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Actor–Partner Interdependence Model Analysis of Sexual Communication and Relationship/Family Planning Factors Among Immigrant Latino Couples in the United States

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Abstract

The Latino population in the United States is quickly growing, and its unintended pregnancy rate is increasing. To decrease unintended pregnancies, couples must mutually agree on family planning. Communication between partners is one key factor identified in successful family planning for couples. Therefore, the purpose of this study was to examine sexual communication and its associations with sexual relationship power, general communication, and views on family planning. The Actor–Partner Interdependence Model was used to analyze dyadic influences of the chosen variables. Forty immigrant Latino couples were recruited from prenatal care clinics. The study results were grouped according to the three types of power structures: exhibition of men’s traditional *machismo* values, exhibition of women’s increased power in their relationships, and exhibition of men’s and women’s own empowerment with sexual communication. There was a negative association between men’s views on family planning and women’s sexual communication (exhibition of *machismo* values); a negative association between women’s sexual relationship power and their partners’ sexual communication (exhibition of women’s increased power); and positive associations between men’s and women’s general communication and sexual communication (exhibition of men’s and women’s own empowerment). Dyadic influences of sexual communication and associated variables need to be incorporated into interventions to facilitate family planning for couples.

Latinos are one of the most rapidly growing populations in the United States and comprise 17.4% of its population (U.S Census Bureau, 2015). The population increase is more a function of birth than immigration (Pew Hispanic Center, 2014), and the U.S. Census Bureau (2015) predicts that the Latino population will continue to grow and is estimated to reach almost 30% of the U.S. population by 2060. Latinos have a higher unintended pregnancy rate than non-Hispanic Whites, and this rate is increasing (Finer & Zolna, 2011). Minority and low-income women have a greater risk for unintended pregnancy, which is associated with delay in seeking prenatal care, less breastfeeding, and negative maternal and infant health outcomes (Kost & Lindberg, 2015; Tonlaar & Ayoola, 2014).

To decrease unintended pregnancies and improve maternal and infant health outcomes, mutually agreed family planning among couples is necessary. Family planning decisions are

influenced by how couples communicate (Kraft et al., 2007; Zukoski, Harvey, Oakley, & Branch, 2011), sexual relationship power within intimate relationships (Matsuda, McGrath, & Jallo, 2012; Pulerwitz, Gortmaker, & DeJong, 2000), and individual views on family planning (Harvey et al., 2009). According to Albritton et al. (2014), being Hispanic is a risk factor for the lack of sexual risk communication, particularly for men. Moreover, sexual communication is intimate and private, and has been linked to contraceptive use in previous research among adolescent couples (Gilliam, Neustadt, Whitaker, & Kozloski, 2011; Widman, Welsh, McNulty, & Little, 2006). These studies either used the individual as a unit of analysis, not couples, or did not sample adults with the highest birth rate among women of reproductive age (Centers for Disease Control and Prevention, 2013). Therefore, understanding the associations between sexual communication and sexual relationship power, general communication, and views on family planning, respectively, will allow researchers to create interventions that better support couples' family planning decisions.

Therefore, the purpose of this study was to examine the associations between sexual communication and sexual relationship power, general communication, and views on family planning, respectively.

The hypotheses of the study include:

1. For both men and women, there are positive relationships between sexual relationship power, general communication, and sexual communication, respectively.
2. For both men and women, there are negative relationships between views on family planning and sexual communication.

The research question of the study is the following: Which variables affect partners' sexual communication among this study sample of Latino couples?

In order to examine factors associated with sexual communication as dyad phenomena, researchers need a statistical analysis method such as the Actor–Partner Interdependence Model (APIM) that properly handles dyad-level data (Kenny, Kashy, & Cook, 2006). Unlike traditional statistical analysis techniques, which assume independence of the study sample, the APIM enables researchers to quantify associations between the individual's independent variable (IV) and dependent variable (DV), as well as the influence on a partner's DV. The APIM has been used in a variety of research studies that involve interpersonal relationships such as associations between caregiver and care receivers' spirituality and well-being (Kim, Reed, Hayward, Kang, & Koenig, 2011), and parent and adult child's stress and perceived conflict (Kenny et al., 2006). Using the APIM, researchers can quantify associations between not only the individual's IV and DV but also a partner's IV on the first individual's DV. Being able to measure two types of associations of non-independent samples simultaneously is a unique aspect of the APIM and gives this study the ability to examine the phenomena that affect couples as a unit.

Theoretical Model

Lewis et al. (2006) explain that dyad-level models take into account both intrapersonal (spouse level) and interpersonal (couple level) contexts of health behavior, recognizing the distinctiveness of individual couple's relationships. The APIM is a statistical model; therefore, the interdependence model of couple influence was created by adapting previous work on interdependence theory (Rusbult & Arriaga, 1997) and family systems theory (Kerr, 2013): The former helps researchers understand the interpersonal context of intimate couples' behaviors, while the latter helps researchers understand that each family member is emotionally connected to the other member of the family and family members react to each other's needs, expectations, and distress. The interdependence model of couple influence is a conceptual model that explains the connections between sexual communication and sexual relationship power, general communication, and views on family planning. Figure 1 shows the theoretical model used in this study: Men's sexual relationship power, general communication, and views on family planning, respectively, influence their own sexual communication; men's sexual relationship power, general communication, and views on family planning, respectively, influence women's sexual communication; women's sexual relationship power, general communication, and views on family planning, respectively, influence their own sexual communication; and women's sexual relationship power, general communication, and views on family planning, respectively, influence men's sexual communication.

Method

Participants and Procedures

A cross-sectional descriptive design was used to examine associations between sexual relationship power, general communication, views on family planning, and sexual communication, respectively, for a dyad sample. A convenience sample of 40 heterosexual Latino couples was recruited from prenatal care clinics in an urban area of the southeastern United States. Study inclusion criteria were the following: (a) Both partners were older than 18 years, (b) both were born in Latin America and emigrated to the United States; (c) couples were married or living together; and (d) female partners were in the second and third trimester of their pregnancy. Potential participants were identified by clinic staff and introduced to a research team member in the waiting rooms of the prenatal care clinics. Screening questions were given to women at a private location in the clinic to ensure privacy. When only women were present at the prenatal care clinics (which was common), they spoke to their partners about the study and got permission to make an appointment at a place and time convenient for the couples. Most participants chose their home in the evenings or on weekends for the study visit. Both study team members (a male research assistant [RA] and the author) went to the participants' home to conduct study visits. Once the study was fully explained and both members agreed to take part, each participant signed separate consent forms (obtained two consents per couple). Institutional review board approval was obtained from the author's university and one of the recruitment sites prior to data collection.

Both research team members collecting data were bilingual in English and Spanish. The RA, hired to ensure men's comfort in sharing information related to sexual matters, was a Latino male who recently emigrated to the United States and possessed demographic characteristics similar to the study participants. Matching of gender has resulted in a better response rate and lesser dropout rates in studies about sexual matters (Dykema, Diloroto, Price, White, & Schaeffer, 2012). Therefore, the male RA conducted data collection visits with men, and the author (female) collected data from women. The men's and women's data were collected in a separate area to ensure that partners' answers/opinions did not influence each other's responses. The study participants were given a choice of completing study questionnaires in English or Spanish. The participants also chose whether to read and complete the questionnaires themselves, or have the questionnaires read to them by the research team members. In the latter case, the participants marked their answers out of sight from the research team members to maximize their privacy and to minimize the chance they would give socially desirable answers. The study data were collected using paper-and-pencil measures. All couples were given a \$25 incentive after the completion of the data collection visits and a light snack during or after the visits.

Power analysis was done using Hauck, Gilliss, Donner, and Gortner's approach (1991). This approach was determined appropriate because it estimates the effective sample of dyad data in equivalence to the sample size of independent observations. Based on the observed Pearson correlation for sexual communication (0.03), the 40 dyads in the study comprise an effective sample size, equivalent to 78 independent observations. With 80% power for identifying a moderate multiple R^2 of at least 3% at 5% significance, our sample size is sufficient for the current study's data analyses.

Measures

Demographic questionnaires and four measures were administered to the participants. Sexual communication and general communication scales were translated and back-translated using the guideline for translating research measures supported by the American Academy of Orthopaedic Surgeons Institute for Work & Health (Beaton, Bombardier, Guillemin, & Ferraz, 1998). Translation and back-translation were done by two people at each step: English to Spanish translation was done by native Spanish speakers fluent in English; Spanish to English back-translation was done by native English speakers fluent in Spanish. After each translation, two bilingual experts compared the translation. After reviewing the back-translation and finalizing the Spanish version, two content experts reviewed the final version of the questionnaire and established content validity. In addition, 10 Latinos (demographic backgrounds similar to those of the study participants) completed the questionnaires and were asked what they understood from these questions. This process was done to ensure face validity.

Sexual Communication

The dyadic sexual communication scale (12-item) was created to measure perception of discussion about sexual matters with partners (Catania, 1998). A 6-point Likert scale was used (1 = *disagree strongly* to 6 = *agree strongly*), and a higher cumulative score indicates more open sexual communication with a partner. The dyadic sexual communication scale has

been validated and used among the Latino population, particularly those engaged in risky sexual behaviors. Criterion-related validity has been examined; consistent condom use has been significantly associated with a higher dyadic sexual communication score among minority adolescent girls (Catania, 1998). Catania, Pollack, McDermott, Qualls, and Cole (1990) examined internal consistency (Cronbach's $\alpha = 0.81$) and test-retest reliability (0.89), and performed factor analysis (obtained single factor). Sexual communication was positively correlated with relationship commitment both among men and women ($r^2 = .588$, $p < .001$; $r^2 = .454$, $p < .01$); thus, criterion validity was established. Cronbach's α for the scale was .7 for men and .74 for women in this study.

Sexual Relationship Power

The sexual relationship power scale (23-item) was created to measure the degree of sexual power within an intimate relationship (Pulerwitz et al., 2000). It consists of two subscales (relationship control, 15 items; decision making dominance, 8 items). The 4-point Likert scale was used for relationship control subscales (1 = *strongly agree* to 4 = *strongly disagree*), and three-answer options were given in the decision-making dominance scale to indicate dominance (1 = *your partner*, 2 = *both of you equally*, 3 = *my partner*). The higher scores indicate higher possession of sexual relationship power with a referring partner. The sexual relationship power scale was created and validated both in English and Spanish among young women in the United States (Pulerwitz, Amaro, Jong, Gortmaker, & Rudd, 2002; Pulerwitz et al., 2000).

Criterion validity was established: Sexual relationship power scale was associated with consistent condom use (Pulerwitz et al., 2002). The Cronbach's α of the scale was .84 (Pulerwitz et al., 2000). With appropriate revisions, the sexual relationship power scale has been used in many countries and with men. For this study, pronouns were changed from "him" to "her" to make the questions appropriate for men. Two content experts reviewed the questions to ensure content validity. Ten men were asked to complete the scale and stated their understanding of the questions to ensure face validity. The Cronbach's α s for the scale were .72 for men and .83 for women in the current study.

General Communication

The communication with the partner scale (13 items) was created by Stuart and Jacobson (1987) to measure quantity and quality of daily communication between partners in general. It is one of the scales included in the couples precounseling inventory that has been used in clinical as well as research settings. A 5-point Likert scale was used (5 = *almost always* to 1 = *almost never*), and a higher score represents higher quality and more frequent communication between partners. The communication with the partner scale has high construct validity with instruments of the same dimensions (behavioral exchanges, patterns of communication, sexual interaction, decision making, and conflict containment; Mostamandy, 2003). Criterion validity was established: The communication with the partner scale is positively correlated with relationship satisfaction for both men and women ($r^2 = .372$, $p < .05$; $r^2 = .33$, $p < .05$). The Cronbach's α of the couples precounseling inventory is .91. The Cronbach's α of the scale in this study was .72 for men and .83 for women.

Contraceptive Attitudes and Perception

The contraceptive attitudes and perception scale (21 items) was created in English and Spanish by Harvey's research team to measure an individual's views on family planning (Harvey, 2009). The author obtained permission to use it for the current study. The questions in the scale cover seven aspects of family planning that may be barriers to users (denial, knowledge, ambivalence, norms, partner, side effects, and hassle and cost). A 5-point Likert scale was used (1 = *do not agree at all* to 5 = *completely agree*; Harvey, 2009), and higher scores reflect greater barriers toward contraceptive use. The items from this scale have been used in HIV/sexually transmitted infection (STI)/unintended pregnancy prevention interventions (Harvey et al., 2009; Kraft et al., 2007). Validity and reliability of the scale have been established: Cronbach's alphas were .79 among 239 men and .74 among 254 women. Exploratory factor analysis was done using varimax rotation with Kaiser normalization. Seven-factor solution was determined as the best solution with loadings (0.405–0.836). Total variance explained by the seven factors was 37.42% (M. Harvey, DrPH, personal communication, April 2011). Cronbach's alpha of the scale was .87 for men and .65 for women in this study.

Analysis

First, basic demographic characteristics were gathered using SPSS statistics software, Version 19.0. Then, as referred to in Figure 2, the Actor Partner Interdependence Model (APIM) was used to conduct statistical analysis by Mplus 6.12. Kenny et al. (2006) referred to the independent variable as an explanatory variable and the dependent variable as an outcome variable. The APIM enables researchers to explain men's and women's explanatory variable effects on their own outcome variable (referred to as actor effects), and men's and women's explanatory variable effect on each other's outcome variable (referred to as partner effects). For example, *women's actor effect* refers to the effect women's sexual relationship power, general communication, and views on family planning each has on their own sexual communication, and *women's partner effect* refers to the effect women's sexual relationship power, general communication, and views on family planning each has on men's sexual communication.

The APIM parameters were estimated using structural equation modeling in a dyad-level structure. There are two dimensions factored into the analyses but not reported in this article: differences between men's and women's actor/partner effects, and error terms on men's and women's outcome variables. Given the complexity of the APIM model, the study focused on reporting and discussing actor and partner effects of the model. When using structural equation modeling for the APIM analyses, researchers can compute no measures of fit because it is a saturated model with zero degree of freedom (Kenny et al., 2006). The APIM takes into account the nonindependent nature of the dyad samples and quantifies their interdependence, thus making it an appropriate and innovative method for this study's analyses.

Results

Demographics

All 80 individuals (40 couples) chose to complete the questionnaires in Spanish. Their demographic characteristics are displayed in Table 1. Mean age of the participants was 28.2 years for men (standard deviation [SD] = 5.7) and 26.5 years for women (SD = 4.8). Mean gestational age was 28.5 weeks (SD = 7.8) at the time when women consented and completed the study. Close to half of the participants were from Mexico (men: 42.5%; women: 47.5%), and the rest were from Central America. Mean years living in the United States was 7.8 for men (SD = 5.0) and 6.7 for women (SD = 4.3). Most of the participants had completed some form of formal education: Among men, 37.5% completed first to sixth grade; 47.5% completed seventh to 12th grade. Among women 52.5% completed first to sixth grade; 45% completed seventh to 12th grade. Mean length of the current relationship was 4.8 years (SD = 4.3). Forty-three percent of women and 28% of men said they have children from previous relationships. Most of the men worked (65% full-time, 32.5% part-time), and most of the women stayed home and took care of home and children (70%). Types of relationships were as follows: 70% were living together without formal commitment (a common form of relationship among Latinos referred to in Spanish as “*acompañado*” or “*juntado*”), and 30% were married through the judicial system or religious organizations.

Actor–Partner Interdependence Model (APIM)

The author examined the actor and partner effects of the following three explanatory variables on the outcome variable (sexual communication): sexual relationship power, general communication, and contraception attitudes and perception. The results of the APIM analyses are shown in Figure 3a–c. In Figure 3a, there were positive associations between sexual relationship power and sexual communication (actor effects; men: $\beta = 11.235$, $p = .000$; women: $\beta = 13.297$, $p = .001$). Women’s sexual relationship power was negatively associated with men’s sexual communication (partner effect; $\beta = -8.885$, $p = .013$). In Figure 3b, general communication was positively associated with sexual communication (actor effects; men: $\beta = 0.705$, $p = .019$; women: $\beta = 0.726$, $p = .000$). Men’s general communication was negatively associated with women’s sexual communication (partner effect; $\beta = -0.523$, $p = .027$).

In Figure 3c, the author quantified actor and partner effects of contraception attitudes and perception. For the actor effect, there was a negative association between men’s contraception attitudes and perception and sexual communication ($\beta = -0.277$, $p = .000$). For partner effects, men’s contraception attitudes and perception had a negative association with women’s sexual communication ($\beta = -0.239$, $p = .000$). Women’s contraception attitudes and perception had a positive association with men’s sexual communication ($\beta = 0.252$, $p = .035$).

Discussion

The author used the APIM to examine associations between sexual communication and sexual relationship power, general communication, and views on family planning. This is a unique study that examined dyad-level data among recently immigrated Latino couples in the United States. The study hypotheses are partially supported, and the results are explained by Latino cultural concepts and the impact of acculturation, defined by changes in beliefs and behaviors as a result of individuals' contacts with people and environments with different cultures (Hazuda, Stern, & Haffner, 1988; Lopez-Class, Castro, & Ramirez, 2011). All immigrants experience acculturation to a host country to different degrees, depending on how much they believe in the Latino cultural concepts to begin with and how they are influenced by the host country's culture.

The cultural concept of *machismo* may play a role in explaining some of the study results because it defines how men should function in a sexual relationship. *Machismo*—male dominance in English—is commonly observed among Latino men, and dictates how a man should behave (e.g., demonstrate a dominating attitude to those inferior to them and demand subordination; Cuéllar, Arnold, & González, 1995). As indicated, the term *machismo* is often associated with the negative connotations indicating men's pride and overbearing dominance related to their wives and families, although *machismo* also signifies the positive aspect of men's protecting and courageous nature. Latino men tend to hold stronger *machismo* values when they grow up with limited resources (e.g., completed less than a secondary school education, grew up with lower socioeconomic status, and/or from a rural area; Speizer, Whittle, & Marion, 2005). On the other hand, women are expected to demonstrate *marianismo*, which means being like Mary (the mother of Christ) by performing as dutiful mothers and wives (Wood & Price, 1997). According to *marianismo* values, Latina women should not speak to men about sexual matters because communicating preferences about sexual matters may be seen as promiscuous behavior (Castillo, Perez, Castillo, & Ghosheh, 2010). Thus, women are traditionally in a position making it difficult to be assertive in sexual communication.

In the current study, when men perceive more barriers toward family planning, they are less open about sexual communication with their partners. When men perceive more barriers toward family planning, their partners are also less open about sexual communication. *Machismo* is one of the family planning-related cultural values that the contraceptive attitude and perception scale includes, and it has been shown to negatively influence sexual communication between partners (Unger, 2000). Men with stronger *machismo* values may not be open to family planning conversations because they may perceive that admitting lack of knowledge about family planning may threaten their dominant position. They may also perceive a threat to their dominant position by having to negotiate and seek agreement about intimate matters that they know little about. In fact, two qualitative studies with newly immigrated Latino men revealed that the participants grew up never having talked about family planning or sexual matters with their families and that they did not where and how to obtain the information or services (Harvey, Branch, Hudson, & Torres, 2013; Sable, Campbell, Schwarz, Brandt, & Dannerbeck, 2006). Rather than focusing on the negative aspects of *machismo*, the author suggests that approaching its positive side could help

engage men and decrease barriers toward family planning. For example, a family planning intervention would be done on the basis that men need to know about family planning to protect their family as a head of the house. Supported by the evidence about the influence of cultural values on the lack of family planning-related knowledge, men with more barriers toward family planning suppress their own and their partners' sexual communication.

One of the common misperceptions regarding family planning method use among Latinos is its contraindication by their religion (more strongly with Catholicism). Religion and religious service attendance have not been associated with Latinas' contraceptive use (Romo, Berenson, & Segars, 2004). One of the contraceptive attitude and perception questions in this current study was to assess whether religion is a contraindication to respondent's contraceptive use. Eighty-five percent of men and 88% of women did not agree at all that using birth control is against their religious beliefs.

The higher general communication scores were associated with men's and women's own higher sexual communication. No study has examined the relationship between general communication and sexual communication among Latino couples. However, Mark and Jozkowski (2013) examined the relationship between communication and sexual communication related to relationship satisfaction among young adults. They found that if couples communicate well about general matters, they are more likely to talk about intimate and private matters. In contrast, when men rate more openness toward general communication, their partners tend to be less open about sexual communication. Even though men perceive that they communicate more and have open communication with their partners, such behavior may be perceived as dominating by women. Thus, the concept of *machismo* also helps explain this result.

For sexual relationship power, when men feel powerful in their relationships, they perceive themselves to have more open communication with their partners about sexual matters, and when women feel powerful in their relationships, they perceive themselves having more open communication with their partners about sexual matters. According to the integrative literature review of the sexual relationship power scale by Matsuda et al. (2012), sexual relationship power is associated with health protective sex behaviors (e.g., consistent condom use) among Latinas. Therefore, when men and women feel powerful in their relationships, they may be more likely to take charge of their sexual behaviors, including discussion of sexual matters with their partners. This significant result for women is notable because according to the traditional cultural value of *marianismo*, women are not supposed to speak about sex; otherwise, they are seen as promiscuous (Castillo et al., 2010; Gómez & Marín, 1996). Moreover, women's sexual relationship power is negatively associated with their partners' sexual communication. In other words, when women feel more powerful in their relationships, their partners tend to be less open about sexual communication. Also, the study showed that the lower the women's barriers for family planning, the lower is their partners' sexual communication openness.

These study results indicate a reverse pattern of *machismo* values. Women are taking a dominant position in their relationships that suppresses men's sexual communication. This is likely a shift in women's relationship dynamics emerging from the rapid changes in Latino

couples' roles in the United States. The study participants were recently immigrated Latino couples: Mean length of their stay in the United States was less than 8 years. Moreover, all of them chose to complete the questionnaires in Spanish. Less than 10 years since emigration is considered newly immigrated to a host country (Harvey et al., 2009), and Spanish as the language of command is an indicator of lower acculturation level (Wallen, Feldman, & Anliker, 2002). There is an growing debate on multidimensional nature of acculturation (behaviors, attitudes, values, and language acquisition) that may not have been captured by language as a sole indication of acculturation (Lopez-Class et al., 2011). The current study shows that women are becoming powerful in their relationships and negatively influencing their partners' sexual communication, which indicates the process of acculturation on their values and behaviors.

There are several ways that women feel powerful in their relationship. Social exchange theory indicates three ways of gaining power (Emerson, 1981): (a) the degree to which a person feels dependent on his or her partner; (b) the amount of resources available; and (c) any alternatives that exist outside of the relationship, including not being bound to stay in the current relationship. As Latinos immigrate to the United States, women who might not have worked in their countries are now working or even becoming breadwinners if their partners are laid off or do not have work. Women gain economic independence through earning income and power by actively contributing to the household. As a result, women feel that they have more options in life. Given that the American culture emphasizes women's rights and independence, Latinas may be experiencing acculturation regarding their values about women. For this study, 70% of the women said that they took care of home and children. However, of these women a number said that they stopped working outside the home recently. Many women worked on their feet all day, and their job duties included heavy lifting; they believed that the physical changes of pregnancy made it difficult to continue working. Therefore, women in this sample may have experienced economic independence at one point, if not at the time of data collection.

Clinical Implications

Prenatal care clinics have a unique advantage of seeing the same patients repeatedly over the course of their pregnancy, and it would be a desirable place to build relationships and trust to find out more about women's sexual relationships and views on family planning. Some Latinas may seek health care only during pregnancy, due to competing life demands, lack of resources (e.g., payments and transportation), or fear of public places. Therefore, prenatal care services offer an opportunity to interact with, support, and help them and their partners as couples make appropriate decisions for family planning after delivery.

Men's family planning attitudes and perceptions are related to lack of knowledge and their traditional gender role in sexual matters (Harvey et al., 2013). Even though opportunities are limited, when men come to prenatal care visits with their partners, clinic staff and health care providers need to facilitate both partners getting involved in prenatal care and postpartum family planning when appropriate. The author recognizes that appropriate methods to promote a couple's family planning would differ depending on the couple's relationship dynamics: If health care providers suspect an abusive relationship, bringing both

partners into the same exam room would rather be harmful. When abuse is not suspected, couples' family planning counseling tailored to their relationship dynamics would be the best approach so that they can get the most appropriate family planning information and communication guidance. Trying to change their cultural values (e.g., *machismo* and *marianismo*) may not be feasible. However, we can support men in learning about family planning without being judgmental, which could reduce barriers and promote sexual communication among partners. Such efforts to empower men will stimulate a positive aspect of *machismo*, to be protecting of and courageous for family.

Research Implications

Examining sexual communication with dyad analyses yields new and important perspectives for Latino couples. As becoming pregnant is not just about women, men's influence must be examined with an appropriate statistical method such as the APIM. Much human behavioral research aims to examine phenomena involving more than one person, so dyad analysis should be a part of the researchers' toolbox.

The current practice can be improved through investigating translatable or clinically feasible ways to address family planning with women and couples during short clinic visits. Considering individual and couple differences, it would be innovative to design technology-based, highly individualized interventions that customize contents based on couples' relationship dynamics, sexual communication, and views on family planning. In this way, interventions can be delivered in or outside of clinic settings, and each couple can work on areas the partners want to strengthen to increase family planning knowledge and sexual communication. Immigrant Latinos may not seek health care services very often due to multiple life demands, communication and health system barriers, and/or low health literacy (Garcés, Scarinci, & Harrison, 2006; Ransford, Carrillo, & Rivera, 2010). Therefore, researchers should design interventions that maximize the use of limited opportunities they have with women and couples in health care services.

Limitations

This was a cross-sectional descriptive study. Therefore, information was gained only at one point in time. The author believes that during pregnancy would be the optimum time to approach couples about family planning because couples do not have to worry about using family planning methods to prevent pregnancy. During pregnancy is also a good time to reflect on couples' pregnancy intention and contraceptive use or nonuse leading to the current pregnancy. Moreover, health care providers speak with women during pregnancy about family planning during routine clinic visits. In regard to the uniqueness of the pregnancy period, the author acknowledges that women may feel more powerful in their relationships than usual because of their physical and emotional needs. Even after considering the uniqueness of the pregnancy period, prenatal care is deemed to be the best time to approach couples about family planning. Prenatal care is one of the few health care services that women repeatedly seek for themselves. Therefore, it would be appropriate to approach couples about family planning to better care for their health and family well-being, particularly for those who are underserved and have limited access to health care.

This is a descriptive study; therefore, the analyses indicate associations only. This study used a convenience sample at two clinics in the urban areas of the southeastern United States. Thus, we have data only from couples who were willing to participate. People who did not choose to participate may have different characteristics than those who did.

The Cronbach's alpha of the contraceptive attitudes and perception scale for women was particularly low ($\alpha = .65$). There are several reasons that Cronbach's alphas are low, such as small sample size and small numbers of questions in a scale (Lynn, 2013). Even with the low Cronbach's alpha of the women's contraceptive attitudes and perception scale, there were significant associations with sexual communication.

Conclusion

The complex findings affirm that it is critical to examine associations between sexual communication, sexual relationship power, general communication, and views on family planning among Latino couples. Knowing the interdependence of respective factors is critical in building interventions to assist family planning decisions for couples, and in turn to decrease unintended pregnancies among an increasing Latino population in the United States. This study provides information needed to create health care services that are tailored to Latino couples in promoting the couples' communication, thus helping them make the best decisions for their family planning.

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Figure 1.

Theoretical model on dyad sexual relationship power (SRP)/general communication (GC)/views on family planning (VFP) and sexual communication (SC).

Figure 2.
Actor-Partner Interdependence Model.

Figure 3.

Results of the Actor–Partner Interdependence Model (APIM) analyses on sexual relationship power (SRP)/general communication (GC)/contraception attitudes and perception (CA&P) and sexual communication (SC).

Table 1

Participant demographic characteristics.

Individual characteristics	Women (<i>n</i> = 40)	Men (<i>n</i> = 40)
Age (years, <i>SD</i>)	26.5 (4.8)	28.2 (5.7)
Gestational age of the fetus (weeks, <i>SD</i>)	28.5 (7.8)	N/A
Country of origin (count, percentage)		
Mexico	19 (47.5)	17 (42.5)
El Salvador	11 (27.5)	9 (22.5)
Honduras	11 (27.5)	7 (17.5)
Guatemala	5 (12.5)	6 (15)
Other Central American countries	N/A	1 (2.5)
Time in the United States (years, <i>SD</i>)	6.7 (4.3)	7.8 (5.0)
Education (count, percentage)		
No formal education	N/A	2 (5)
First to sixth grade	21 (52.5)	15 (37.5)
Seventh to 12th grade	18 (45)	19 (47.5)
College or more	1 (2.5)	4 (10)
Work status (count, percentage)		
Full-time	6 (15)	26 (65)
Part-time	6 (15)	13 (32.5)
Take care of home/children	28 (70)	0
Not working (on disability)	0	1 (2.5)
Existence of children from previous	17 (43)	11 (28)
Relationship (count, percentage)		
Couple characteristics		
Relationship status (count, percentage)		
Living together (“acompañado” or “juntado”)	28 (70)	
Married	12 (30)	

Note. *SD* = standard deviation