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## Intimate Partner Violence Among Female Sex Workers and Their Noncommercial Male Partners in Mexico: A Mixed-Methods Study

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### Abstract

Utilizing mixed methods, we examined intimate partner violence (IPV) behaviors among 428 female sex workers (FSWs) who use drugs and their noncommercial male partners in Tijuana and Ciudad Juarez, Mexico. Half of all participants reported perpetrating and experiencing at least one type of IPV behavior in the past year. In interviews, drug use emerged as an important theme associated with IPV behaviors, and we found men and women differed in their motivations for engaging in IPV behaviors. Findings highlight how gender and power are interlinked with and may exacerbate drug use and IPV behaviors among marginalized populations.

### Keywords

female sex workers; couples; drug use; intimate partner violence

### Introduction

Intimate partner violence (IPV), defined as “physical, sexual, or psychological harm by a current or former partner or spouse” (Breiding, Basile, Smith, Black, & Mahendra, 2015), carries significant public health consequences, including depression, posttraumatic stress disorder (PTSD), and physical injury (Hines & Malley-Morrison, 2001; Schumacher, Feldbau-Kohn, Slep, & Heyman, 2001). High rates of IPV in the context of sexual

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partnerships have been reported among couples who use drugs (El-Bassel et al., 2007) and female sex workers (FSWs) and their male clients (Carlson et al., 2012). However, few studies have examined the dynamics and contexts surrounding IPV within dyads of FSWs who use drugs and their noncommercial male partners. Many FSWs have intimate partners (Fleming, Barrington, Perez, Donastorg, & Kerrigan, 2015), experience high levels of IPV (Ulibarri, Strathdee, Lozada, et al., 2010; Wechsberg, Luseno, & Lam, 2005), use drugs (Strathdee et al., 2008; Ulibarri, Strathdee, & Patterson, 2010), and are at heightened risk of HIV (Shannon et al., 2015). Furthermore, although much of the research on IPV among heterosexual couples focuses on violence perpetrated by men against women, it is important to acknowledge that violence can occur toward men as well. However, there is a paucity of research examining IPV behaviors among both men and women in relationships and the dynamics and context that may contribute to IPV behaviors such as drug use, relationship power imbalances, and nonconformity to traditional gender roles. The purpose of our mixed-methods study was to examine the prevalence and social context of IPV among FSWs who use drugs and their steady, noncommercial male partners to improve HIV risk reduction interventions targeting safer sex and injection drug use for this population. Data for this study were collected as part of a larger epidemiological study of HIV risk among FSWs and their noncommercial male partners in Mexico (Bazzi et al., 2015).

### **IPV Among Couples Who Use Drugs**

High rates of IPV behaviors have been documented among couples who use drugs (Caetano, Nelson, & Cunradi, 2001; Chermack, Walton, Fuller, & Blow, 2001; Marshall, Fairbairn, Li, Wood, & Kerr, 2008). For example, Stuart et al. (2008) found drug use was often associated with IPV perpetration by both men and women who were arrested for violence and court-referred to batterer intervention programs in Rhode Island. Moreover, Stuart and colleagues (2008) found a linear relationship between increasing number of drugs used and increasing frequency of physical violence perpetration among men. Drug use was also associated with violence perpetration among women, but a linear relationship was not detected (Stuart et al., 2008). In a study of men and women in drug treatment, Chermack and colleagues (2001) found the prevalence of IPV victimization to be roughly equal among men and women (61% vs. 65%). However, why drug-involved women engage in IPV behaviors is less known. Other studies have documented the co-occurring nature of substance use and IPV behaviors, such as arguing over paying for or sharing drugs (Amaro & Hardy-Fanta, 1995; Rosenbaum, 1981; Sterk, 1999). In a subsequent study, Stuart and colleagues (2013) found that both IPV victimization and perpetration were more likely to occur on heavy substance use days among women attending services for domestic violence offenders. It is important to note that much of this research was conducted with individuals reporting about their relationships and behaviors; few studies on these topics have enrolled couples and assessed IPV from the perspectives of both members of the couple.

### **IPV Among FSWs and Their Noncommercial Partners**

Although previous international research has found that FSWs experience high rates of physical and sexual violence from clients (Dalla, Xia, & Kennedy, 2003; Sanders, 2004), violence within FSWs' noncommercial relationships (e.g., with boyfriends, spouses) remains less studied. Qualitative data from FSWs in Mumbai, India, showed that FSWs'

noncommercial partners who had been paying clients often evolved into physically violent intimate partners and eventually physically and sexually violent pimps (Karandikar & Próspero, 2010). A study examining partner violence among FSWs in China found that the prevalence of IPV was higher in FSWs' relationships with their noncommercial male partners than their male clients (Zhang et al., 2012). In addition, previous research in the Mexico–U.S. border region has shown high levels of IPV victimization among FSWs (Ulibarri, Strathdee, Lozada, et al., 2010). However, as in the majority of IPV research, these data were obtained from individuals' reports of IPV victimization. Although couples-based research regarding IPV may be contra-indicated in some circumstances such as severe and dangerously abusive relationships, a strength of the current study was that we were able to obtain information regarding IPV behaviors from both members of the couple and employ mixed methods to qualitatively explore corresponding quantitative data regarding IPV behaviors.

### **IPV and Bidirectionality**

Historically, IPV research among diverse heterosexual couples has rarely assessed women's engagement in abusive behaviors toward men (Archer, 2000; Straus, 2011) or how both members of a couple may engage in IPV behaviors (referred to as “bidirectionality” of IPV behaviors). Some research has shown that women who engage in violent behaviors may perpetrate less severe forms of physical violence than men (Saunders, 2002; Weston, Temple, & Marshall, 2005). On the contrary, a meta-analysis conducted by Straus (2011) revealed that severe assault can be reciprocal in that a male who severely assaults his female partner is highly likely to experience severe assault as well. Nevertheless, the motivations for becoming violent often differ between men and women, with women resorting to violence as a means of expressing anger or in response to abuse from men, and men engaging in violent behaviors as a form of control over women (Bair-Merritt et al., 2010). However, little is known regarding whether reasons for engaging in IPV perpetration differ when stereotypical gender norms are violated, such as in the case of FSWs in Mexico.

### **Theory of Gender and Power, and Bidirectionality of IPV**

It is important to explore and better understand the social environment and gendered dimensions of IPV, particularly in the context of drug use and sex work along the Mexico–U.S. border. Our analysis draws from theories of gender and power to conceptualize gender relations, including engagement in IPV, as a dynamic process shaped by broader socioeconomic and cultural contexts (Connell, 1987, 2012). The theory of gender and power gives attention to several key factors that shape relationships between heterosexual women and men, including the division of labor, which examines economic inequalities; the sexual division of power, which gives primacy to issues of power and control in intimate relationships; and cathexis, which addresses social norms and the importance of affect in shaping ideas and desires within relationships (Connell, 1987, 2012).

In the context of Mexico's Northern border, where individuals' abilities to earn a living wage may be constrained by the depressed local economy, traditional gender role norms may be more relaxed due to the necessity for women and men to work and contribute equally to the combined household. In economically constrained urban cities, informal economic

opportunities may take the form of sex work among women and odd jobs and petty crimes for men (Pisani, Richardson, & Patrick, 2008). This trend may increasingly constrain men from their capacity to fulfill socially and culturally assigned roles as household providers, whereas women are emerging as the low-wage earning heads of households (González de la Rocha, 2006). In previous ethnographic work with our population of men and women, Syvertsen, Robertson, Rolon et al. (2013) found women's participation in informal sex work exacerbated male partners' feelings of exclusion and emotional hardship. This is consistent with ethnographic work among male sex workers in the Dominican Republic that found that while sex work provided economic security, it threatened couples' emotional security and violated culturally prescribed sexual and gender norms (Padilla, 2007). Although the Padilla study was with male sex workers in heterosexual relationships, there may be parallels to experiences among women who engage in sex work and are in heterosexual relationships in the context of Mexico's Northern border.

### Study Setting

Our study is set in the two largest Northern border cities in Mexico. Tijuana, south of San Diego, California, has a population of 1.6 million residents, and Ciudad Juárez, in the state of Chihuahua, has a population of 1.3 million residents and forms a port of entry with El Paso, Texas. This study was conducted in 2010 and 2011, during the height of drug trafficking-related violence in these border communities (Brouwer et al., 2006; Bucardo et al., 2005; Molzahn, Rios, & Shirk, 2012). Witnessing community violence has been associated with higher odds of personal experiences of violence among FSWs in Tijuana and Ciudad Juarez because of overall societal levels of violence (Conners et al., 2016). Understanding substance use and personal violence experiences such as IPV among FSWs and their male partners in communities heavily affected by drug use and violence in general could help identify drug and violence prevention strategies and improve quality of services for this socially marginalized population.

### Purpose

The goal of this mixed-methods study was to quantitatively examine the prevalence, type, severity, and bidirectionality (perpetration and victimization among both partners) of IPV behaviors and qualitatively explore the social contexts in which these IPV behaviors occurred among FSWs who use drugs and their noncommercial male partners in Tijuana and Ciudad Juarez, Mexico, to improve future HIV prevention interventions. Based on our previous research with FSWs in these two cities finding 35% prevalence of IPV violence victimization (Ulibarri, Strathdee, Lozada, et al., 2010), we anticipated that IPV victimization would be relatively similar in this sample. Given the lack of IPV victimization research among men in Mexico and Straus's (2011) findings of reciprocal IPV behaviors among couples in other settings, we hypothesized that the prevalence of IPV victimization among male partners would be similar to that of their female partners. Based on our fieldwork with couples in these communities (Syvertsen, Robertson, Palinkas et al., 2013; Syvertsen, Robertson, Rolón et al., 2013), we also expected that the contexts and motivations surrounding IPV would differ for men and women, and that women's engagement in sex work would be a key factor underlying IPV. Previous ethnographic work with this population found that relationship conflict was widespread and exacerbated by the

material and physical insecurity that couples experience living in the Mexico–U.S. border region (Syvertsen, Robertson, Rolón et al. 2013). It also found that men’s limited economic opportunities, drug addiction, and loneliness made them more emotionally and economically invested in their intimate relationships with their female partners who engaged in sex work than conventional gendered stereotypes would avail (Syvertsen, Robertson, Palinkas et al., 2013; Syvertsen, Robertson, Rolón et al., 2013). A better understanding of the context in which drug use, interpersonal conflict, and economic vulnerability converge could inform the design of couples-based substance use and HIV prevention interventions among socially marginalized couples.

## Method

### Study Design and Population

We utilized quantitative and qualitative data from a mixed-methods, social-epidemiological study (*Proyecto Parejas*) of 214 FSWs and their primary, intimate male partners ( $n = 428$ ) in Tijuana ( $n = 212$ ) and Ciudad Juárez ( $n = 216$ ), Mexico, as described elsewhere (Syvertsen et al., 2012). Briefly, outreach workers familiar with the neighborhoods and study populations used targeted and snowball sampling to recruit women from areas in the cities where frequent sex work and drug use occur (bars, motels, streets, alleys). Inclusion criteria for women included the following: being at least 18 years of age; reporting exchanged sex for money, drugs, shelter, or goods in the past 30 days; reporting ever using heroin, cocaine, crack, or methamphetamine; reporting having a noncommercial male sexual partner for at least 6 months; and reporting having sex with that partner in the past 30 days. IPV severity was assessed in a series of questions about the type and severity of IPV, and women who feared immediate life-threatening violence as a result of participating in the study were screened out of the study for safety concerns (Syvertsen et al., 2012). Eligible women were invited to bring their male partners into the study offices for a second screening to assess men’s eligibility, which included being 18 years of age or older, reporting being in a sexual relationship with the eligible FSW partner for at least 6 months, and having had sex with this partner within the past 30 days. In addition, the series of questions about the type and severity of IPV within relationships was repeated for women and men to screen out additional ineligible cases. Eligible couples provided written informed consent for quantitative and qualitative interviews and HIV/sexually transmitted infection (STI) testing. Institutional review boards at the University of California, San Diego, the Hospital General and El Colegio de la Frontera Norte in Tijuana, and the Universidad Autónoma de Ciudad Juárez approved all study protocols.

### Data Collection and Measures

Quantitative data were collected during 2010–2011 via interviewer-administered baseline surveys lasting 1–2 hr. Measures included demographics (e.g., age, education, and income), relationship characteristics (e.g., relationship length, number of children), sexual risk behaviors, and lifetime and recent drug use. Past year prevalence and severity of IPV was measured using a modified version of the Revised Conflict Tactics Scale–Short Form (CTS2 Short Form; Straus & Douglas, 2004). A total of eight dichotomous (“yes” or “no” response) items measured prevalence of IPV perpetration and victimization experienced by each

partner. We computed separate IPV perpetration and victimization total scores by summing the number of “yes” responses to the IPV perpetration and victimization items. Cronbach’s alpha for the eight IPV perpetration items was .84 for women and .75 for men. Cronbach’s alpha for the eight IPV victimization items was .84 and .76 for FSWs and male partners, respectively. Severity was determined by categorizing type of IPV behavior (e.g., minor and major forms of psychological aggression, physical assault, injury, and sexual coercion) based on scoring procedures recommended by Straus and Douglas (2004) for the CTS2–Short Form. Each individual was compensated US\$20 for the interview and HIV/STI testing.

We also selected a subset of couples for qualitative interviews using purposive sampling (Johnson, 1990) for maximum variation in age, length of relationship, male employment status (as a proxy for dependence on the female’s sex work), and type of drug use (injection vs. noninjection drug use and stimulants vs. depressants). Bilingual interviewers used semi-structured guides to conduct individual and joint interviews exploring relationship conflict, power, and gender role dynamics and drug use with 41 couples (18 couples in Tijuana and 23 couples in Ciudad Juarez for a total of 122 qualitative interviews) between February 2010 and March 2011. Couples were compensated US\$20 for the joint qualitative interview and an additional US\$20 for each individual qualitative interview. All qualitative interviews were audio-recorded and transcribed verbatim following a structured protocol (McLellan, MacQueen, & Neidig, 2003).

## Data Analysis

This mixed-methods analysis utilized baseline quantitative data to examine prevalence and severity of IPV among the couples, whereas qualitative data provided a deeper understanding of the context in which IPV behaviors and conflict occurred according to participants. First, descriptive statistics (e.g., frequencies, means, sums) were computed for both FSWs and their male partners for all demographics (e.g., age, relationship length, years of education, number of children), drug use, and IPV variables. We utilized *t* tests or Wilcoxon rank-sum tests for continuous variables and paired *t* tests or McNemar’s chi-square tests for binary and categorical variables to examine differences in characteristics and IPV behaviors between women and men. The Statistical Package for the Social Sciences (SPSS version 23) was used to conduct all quantitative analyses.

Next, thematic analyses of qualitative data involved a collaborative, multistep process. Our bilingual research team developed a codebook based upon key topics in the interview guide and emergent themes (MacQueen, McLellan, Kay, & Milstein, 1998). Coding was split between four primary coders who discussed and resolved any issues during the analysis process and refined codes as necessary. Finalized codes were applied utilizing MAXQDA software. Coders wrote memos about important findings and crosscutting themes regarding relationship conflict, IPV behaviors, and how substance use and relationship dynamics might influence couples’ IPV experiences. Our analysis followed an iterative process of discovering and confirming themes, as descriptive statistics identified prevalence and severity of IPV behaviors that we then looked to the qualitative data to contextualize and provide an enhanced understanding of couples’ IPV experiences. Representative quotes were selected to illustrate the context in which relationship conflict and IPV behaviors occurred.



All quotes are gleaned from individual interviews, unless indicated otherwise, and names are pseudonyms to protect confidentiality.

## Results

### Characteristics of Couples

Participant characteristics are presented in Table 1. The average age of participants was 35.3 years and the mean relationship length with current partner was 4.5 years. Most participants (83.6%) reported having at least one child. In regard to recent drug use, 91% of women and 86% of men had used cocaine, heroin, crack, and/or methamphetamine in the past 6 months. Characteristics of the qualitative subsample of 41 couples ( $n = 82$ ) were similar to the overall cohort, as previously described (Bazzi et al., 2016; Syvertsen, Robertson, Palinkas et al., 2013).

### Prevalence of IPV Behaviors

Of the total sample, 49.1% of participants reported perpetrating at least one type of IPV behavior within the past year, and 47.4% reported being the victim of at least one form of IPV behavior within the past year. Table 2 provides the prevalence of IPV perpetration and victimization behaviors by type for women and men. We also examined whether both members of the couple engaged in violent behaviors toward one another or whether only one partner perpetrated IPV behavior (Table 3). Among the entire sample, 70 couples (32.7%) reported engaging in bidirectional IPV behaviors. IPV perpetrated by male partners only occurred in 39 couples (18.2%) and by female partners only in 31 couples (14.5%).

### Types of IPV Behaviors

**Psychological aggression.**—Psychological aggression was the most common type of IPV behavior reported by participants: 46.7% ( $n = 199$ ) reported perpetrating some form of psychological aggression. Of those who perpetrated psychological aggression, 36.7% ( $n = 157$ ) engaged in minor psychological aggression (e.g., insulted, swore, shouted, or yelled at their partner), 0.7% ( $n = 3$ ) engaged in major psychological aggression (e.g., destroyed something or threatened to hit their partner), and 9.1% ( $n = 39$ ) reported perpetrating both minor and major psychological aggression toward their partner (categories are mutually exclusive). Reports of psychological aggression victimization are reported in Table 2. Psychological aggression victimization was significantly different by gender ( $\chi^2 = 17.06$ ,  $p < .01$ ), with more males reporting psychological aggression victimization.

In the qualitative interviews, Diego, age 40, from Ciudad Juarez, described experiencing minor psychological aggression from his female partner:

She's the one that always starts fighting, verbally, and we start arguing because she starts telling me that I don't earn enough money and that she wants more, do you know what I mean? And we start fighting from there.

Mariana, age 44, from Tijuana, said that verbal aggression can be more hurtful than physical abuse: "He talks shit about me and I say, you very well know that is the worst way to hurt someone. You are hurting someone more with your tongue than with a stick."

**Physical assault.**—In regard to physical assault behaviors, 24.2% ( $n = 104$ ) of individuals reported that they physically assaulted their partner. Of those, 12.9% ( $n = 55$ ) reported engaging in only minor forms of physical assault (e.g., pushing, shoving, or slapping), 9% ( $n = 4$ ) reported engaging in only major forms of physical assault (e.g., punching, kicking, or beating up their partner), and 10.5% ( $n = 45$ ) reported perpetrating both minor and major physical assault. Significantly more women perpetrated physical assault than men ( $\chi^2 = 11.26, p < .05$ ). The prevalence of physical assault victimization is available in Table 2.

As an example of female-perpetrated physical assault, Carolina, age 29, from Tijuana, described how she hit her male partner when she became jealous of him talking to another woman: “Once, a slap in the face or I hit him, because I was jealous. Sometimes he is talking [to another woman] and then I suddenly arrive and bam—a slap in the face.”

Ramona, age 20, from Tijuana, provided an example of male-perpetrated physical assault. When asked whether her partner had ever hit her, she described a time when she was pregnant and her partner beat her:

Also, when I [was pregnant], um I remember that he beat me really bad or he ... he got on top of me and with his knees he would put them right here so that I couldn't move my arms, here, and he would get on top of me and he would start beating me.

Ramona went on to say that her father-in-law intervened, but she suffered a series of beatings while she was pregnant.

**Physical injury.**—Perpetration of physical violence that resulted in injury to partners was reported by 14.3% ( $n = 67$ ) of all individuals. Minor injuries (e.g., sprains, bruises, or small cuts) accounted for 11.2% ( $n = 48$ ) of injuries. Major injuries (e.g., requiring a doctor visit) accounted for a small proportion (0.5%;  $n = 2$ ) of injuries.

In the qualitative interviews, men did not describe any injuries resulting from physical assault from their partner. However, several women discussed physical injuries sustained from their partners. Ramona explained that her partner's violence caused her numerous injuries: “A while ago, like about eight months I think, he also hit me because I took too long to come back [from work] ... he opens my lip and, and leaves me bruises all over my legs.”

**Sexual coercion.**—Perpetration of sexual coercion or rape was the least prevalent form of IPV behavior reported. Among the entire sample, 9.6% ( $n = 40$ ) reported engaging in some form of sexually coercive behavior. Of those, most (7.2%;  $n = 31$ ) engaged in minor sexual coercion (e.g., insisted on sex when their partner did not want to), 0.2% (1) engaged in major sexual coercion (e.g., using force to make their partner have sex; rape), and 2.1% ( $n = 9$ ) engaged in both minor and major sexual coercion toward their partner. Although men reported perpetrating sexual coercion in the survey (10.3%;  $n = 22$ ; Table 2), they did not elaborate on any examples of this in their qualitative interviews.

Conversely, women described instances of sexual coercion victimization. Sofia, 34, from Tijuana, provided a description of forced oral sex:



We had a big argument; I didn't want to give him oral sex. He forced me and he put on the condom and well he grabbed me from here, from my hair, and well, I had to open my mouth, and I mean he couldn't break my teeth, so then I opened my mouth, and that is why this part is a bit cut.

She also reported being raped by her partner: "... sometimes he grabs me by force and he rapes, he tears my underwear. Even though I don't want to [have sex], he forces me to do it."

### Context of IPV Behaviors

We examined the context in which these IPV behaviors and conflict occurred among the couples through the analysis of the qualitative interviews. Compared with other forms of IPV, couples spoke most openly about psychological violence and arguing, which lent key insight into relationship dynamics and sources of contention that could escalate into more severe forms of IPV. As described below, several interrelated themes emerged regarding when and why couples engaged in IPV behaviors, including women's sex work, jealousy, relationship power dynamics, and drug use.

**Women's sex work.**—Many couples reported arguing over the financial need for women to engage in sex work. In their joint interview, David and Mariana, both age 44 and from Tijuana, described how her sex work and his inability to provide for her financially were a source of conflict in their relationship:

Mariana [speaking to the interviewer and then David, her partner]: He used to get upset a lot [about her sex work], so then he would be furious and wouldn't let me come in the house, remember?

David [speaking to Mariana]: Well yes, I feel responsible because I can't give you more, you know. [Then, speaking to the interviewer] ... if I had it I would give it to her so she wouldn't have to do that [sex work].

Men's inability to provide for their female partners was a common source of conflict mentioned by couples. Several women provided examples of when their male partners were upset because they earned more money than their partners through their sex work. Lauren, 23, from Ciudad Juarez, said, "... when we have arguments, we argue about money, about how I earn more and he earns less; but when we are not arguing, we don't have any problems regarding money; only when we fight."

Men also talked about how they felt uncomfortable that their female partners had sex with other men as part of their work. José, 34, from Ciudad Juarez, shared in his couples interview how his partner's sex work has affected their sex life and created conflict in their relationship:

We argue. A lot of times I have a desire to be with her. And I don't know about her; maybe she comes back home annoyed from work, or I don't know. But I think this is why our problems start; when she doesn't want to [have sex], and I get annoyed. A lot of the time there's like jealousy, right? Due to the relations she has, because we've been together for four years now, but knowing the kind of relations she has

with other people, knowing that she sexually interacts with others makes me feel a little angry.

(José)

Women, in turn, reported that conflict also emerged when their male partners insinuated they enjoyed sex work. Maria, 32, from Ciudad Juarez, said,

We have conflicts over stupid things; because I'm working and I take too long to come out. He asks me, "Why do you like being there so much?" and things like that; and I tell him that I have to work, and that that's the reason I came here, but he gets annoyed anyways. He understands me later, but he gets mad for a while.

In such accounts of conflict, women contended that they engaged in sex work for money and lack of better job opportunities, not for pleasure.

**Jealousy.**—Both women and men reported jealousy as a common source of conflict in relationships. Whereas men often reported feeling jealous because of women's sex work, women's jealousy often emerged when they felt betrayed or rejected. Carolina, 31, from Ciudad Juarez, reported feeling jealous and betrayed because her partner cheated on her: "Well, betrayal ... to know that he has betrayed me. ... I get angry. I just want to be the only one." Hector, age 41, from Tijuana, described how his partner feels rejected by his family and others possibly because of her sex work and drug use, which makes her cling to him and get jealous if he spends too much time with his family:

She thinks that they are going to reject her or that they don't want her or they hate her, she thinks that the whole world hates her, right? She thinks her family, her aunts hate her, her mom hates her, that I hate her, I tell her, honey, no one hates you.

**Relationship power dynamics.**—Couples also expressed conflict over relationship power dynamics. Contrary to traditional male and female gender roles in which men are the head of the household and control the finances, many of the women in our study reported being the main income earner and making the majority of household decisions, while the male partners stayed at home, which often resulted in conflict. Sylvia, 25, and Roberto, 33, from Ciudad Juarez, provided an example of this in their couples interview:

**Sylvia** Like he has never been married so he doesn't have the capacity to tolerate being in the house, receiving orders from someone. He doesn't like me to boss him around...

**Roberto** Um, I don't like to be told what to do. Actually, I am the one who always tells others what to do and it is very new to me that she's the one that tells me, "You know what, this and that, or go at this hour and come back." It has been very weird to me, out of the ordinary.

**Sylvia** It's because, what happened is that since he doesn't have a job, I tell him to help me around the house, help me in whatever he can, and he leaves for the whole day, he goes with his mom. So, I get mad, and I tell him to go visit her and to come back at a certain hour, because he has things to do, and he doesn't like it when I give him a schedule. He doesn't like it.

Many men reported feeling frustrated because of not being able to find work and having to stay home. Women's sex work was a reliable source of income for couples, but men often had to then take more responsibility at home doing chores and taking care of children. Tomás, age 29, from Tijuana, said, "Maybe now the roles changed like she's the provider at the house and I am, one could say, the househusband."

**Drug use.**—Conflict while under the influence of drugs or while going through drug withdrawal was the final important theme in our qualitative data. Teresita, 27, from Ciudad Juarez, provided this example of why she and her partner argue:

Because I'm hooked on *agua celeste* ['*heavenly water*,' street name for a sky-blue colored solvent reportedly inhaled or ingested to produce an intoxicating effect]. I had a lot and I wanted more, and we got really crazy the two of us, and I wanted to go out, and he wouldn't let me. Then I started to throw all the food, and he got pissed.

Similarly, Jesús, 30, from Ciudad Juarez, cited drug use as a primary reason why he and his partner fight: "We've fought mainly because of drugs ... when we're feeling *malilla* [drug withdrawal], and we want to consume drugs, but we can't." He then went on to say, "Once we were drugged, our attitudes would change... we wouldn't continue arguing over the same thing." Many women also reported that they would buy their male partners drugs to keep them calm and to avoid arguing and potential violence, as described in the following individual interviews:

Everything's fine, as long as he has his "*gallito*" [marijuana] and he's happy with that, yeah.—

(Alicia, 50, from Ciudad Juarez)

I mean, that is why I try to go out like this and work. I try to always have something for him [drugs] so that he is not in a bad mood.

(Lidia, 40, from Tijuana)

He doesn't even bother me, nothing, when he has it [drugs]... and if he is [suffering from] *malilla* [drug withdrawal], oh, he even beats me because of that.

(Mariana, 44, from Tijuana)

In addition, some couples tied their conflict to needing money for drugs or men being resentful that women had to engage in sex work to support their drug habits. Leticia, 34, from Ciudad Juarez, said her partner got angry with her for spending money on drugs: "He is angry about me spending the money on drugs. He says, 'then why do you go out to work if you spend the money in that?' Then we argue."

## Discussion

We examined the prevalence of and social contexts in which IPV behaviors occurred among FSWs and their noncommercial male partners. Our quantitative results showed that roughly half of all couples reported perpetrating and experiencing at least one type of IPV behavior in the past year, with psychological aggression being the most common form of IPV,

followed by physical assault and sexually coercive IPV behaviors. In addition, we found that a third of the couples reported that both partners engaged in some form of IPV (bidirectionality of IPV). Similar findings regarding the prevalence, severity, and bidirectionality of IPV have been found in studies among young adults (Renner & Whitney, 2010) and other diverse couples including those who use drugs (Frye et al., 2007; Kalokhe et al., 2012), same-sex couples (Wu et al., 2015), and couples with a history of criminal justice system involvement (Langhinrichsen-Rohling, Misra, Selwyn, & Rohling, 2012), suggesting that IPV is a pervasive public health issue requiring research and appropriate intervention.

Although our quantitative data provided the prevalence of specific IPV behaviors, our qualitative methods allowed us to examine the social contexts in which these IPV behaviors occurred. Importantly, our results suggest that men and women have different reasons for engaging in IPV. Previous research has shown that common motives for IPV by both men and women are self-defense, retaliation, expression of negative emotions, and communication difficulties (Bair-Merritt et al., 2010; Elmquist et al., 2014; Ross, 2011). While our results broadly reflect these motivations, we draw on the theory of gender and power to suggest that men and women often have differing and more nuanced reasons for engaging in IPV that reflect the dynamic socioeconomic and cultural context of the Mexico–U.S. border region as well as couples’ socially marginalized status.

Our qualitative data revealed important gender differences in terms of motivations and triggers for IPV. Specifically, we found that the male partners reported engaging in IPV behaviors when they felt that their masculinity was threatened, which was tied to nontraditional divisions of labor and power within relationships, economic insecurity, and shifting gender roles around women’s earning potential. For example, men often recounted that they were frustrated that they could not provide money to support their female partner or family, and their female partner had to engage in sex work to earn money, which in turn created conflict around her sex work. The traditional Mexican gender role orientation of *machismo* accepts male dominance in relationships as a proper form of male conduct, and more prosocial aspects of *machismo* encourage taking care of one’s family and being a good provider. The traditional female role orientation of *marianismo* accepts motherly nurturance and the demure and pure identity of a virgin (as in the Virgin Mary) as a proper form of female conduct (Castro & Hernandez, 2004). The women in our study did not always engage in “proper” conduct by nature of having to engage in sex work and using drugs, and men were not always able to be the main provider in the family. In our study, men’s perceptions regarding violating these traditional gender roles may have contributed to conflict in their relationships. In a review of risk factors for IPV perpetration among Mexican American males in the United States, adherence to strictly defined gender roles such as *machismo* and *marianismo* and the perceived imbalance of power within relationships increased the risk of IPV perpetration (Mancera, Dorgo, & Provencio-Vasquez, 2017). This imbalance of power may have been a motivating factor for men in our study to engage in IPV behaviors. Conversely, if traditional Mexican gender role beliefs and attitudes are indeed closely tied to individual IPV behaviors within relationships, it may be useful for interventions to change social norms and prevent IPV to emphasize the more positive aspects of these gender roles such as strength, courage, honor, faithfulness, loyalty, and family responsibility (Cummings, Gonzalez-Guarda, & Sandoval, 2013; Torres, Solberg, & Carlstrom, 2002). Further research

is needed to examine how traditional gender role beliefs may socialize acceptance of violence in relationships at both the individual and societal levels (Mancera et al., 2017), especially in Mexico–U.S. border contexts in which community-level violence may already be high (Molzahn et al., 2012), permissive attitudes toward violence against women are prevalent (Fleming, McClearly-Sills, et al., 2015), and women’s comparative economic earning power and roles within households are rapidly changing.

We found that IPV was bidirectional in these relationships, as the women in our study also engaged in IPV behaviors, albeit for different reasons than their male partners. Women tended to perpetrate IPV behaviors when they perceived their relationship to be threatened, reflecting shifting balances of power. Many women reported feeling isolated and ostracized by their family and friends because of their drug use or sex work. Consequently, they relied heavily on their male partners for comfort and social support (Syvertsen, Robertson, Rolón, et al., 2013; Wagner et al., 2013). This was similar to findings from a systematic review of women’s motivations for engaging in IPV in which anger and not being able to get a partner’s attention were common themes (Bair-Merritt et al., 2010). In addition, in an ethnographic study of methamphetamine-using women in California, Hamilton and Goeders (2010) found that women who perpetrated IPV reported jealousy and anger over their partner excluding them from social occasions as reasons they initiated IPV with their partners. In this context, such emotional responses from women were generated by men’s own emotional and behavioral responses to women’s sex work and perceived relationship power imbalances, feelings of inadequacy, and jealousy. Ultimately, these emotional conflicts surrounding sex work reflect the broader socioeconomic inequalities, poverty, and social marginalization with which both partners contend.

The overlap between drug use and IPV was a major theme in our qualitative results. Both men and women engaged in IPV behaviors surrounding drug use, which is consistent with research with other samples of drug- or alcohol-involved couples in Mexico (Avila-Burgon et al., 2014; Fleming, McClearly-Sills et al., 2015; Rey, García, Icaza, & Sainz, 2007) and the United States (El-Bassel et al., 2004; Frye et al., 2007; Kalokhe et al., 2012; Rey et al., 2007) as well as FSWs in Mexico (Ulibarri, Strathdee, Lozada et al., 2010; Witte, Batsukh, & Chang, 2010). Many of the couples in our study reported fighting over the amount of money spent on drugs, and changes in personality when high or going through withdrawal, which is consistent with previous ethnographic research among methamphetamine-using men and women in the United States (Hamilton & Goeders, 2010; Sexton, Carlson, Leukefeld, & Booth, 2009). Given the ongoing patterns of drug trafficking and related community-level violence on the border, the spillover of drug use into intimate relationships remains a concern for IPV. Furthermore, as couples’ drug consumption increases and withdrawals intensify, the potential for IPV could increase.

Our study provided a contextualized understanding of the type and frequency in which emotional and physical IPV behaviors occurred for this unique sample of Mexican women and men. However, more research is needed to fully understand the complexity of individual- and societal-level IPV risk factors such as permissive attitudes toward violence against women and witnessing or engaging in other forms of violence among FSWs and drug-using populations (Fleming, McClearly-Sills et al., 2015; Hamilton & Goeders, 2010).

Better elucidating the synergistic relationship between drug use, IPV, and negative health outcomes such as HIV among sex workers and their intimate partners is also an area ripe for future research.

Our study has limitations. First, the cross-sectional study design does not permit us to quantitatively describe the temporality of IPV within relationships (i.e., which partner initiated the IPV behaviors). As a result, we do not know whether female partners engaged in IPV behaviors in reaction to violent behaviors initiated by their male partners, or vice versa. However, in our qualitative interviews, we asked general, open-ended questions regarding conflict experienced within relationships and then followed up with more specific probes once IPV emerged as a key theme. This mixed-methods design allowed us to examine the context of our quantitative findings and provided in-depth information about the relationship dynamics surrounding IPV in this population. Second, partners who were concerned about IPV as a result of participating in this study were screened out, thus potentially biasing our sample toward couples who were less prone to violence or conflict. In the preliminary screening, we erred on the side of safety and placed the decision on whether to recruit male partners into the study under the FSWs' control and excluded any couples with a recent history of severe IPV. However, only 4.2% (14/90) of women were disqualified from the study at initial screening because they were worried about IPV; at a secondary screening of both partners, two couples were excluded from the study for this reason, and it was the male partners' concern over IPV from their female partners (Syvertsen et al., 2012). Similarly, the couples in this study were in relatively stable relationships and may not be representative of less stable or newer relationships. Finally, it is possible that men under-reported IPV perpetration and victimization because of social desirability. Because of this, we also drew upon our qualitative interviews to confirm the patterns we observed in the quantitative data.

These limitations notwithstanding, findings from our study speak to the importance of how gender and power are interlinked and may exacerbate drug use and IPV among vulnerable populations along the Mexico–U.S. border. Understanding the occurrence and contexts of IPV among FSWs and their male partners in communities heavily affected by drug trafficking and violence can inform drug and violence prevention strategies and improve the quality of services for this socially marginalized population. Our results suggest that couples-based interventions should consider how sex work and the autonomy and earning potential it brings to women shape power differentials, interplay with drug use, and affect the emotional quality of relationships in ways that have implications for IPV. Interventions could acknowledge and address these shifting gender roles and interpersonal dynamics through developing enhanced communication and coping skills apart from drug use (El-Bassel et al., 2004). More broadly, economic interventions that target the structural drivers of IPV (e.g., lack of opportunities and the need to engage in sex work) could be beneficial to decrease the prevalence and severity of different types of violence among marginalized couples.



## Conclusion

Mixed-methods research can provide important contextual information to explain underlying phenomena that drive violence and aggression, as well as relationship dynamics around IPV that might differ by gender. Future intervention research should use both quantitative and qualitative methods to examine issues of trust, gender roles, and IPV behaviors while under the influence of drugs, and societal norms of IPV and violence against women among FSWs and drug-involved couples. Subsequently, researchers and clinicians may integrate this knowledge into substance abuse, HIV prevention, and mental health services for these under-served populations. Ultimately, couples-based approaches that engage both partners and work to improve communication regarding their unique external risks need to be developed and evaluated for improved HIV prevention among FSWs and their partners.

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## References

- Amaro H, & Hardy-Fanta C (1995). Gender relations in addiction and recovery. *Journal of Psychoactive Drugs*, 27, 325–337. doi:10.1080/02791072.1995.10471698 [PubMed: 8788689]
- Archer J (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin*, 126, 651–680. [PubMed: 10989615]
- Avila-Burgon L, Valdez-Santiago R, Barroso-Quiab A, Hajar M, Rojas R, & Del Rio-Zolezzi A (2014). [Prevalence and factors associated with intimate partner abuse in female users of public health services in Mexico: A comparative analyses]. *Revista de Investigacion Clinica*, 66, 45–58. [PubMed: 24762726]
- Bair-Merritt MH, Crowne SS, Thompson DA, Sibinga E, Trent M, & Campbell J (2010). Why do women use intimate partner violence? A systematic review of women's motivations. *Trauma, Violence, & Abuse*, 11, 178–189. doi:10.1177/1524838010379003
- Bazzi AR, Rangel G, Martinez G, Ulibarri MD, Syvertsen JL, Bazzi SA, et al. (2015). Incidence and predictors of HIV and sexually transmitted infections among female sex workers and their intimate male partners in northern Mexico: A longitudinal, multilevel study. *American Journal of Epidemiology*, 181, 723–731. doi:10.1093/aje/kwu340 [PubMed: 25769307]
- Bazzi AR, Syvertsen JL, Rolon ML, Martinez G, Rangel G, Vera A, et al. (2016). Social and structural challenges to drug cessation among couples in northern Mexico: Implications for drug treatment in underserved communities. *Journal of Substance Abuse Treatment*, 61, 26–33. doi:10.1016/j.jsat.2015.08.007 [PubMed: 26470596]
- Breiding MJ, Basile KC, Smith SG, Black MC, & Mahendra RR (2015). Intimate partner violence surveillance: Uniform definitions and recommended data elements (Version 2.0). Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Brouwer KC, Case P, Ramos R, Magis-Rodriguez C, Bucardo J, Patterson TL, & Strathdee SA (2006). Trends in production, trafficking, and consumption of methamphetamine and cocaine in Mexico. *Substance Use & Misuse*, 41, 707–727. [PubMed: 16603456]
- Bucardo J, Brouwer KC, Magis-Rodriguez C, Ramos R, Fraga M, Perez SG, et al. (2005). Historical trends in the production and consumption of illicit drugs in Mexico: Implications for the prevention of blood borne infections. *Drug and Alcohol Dependence*, 79, 281–293. [PubMed: 16102372]
- Caetano R, Nelson S, & Cunradi C (2001). Intimate partner violence, dependence symptoms and social consequences from drinking among White, Black and Hispanic couples in the United States. *American Journal on Addictions*, 10(Suppl), 60–69. doi:10.1080/10550490150504146
- Carlson CE, Chen J, Chang M, Batsukh A, Toivgoon A, Riedel M, & Witte SS (2012). Reducing intimate and paying partner violence against women who exchange sex in Mongolia: Results from a randomized clinical trial. *Journal of Interpersonal Violence*, 27, 1911–1931. doi:10.1177/0886260511431439 [PubMed: 22366477]
- Castro FG, & Hernandez NT (2004). A cultural perspective on prevention interventions In Velasquez RJ, Arellano LM, & McNeill BW (Eds.), *The handbook of Chicana/o psychology and mental health* (pp. 371–397). Mahwah, NJ: Lawrence Erlbaum.
- Chermack ST, Walton MA, Fuller BE, & Blow FC (2001). Correlates of expressed and received violence across relationship types among men and women substance abusers. *Psychology of Addictive Behaviors*, 15, 140–151. doi:10.1037/0893-164x.15.2.140 [PubMed: 11419230]
- Connell RW (1987). *Gender and power: Society, the person and sexual politics*. Redwood City, CA: Stanford University Press.
- Connell R (2012). Gender, health and theory: Conceptualizing the issue, in local and world perspective. *Social Science & Medicine*, 74, 1675–1683. [PubMed: 21764489]
- Conners EE, Silverman JG, Ulibarri MD, Magis-Rodriguez C, Strathdee SA, Staines-Orozco H, et al. (2016). Structural determinants of client perpetrated violence among female sex workers in two Mexico-U.S. border cities. *AIDS and Behavior*, 20, 215–224. doi:10.1007/s10461-015-1111-1 [PubMed: 26111732]
- Cummings AM, Gonzalez-Guarda RM, & Sandoval MF (2013). Intimate partner violence among Hispanics: A review of the literature. *Journal of Family Violence*, 28, 153–171. doi:10.1007/s10896-012-9478-5 [PubMed: 23606787]

- Dalla RL, Xia Y, & Kennedy H (2003). "You just give them what they want and pray they don't kill you": Street-level sex workers' reports of victimization, personal resources, and coping strategies. *Violence Against Women*, 9, 1367–1394.
- El-Bassel N, Gilbert L, Golder S, Wu E, Chang M, Fontdevila J, & Sanders G (2004). Deconstructing the relationship between intimate partner violence and sexual HIV risk among drug-involved men and their female partners. *AIDS and Behavior*, 8, 429–439. [PubMed: 15690116]
- El-Bassel N, Gilbert L, Wu E, Chang M, Gomes C, Vinocur D, & Spevack T (2007). Intimate partner violence prevalence and HIV risks among women receiving care in emergency departments: Implications for IPV and HIV screening. *Emergency Medicine Journal*, 24, 255–259. [PubMed: 17384378]
- Elmqvist J, Hamel J, Shorey RC, Labrecque L, Ninnemann A, & Stuart GL (2014). Motivations for intimate partner violence in men and women arrested for domestic violence and court referred to batterer intervention programs. *Partner Abuse*, 5, 359–374. doi:10.1891/1946-6560.5.4.359 [PubMed: 25332752]
- Fleming PJ, Barrington C, Perez M, Donastorg Y, & Kerrigan D (2015). Strategies for recruiting steady male partners of female sex workers for HIV research. *AIDS and Behavior*, 19, 362–368. [PubMed: 25192901]
- Fleming PJ, McCleary-Sills J, Morton M, Levtov R, Heilman B, & Barker G (2015). Risk factors for men's lifetime perpetration of physical violence against intimate partners: Results from the International Men and Gender Equality Survey (IMAGES) in eight countries. *PLoS ONE*, 10(3), e0118639. doi:10.1371/journal.pone.0118639 [PubMed: 25734544]
- Frye V, Latka MH, Wu Y, Valverde EE, Knowlton AR, Knight KR, et al. (2007). Intimate partner violence perpetration against main female partners among HIV-positive male injection drug users. *JAIDS: Journal of Acquired Immune Deficiency Syndromes*, 46, S101–S109. [PubMed: 18089979]
- González de la Rocha M (2006). Vanishing assets: Cumulative disadvantage among the urban poor. *Annals of the American Academy of Political and Social Science*, 606, 68–94.
- Hamilton AB, & Goeders NE (2010). Violence perpetrated by women who use methamphetamine. *Journal of Substance Use*, 15, 313–329. [PubMed: 26045288]
- Hines DA, & Malley-Morrison K (2001). Psychological effects of partner abuse against men: A neglected research area. *Psychology of Men and Masculinity*, 2, 75–85.
- Johnson JC (1990). *Selecting ethnographic informants*. Newbury Park, CA: Sage.
- Kalokhe AS, Paranjape A, Bell CE, Cardenas GA, Kuper T, Metsch LR, & del Rio C (2012). Intimate partner violence among HIV-infected crack cocaine users. *AIDS Patient Care and STDs*, 26, 234–240. doi:10.1089/apc.2011.0275 [PubMed: 22364209]
- Karandikar S, & Próspero M (2010). From client to pimp: Male violence against female sex workers. *Journal of Interpersonal Violence*, 25, 257–273. [PubMed: 19553559]
- Langhinrichsen-Rohling J, Misra TA, Selwyn C, & Rohling ML (2012). Rates of bidirectional versus unidirectional intimate partner violence across samples, sexual orientations, and race/ethnicities: A comprehensive review. *Partner Abuse*, 3, 199–230. doi:10.1891/1946-6560.3.2.199
- MacQueen KM, McLellan E, Kay K, & Milstein B (1998). Codebook development for team-based qualitative analysis. *Field Methods*, 10, 31–36.
- Mancera BM, Dorgo S, & Provencio-Vasquez E (2017). Risk factors for Hispanic male intimate partner violence perpetration. *American Journal of Men's Health*, 11, 969–983. doi: 10.1177/1557988315579196
- Marshall BDL, Fairbairn N, Li K, Wood E, & Kerr T (2008). Physical violence among a prospective cohort of injection drug users: A gender-focused approach. *Drug and Alcohol Dependence*, 97, 237–246. [PubMed: 18487025]
- McLellan E, MacQueen KM, & Neidig JL (2003). Beyond the qualitative interview: Data preparation and transcription. *Field Methods*, 15, 63–84.
- Molzahn C, Rios V, & Shirk DA (2012). *Drug violence in Mexico: Data and analysis through 2011*. San Diego, CA: Trans-Border Institute, Joan B. Kroc School of Peace Studies.
- Padilla M (2007). Tourism and tigueraje: The structures of love and silence among Dominican male sex workers In Padilla M, Hirsch JS, Munoz-Laboy M, Sember RE, & Parker RG (Eds.), *Love and*

globalization: Transformations of intimacy in the contemporary world (pp. 38–69). Nashville, TN: Vanderbilt University Press.

- Pisani MJ, Richardson C, & Patrick JM (2008). Economic informality on the U.S.-Mexican border: A (re)view from South Texas. *Journal of Borderlands Studies*, 23, 19–40.
- Renner LM, & Whitney SD (2010). Examining symmetry in intimate partner violence among young adults using socio-demographic characteristics. *Journal of Family Violence*, 25, 91–106. doi: 10.1007/s10896-009-9273-0
- Rey GN, García FJ, Icaza M-M, & Sainz MT (2007). La depresión y su relación con la violencia de pareja y el consumo de alcohol en mujeres Mexicanas. *Revista Mexicana de Psicología*, 24, 165–173.
- Rosenbaum M (1981). When drugs come into the picture, love flies out the window: Women addicts' love relationships. *International Journal of the Addictions*, 16, 1197–1206. [PubMed: 7327782]
- Ross JM (2011). Personality and situational correlates of self-reported reasons for intimate partner violence among women versus men referred for batterers' intervention. *Behavioral Sciences & the Law*, 29, 711–727. [PubMed: 21928400]
- Sanders T (2004). A continuum of risk? The management of health, physical and emotional risks by female sex workers. *Sociology of Health and Illness*, 26, 557–574. [PubMed: 15283777]
- Saunders DG (2002). Are physical assaults by wives and girlfriends a major social problem? A review of the literature. *Violence Against Women*, 8, 1424–1448.
- Schumacher JA, Feldbau-Kohn S, Slep AMS, & Heyman RE (2001). Risk factors for male-to-female partner physical abuse. *Aggression and Violent Behavior*, 6, 281–352.
- Sexton RL, Carlson RG, Leukefeld CG, & Booth BM (2009). An ethnographic exploration of self-reported violence among rural methamphetamine users. *Journal of Ethnicity in Substance Abuse*, 8, 35–53. doi:10.1080/15332640802683409 [PubMed: 19266373]
- Shannon K, Strathdee SA, Goldenberg SM, Duff P, Mwangi P, Rusakova M, et al. (2015). Global epidemiology of HIV among female sex workers: Influence of structural determinants. *Lancet*, 385, 55–71. doi:10.1016/s0140-6736(14)60931-4 [PubMed: 25059947]
- Sterk CE (1999). Building bridges: Community involvement in drug and HIV research among minority populations. *Drugs and Society*, 14, 107–121.
- Strathdee SA, Philbin MM, Semple SJ, Pu M, Orozovich P, Martinez G, et al. (2008). Correlates of injection drug use among female sex workers in two Mexico-U.S. border cities. *Drug and Alcohol Dependence*, 92, 132–140. [PubMed: 17714888]
- Straus MA (2011). Gender symmetry and mutuality in perpetration of clinical-level partner violence: Empirical evidence and implications for prevention and treatment. *Aggression and Violent Behavior*, 16, 279–288.
- Straus MA, & Douglas EM (2004). A short form of the Revised Conflict Tactics Scales, and typologies for severity and mutuality. *Violence & Victims*, 19, 507–520. [PubMed: 15844722]
- Stuart GL, Moore TM, Elkins SR, O'Farrell TJ, Temple JR, Ramsey SE, & Shorey RC (2013). The temporal association between substance use and intimate partner violence among women arrested for domestic violence. *Journal of Consulting and Clinical Psychology*, 81, 681–690. doi:10.1037/a0032876 [PubMed: 23647284]
- Stuart GL, Temple JR, Follansbee KW, Bucossi MM, Hellmuth JC, & Moore TM (2008). The role of drug use in a conceptual model of intimate partner violence in men and women arrested for domestic violence. *Psychology of Addictive Behaviors*, 22, 12–24. doi:10.1037/0893-164x.22.1.12 [PubMed: 18298227]
- Syvrtsen JL, Roberston AM, Abramovitz D, Rangel MG, Martinez G, Patterson TL, et al. (2012). Study protocol for the recruitment of female sex workers and their noncommercial partners into couple-based HIV research. *BMC Public Health*, 12(1), Article 136.
- Syvrtsen JL, Robertson AM, Palinkas LA, Rangel MG, Martinez G, & Strathdee SA (2013). “Where sex ends and emotions begin”: Love and HIV risk among female sex workers and their intimate, non-commercial partners along the Mexico-US border. *Culture, Health & Sexuality*, 15, 540–554. doi:10.1080/13691058.2013.773381
- Syvrtsen JL, Robertson AM, Rolón ML, Palinkas LA, Martinez G, Rangel MG, & Strathdee SA (2013). “Eyes that don't see, heart that doesn't feel”: Coping with sex work in intimate

- relationships and its implications for HIV/STI prevention. *Social Science & Medicine*, 87, 1–8. [PubMed: 23631772]
- Torres JB, Solberg VSH, & Carlstrom AH (2002). The myth of sameness among Latino men and their machismo. *American Journal of Orthopsychiatry*, 72, 163–181. doi:10.1037/0002-9432.72.2.163 [PubMed: 15792057]
- Ulibarri MD, Strathdee SA, Lozada R, Magis-Rodriguez C, Amaro H, O'Campo P, & Patterson TL (2010). Intimate partner violence among female sex workers in two Mexico–U.S. Border cities: Partner characteristics and HIV risk behaviors as correlates of abuse. *Psychological Trauma: Theory, Research, Practice, and Policy*, 2, 318–325. doi:10.1037/a0017500
- Ulibarri MD, Strathdee SA, & Patterson TL (2010). Sexual and drug use behaviors associated with HIV and other sexually transmitted infections among female sex workers in the Mexico-US border region. *Current Opinion in Psychiatry*, 23, 215–220. [PubMed: 20308903]
- Wagner KD, Verdugo SR, Syvertsen JL, Rusch M, Rangel MG, & Morris MD (2013, 5). Personal social networks of female sex workers and their non-commercial male sex partners in Tijuana, Mexico: Implications for HIV/STI risk. Paper presented at the Annual Meetings of the International Network for Social Network Analysis, Hamburg, Germany.
- Wechsberg WM, Luseno WK, & Lam WK (2005). Violence against substance-abusing South African sex workers: Intersection with culture and HIV risk. *AIDS Care*, 17, S55–S64. [PubMed: 16096118]
- Weston R, Temple JR, & Marshall LL (2005). Gender symmetry and asymmetry in violent relationships: Patterns of mutuality among racially diverse women. *Sex Roles*, 53, 553–571.
- Witte SS, Batsukh A, & Chang M (2010). Sexual risk behaviors, alcohol abuse, and intimate partner violence among sex workers in Mongolia: Implications for HIV prevention intervention development. *Journal of Prevention & Intervention in the Community*, 38, 89–103. doi: 10.1080/10852351003640625 [PubMed: 20391057]
- Wu E, El-Bassel N, McVinney LD, Hess L, Fopeano MV, Hwang HG, et al. (2015). The association between substance use and intimate partner violence within Black male same-sex relationships. *Journal of Interpersonal Violence*, 30, 762–781. doi:10.1177/0886260514536277 [PubMed: 24919997]
- Zhang C, Li X, Hong Y, Chen Y, Liu W, & Zhou Y (2012). Partner violence and HIV risk among female sex workers in China. *AIDS and Behavior*, 16, 1020–1030. [PubMed: 21598033]



**Table 1.**

Characteristics of Female Sex Workers and Their Noncommercial Partners Along the Mexico–U.S. Border ( $n = 428$ ).

	Women ( $n = 214$ )		Men ( $n = 214$ )		Test statistic ( $t$ , $Z$ or $\chi^2$ ) $p$ value
	$n$ (%)	$M$ ( $SD$ )	$n$ (%)	$M$ ( $SD$ )	
Live in Tijuana (vs. Ciudad Juarez)	104 (49)		104 (49)		<i>ns</i>
Age		33.4 (9.0)		37.3 (9.5)	.00***
Years of school completed		6.7 (2.9)		7.4 (2.9)	.01**
Income ( $\leq$ US\$2,500 pesos/month)	85 (40)		118 (55)		.00***
Number of children		3.1 (1.7)		2.7 (1.8)	<i>ns</i>
Number of financial dependents		1.8 (1.7)		1.6 (1.2)	.00***
Used drugs in the past 6 months	194 (91)		183 (86)		.05*

Note. *ns* = nonsignificant.

\* Significant at  $p < .05$ .

\*\* Significant at  $p < .01$ .

\*\*\* Significant at  $p < .001$ .

**Table 2.**

Prevalence of IPV Behavior Perpetration and Victimization by Assault Type Among Female Sex Workers and Their Noncommercial Partners Along the Mexico–U.S. Border ( $n = 214$ ).

Type	Male perpetration	Female perpetration	Male victimization	Female victimization
Psychological aggression				
None	111 (51.9%)	118 (55.1%)	104 (48.6%) <sup>**</sup>	136 (63.6%) <sup>**</sup>
Minor only	82 (38.3%)	75 (35%)	84 (39.3%) <sup>**</sup>	56 (26.2%) <sup>**</sup>
Major only	3 (1.4%)	0 (0%)	4 (1.9%) <sup>**</sup>	2 (0.9%) <sup>**</sup>
Minor and Major	18 (8.4%)	21 (9.8%)	22 (10.3%) <sup>**</sup>	20 (9.3%) <sup>**</sup>
Physical assault				
None	170 (79.4%) <sup>*</sup>	154 (72%) <sup>*</sup>	163 (76.2%)	172 (80.4%)
Minor only	24 (11.2%) <sup>*</sup>	31 (14.5%) <sup>*</sup>	17 (7.9%)	17 (7.9%)
Major only	3 (1.4%) <sup>*</sup>	1 (0.5%) <sup>*</sup>	3 (1.4%)	4 (1.9%)
Minor and Major	17 (7.9%) <sup>*</sup>	28 (13.1%) <sup>*</sup>	31 (14.5%)	21 (9.8%)
Injury				
None	188 (87.9%)	179 (83.6%)	187 (87.4%)	181 (84.6%)
Minor only	22 (10.3%)	26 (12.1%)	23 (10.7%)	27 (12.6%)
Major only	1 (0.5%)	1 (0.5%)	1 (0.5%)	0 (0%)
Minor and Major	3 (1.4%)	8 (3.7%)	3 (1.4%)	6 (2.8%)
Sexual coercion				
None	192 (89.7%)	195 (91.1)	198 (92.5%)	194 (90.7%)
Minor only	19 (8.9%)	12 (5.6%)	14 (6.5%)	12 (5.6%)
Major only	0 (0%)	1 (0.5%)	0 (0%)	1 (0.5%)
Minor and Major	3 (1.4%)	6 (2.8%)	2 (0.9%)	7 (3.3%)

Note. McNemar's chi-square tests significantly different by gender. IPV = intimate partner violence.

\* Significant at  $p < .05$ .

\*\* Significant at  $p < .01$ .

**Table 3.**

Violence Bidirectionality Among Female Sex Workers and Their Noncommercial Partners Along the Mexico–U.S. Border ( $n = 214$ ).

Type of violence	<i>n</i> (%)
No violence	74 (34.6)
Male-perpetrated violence only	39 (18.2)
Female-perpetrated violence only	31 (14.5)
Both female and male perpetration	70 (32.7)

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