

Birthplace, Culture, Self-Esteem, and Intimate Partner Violence Among Community-Dwelling Hispanic Women

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Abstract:

The purpose of this study was to explore variations in demographics, culture, self-esteem, and intimate partner violence among Hispanic women according to birthplace, and to identify factors associated with these differences in intimate partner violence (IPV). Baseline data from a randomized control trial testing the efficacy of an HIV prevention program were used. Path analyses identified differences in IPV between Colombian women and women from other Central/South American countries. Self-esteem was the only factor associated with these differences. Interventions addressing the unique needs of Hispanic women from different subgroups are needed.

Keywords: culture | Hispanics | intimate partner violence

Article:

Introduction

Intimate partner violence (IPV), a far-reaching public health problem affecting all populations across socioeconomic classes and cultures, can be particularly devastating among Hispanic women lacking access to or knowledge of relevant social services (Kelly, 2009). There is conflicting evidence regarding whether Hispanics living in the United States experience IPV more frequently than other racial and ethnic groups. The U.S. Department of Justice's Bureau of Justice Statistics (2007) reports no significant differences in IPV rates between Hispanics and non-Hispanics; however, studies utilizing population-based samples rather than crime statistics note Hispanics are at higher risk for IPV than other racial/ethnic groups (Caetano, Field, Ramisetty-Mikler, & McGrath, 2005; Kantor, Jasinski, & Aldarondo, 1994; Tjaden & Thoennes, 2000). There is also

conflicting evidence on whether socioeconomic status accounts for these differences. While some researchers have noted that differences in IPV rates across race and ethnicity disappear once socioeconomic factors are controlled for (Kantor et al., 1994; Tjaden & Thoennes, 2000), others have found that Hispanics and Blacks experience more than twice the incidence of IPV than non-Hispanic Whites, even when socioeconomic variables are taken into account (Caetano et al., 2005).

In addition to the challenges of establishing the incidence and prevalence of IPV among Hispanic women in the United States and determining the role that socioeconomic factors play, is the difficulty of differentiating these rates among Hispanic women of various countries of birth. Few studies investigating IPV among women request information on culture beyond Hispanic or non-Hispanic ethnicity (Aldarondo, Kantor, & Jasinski, 2002; Kantor et al., 1994; Tjaden & Thoennes, 2000), thus neglecting to acknowledge that numerous subcategories of Hispanics of various cultures exist (Page, 2005), and foregoing an important opportunity to explore the intersection of socioeconomic status, culture, and IPV among Hispanics. As such, few studies examine variables that may account for observed differences between groups. The purposes of this exploratory study are to: (a) identify variations in demographics, cultural factors (acculturation, Hispanic Stress, and machismo), self-esteem, and IPV among Hispanic women according to birthplace; and (b) describe the relationship between birthplace, demographics, cultural factors, self-esteem, and IPV among a community sample of Hispanic women living in South Florida.

Background

Conceptual Framework

Using the syndemic model of substance abuse, IPV, HIV infection, and mental health among Hispanics (Gonzalez-Guarda, Florom-Smith, & Thomas, 2011) as the theoretical framework for this study, demographic, cultural, and psychological factors were conceptualized as factors associated with IPV among Hispanic women that may partly account for differences in the frequency of IPV across birthplace. The Syndemic model considers multiple, interwoven, and simultaneously occurring conditions contributing to health disparities among Hispanics within the context of poor social and/or physical environments, while also acknowledging the importance of individual, relationship, socioenvironmental and cultural level risk, and protective factors. These factors are conceptualized as links between these conditions (Gonzalez-Guarda et al., 2011). Increased understanding of the potential links between demographic, cultural, and psychological factors influencing IPV among Hispanic women may provide needed insight into a complex set of relationships requiring innovative interventions on multiple levels.

Demographic Factors

Birthplace. Very few studies have investigated the effect of birthplace on variations in IPV among Hispanic subgroups (Aldarondo et al., 2002; Kantor et al., 1994). Aldarondo and colleagues (2002) used national survey data to determine the predictive utility of commonly regarded individual (age, violence approval, alcohol consumption, and history of violence), relationship (marital status, relationship conflict), and social (income, employment, and occupation) markers of IPV among Mexican, Mexican American, and Puerto Rican Hispanics residing in the United States previously analyzed in their 1994 study (Kantor et al., 1994). The authors found that the commonly recognized markers for IPV did not adequately explain the between-group differences in IPV among the three

Hispanic subgroups. Aldarondo and colleagues (2002) found that Mexican American men reported the highest rates of assaults on their wives, followed by Puerto Rican men living in the U.S. mainland, and lastly Mexican men. This may be due to differences in the levels of acculturation between these groups, as research has indicated that higher levels of acculturation are associated with an increase in risk behaviors, such as substance abuse and violence, among Hispanics (Gonzalez-Guarda et al., 2011). Interestingly, Aldarondo and colleagues (2002) found that the highest rates of reported assault among Hispanic women were among Puerto Rican families living in the U.S. mainland, then Mexican American families, and lastly Mexican families. The authors cite the hesitancy of spouses of immigrant perpetrators in reporting IPV as a partial explanation of the discrepancies between men and women's reports of assault, and suggest future researchers should highlight culture-specific variables associated with IPV. In addition, these discrepancies may be explained by differences in legal status. Individuals from Puerto Rico do not immigrate to the United States, as natural-born Puerto Ricans are U.S. citizens (United States Department of the Interior, 2010). As such, Puerto Rican women living in the U.S. mainland may feel more comfortable reporting IPV than undocumented immigrant Hispanic women from other subgroups, who may fear the deportation of themselves or their partners as an outcome.

Socioeconomic status. Other demographic factors, such as socioeconomic inequalities, have been found to be risk factor for IPV among Hispanics (Cunradi, Caetano, & Schafer, 2002; Kantor et al., 1994) and in the general population (Tjaden & Thoennes, 2000). However, little consensus exists on specific resource disadvantages that place Hispanic women at increased risk for IPV, and whether these disadvantages persist when other factors are considered. Identified socioeconomic risk factors for IPV among Hispanics vary from study to study depending on the socioeconomic indicators (e.g., employment vs. income), population sampled, and control measures included in the analyses. While low income has consistently been identified as a socioeconomic risk factor for IPV among Hispanics (Caetano, Cunradi, Clark, & Schafer, 2000; Cunradi et al., 2002; Kantor et al., 1994), findings associating education and IPV have been inconsistent, with some researchers arguing that these factors are not related (Cunradi et al., 2002; Gonzalez-Guarda, Peragallo, Vasquez, Urrutia, & Mitrani, 2009), and others supporting strong relationships between the two (Denham et al., 2007; Newcomb & Carmona, 2004).

Inconsistencies in these findings may be indicative of important differences that exist between the Hispanic subgroups sampled. In a study examining the socioeconomic predictors of IPV among a representative sample of couples from different Hispanic subgroups (e.g., Mexican, Puerto Ricans living in the U.S. mainland, and Cuban) and racial origins, male unemployment was a significant predictor of male-to-female IPV across all groups (Kantor et al., 1994). However, in a further examination of this same data set, Aldarondo and colleagues (2002) found that the unique contribution of socioeconomic resources (i.e., income, employment, and occupational status) examined to predict IPV was significantly reduced when relationship factors and other differences between Hispanic subgroups were considered. This finding indicates there may be other factors (e.g., acculturation, Hispanic stress, and machismo) mediating the relationship between economic resources and IPV.

Cultural Factors

Acculturation. Acculturation occurs when individuals or groups of different cultures interact, resulting in changes in both cultures; however, in a multicultural society, nondominant culture groups generally experience greater change than the dominant culture group (Berry, 1997). The

voluntary aspects of and difficulty involved in acculturation may vary for individuals and groups, but Berry (1997) maintains the bidirectional issues of cultural maintenance (the significance and preservation of cultural identity) and contact and participation (interaction or lack thereof with other cultural groups) are common concerns across cultural groups.

Studies using unidimensional (e.g., time spent in the United States) or language-oriented measures of acculturation have found that acculturation is a strong predictor of IPV. In a study of predominantly low-income women of Mexican origin, Firestone, Harris, and Vega (2003) found acculturation to be the greatest predictor of IPV, even when other factors such as stress, education level, and income were considered. In a longitudinal study, Caetano, Ramisetty-Mikler, and McGrath (2004) measured acculturation among Hispanic couples as a dyad representing the level of acculturation of each partner (e.g., low-low, low-medium, low-high, medium-medium, medium-high, high-high), and found couples with at least one member of medium acculturation (e.g., medium-low, medium-medium, or medium-high) were more likely to report male-to-female partner violence than couples reporting other levels of acculturation. However, because these studies measure acculturation toward one orientation, American culture, little is known about the role that maintaining one's own culture of origin (e.g., Hispanicism) plays in predicting IPV.

Hispanic stress. Hispanic stress is viewed as a cluster of stressful events specific to Hispanics as members of an ethnic minority group in the United States. Acculturative stress, the stress associated with acculturating to the United States, has been found to partially mediate the relationship between acculturation and risk for IPV among Hispanic women (Caetano et al., 2005). Examples of these stressful events are problems with linguistic differences, changing personal and family values, changing gender role expectations, difficulty in meeting daily needs, and immigrant status (Cervantes, Padilla, & Salgado de Snyder, 1991). Hispanic (i.e., acculturation) stress has been found to be the third most significant influence on IPV among women of Mexican origin, after acculturation and the spouse demanding his own way (Firestone et al., 2003).

Machismo. The term machismo is often used to refer to the negative ideals and behaviors associated with being a strong man in Hispanic culture, such as domination of women, virility, and risky behaviors such as having multiple intimate partners and engaging in substance abuse. Although some scholars argue that the concept of machismo is associated with both positive (e.g., chivalrous) and negative (e.g., aggressive) behaviors (Arciniega, Anderson, Tovar-Blank, & Tracey, 2008), investigators found in several studies that Hispanic female research participants often focused on the negative aspects of machismo when they described cultural factors associated with IPV in their communities (Gonzalez-Guarda, Vasquez, Urrutia, Villarruel, & Peragallo, 2011; Moreno, 2007; Peragallo, DeForge, Khoury, Rivero, & Talashek, 2002). A recent qualitative study conducted with a diverse sample of Hispanic men also provided evidence that culturally ascribed norms for men are believed to promote IPV and other risky behaviors among men in their community (Gonzalez-Guarda, Ortega, Vasquez, & De Santis, 2010).

The negative components of machismo are likely to contribute to power imbalances in Hispanic relationships. In heterosexual relationships, gender power imbalance has been found to influence sexual risk behaviors and IPV among Hispanic women. Pulerwitz, Amaro, De Jong, Gortmaker, and Rudd (2002) found Hispanic women with high relationship power were more likely to report consistent condom use than Hispanic women with low relationship power. Hispanic women with low relationship power may feel like they do not have the competency or efficacy to negotiate condom use or may feel at risk for victimization if they attempt to do so. In addition Raj,

Silverman, and Amaro (2004) reported that abused-Hispanic women were more likely to report high gender-based risk as well as high STD/HIV risk perceptions than nonabused-Hispanic women. This may be because their partners ascribe to the more negative aspect of machismo that promotes aggression, control in the relationship, and risky behaviors among men. Despite the fact that machismo has been identified conceptually as a risk factor for IPV, few studies have measured this construct or explored the relationship of machismo with IPV within Hispanic culture.

Psychological Factors

Self-esteem. Self-esteem, the favorable or unfavorable attitude toward one's self (Rosenberg, 1965), appears to be an important individual-level factor that can protect Hispanic women against IPV. In a study exploring the relationships between extrinsic (i.e., external factors such as income, education, employment, and health status) and intrinsic (i.e., internal factors such as self-esteem) factors associated with IPV among a community sample of Hispanic women from diverse backgrounds, self-esteem was the only individual-level factor that had a clinically and statistically significant protective effect on IPV (Gonzalez-Guarda et al., 2009). Further, one study with Hispanic women found that self-esteem is not only directly related to IPV, in that women with higher self-esteem are less likely to tolerate an abusive relationship, but also that self-esteem is a mechanism through which aggressors victimize their partners. That is, aggressors work on lowering their victims' self-esteem in order to make them more vulnerable to IPV (Gonzalez-Guarda et al., 2011).

The purpose of this study is to expand knowledge about IPV in two ways. First, we expand on previous studies of Hispanic women by exploring the relationship between birthplace and IPV. Second, we examine whether the relationship between birthplace and IPV is associated with several other variables, such as demographics, cultural factors, or self-esteem. We accomplish these purposes by testing two research questions. First, are there significant differences in IPV between women of different countries of origin? Second, if differences exist, do differences in other factors (demographics, cultural factors, or self-esteem) mediate the differences in IPV?

Method

Design

Standardized questionnaires were administered to participants of SEPA II (Salud, Educación, Prevención y Autocuidado-Health, Education, Prevention, and Self-care; (Peragallo, Gonzalez-Guarda, McCabe, & Cianelli, 2012), a randomized control trial of a group intervention designed for Hispanic women in the United States to reduce HIV risk. Participants were assessed at baseline and at three follow-up periods (3 months, 6 months, and 12 months) after receiving the intervention. All of the measures used in this study were taken at baseline, with the exception of the measure for machismo (a description of the measure will follow), a supplemental measure that was added to the SEPA II assessment battery for the purposes of this study. Participants responded to the machismo measure during one of their follow-up appointments; measuring machismo during the follow-ups was not considered problematic because machismo, as with many beliefs about gender roles, was construed as being stable for individuals over a single year. Preliminary evaluation of the cultural variables assessed in Project SEPA II (i.e., acculturation and Hispanic stress) revealed that these measures were stable, meaning that the scores changed very little over

time. Consequently, the study team decided to stop reassessing for these variables during follow-up periods in order to reduce participant burden. In addition, gender norms were also not one of the hypothesized mechanisms of change targeted in the SEPA II intervention. All questionnaires were administered in English or Spanish via face-to-face interviews conducted by bilingual, female study personnel between January 2008 and April 2009. The sample, recruitment methods, and procedures for SEPA II are described elsewhere (Peragallo et al., 2012). The sample for this study consisted of a subset of participants who responded to the machismo measure (N = 350).

Measures

Demographic variables. Demographic information (e.g., birthplace, age, years living in the United States, income, education) was collected at the beginning of the assessment. Participants were asked to report their birthplace. In order to allow for large enough groups to make comparisons, responses were recoded into the following groups: Colombia (33.9%); other Central/South American countries, including Mexico (34.3%); Cuba (12.8%); other Caribbean countries (11.1%); and the United States (7.8%). Age was measured on a continuous scale. Income data were collected according to preestablished ranges, as this has been found to help participants feel more comfortable disclosing their income (Fowler, 1995). Monthly income was categorized into one of eight ranges (< US\$500; US\$500-US\$999; US\$1,000-US\$1,999; US\$2,000-US\$2,999; US\$3,000-US\$4,999; US\$4,000-US\$4,999; US\$5,000-US\$5,999; >US\$5,999), and treated as continuous in the analyses. Education was originally collected as a continuous scale but later dummy coded to differentiate between individuals who completed at least a high school education, and individuals who did not.

Acculturation. The Bidimensional Acculturation Scale (BAS; Marin & Gamba, 1996) consists of 24 items that measure acculturation in a bidimensional manner. This scale consists of two subscales that measure how acculturated Hispanics are to American culture (Americanism) and to their culture of origin (Hispanicism). Americanism and Hispanicism are calculated by adding and averaging the responses to the 12 questions in each of these cultural domains. Scores for each domain can range from 1 to 4, with a score of 2.5 used as a cutoff point for low or high cultural activities. The validity of this measure is supported by high correlation with criteria previously used for developing acculturation scales (Marin & Gamba, 1996). In this study, the BAS demonstrated a high reliability for both the Americanism and Hispanicism subscales ($\alpha = .95$ and $.85$, respectively).

Hispanic stress. Hispanic stress was assessed with the Hispanic Stress Inventory (HSI; Cervantes et al., 1991). The immigrant version of this scale was used, as the vast majority of the sample was foreign born (92.5%). The original version includes five subscales that measure economic stress, parental stress, family/cultural stress, marital stress, and immigration stress via 73 items. The parental stress subscale was not used in this study because not all of the participants were parents. Responses to these items screen for common stressors Hispanics face in the United States by asking participants if they have experienced these stressors. If participants respond “yes,” they are asked to evaluate how much this stressor affected them. Two scores are calculated for each subscale. One score calculates exposure to the stressors and the other score evaluates the effect that stressor had in participants’ lives. The score measuring exposure to the stressor was used for

this study. The economic, family/cultural, marital, and immigration stress subscales demonstrated high reliability ($\alpha = .74, .80, .74, .83$, respectively).

Machismo. The concept of machismo was initially measured in this study through the Traditional machismo and Caballerismo Scale (Arciniega et al., 2008). This 20-item scale is the only measure that aims to capture both the negative (i.e., Traditional machismo subscale) and positive (i.e., Caballerismo subscale) dimensions of machismo in Hispanic culture. The Traditional machismo subscale contains questions regarding time-honored expected male and female roles in society (e.g., a man should be in control of his wife, the bills should be under the man's name, women should be beautiful). The Caballerismo subscale contains questions regarding men's responsibilities to their family and society in general (e.g., men should be willing to fight to defend their families, men should be affectionate to their children, men must display good manners in public). Agreement or disagreement with these items are measured on a Likert-type scale and summed for one score for each subscale. The scale was initially developed and tested for reliability and validity among Mexican American males in English (Arciniega et al., 2008). This instrument was translated into Spanish through the standard translation, back-translation, and verification process. However, because both subscales performed poorly within this sample ($\alpha = .59$ for Traditional machismo and $\alpha = .48$ for Caballerismo) only one item from this measure was selected (i.e., "a man should be in control of his wife") as an indicator of participants' acceptance of traditional machismo. This item was chosen because results from qualitative research conducted with a similar sample indicated this belief was pervasive among women in Hispanic culture (Gonzalez-Guarda et al., 2011).

Self-esteem. The Rosenberg Self-esteem Scale (RSE; Rosenberg, 1965), which includes 10 questions relating to participants' perceptions of themselves, was used to measure self-esteem. Responses to each question are measured on a Likert-type scale ranging from 1 (strongly agree) to 4 (strongly disagree). Total scores range from 10 to 40, with higher scores indicating higher levels of self-esteem. This scale has demonstrated good reliability when used among Hispanics (Robins, Hendin, & Trzesniewski, 2001). In this study, the self-esteem scale demonstrated good internal consistency ($\alpha = .84$).

IPV. Partner violence was ascertained with the Partner-to-You (victimization) subscale of the Revised Conflict Tactics Scales (CTS2), one of the most widely used instruments to measure IPV (Straus & Douglas, 2004). The CTS2 measures violent tactics used to handle conflicts in intimate relationships, including physical, sexual, and psychological forms of abuse. The Partner-to-You subscale consists of 12 items that assess for physical (e.g., pushing, grabbing, or shoving you), sexual (e.g., forced sex), and psychological (e.g., insults) forms of abuse perpetrated by an intimate partner. Participants report the number of times they experienced these violent tactics (never, one time, two times, or three or more times) in the past 3 months. The Partner-to-You subscale demonstrated strong reliability ($\alpha = .86$) in this study. To correct for positive skew, the square root of IPV was used in analyses.

Analysis

The analysis was conducted in two steps. First, we tested for differences in IPV between the five national origin groups using ANOVA. Bonferroni post hoc tests identified which groups were

significantly different. ANOVA and Bonferroni post hoc also tested for differences in demographic variables (age, income, education, and percent years in the United States), cultural factors (acculturation, Hispanic stress, machismo), and self-esteem between Hispanic women from different birthplaces, and to identify which groups were different. Next, we evaluated mediation using path analyses (Mplus 6; Muthén & Muthén, 2007). Bentler and Chou's (1987) recommendation of five participants per path suggests that 70 participants will be sufficient for mediation analyses of any two groups. Results of ANOVA were used to select possible mediators (i.e., only variables that differed significantly between birthplace with significant differences in IPV were included in the mediation analyses). The bias-corrected bootstrap method, which forms standard error estimates by resampling and correcting for bias in the central tendency of the model estimates, was used to test for mediation (MacKinnon, Lockwood, & Williams, 2004). This method produces a coefficient, confidence interval, and p statistic associated with the product of the paths to and from the mediators. Maximum likelihood estimation was also used to permit the inclusion of missing data. Cutoffs for excellent fit were (comparative fit index) $CFI \geq .95$, and (root mean square error of approximation) $RMSEA \leq .06$ (Kline, 2009) and for acceptable fit were $CFI \geq .90$, and $RMSEA \leq .08$ (McDonald & Ho, 2002). Finally, to improve model fit, correlated errors suggested by modification indices that made theoretical sense were added.

Results

Group Differences

As shown in Table 1, there were significant differences in IPV between women from different birthplaces. Post hoc Bonferroni tests indicated that Colombian women reported less IPV than women born in other Central/South American countries ($p = .001$). Significant differences in age, income, education, percentage of years living in the United States, acculturation, occupational stress, immigration stress, control of wife, and self-esteem were found ($p < .05$). No significant differences between groups were noted for marital stress and family stress. Post hoc Bonferroni analyses showed that the Colombian women had more education than women born in Cuba ($p < .001$), the Caribbean ($p < .001$), Central/South America ($p < .001$), and the United States ($p < .01$). Colombian women also reported higher income than women born in Cuba ($p < .001$), the Caribbean ($p < .01$), Central/South America ($p < .01$), and the United States ($p < .01$). Women born in the United States were significantly younger than those born in Cuba ($p < .001$), Colombia ($p < .001$), the Caribbean ($p < .01$), and Central/South America ($p < .001$). Women born in the United States also spent significantly greater proportions of their lives in the United States than those born in Cuba ($p < .001$), Colombia ($p < .001$), the Caribbean ($p < .001$), and Central/South America ($p < .001$). Women born in the United States had greater Americanism than those born in Cuba ($p < .001$), Colombia ($p < .001$), the Caribbean ($p < .001$), and Central/South America ($p < .001$), and lower Hispanicism than those born in Cuba ($p < .001$), Colombia ($p < .001$), the Caribbean ($p < .001$), and Central/South America ($p < .001$). Women born in the United States had significantly lower immigration stress than those born in Cuba ($p < .01$), Colombia ($p < .001$), the Caribbean ($p < .01$), and Central/South America ($p < .001$). Cuban women had significantly lower immigration stress than women from Central/South America ($p < .001$) and Colombia ($p < .05$). Caribbean women had significantly lower immigration stress than women from Central/South America ($p < .05$) and Colombia ($p < .001$). For occupational stress, the difference between women from the Caribbean and Central/South America approached statistical significance ($p = .05$).

Table 1. Means (SD) for Woman in Five Birthplace Categories.

Variable	<i>F</i>	Cuba (n = 70)		Colombia (n = 186)		Caribbean (n = 61)		Central/South America (n = 188)		US (n = 42)	
Violence	3.43***	0.31	(0.48)	0.31	(0.43)	0.42	(0.50)	0.48	(0.57)	0.48	(0.66)
Americanism	41.03***	2.19	(0.81)	2.23	(0.60)	2.40	(0.91)	2.23	(0.70)	3.67	(0.46)
Hispanicism	40.19***	3.58	(0.37)	3.62	(0.30)	3.63	(0.41)	3.59	(0.40)	2.82	(0.61)
Occupational stress	3.09*	2.86	(2.42)	3.12	(2.52)	2.30	(1.69)	3.46	(2.78)	2.36	(2.14)
Marital stress	0.75	3.30	(2.79)	3.55	(2.87)	3.36	(2.73)	3.83	(2.92)	3.38	(2.98)
Immigration stress	20.89***	3.56	(3.03)	5.60	(3.69)	3.34	(2.91)	5.34	(4.21)	1.26	(1.84)
Self-esteem	7.83***	23.59	(6.00)	25.87	(3.83)	24.23	(4.08)	24.14	(5.05)	21.98	(5.44)
Control wife	5.10***	2.64	(2.27)	1.60	(1.22)	2.49	(1.95)	2.23	(1.88)	1.50	(0.91)
Years in the United States	105.40***	0.37	(0.29)	0.19	(0.16)	0.34	(0.26)	0.25	(0.18)	0.88	(0.19)
Age, years	10.18***	39.67	(8.16)	37.54	(7.98)	36.61	(9.50)	37.40	(7.53)	29.79	(10.53)
Education, years	11.41***	12.53	(2.36)	14.70	(3.19)	12.61	(3.37)	12.81	(3.80)	12.50	(2.98)
Monthly income	8.32***	2.78	(1.28)	3.56	(1.29)	2.80	(1.37)	3.04	(1.21)	2.83	(1.29)

Note: Square root of violence and stress variables were used in ANOVA, but actual M and SD are shown.

*p = .05. **p = .01. ***p = .001.

Mediation

Only those birthplaces (Colombia, $N = 186$, or other Central/South American nations, $N = 188$) that had statistically significant differences in IPV in post hoc Bonferroni tests were included in the mediation model. The initial mediation model did not have an acceptable fit to the data, $CFI = .62$, $RMSEA = .15$. Model fit was improved significantly when covariance between the errors of education and (a) income, and (b) control of wife were added to the model. The modified (with two additional covariances) model had acceptable fit to the data, $CFI = .94$, $RMSEA = .08$. As described in [Figure 1](#), significant paths were found between birthplace and income ($\beta = -.20$, $B = -0.26$, $SE_B = 0.07$, $p < .001$, 95% $CI(B) = -0.35, -0.13$), education ($\beta = -.26$, $B = -0.95$, $SE_B = 0.18$, $p < .001$, 95% $CI(B) = -1.24, -0.66$), self-esteem ($\beta = -.19$, $B = -0.86$, $SE_B = 0.23$, $p < .001$, 95% $CI(B) = -1.24, -0.47$), and beliefs that a man should be in control of his wife ($\beta = .21$, $B = 0.33$, $SE_B = 0.10$, $p < .01$, 95% $CI(B) = 0.16, 0.49$). Consistent with the ANOVA results, women born in other countries in Central/South America reported lower income, less education, greater control over wife, and lower self-esteem than women born in Colombia. Self-esteem was significantly related to IPV ($\beta = -.19$, $B = -0.01$, $SE_B = 0.002$, $p < .01$, 95% $CI(B) = -0.012, -0.005$), such that women with higher self-esteem had lower IPV. A significant path was also found between birthplace and IPV ($\beta = .14$, $B = 0.03$, $SE_B = 0.01$, $p < .05$, 95% $CI(B) = 0.01, 0.04$), controlling for education, income, self-esteem, and the belief that a man should be in control of his wife, indicating that women born in other Central/South American countries had significantly greater IPV than women born in Colombia. In addition, the product of the path from birthplace to self-esteem and from self-esteem to IPV was significant ($\beta = .037$, $B = 0.007$, $SE_B = 0.003$, $p < .01$, 95% $CI(B) = 0.003, 0.012$), indicating that self-esteem partially mediated the relationship between birthplace and IPV when differences in the demographic and cultural variables were accounted for. Combined, education, income, self-esteem, beliefs about controlling one's wife, and nativity explained a small amount ($R^2 = .08$) of variation in IPV.

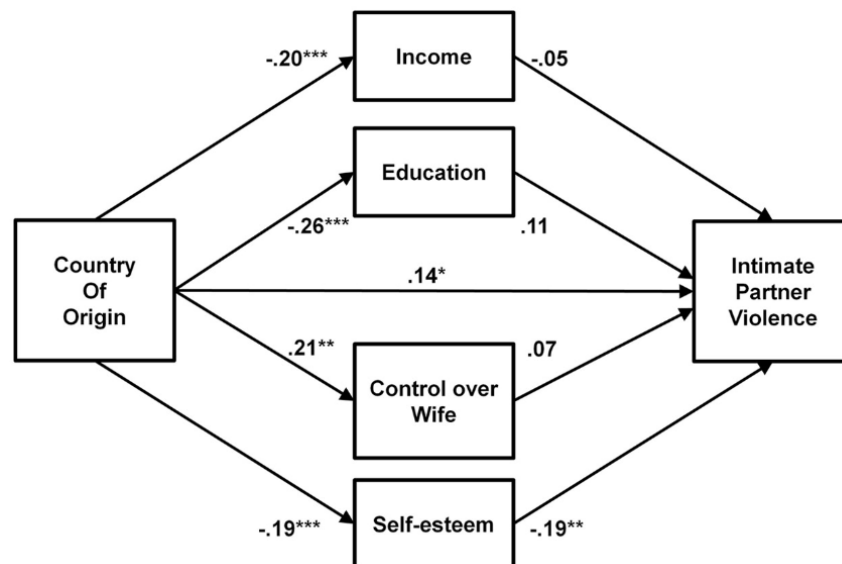


Figure 1. Self-esteem partially mediating the relationship between birthplace and interpersonal violence for women from Columbia and Central/South America (Standardized solution; $n = 374$).

Note: $CFI = .94$; $RMSEA = .08$. * $p < .05$. ** $p < .01$. *** $p < .001$. Correlated errors not shown. Country of origin: 1 = Central/South American, 0 = Columbia.

Discussion

To the authors' best knowledge, this study is the first to explore differences in a myriad of demographic and cultural variables, self-esteem, and IPV among Hispanic women of different countries of birth. The sample of women participating in this study reported varying ages, income and educational levels, percentage of their lives lived in the United States, acculturation levels, exposures to occupational and immigration stressors, beliefs regarding whether a man should be in control of his wife, self-esteem, and IPV according to birthplace. Although few research studies have accounted for the heterogeneity of Hispanics regarding these variables, this study suggests that important differences exist among Hispanics from different countries of birth in terms of health-related indicators. However, due to convenience sampling, the differences noted between the groups of Hispanic women compared in this study cannot be generalized to the general Hispanic population in South Florida or other areas in the United States.

Colombian and Cuban women in this study appeared to fare better than the other groups of women. Colombian and Cuban women had lower mean IPV scores than women from other Latin American countries and the United States, although these differences were only significant between Colombian women when compared to women from other Central/South American countries. Colombian women also had better socioeconomic indicators, reporting a higher monthly income and more years of education. The Colombian women's average age was the second highest of the subgroups, they spent the least amount of time in the United States, and they had the highest level of education, which may indicate that these women were educated outside of the United States. The demographic profile of the participants of the study is likely a result of the migratory patterns of Hispanics to the United States, and specifically to South Florida. For example, Colombians as a group are most concentrated in Florida (31.9%), have higher levels of education and income, more proficiency in English, and a greater likelihood of being married compared to U.S. Hispanics overall (Pew Hispanic Center, 2010). These migratory and demographic patterns appear to contribute to the vulnerability to IPV Colombian women face as a group. More research is needed to identify what factors relating to these patterns (e.g., economic, political, historical) are responsible for this vulnerability among Hispanic women from different subgroups.

One important factor that may be associated with vulnerability of Hispanic women for IPV is stress. Colombian and Cuban women scored lower on occupational and immigration stress than women from other Central/South American countries. This may be because these two groups comprise a large proportion of Hispanics living in South Florida. Hispanics represent 45% of the population living in Miami-Dade and Broward Counties, and Colombians and Cubans represent 4% and 20% of this population, respectively (United States Census Bureau, 2000). Being the majority of a minority (i.e., Cubans are the largest Hispanic subgroup, accounting for 45% of all Hispanics in the area) and/or living in enclaves in South Florida (i.e., participants were recruited from a highly dense Colombian neighborhood in Broward County), may indicate these women have access to more resources than the other minority Hispanic subgroups. These resources can assist in helping these women find desirable employment opportunities and navigate the immigration and legal systems. It is also important to note that anyone from Cuba has the right to claim refugee status in the United States because of political persecution, and Colombians may seek refugee status on an individual basis because of persecution from the guerrillas (UNHCR, 2010). These political considerations may assist Hispanics from these countries in obtaining legal status, and therefore provide access to more opportunities in the United States. However, because access to these resources and legal status were not directly assessed in this study, this hypothesis

could not be tested. More research needs to be conducted to tease out the effects that minority and immigration status may have on health outcomes, with both nationally representative groups of Hispanics and across Hispanic subgroups in different regions of the United States.

The beliefs regarding traditional gender roles, as measured in this study, did not appear to play an important role in predicting differences in IPV across Hispanic subgroups. However, this is not consistent with what others have documented in the literature. Santana, Raj, Decker, Marche, & Silverman, 2006 found that more traditional masculine gender roles are associated with an increased risk for the perpetration of IPV among a primarily Hispanic sample of Hispanic men (AOR = 2.1, 95% CI = 1.2, 3.6). The lack of a statistically significant relationship between gender role beliefs and IPV in this study may have occurred because only one aspect of machismo, the participants' perceptions of whether a man should be in control of his wife, was assessed. Although a measure of machismo that includes both positive and negative aspects of this concept was used (Arciniega et al., 2008), the scale did not perform adequately enough to be used in the analysis. Problems with this scale included very poor reliability and extreme scores on most items, both of which may have restricted the ability to detect significant relationships. The scale may have performed poorly because it was developed for Mexican American males, and the items may have not resonated in the same way for Hispanic women from diverse countries of origin. This measure was chosen by the authors because it was the only gender role scale specifically developed for Hispanics, and the items from this scale fit well with qualitative research conducted with the targeted community. The lack of a more suitable machismo measure speaks of the dearth of valid and reliable psychological instruments appropriate for use with Hispanic populations in general, and Hispanic female subgroups in particular. Additional research is needed to develop the instrumentation needed to perform rigorous studies of cultural beliefs with Hispanic populations.

Differences in demographic and cultural factors across Hispanic subgroups did not account for variations in IPV scores. However, self-esteem partially mediated the relationship between birthplace and IPV, thus indicating that this variable partially explained the difference in IPV scores within the model. Self-esteem has been found to be associated with IPV in other studies conducted with similar samples (Gonzalez-Guarda et al., 2009). Caution must be taken, however, in identifying self-esteem as a risk or protective factor, as this may lead to incorrect conclusions regarding the victim "causing" abuse. Hispanic women have described self-esteem to be a mechanism through which perpetrators victimize their partners. That is, Hispanic women have described how their partners started to victimize them by verbal and psychological forms of abuse that intentionally lowered their self-esteem and left them more vulnerable to battering (Gonzalez-Guarda et al., 2011).

The finding of self-esteem mediating birthplace and IPV may also have been a result of confounding. Investigators interacting with the women during the intervention sessions noted that the Colombian participants were more participatory than the other women during sessions, and often took control of group discussions. These participants also appeared more self-confident and empowered, which again, may have been related to variations in demographic factors across subgroups and/or relationship power. Researchers have documented the role that power imbalances in intimate relationships play in determining the ability of women to negotiate safer behaviors such as condom use (Pulerwitz et al., 2002) and in mitigating gendered-based risks such as IPV and HIV (Raj et al., 2004). Thus, self-esteem may have been found to mediate the relationship between birthplace and IPV because women with lower levels of self-esteem were more likely to have low relationship power. More research is needed to identify how individual-level factors, such as self-esteem, interact with relationship factors, such as relationship power,

and other cultural and environmental factors to place Hispanics from different countries of birth at risk for IPV. This research should include information regarding the characteristics of women's partners, whose attitudes, beliefs, and behaviors may have strong predictive values.

It is important to note that the current data set had several limitations. Self-esteem and IPV were measured in a single cross section, which limits causal interpretations. We cannot rule out the possibility that the experience of IPV led to decreases in self-esteem for the women in this sample, or that a third variable (e.g., personality differences in assertiveness) caused both low self-esteem and higher risk for IPV. Further, results from this study do not rule out the possibility that alternative models could fit the data as well or better, and the relatively modest amount of variation in IPV explained by these predictors suggests that many other variables might explain IPV. Of these, legal status in the United States and/or relationship power could have explained some of these relationships (Aldarondo et al., 2002; Gonzalez-Guarda et al., 2010). Nevertheless, in order to prevent turning participants away from the study because of fear of deportation or having a questionnaire that was too lengthy, legal status and relationship power were not assessed. Lastly, in addition to the problems regarding the measure used for machismo that were previously discussed, this measure was collected at a different time point (i.e., during one of the follow-up appointments) than the other variables in this study, which were collected at baseline. It is possible that the intervention had an effect on this variable.

This study supports the development of interventions that address the unique context, experiences, and culture of Hispanic women according to their birthplace. As supported by this study, Hispanic women vary significantly in demographic, cultural, and psychological factors according to their birthplace. As such, interventions addressing Hispanic women should take these differences into consideration. Although others have called attention to the need for social scientists and clinicians to acknowledge that Hispanics represent numerous cultural identities (Page, 2005), few culturally specific interventions considering these differences exist. This is likely due to the difficulty in striking a balance between being generalizable enough to apply to women of various cultural groups, but specific enough to meet the unique needs of these Hispanic subgroups. Striking this balance is crucial to the prevention of IPV among Hispanics and the general health and well-being of this population.

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