findings lend support to the supposition that foreign-born Hispanic women, those who immigrate at a later age, and less acculturated Hispanic women may engage in different sexual risk behaviors than native-born Hispanic women, those who immigrate at an earlier age, and more acculturated Hispanic women (Fernandez-Esquer, Atkinson, Diamond, Useche, & Mendiola, 2004).

Our study is unique from previous research in that we collected data among Latinas from two distinct ethnic groups—Mexican and Puerto Rican—and compared the groups across (a) relationship types (i.e., primary or extradyadic); (b) known or suspected high-risk behaviors of primary partners; (c) relationship power within primary partnerships; (d) economic status; (e) level of acculturation; and (f) sexual risk behaviors within primary and extradyadic relationships. In addition to limiting our sample to Mexican and Puerto Rican participants, stringent inclusion criteria were used to ensure that the women in our study had clearly defined characteristics that conferred high risk of exposure to HIV. We hypothesized that Latinas with less relationship power and greater acculturation would report greater sexual risk behavior with primary partners.

Method

Participants

In 2004, a convenience sample ($N = 40$) of heterosexually active Latinas was recruited at a community-based family planning clinic in a large U.S. city in the Midwest. To be included in the study, participants had to meet the following eligibility criteria: (a) 18 to 29 years of age; (b) able to understand, speak, and read English; (c) of Mexican or Puerto Rican ethnicity; (d) heterosexually active within the last 3 months; (e) unmarried and noncohabiting; (f) engaged in a primary relationship; and (g) not attempting to become pregnant at the time of recruitment. Participation was restricted to women 18 to 29 years old because Hispanic women in this age range are at greater risk for HIV infection than those in other age groups (CDC, 2007c). Because of the evidence suggesting that acculturation may influence sexual behavior (Fernandez-Esquer et al., 2004), participation was restricted to bilingual women in an attempt to provide some control for level of acculturation.

Previous studies of risk behavior and acculturation have used participants' primary language (e.g., English, Spanish, both, or a blend of the two [e.g., Spanglish]) or primary language spoken with parents (Epstein, Doyle, & Botvin, 2003) as a proxy measure for acculturation (Adam et al., 2005). It is important to note that very few studies require samples to be bilingual, although foreign-born Hispanic women who immigrated to the United States during early childhood and have participated in the U.S. educational system from an early age often are Spanish-English bilingual, as are many U.S. native-born Hispanic women. Thus, very little is known about this population in relation to sexual risk behavior, which is why we chose to restrict the sample to bilingual Hispanic women.

Participation was restricted to women of Mexican or Puerto Rican ethnicity to explore risk behavior among two Hispanic subpopulations that are geographically and culturally distinct, as well as disproportionately represented in HIV/AIDS cases (Peragallo et al., 2005). Moreover, these two populations are among the largest within those described under the general ethnicity term *Hispanic*: In 2000, 20.6 million Mexicans and 3.4 million Puerto Ricans were identified as living in the United States, with Mexicans comprising 58.5% and Puerto Ricans comprising 9.6% of all Hispanics (United States Bureau of the Census, 2001, 2006).

We restricted participation to women who reported that they were in primary relationships because such relationships are characterized by inconsistent condom use. Previous research (Sangi-Haghpeykar, Poindexter, Young, Levesque, & Horth, 2003) has demonstrated that although women frequently use condoms in new or extradyadic relationships, they report less consistent condom use within primary relationships. Relationship stability (i.e., marriage or cohabitation) also has been correlated with more protective sexual behavior (e.g., limiting sex partners). Therefore, we restricted participation to unmarried and noncohabiting women (Stein, Nyamathi, Ullman, & Bentler, 2006) in order to ensure that the women in our study had characteristics that conferred high risk of exposure to HIV. A related reason for this restriction is that young adulthood is often characterized by periods of rapid-turnover serial monogamy (Rosengard, Adler, Gurvey, & Ellen, 2005). Although young women may define their sexual relationships as monogamous, relationships

among young adults tend to be relatively unstable and prone to dissolution. By restricting participation to unmarried and noncohabiting women, we were more likely to include participants involved in serial sexual relationships. This factor is important because serial relationships increase women's lifetime number of sexual partners, which in turn increases women's exposure to HIV and other sexually transmitted infections.

All participants completed an informed-consent form that had been approved by the institutional review board at the Medical College of Wisconsin. In order to protect participant anonymity, no personal identifiers were collected. The investigators implemented procedures to ensure that field staff were sensitive to potential challenges of conducting research among multicultural populations (Fisher & Ragsdale, 2006), and prospective participants were informed that nonparticipation in the study would in no way affect the delivery of health care services at the family planning clinic.

Among the 152 women initially approached to participate in the study, we had a 20% refusal rate ($n = 31$). Women who declined to participate in the eligibility screening most often cited time constraints as the reason for nonparticipation. Among those 121 women who agreed to participate in the study, 51% ($n = 62$) were ineligible, most of them because their ethnicity was other than Mexican or Puerto Rican, and some because they were not involved in a primary relationship. Of the eligible women ($n = 59$), 32% ($n = 19$) did not show up for their interview appointment, leaving 67% ($n = 40$) to complete the survey (16% and 33%, respectively, of those who had agreed to participate).

Procedures

Female research staff trained in interviewing procedures administered the survey to participants in private offices at the family planning clinic. The semistructured survey elicited information in the following areas: sociodemographics, acculturation, relationship power, and sexual risk behavior in the past 3 months with primary and extradyadic partners. For this study, a primary sex partner was defined as a "man you have sex with on an ongoing basis (boyfriend or lover) for at least 1 month at the time of the interview." An extradyadic partner was defined as a "man you have sex with occasionally, including a man you've had sex with once and plan to have sex with again, or a man you had sex with once and don't plan to have sex with again." The administration of the instrument averaged approximately 90 minutes, and respondents received $30 as compensation for their participation.

Study Measures

Sociodemographic variables.—We assessed age, ethnicity, country of birth, age of immigration if born outside the continental United States, parents' country of birth, education, income, past marital status, number of children, and duration (in months) of current primary relationship.

Acculturation.—We adapted the 30-item Acculturation Rating Scale for Mexican Americans—II (ARSMA-II; Cuéllar, Arnold, & Maldonado, 1995) for use in this study to assess acculturation to Anglo-American culture (Cuéllar, Harris, & Jasso, 1980). Examples of scale items included, "I enjoy Spanish language movies"; "My friends, while I was

growing up, were of Anglo origin"; and "I like to identify myself as a (Mexican/Puerto Rican)." Although the ARSMA-II was designed for use with people of Mexican origin, the scale has been adapted for other Hispanic groups without significant differences in acculturation measurement (Carmona, Romero, & Loeb, 1999). Therefore, we followed the methodology of Carmona and colleagues in administering this measure by substituting the term *Puerto Rican* for *Mexican* for each participant who identified as Puerto Rican, which resulted in the Mexican/Puerto Rican Orientation subscale (MPROS).

Our adapted ARSMA-II measure consisted of two subscales, the MPROS and the Anglo Orientation Subscale (AOS). The 17-item MPROS included such items as "My thinking is done in Spanish." The 13-item AOS included such items as "I write letters in English." Responses were assessed on a 5-point Likert-type scale ranging from 1 (*not at all*) to 5 (*almost always*). Consistent with previous research, the MPROS and AOS subscales demonstrated excellent internal consistency (with Cronbach's alphas of .85 and .81, respectively). In accordance with the methodology developed by Carmona and colleagues (1999), the total acculturation score was obtained by first dividing the sum of MPROS by 17 to obtain a mean score and dividing the sum of the AOS by 13 to obtain a mean score. Subsequently, the MPROS mean score was subtracted from the AOS mean score to obtain the acculturation score:

$$[AOS\ mean\ score - MPROS\ mean\ score = Acculturation\ Score]$$

Higher scores on the measure indicate greater assimilation into Anglo culture.

Relationship power.—We used an adapted version of the 23-item Sexual Relationship Power Scale (SRPS), which has been validated previously among Latina populations to measure power in sexual relationships and to explore the role of relationship power in safer sexual negotiations (Pulerwitz, Gortmaker, & DeJong, 2000). We omitted one item, "My partner might be having sex with someone else," because community experts believed it would be too anxiety provoking for participants and its inclusion was considered unnecessary to the integrity of the overall scale. The SRPS contained two subscales: the 15-item Relationship Control Subscale (RCS), which was changed to a 14-item subscale, and the 8-item Decision-Making Dominance Subscale (DDS), which remained unchanged. The scales demonstrated excellent and fair internal consistencies, with coefficient alphas of .88 and .63, respectively, outcomes consistent with previous research findings (Pulerwitz et al., 2002).

The RCS included such items as, "My partner does what he wants, even if I do not want him to." Responses to the RCS were assessed on a 4-point Likert-type scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). The DDS included such questions as, "Who usually has more say about whether you have sex?" Responses to the DDS were assessed on a 3-point scale (1 = partner; 2 = equally; 3 = you). Using the standard procedures developed by the creators of the SRPS, the scores for the RCS and the DDS were first calculated separately to give both subscales the same range, and then were combined to create one overall SRPS score (Pulerwitz et al., 2000; Pulerwitz et al., 2002).

For the RCS, the minimum score was 23 and the maximum score was 56. For the DDS, the minimum score was 11 and the maximum score was 22. For each respondent, the sum of each subscale was divided by the number of nonmissing items, creating a mean score for that subscale. Then, for each subscale, the mean scores were rescaled to a range of 1 to 4, thus giving both subscales the same range. This procedure was enacted using the following formula:

$$\left[\frac{\{Subscale\ score\}-\{Minimum\ of\ range\}}{\{Maximum\ of\ range\}-\{Minimum\ of\ range\}}\right]\times 3+1$$

Subsequently, the mean scores for the RCS and the DDFS were combined into an overall score, using the following formula:

$$\frac{[Relationship\ Control\ score+Decision\text{-}Making\ Dominance\ score]}{2}$$

Finally, the total score for the overall SRPS was calculated by rescaling the combined score to a range of 1 to 4, using the following formula:

$$\left[\frac{\{Overall\ scale\ score\}-\{Minimum\ of\ range\}}{\{Maximum\ of\ range\}-\{Minimum\ of\ range\}}\right]\times 3+1$$

All of the analyses reported in this article used the final SRPS score representing the overall relationship power dynamic. The internal consistency for the overall SRPS measure was excellent, with an alpha of .87. Higher scores on the measure indicate greater sexual relationship power.

Sexual behavior measure.—Participants' sexual behavior during the 3 months prior to the survey was measured using 15 items, and data were collected separately for primary partners and extradyadic partners for each item. For example, each participant was first asked to indicate how many times in the past 3 months she had vaginal and anal sex with her primary partner, as well as to report how many times she used a condom with her primary partner during each episode of vaginal and anal sex. Then the participant was asked to indicate how many times in the past 3 months she had vaginal and anal sex with extradyadic partners, and to report how many times she used a condom with extradyadic partners during each episode of vaginal and anal sex. To calculate the total number of unprotected sex acts across all partner types, each participant's number of reported acts of vaginal and anal sex in which a condom was used was subtracted from her total number of reported acts of vaginal and anal sex. Items included, "In the past 3 months, how many times did you have sex with a partner you think or know was also having sex with someone else during the time you were having a sexual relationship with him?" and "In the past 3 months, how many times did you have sex with a man who has ever had sex with other men?"

Results

Data Analyses

We conducted descriptive analyses (i.e., frequencies and correlations) to describe the sample and examine the relationships of the theoretical variables of interest to us. Because the unprotected sex data were positively skewed, we conducted a logarithmic transformation to normalize the distribution so that we would not violate the normality assumption of regression analysis. To examine our hypothesis that less relationship power and greater acculturation would be associated with greater sexual risk behavior in primary relationships, we conducted a hierarchical multiple regression analysis with unprotected sex in the past 3 months as the dependent variable. To statistically control for the effects of sociodemographic variables, in the first block we entered variables for age and ethnicity (i.e., either Mexican or Puerto Rican). In the second and final block, we entered our theoretical variables of interest (i.e., acculturation and relationship power).

Sociodemographic Characteristics

Of the total sample (N = 40), 75% (n = 30) were native-born Latinas (i.e., those born within the continental United States). Among the 10 foreign-born participants (i.e., those born outside the continental United States), the mean (M) age at the time of immigration was 7 years (standard deviation [SD] = 5 years, range = 1–16 years). Of the total sample, 28% (n = 11) had completed up to 10 years of education, 63% (n = 25) had 11 to 12 years, and 10% (n = 4) had 13 to 16 years. Participants' average length of involvement with their primary partner was 27 months (SD = 24 months, range = 2–108 months). There were no significant differences in relationship duration between ethnic groups (Mexican, 29.5 months versus Puerto Rican, 23.8 months). The mean age for the overall sample was 20 years (SD = 2.80, range = 18–29 years), and most participants had at least one child (60%, M = 1, range = 0–4).

Acculturation and Relationship Power Scores

As Table 1 shows, the mean acculturation score of the sample was .20 (SD = 1.11, range = −2.53−2.01), and mean relationship power score was 2.78 (SD = .78, range = 1–4).

Sexual Behaviors With Primary and Extradyadic Partners

All participants were sexually active, with 100% reporting ever experiencing vaginal intercourse and 45% (n = 18) reporting ever experiencing anal intercourse. The mean age at first vaginal intercourse (noncoerced) was 15 years (SD = 2.07, range = 8–20 years). The mean age at first anal intercourse (noncoerced) was 18 years (SD = 2.53, range = 13–25 years). The mean lifetime number of vaginal sexual partners was 6 (SD = 5.79, range = 1–30 partners), and the mean lifetime number of anal sex partners was 1 (SD = .59, range = 1–3 partners). All women in the study reported having had vaginal sex with a primary partner in the past 3 months, and 15% (n = 6) reported having had anal sex with a primary partner in the past 3 months. Moreover, 15% (n = 6) of study participants reported having had vaginal sex with an extradyadic partner in the past 3 months, and no participant reported having had anal sex with an extradyadic partner in the past 3 months. Of the 6 participants who

reported having had vaginal sex with an extradyadic partner in the past 3 months, 50% (n = 3) reported never using condoms with extradyadic partners.

Overall, 93% (n = 37) of participants had engaged in at least one sexual risk behavior with a primary partner in the past 3 months. Ninety percent (n = 36) reported having unprotected vaginal sex with their primary partner, and 10% (n = 4) reported engaging in unprotected anal sex with their primary partner. Thirty-five percent (n = 14) reported that they drank alcohol before or during sex and did not use condoms with their primary partner. Twenty-three percent (n = 9) reported that they engaged in unprotected sex with a primary partner whom the participant thought or knew engaged in extradyadic sex. Thirteen percent (n = 5) reported that they used noninjected drugs (e.g., marijuana, cocaine, Ecstasy) before or during sex and did not use condoms with their primary partner. No respondent reported that her primary partner had ever engaged in sex with another man, and no respondent reported that her primary partner was HIV positive. Table 2 shows the frequency of risk behaviors by ethnicity.

To examine ethnic-group differences on our theoretical variables of interest, we conducted t-tests for independent samples on age, acculturation, relationship power, and unprotected sex. We did not find any significant ethnic-group differences in acculturation or unprotected sex between participants of Mexican ethnicity versus Puerto Rican ethnicity. However, we found that participants of Mexican ethnicity reported greater relationship power (M = 3.08, SD = .76) compared with participants of Puerto Rican ethnicity (M = 2.47, SD = .69, t = 2.66, p = .02). Also, participants of Puerto Rican ethnicity were older (M = 21.56, SD = 3.22) than participants of Mexican ethnicity (M = 19.65, SD = 1.95, t = 2.26, p = .04).

Age was positively and significantly associated with having unprotected sex (rho = .34, p < .02). No other demographic variables were significantly associated with having unprotected sex. Therefore, we controlled for age and ethnicity in the multiple regression analyses by entering age and ethnicity into the equation first (see Table 3 for correlation matrix). The overall model was significant [F = 3.78 (df = 4, 35), p < .02], with Mexican ethnicity (t = −2.06, p < .05) and less relationship power (t = −2.97, p < .01) both significantly associated with a greater likelihood of having unprotected sex (see Table 4). Acculturation was trending in the expected direction (t = 1.86, p = .07). Even though the sample size was small, the effect size for the overall model was large (f_2 = .43; Cohen, 1988), suggesting that ethnicity and relationship power are robust correlates of having unprotected sex in primary sexual relationships among young adult Latinas.

Discussion

Consistent with previous research, we found significant sexual risk behavior occurring in primary relationships among our sample of unmarried and noncohabiting bilingual Latinas of Mexican or Puerto Rican ethnicity. Almost all participants reported at least one sexual risk behavior in the past 3 months with their primary partner, with a subsample also reporting unprotected anal sex. The most-often-cited sexual risk behavior, reported by 90% of study participants, was unprotected vaginal intercourse with a primary partner. Our findings are consistent with extant literature indicating that Hispanic women often do not

use condoms during vaginal sex with primary partners (Bowleg et al., 2000; Ehrhardt et al., 2002). Nearly 75% of Hispanic women who contracted HIV/AIDS during 2001–2004 acquired the virus through heterosexual contact (CDC, 2007a).

Among the sample, no participant reported that her primary partner had ever engaged in sex with another man or that her primary partner was HIV positive. It is important to note that we cannot make too much out of these findings because of the small sample size. However, previous research (Adimora et al., 2007; Marín, 2003; Montgomery et al., 2003; Ward & Ragsdale, 2004) has found that Hispanic women tend to underreport bisexual activity among their male partners. Therefore, increasing women's awareness of the risk of HIV transmission through heterosexual contact with bisexual men is an important first step in HIV prevention among Hispanic women.

We found no significant relationship between acculturation and sexual risk behavior among study participants. However, the data were trending in the expected direction, with greater acculturation associated with greater sexual risk behavior, so it is possible that a larger sample size would have yielded significant results. Moreover, acculturation was not significantly associated with relationship power in our sample. This outcome may be an artifact of the nature of our sample populations, who were primarily native-born Latinas and who were bilingual, indicating a relatively high level of acculturation. Indeed, respondents' mean score on the ARMSA-II suggests that most study participants fall within level three of the five levels of acculturation, indicating moderate levels of acculturation (Cuéllar et al., 1995). To increase understanding of the effect of ethnicity and acculturation on Hispanic women's sexual risk behaviors within primary and extradyadic relationships, more research is needed among ethnically diverse populations of Latinas that include women with varying levels of acculturation.

The findings of this study are consistent with those of previous studies among Hispanic women (Harvey et al., 2002; Parrado et al., 2005; Pulerwitz et al., 2002; Raj et al., 2004), which have found that low relationship power was associated with greater sexual risk behavior, including unprotected sex. Indeed, women's sexual sub-ordination to men is a near-universal phenomenon and, as a result, "men are more likely than women to initiate, dominate, and control sexual interactions and reproductive decision-making" (Gupta et al., 2000, p. 216).

Further complicating women's ability to negotiate protected sex in relationships is whether a woman defines her partner as a primary or committed partner versus an extradyadic or casual partner. Macaluso, Demand, Artz, & Hook (2000) have noted that condom use is linked to partner type, such that individuals tend to use condoms more frequently in relationships they define as casual than in relationships they define as emotionally intimate or committed (Macaluso et al.). As couples become more emotionally committed to one another over time, many often stop using condoms as a sign that the partners trust one another. Thus, trust and emotional intimacy often are signified by non–condom use as relationships become more committed. This pattern can decrease self-efficacy regarding condom use among resource-limited women with low relationship power because they often are dependent on their male partners for economic as well as emotional support. Therefore,

negotiating condom use may threaten not only a woman's emotional well-being but also her economic stability.

There is evidence that HIV-prevention interventions that provide women with skills enabling them to deal effectively with relationship and interpersonal power dynamics are successful in reducing sexual risk behaviors. For instance, a randomized clinical trial among 657 Mexican and Puerto Rican women who ranged in age from 18 to 44 years (Peragallo, DeForge, Khoury, Rivero, & Talashek, 2002; Peragallo et al., 2005) found that a culturally tailored intervention focusing on issues such as condom negotiation, violence prevention, and partner communication led to increased condom use. This result is also consistent with findings from research with other populations (e.g., Greig & Koopman, 2003), which have demonstrated more condom use among women with greater relationship power.

In the present study, we found that Mexican ethnicity was associated with greater sexual risk behavior. However, it is important to note that "considerable variation in power among Mexican women…according to education and other resources also challenges the idea that culture, rather than poverty or limited opportunities, is the root of powerlessness for these women" (Parrado et al., 2005, p. 368). Although we found no significant differences in relationship duration between the two ethnic groups, Latinas of Mexican ethnicity reported their relationships lasting 6 months longer, on average, than Latinas of Puerto Rican ethnicity. Although we did not have sufficient statistical power to test the association between relationship length and sexual risk behavior in our model, it may be that the longer Mexican and Puerto Rican couples are together, the less likely they are to use condoms on a regular basis. Indeed, there is evidence that this trend may be the case across ethnic groups. For example, a study among 2,258 men and women in Italy (Saracco, Lazzarin, Musicco, & Moroni, 1989) found that female gender and longer relationships were significantly associated with acquiring HIV infection. Additionally, a study among United States male and female undergraduates (Civic, 1999; also see Macaluso et al., 2000) found that length of relationship was the only relationship characteristic that was significantly associated with condom use.

Further research is needed to examine the cultural meanings and expressions of interpersonal power within the context of both primary and extradyadic relationships among Latinas in the United States who vary across ethnicity and national origin (i.e., born within versus outside the continental United States). Understanding how Latinas perceive condom use within the context of their primary and extradyadic relationships is key to developing effective HIV-prevention interventions for this ethnically diverse and vulnerable population. Moreover, research is needed that focuses on relationship dynamics associated with condom use among young adult Latinas as they enter new sexual relationships.

Our data support previous research showing that Hispanic/Latinas in primary relationships often feel that they are not at risk for HIV and other sexually transmitted infections (Civic, 1999; Macaluso et al., 2000). In this study, 90% ($n = 36$) of participants reported having had unprotected sex with their primary partners in the previous 3 months. Of further concern is that 15% ($n = 6$) of the participants reported having at least one extradyadic partner in the

past 3 months, and among this subsample, 50% ($n = 3$) reported non–condom use with an extradyadic partner.

Limitations

The results presented in this article need to be considered in the context of the following methodological limitations. First, selection bias was a possibility on several levels, including potential respondents' refusal to take the eligibility screen, women's inability to meet the eligibility criteria, and eligible women's failure to show up for their appointment to take the survey. Moreover, we conducted the study among a small convenience sample recruited at a community-based family planning clinic, so study findings may not be generalizable to other populations. Additionally, all of the data were self-reported, a method subject to social desirability biases that can result in over- and underreporting, response refusal, and poor memory recall. Furthermore, the cross-sectional study design does not allow us to infer causality. Therefore, it is possible that the factors of ethnicity, acculturation, and relationship power associated with sexual risk behavior may, indeed, influence sexual risk behavior, or may be affected by sexual risk behavior, or may be related to a third, unknown variable or set of variables not included in this study. Finally, the small sample size limits our ability to detect statistical significance.

Although the limited sample size and the exclusive focus on inner-city bilingual Latinas attending a family planning clinic render our conclusions tentative, the magnitude of the association between relationship power and sexual risk suggests that relationship power is an important consideration in designing interventions for HIV prevention within primary and extradyadic relationships for young adult Latinas of Mexican or Puerto Rican ethnicity.

Implications

Our findings support the need for culturally sensitive and gender-appropriate prevention efforts among Mexican and Puerto Rican populations in the United States that address differences in acculturation (Gómez & Marín, 1996; Seal, Wagner-Raphael, & Ehrhardt, 2000; Ward & Ragsdale, 2004). Primary sexual relationships pose particular and unique risks of HIV and other sexually transmitted infections to Latinas of Mexican or Puerto Rican ethnicity. Trust, intimacy, and commitment influence sexual behavior among heterosexual couples in primary relationships, and these factors are particularly salient to Hispanic women's ability to negotiate condom use. However, very little is known about how these factors affect decision making regarding condom use among young adult Mexican women and Puerto Rican women during the early stages of primary relationships.

Likewise, HIV-prevention intervention studies are needed among Hispanics within the United States that consider (a) individual factors, such as migration, acculturation, and relationship power; (b) behavioral factors, such as undisclosed high-risk sex and injected drug use; and (c) structural factors, such as access to education, economic and social discrimination, and access to health care (Gonzalez, Hendriksen, Collins, Durán, & Safren, 2008; Herbst, et al., 2007; Shedlin, Decena, & Oliver-Velez, 2005). In terms of undisclosed high-risk sex, for example, the prevalence and effect of unprotected bisexual encounters among heterosexually identified Hispanic men warrant continued research. Additionally,

investigating the reasons why some young adult Hispanic women do not use condoms within primary or extradyadic relationships deserves further study.

Developing effective HIV-prevention interventions among resource-limited young adult U.S.-born and immigrant Hispanic women requires that research efforts focus on the mediating and moderating effects of acculturation and relationship power on sexual risk behavior among women in both primary and extradyadic relationships. Prevention interventions that are culturally tailored to address sociocultural factors associated with sexual risk behavior and that increase relationship power within the context of primary relationships may be particularly effective at reducing risk among low-income, inner-city Hispanic women in the United States.

Although interventions designed to directly increase women's relationship power may be difficult to implement, areas that have the potential to indirectly increase relationship power among young adult Latinas in the United States include providing educational opportunities, encouraging economic independence, and teaching condom-use skills and sexual communication skills. Indeed, findings from Greig and Koopman's (2003) study on the relationships between women's empowerment and HIV prevention suggest that "providing women with greater access not only to education, but also to income-generating opportunities and negotiating skills may help to empower them to protect themselves against HIV through condom use" (p. 207).

Finally, increasing condom-use skills among Hispanic women in the United States might best be accomplished in a couples-based intervention, given that a "prominent feature of a 'relationship' is that events associated with one person are causally connected to those associated with the other person" (Kelley et al., 1983, p. 24) and that the use of condoms involves cooperation from both members of a couple. Although most HIV studies are conducted at the individual level, a small number of HIV studies have collected and analyzed data at the dyad level (e.g., Allen et al., 2003; Padian, Shiboski, Glass, & Vittinghoff, 1997). Couples-based HIV research can help more fully account for sexual risk dynamics within the context of intimate relationships among culturally diverse young adult Latinas in the United States.

Acknowledgments

Data collection was supported by the Center for AIDS Intervention Research, Medical College of Wisconsin, by grant T32 MH19958 (S. D. Pinkerton, training director) and grant P30-MH52776 (J. A. Kelly, principal investigator) from the National Institute of Mental Health, National Institutes of Health. Data analysis was supported by the Behavioral Sciences Training in Drug Abuse Research program sponsored by Medical and Health Research Association of New York City Inc. and the National Development and Research Institutes with grant 5T32 DA07233 from the National Institute on Drug Abuse, National Institutes of Health. Manuscript development was supported by the Department of Anthropology and Middle Eastern Cultures and the Social Science Research Center of Mississippi State University. The authors would like to thank Terri deRoon, Kelly Malen, Michelle Parisot, Donna Whitson-Jones, April Winningham, and Valerie Wright of the CAIR Latina Study Team. We would also like to thank Sandra Gasper, Cynthia Cortinas, Deirdre Fowler, Teresa Ramirez, Christine Rivera, Brenda Rodriguez, and Joanne Rombca for their invaluable field support, as well as the respondents for their generous participation.

References

Adam MB, McGuire JK, Walsh M, Basta J, & LeCroy C (2005). Acculturation as a predictor of the onset of sexual intercourse among Hispanic and White teens. Archives of Pediatric & Adolescent Medicine, 59, 261–265.

Adimora AA, Schoenbach VJ, & Doherty IA (2007). Concurrent sexual partnerships among men in the United States. American Journal of Public Health, 97, 2230–2237. [PubMed: 17971556]

Allen S, Meinzen-Derr J, Kautzman M, Zulu I, Trask S, Fideli U, et al. (2003). Sexual behavior of HIV discordant couples after HIV counseling and testing. AIDS, 17, 733–740. [PubMed: 12646797]

Bowleg L, Belgrave FZ, & Reisen CA (2000). Gender roles, power strategies, and precautionary sexual self-efficacy: Implications for Black and Latina women's HIV/AIDS protective behaviors. Sex Roles, 42, 613–635.

Carmona JV, Romero GJ, & Loeb TB (1999). The impact of HIV status and acculturation on Latinas' sexual risk taking. Cultural Diversity and Ethnic Minority Psychology, 5, 209–221.

Centers for Disease Control and Prevention. (2007a). HIV/AIDS among Hispanics/Latinos. Retrieved April 10, 2008, from http://www.cdc.gov/HIV/hispanics/resources/factsheets/hispanic.htm

Centers for Disease Control and Prevention. (2007b). HIV/AIDS among women. Retrieved April 10, 2008, from http://www.cdc.gov/hiv/topics/women/resources/factsheets/women.htm

Centers for Disease Control and Prevention. (2007c). HIV/AIDS surveillance report 2005 (Vol. 18). Atlanta: Author. Retrieved May 28, 2008, from http://www.cdc.gov/hiv/topics/surveillance/resources/reports

Centers for Disease Control and Prevention. (2008). HIV/AIDS in the United States. Retrieved April 10, 2008, from http://www.cdc.gov/hiv/resources/factsheets/us.htm

Civic D (1999). The association between characteristics of dating relationships and condom use among heterosexual young adults. AIDS Education and Prevention, 11, 343–352. [PubMed: 10494358]

Cohen J (1988). Statistical power analysis for the behavioral sciences. Hillsdale, NJ: Lawrence Erlbaum Associates.

Cuéllar I, Arnold B, & Maldonado R (1995). Acculturation Rating Scale for Mexican Americans—II: A revision of the original ARSMA scale. Hispanic Journal of Behavioral Sciences, 17, 275–304.

Cuéllar I, Harris LC, & Jasso R (1980). An acculturation scale for Mexican-American normal and clinical populations. Hispanic Journal of Behavioral Sciences, 2, 199–217.

Ebin VJ, Sneed CD, Morisky DE, Rotherram-Borus MJ, Magnusson AM, & Malotte CK (2001). Acculturation and interrelationships between problem and health-promoting behaviors among Latino adolescents. Journal of Adolescent Health, 28, 62–72.

Ehrhardt AA, Exner TE, Hoffman S, Silberman I, Yingling S, Adams-Skinner J, et al. (2002). HIV/STD risk and sexual strategies among women family planning clients in New York: Project FIO. AIDS and Behavior, 6, 1–13.

Epstein JA, Doyle M, & Botvin GJ (2003). A mediational model of the relationship between linguistic acculturation and polydrug use among Hispanic adolescents. Psychological Reports, 93, 859–866. [PubMed: 14723455]

Fernandez-Esquer ME, Atkinson J, Diamond P, Useche B, & Mendiola R (2004). Condom use self-efficacy among U.S. and foreign-born Latinos in Texas. Journal of Sex Research, 41, 390–399. [PubMed: 15765279]

Fisher CB, & Ragsdale K (2006). Goodness-of-fit ethics for multicultural research. In Trimble JE & Fisher CB (Eds.), The handbook of ethical research with ethnocultural populations and communities (pp. 3–26). Thousand Oaks, CA: Sage.

Gómez C, & Marín BV (1996). Gender, culture and power: Barriers to HIV prevention strategies for women. Journal of Sex Research, 33, 355–362.

Gonzalez JS, Hendriksen ES, Collins EM, Durán RE, & Safren SA (2008, May 23). Latinos and HIV/AIDS: Examining factors related to disparity and identifying opportunities for psychosocial intervention research. AIDS & Behavior [E-pub ahead of print].

Greig FE, & Koopman C (2003). Multilevel analysis of women's empowerment and HIV prevention: Quantitative survey results from a preliminary study in Botswana. AIDS and Behavior, 7, 195–208. [PubMed: 14586204]

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. [PubMed: 15631566]

Gupta GR, Weiss E, & Whelan D (2000). Women and AIDS: Building a new HIV prevention strategy. In Mann JM & Tarantola DJM (Eds.), AIDS in the world II: Global dimensions, social roots and responses (pp. 215–228). New York: Oxford University Press.

Harvey SM, Beckman LJ, Browner CH, & Sherman CA (2002). Relationship power, decision making, and sexual relations: An exploratory study with couples of Mexican origin. Journal of Sex Research, 39, 284–291. [PubMed: 12545411]

Heavey EJ, Moysich KB, Hyland A, Druschel CM, & Sill MW (2008). Differences in pregnancy desire among pregnant female adolescents at a state-funded family planning clinic. Journal of Midwifery & Women's Health, 53, 130–137.

Herbst JH, Kay LS, Passin WF, Lyles CM, Crepaz N, & Marín BV, for the HIV/AIDS Prevention Research Synthesis Team. (2007). A systematic review and meta-analysis of behavioral interventions to reduce HIV risk behaviors of Hispanics in the United States and Puerto Rico. AIDS and Behavior, 11, 25–47. [PubMed: 16917668]

Hines AM, & Caetano R (1998). Alcohol and AIDS-related sexual behavior among Hispanics: Acculturation and gender differences. AIDS Education and Prevention, 10, 533–547. [PubMed: 9883288]

Hirsch JS, Higgins J, Bentley ME, & Nathanson CA (2002). The social constructions of sexuality: Marital infidelity and sexually transmitted disease-HIV risk in a Mexican migrant community. American Journal of Public Health, 92, 1227–1237. [PubMed: 12144974]

Kasirye OC, Walsh JA, Romano PS, Beckett LA, Garcia JA, Elvine-Kreis B, et al. (2005). Acculturation and its association with health-risk behaviors in a rural Latina population. Ethnicity & Disease, 15, 733–739. [PubMed: 16259501]

Kelley HH, Berscheid E, Christensen A, Harvey JH, Huston TL, Levinger G, et al. (1983). Analyzing close relationships. In Kelley HH, Berscheid E, Christensen A, Harvey JH, Houston TL, Levinger G, et al. (Eds.), Close relationships (pp. 20–67). New York: Freeman.

Koniak-Griffin D, Lesser J, Henneman T, Huang R, Huang X, Tello J, et al. (2008, March 21). HIV prevention for Latino adolescent mothers and their partners. Western Journal of Nursing Research [E-pub ahead of print].

Lesser J, Koniak-Griffin D, Gonzalez-Figueroa E, Huang R, & Cumberland WG (2007). Childhood abuse history and risk behaviors among teen parents in a culturally rooted, couple-focused HIV prevention program. Journal of the Association of Nurses in AIDS Care, 18, 18–27.

Macaluso M, Demand MJ, Artz LM, & Hook EW (2000). Partner type and condom use. AIDS, 14, 537–546. [PubMed: 10780716]

Marín BV (2003). HIV prevention in the Hispanic community: Sex, culture, and empowerment. Journal of Transcultural Nursing, 14, 186–192. [PubMed: 12861921]

Marín BV, Gómez CA, & Hearst N (1993). Multiple heterosexual partners and condom use among Hispanics and non-Hispanic Whites. Family Planning Perspectives, 25, 170–174. [PubMed: 8405343]

Marín BV, Tschann JM, Gómez CA, & Kegeles SM (1993). Acculturation and gender differences in sexual attitudes and behaviors: Hispanic vs non-Hispanic White unmarried adults. American Journal of Public Health, 83, 1759–1761. [PubMed: 8259813]

Marks G, Cantero PJ, & Simoni JM (1998). Is acculturation associated with sexual risk behaviours? An investigation of HIV-positive Latino men and women. AIDS Care, 10, 283–295. [PubMed: 9828972]

Montgomery JP, Mokotoff ED, Gentry AC, & Blair JM (2003). The extent of bisexual behaviour in HIV-infected men and implications for transmission to their female partners. AIDS Care, 15, 829–837. [PubMed: 14617504]

National Campaign to Prevent Teen Pregnancy. (2006, June). Fact sheet: Teen sexual activity, pregnancy and childbearing among Latinos in the United States. Washington, DC: Author. Retrieved May 29, 2008, from http://www.thenationalcampaign.org/resources/pdf/Latinos_2006.pdf

Padian NS, Shiboski SC, Glass SO, & Vittinghoff E (1997). Heterosexual transmission of human immunodeficiency virus (HIV) in Northern California: Results from a ten-year study. American Journal of Epidemiology, 146, 350–357. [PubMed: 9270414]

Parrado EA, Flippen CA, & McQuiston C (2004). Use of commercial sex workers among Hispanic migrants in North Carolina: Implications for the spread of HIV. Perspectives on Sexual and Reproductive Health, 36, 150–156. [PubMed: 15321781]

Parrado EA, Flippen CA, & McQuiston C (2005). Migration and relationship power among Mexican women. Demography, 42, 347–372. [PubMed: 15986990]

Peragallo N, Deforge B, O'Campo P, Lee SM, Kim YJ, Cianelli R, et al. (2005). A randomized clinical trial of an HIV risk-reduction intervention among low-income Latina women. Nursing Research, 54, 108–118. [PubMed: 15778652]

Peragallo N, DeForge BR, Khoury Z, Rivero R, & Talashek M (2002). Latinas' perspectives on HIV/AIDS: Cultural issues to consider in prevention. Hispanic Health Care International, 1(1), 11–22.

Pulerwitz J, Amaro H, DeJong W, Gortmaker SL, & Rudd R (2002). Relationship power, condom use and HIV risk among women in the USA. AIDS Care, 14, 789–800. [PubMed: 12511212]

Pulerwitz J, Gortmaker SL, & DeJong W (2000). Measuring sexual relationship power in HIV/STD research. Sex Roles, 42, 637–660.

Ragsdale K, Anders JT, & Philippakos E (2007). Migrant Latinas and brothel sex work in Belize: Sexual agency and sexual risk. Journal of Cultural Diversity, 14(1), 26–34. [PubMed: 19172970]

Raj A, Silverman JG, & Amaro H (2004). Abused women report greater male partner risk and gender-based risk for HIV: Findings from a community-based study with Hispanic women. AIDS Care, 16, 519–529. [PubMed: 15203419]

Rojas-Guyler L, Ellis N, & Sanders S (2005). Acculturation, health protective sexual communication, and HIV/AIDS risk behavior among Hispanic women in a large Midwestern city. Health Education and Behavior, 32, 767–779. [PubMed: 16267147]

Rosengard C, Adler NE, Gurvey JE, & Ellen JM (2005). Adolescent partner-type experience: Psychosocial and behavioral differences. Perspectives on Sexual and Reproductive Health, 37, 141–147. [PubMed: 16150662]

Sangi-Haghpeykar H, Poindexter AN, Young A, Levesque JE, & Horth F (2003). Extra-relational sex among Hispanic women and their condom-related behaviours and attitudes. AIDS Care, 15, 505–512. [PubMed: 14509865]

Santana MC, Raj A, Decker MR, La Marche A, & Silverman JG (2006). Masculine gender roles associated with increased sexual risk and intimate partner violence perpetration among young adult men. Journal of Urban Health, 83, 575–585. [PubMed: 16845496]

Saracco A, Lazzarin A, Musicco M, & Moroni M (1989). Gender, relationship length and the risk of heterosexual HIV transmission. European Journal of Epidemiology, 5, 403–404. [PubMed: 2792316]

Satcher AJ, Durant T, Hu X, & Dean HD (2007). AIDS cases among women who reported sex with a bisexual man, 2000–2004—United States. Women & Health, 46(2–3), 23–40. [PubMed: 18160368]

Seal DW, Wagner-Raphael LI, & Ehrhardt AA (2000). Sex, intimacy, and HIV: An ethnographic study of a Puerto Rican social group in New York City. Journal of Psychology and Human Sexuality, 11, 51–92.

Shedlin MG, Decena CU, & Oliver-Velez D (2005). Initial acculturation and HIV risk among new His- panic immigrants. Journal of the National Medical Association, 97, 32S–37S. [PubMed: 16080455]

Singh S, Darroch JE, & Frost JJ (2001). Socioeconomic disadvantage and adolescent women's sexual and reproductive behavior: The case of five developed countries. Family Planning Perspectives, 33, 251–258, 289. [PubMed: 11804434]

Stein JA, Nyamathi A, Ullman JB, & Bentler PM (2006, February 3). Impact of marriage on HIV/AIDS risk behaviors among impoverished, at-risk couples: A multilevel latent variable approach. AIDS and Behavior, 1–12 [E-pub ahead of print].

Suarez-Al-Adam M, Raffaelli M, & O'Leary A (2000). Influence of abuse and partner hypermasculinity on the sexual behavior of Latinas: Results from an HIV preventive intervention study. AIDS Education and Prevention, 12, 263–274. [PubMed: 10926129]

United States Bureau of the Census. (2001). The Hispanic population 2000: Census 2000 brief. Retrieved April 26, 2007, from http://www.census.gov/prod/2001pubs/c2kbr01-3.pdf

United States Bureau of the Census. (2006). 2006 American community survey. Retrieved April 10, 2008, from http://factfinder.census.gov/servlet/ACSSAFFFacts?_event=&geo_%20id=01000US%20&_geoContext=01000US&_street=&_county=&_cityTown=&_state=&_zip=&_lang=en&_sse=on&ActiveGeoDiv=&_useEV=&pctxt=fph&pgsl=010

Ward J, & Ragsdale K (2004). Latinas, sexual communication & HIV/AIDS education: Notes from the field. AIDS & Anthropology Bulletin, 16(2), 3–4.

Way S, Finch BK, & Cohen D (2006). Hispanic concentration and the conditional influence of collective efficacy on adolescent childbearing. Archives of Pediatrics & Adolescent Medicine, 160, 925–930. [PubMed: 16953015]

Zanner KB, & Stevens GL (2001). A guide to better understanding of Latino family culture. Retrieved January 3, 2007, from http://elkhorn.unl.edu/epublic/pages/publicationD.jsp?publicationId=53

Table 1.

Sample Characteristics ($N = 40$)

Variable	*n*	%	*Mean*	*SD*	*Range*
Age (in years)			20.60	2.80	18–29
Ethnicity					
Mexican	20	50			
Puerto Rican	20	50			
Education (in years)			11.25	1.53	8−16
Acculturation score			0.20	1.11	−2.53−2.01
Relationship power score			2.78	.78	1−4
Engaged in unprotected sex	34	85			
Believe partner is monogamous	37	92.5			

Table 2.

Frequency of Risk Behavior in the Past 3 Months With a Primary Partner by Ethnicity

Variables	Mexican (*N* = 20) % (*n*)	Puerto Rican (*N* = 20) % (*n*)
Unprotected sex with a partner who engaged in extradyadic sex	20 (4)	25 (5)
Unprotected vaginal sex	10 (2)	20 (4)
Unprotected anal sex	5 (1)	20 (4)

Table 3.

Correlation Matrix of Independent and Dependent Variables

		1	2	3	4	5	
1	Age	1.00	.31*	−.01	−.18	.34**	
2	Ethnicity		1.00	.04	−.43**	−.04	
3	Acculturation			1.00	.08	.25	
4	Relationship power				1.00	−.30*	
5	Unprotected sex						1.00

*$p < .05$.

**$p < .01$.

Table 4.

Multiple Regression Model Predicting Unprotected Sex

Independent variables	*Beta*	*SE*	*t*
Age	.278	.035	1.83
Ethnicity	−.334	.203	−2.06*
Acculturation	.268	.082	1.86
Relationship power	−.464	.127	−2.97**

Note. Final model [$F = 3.78$ ($df = 4, 35$); Adj $R^2 = .22$, $p < .02$].

* $p < .05$.

** $p < .01$.