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## Relationship Factors Associated with Sexual Risk Behavior and High-Risk Alcohol Consumption among Latino MSM: Challenges and Opportunities to Intervene on HIV Risk

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### Abstract

The HIV epidemic continues to be a major public health concern, affecting communities with varying prevention and treatment needs. In the United States, Latino men who have sex with men (MSM) bear a disproportionate burden of HIV incidence. While recent studies have highlighted the relevance of relationship factors for HIV transmission among MSM generally, the unique needs and experiences of Latino MSM have received relatively little attention. Consequently, associations among relationship factors and HIV risk among Latino MSM remain unknown. This mixed-methods study examined relationship status and dynamics and potential HIV-related risk behaviors among Latino MSM. Quantitative analyses with 240 Latino MSM investigated associations between relationship status and engagement in condomless anal intercourse (CAI). Focus groups with 20 Latino male couples and 10 health service providers explored the impact of relationship dynamics on sexual behaviors, as well as opportunities to intervene on HIV risk. The majority of participants were predominantly Spanish speaking, most screened positive for high-risk alcohol consumption in the past month, more than half engaged in CAI in the past three months, and a majority reported multiple sexual partners in this period. Among participants in same-sex relationships (n=175), approximately half reported multiple partners in the previous

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three months and more than two-thirds reported CAI in this time period. Being in a same-sex relationship was positively associated with high-risk alcohol consumption and being age 30 or older, and negatively associated with having multiple partners. Moreover, being in a same-sex relationship significantly increased the likelihood that participants would report engaging in CAI. Qualitative analyses identified themes related to relationship dynamics and sexual behavior, as well as opportunities to intervene on HIV risk. Despite the challenges encountered by Latino male couples, most participants expressed commitment to and support for their partners. As such, prevention efforts involving Latino male couples must address relationship dynamics and the role they play in sexual health, including safer sex practices.

## Keywords

Latino MSM; relationship dynamics; sexual risk behaviors; alcohol consumption

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## Introduction

Among the estimated 1.2 million persons living with human immunodeficiency virus (HIV) infection in the United States in 2011, 14% were living with undiagnosed infection. The majority of persons who received a diagnosis of HIV infection in 2011 (62%) were men who have sex with men (MSM) (Centers for Disease Control and Prevention, 2015). Whereas Latinos overall continue to bear a disproportionate burden, representing 23% of new infections in the United States in 2013 in spite of comprising only 16% of the population, 81% new infections among Latinos were specifically among MSM (Centers for Disease Control and Prevention, 2013). For Latino men infected with HIV, the most common modes of transmission are male-to-male sexual contact and injection drug use (Tung, 2012). Recent alarming data was released by researchers at the Centers for Disease Control concluding that if current HIV diagnoses rates persist, about 1 in 2 black MSM and 1 in 4 Latino MSM in the United States will be diagnosed with HIV during their lifetime (Centers for Disease Control and Prevention, 2016).

Research has indicated that relationship status is not a protective factor against HIV (Starks, Gamarel, & Johnson, 2014; Sullivan, Salazar, Buchbinder, & Sanchez, 2009). For example, a study with 91 serodiscordant couples found that 30% of the couples engaged in risk taking and/or strategic positioning unprotected anal sex (Starks et al., 2014). Rates of new HIV infections among gay male couples may be in part due to their low levels of condom use, greater likelihood of having anal sex, and greater frequency of unprotected anal intercourse (UAI), thereby increasing their cumulative risk for HIV infection over time (Sullivan et al., 2009). Studies have also attributed the source of many new HIV and other sexually transmitted infections (STI) to primary partners (Kippax et al., 2003). In addition, behavioral studies consistently find that men are more likely to engage in condomless anal intercourse (CAI) with primary partners than with outside partners, especially in HIV concordant relationships (Frost, Stirratt, & Ouellette, 2008; Jin et al., 2009). Due to these trends, the context of relationship status is important for understanding and addressing HIV risk among Latino MSM.

Previous research has also explored relationship dynamics, including attachment, agreements, and intimacy within relationships, with CAI. For example, Hoff and colleagues (2012) found that a majority of male couples in their sample had agreements allowing sex outside the relationship and that a significant percentage of individuals have CAI outside of their relationship. They also found that men in concordant HIV positive and HIV discordant relationships were more likely to engage in CAI outside of their primary relationship than individuals in concordant HIV negative relationships. Among discordant couples, HIV positive individuals were substantially more likely to report engaging in CAI outside of their relationship than their HIV negative partners. In addition, couples who felt more connected to each other were more likely to have CAI within their relationship regardless of HIV status (Hoff, Chakravarty, Beougher, Neilands, & Darbes, 2012). Further research has found that although MSM are more likely to know the HIV status of primary partners than the status of casual partners, the majority of HIV transmissions among MSM are from primary partners due to greater overall frequencies of anal sex acts and decreased condom use within these relationships (Sullivan et al., 2009). HIV sexual risk behaviors are further impacted by attachment and sexual satisfaction within male partnerships, as well as the perceived seriousness of such partnerships (Ciesla, Roberts, & Hewitt, 2004; Udi Davidovich, de Wit, & Stroebe, 2006; Mustanski, Newcomb, & Clerkin, 2011). Starks and colleagues determined that securely attached, partnered MSM reported comparatively high levels of sexual communication within their relationships. Avoidantly attached men, on the other hand, reported engaging in CAI with more casual partners than those with other attachment styles (Starks & Parsons, 2014). Working specifically with serodiscordant male couples, Gamarel and colleagues found that the adoption of a “we” orientation was associated with increased engagement in protected anal intercourse among HIV+ men, whereas sexual satisfaction was associated with this outcome among their HIV- partners (Gamarel et al., 2014).

Interdependence theory (Rusbult & Van Lange, 2003) has been applied to HIV risk behaviors among male couples. According to this perspective, that men in relationships with other men make decisions regarding their sexual behavior with primary and outside partners based on a number of relationship factors, such as intimacy, autonomy, equality, commitment, satisfaction, and communication (U. Davidovich, de Wit, & Stroebe, 2000; De Wit, Stroebe, De Vroome, Sandfort, & Van Griensven, 2000). For some men, CAI is perceived as a way of showing love and intimacy to one another (Udi Davidovich, de Wit, & Stroebe, 2004; Heather, Alison, & Karen, 2002). This, in combination with the aforementioned associations between safer sex practices (i.e. engagement in protected and unprotected anal intercourse) and partner attachment, sexual satisfaction, and relationship seriousness, may help to account for the frequency with which HIV transmission occurs within (initially discordant) primary relationships. In addition, the investment model has been applied to examine interpersonal relationships (Le & Agnew, 2003; Rusbult, 1980). The model is comprised of four constructs: relationship satisfaction, quality of alternatives, investment size, and commitment level (Arriaga & Agnew, 2001). A meta-analysis of the Investment Model of commitment was conducted. Across 52 studies, including 60 independent samples and 11,582 participants, satisfaction with, alternatives to, and investments in a relationship each correlated significantly with commitment to that relationship. Support for the model was obtained in predicting commitment in both

relational domains (e.g., commitment to a romantic partnership) and nonrelational domains (e.g., commitment to one's job), but was significantly stronger in relational domains (Le & Agnew, 2003).

While the interdependence theory and the investment model have been tested with couples, they have not been applied to Latino male couples, in particular, being inclusive of other social, cultural and structural factors that could potentially impact relationship dynamics. In addition, previous studies focus on the dyad and fail to recognize that individuals within couples may also engage with additional serious and casual sexual partners. Such oversights inhibit researchers' capacity to comprehensively address elements of satisfaction, investment and potential sexual risk behaviors.

While being in a relationship has been associated with HIV sexual risk behavior, there are conflicting data regarding the role relationships play in the substance use that may lead to sexual risk taking. One study found that alcohol consumption contributed to increased CAI with outside partners, but not with primary partners, although this could be due to the already high rates of CAI within primary relationships (Vanable et al., 2004). Furthermore, an exploratory study of alcohol's role in the sexual scripts of Black and Latino youth found that some individuals associated alcohol use with casual sex, but not with romantic sex (Mutchler, McDavitt, & Gordon, 2014). In a meta-review that was inclusive of (but not limited to) MSM, Claxton and colleagues determined that alcohol use was significantly associated with casual sexual relationships and experiences overall, although this relationship was considerably stronger for younger adults than for older adults (Claxton, DeLuca, & van Dulmen, 2015).

Parsons and colleagues found that alcohol plays a strong role in the sexual scripts of HIV positive MSM (Parsons et al., 2004). Specifically, in a sample of predominantly African American and Latino MSM, they found that many participants drank alcohol in order to lower their inhibitions before sex. This might lead to greater alcohol use among partnered MSM, due to their greater frequency of sexual encounters; however, strong bonds within relationships might also make alcohol use seem less necessary, as men may feel fewer inhibitions with their primary partners. In a later study, Parsons and colleagues (2013) found that it may be relationship agreements, not simply the presence or absence of relationships, that influences risk behaviors (Parsons, Starks, DuBois, Grov, & Golub, 2013). Specifically, they found that individuals in open and semi-monogamous relationships were more likely to use drugs than those in monogamous relationships.

Finally, it is important to remember that alcohol is only one of many substances that may facilitate sexual risk taking. Cocaine, marijuana, and party drugs such as ecstasy have also been associated with CAI, substance use in connection with sexual expectancies, and relationship agreements more broadly among MSM (Celentano et al., 2006; Colfax et al., 2004).

Limited research has examined the association between relationship status and sexual and substance use risk behaviors among a diverse sample of Latino MSM. Our study builds on previous qualitative and quantitative research (Beougher, Gomez, & Hoff, 2011; J. De

Santis, 2012; J. P. De Santis, Vasquez, Deleon, & Gonzalez-Guarda, 2012) by examining the impact of relationship status on sexual and substance use risk behaviors among Latino MSM. There is an urgent need for research to advance our understanding of HIV risk behaviors among Latino men in same-sex relationships. Our study addresses a further gap in the literature in that the majority of participants are predominantly Spanish-speaking. Predominantly Spanish-speaking populations often have extra barriers to HIV testing and care, including language barriers; stigma (e.g., concerns with concealing their sexual behavior); less knowledge about HIV risks; documentation status; a lack of culturally and linguistically appropriate HIV testing and linkage care services; and financial concerns with regard to the cost of testing. In spite of these considerable barriers, predominantly and exclusively Spanish-speaking men have rarely been addressed in the literature on male couples.

Understanding how relationship status impacts risk behaviors could help to determine the extent to which providers should develop couple-specific interventions for Latino MSM, while also providing guidance for the development of such interventions. That is, with findings specific to Latino MSM, future studies can narrow their focus to create and implement more efficient interventions. Drawing on previous literature, we predicted that Latino MSM in primary relationships with other men would report engaging in more frequent CAI, whether within or outside of primary partnerships, than those who were not in such relationships. We further expected that this association would persist when controlling for a range of other factors, including alcohol and other substance use. Given our interest in developing interventions to address sexual risk behavior, we then conducted focus groups with Latino male couples and providers who serve them to further understand relationship dynamics and sexual behavior as well as identify strategies for translating these into effective, affirming, and culturally appropriate interventions.

## Methods

### Participants

We employed a cross-sectional study design that began enrollment in January 2014 and ended in March 2014. Participants were invited to complete a phone or in-person questionnaire. A total of 240 participants completed the questionnaire. The interviewers self-identified as bilingual Latino gay men. Focus groups with 20 Latino male couples (N=40 individuals) and 10 health service providers were also conducted in order to adapt a couple-based HIV prevention intervention for Latino MSM. Surveys and focus groups were conducted as part of a larger study on community health among Latino MSM in New York City, which addressed sexual behavior and associated risks, substance use, mental health concerns, discrimination, and interpersonal violence, among other issues. For the present study, we focus specifically on quantitative data pertaining to relationship status, and qualitative data pertaining to couple dynamics and strategies for adapting a couple-based intervention.

Participants were recruited from a variety of venues including social media, word of mouth referral, and a variety of community-based organizations including a local LGBT center, a community health center, and two Latino HIV/AIDS agencies, and an additional HIV

agency specializing in harm reduction and LGBT-specific services. We employed purposive stratified sampling (Trost, 1986) to diversify the sample by age, sexual and gender identity, national origin, HIV status, relationship duration, immigration status, prior involvement in HIV research, and prior involvement with community-based agencies. Social media venues such as Grindr and Facebook were particularly valuable for recruiting participants who were not receiving services from or otherwise involved with community-based agencies (Martinez et al., 2014). Providers were recruited by reaching out to a range of local health and social services agencies that serve Latino MSM. The resulting sample included paid professional as well as volunteer providers. The study was approved by the IRB at the PI's institution.

## Quantitative Measures and Analysis

**Demographic characteristics**—All demographic characteristics were dichotomized for the purposes of data analysis. These included age (18-29 vs. 30+ years old); sexual identity (gay vs. other); language spoken, written, and read (predominantly Spanish-speaking vs. equally or more fluent in English); and recruitment venue (social media such as Facebook and Grindr, vs. other means such as word of mouth and community agencies).

**High-risk alcohol consumption**—Our measures for high-risk alcohol consumption were based on recommendations from the Substance Abuse and Mental Health Services Administration (Substance Abuse and Mental Health Services Administration, 2015). Participants were asked whether they ever had consumed 5 or more alcoholic beverages in a single occasion (i.e. binge drinking); those who answered “yes” were then asked how many times they had done so in the previous 30 days. Those who reported at least one session of binge drinking in the past 30 days were categorized as engaging in high-risk alcohol consumption.

**Substance use**—Participants were asked about substance using behaviors in the past three months. Substances assessed included marijuana, coke or crack, and club or party drugs.

**Sexual risk behavior**—Sexual risk behavior was assessed by asking participants to report the number of male sexual partners in the past 3 months. This was followed by a series of questions that prompted the respondent to indicate the number of anal intercourse episodes, as well as the number and times condoms were used. Participants were coded as having multiple partners if they reported at least two male sexual partners during this time period, and were coded as engaging in CAI if they reported at least one incident of CAI during this time period. These measures were based on survey guidelines from the National Survey of Sexual Health and Behavior (Reece et al., 2010), as well as measures from previous couple-based research with Black MSM (Wu, El-Bassel, Donald McVinney, Fontaine, & Hess, 2010; Wu et al., 2011). One potential limitation of this measure was that we asked participants about CAI in general, and did not collect sufficient data to distinguish CAI in primary relationships from that in casual relationships and encounters. Only CAI was assessed as an outcome variable; having multiple partners was incorporated as a control measure for sexual risk.

**Relationship status**—This variable aimed specifically to capture same-sex relationship status, given our interest in Latino MSM and the relationships and sexual risk factors (i.e. CAI) most common within this community. Participants were asked, “do you currently consider yourself in a relationship with another man?” Those who responded “yes” were coded as being in a relationship. We asked these participants if there was a man they considered their primary or main partner, and if so, about the duration (years and months) of their primary relationship.

Frequencies and percentages were calculated for categorical and dichotomous variables, with percentages proportionate to the entire sample of n=240. We conducted  $\chi^2$  analyses to assess bivariate associations between relationship status and all control variables, as well as the bivariate associations between our outcome variable of CAI and all other measures. To determine the extent to which relationship status predicts reports of CAI, we conducted a multivariate logistic regression incorporating all controls. All analyses were conducted using SPSS.

### Qualitative Measures and Analysis

We sought input from Latino male couples and service providers in order to better address sexual risk behaviors among couples and integrate comprehensive sexual health information relevant to Latino MSM into a couples-based HIV prevention intervention. A total of 20 couples (i.e. 40 individuals), divided into two cohorts of 9 and 11 couples each, participated in this part of the study. A small majority of these participants had been in relationships for at least one year (n=10, 55% in cohort 1; n=13, 59% in cohort 2). We conducted three focus groups with each cohort. All focus groups were conducted in Spanish. Open-ended questions addressed information regarding relationship dynamics and overall experiences that might impact sexual risk behavior, the perceived appeal of a couple-based intervention, strategies for reaching and retaining couples, and any further concerns that might be addressed in a couple-based intervention. Sample questions (translated) included, *What does a healthy community look like? What are the best places and ways to reach people like you? How could we make health education programs or services more meaningful for Latino MSM with limited English proficiency and their same-sex partners? Is there any more information you can provide us that you think would be useful in terms of improving health among Latinos and their same-sex partners?*

We employed the nominal group technique in order to identify and prioritize key concerns facing Latino male couples as a community (Boddy, 2012). This technique ensures that all participants have a voice within the focus group. Each individual is invited to respond to a prompt, and provide a brief explanation of his/her perspective, after which all participants collectively rank the responses. Participants were asked, *What do you think are the most important issues facing your community in New York City?* and *What do you think are the major health issues (or risks) for Latinos in same-sex relationships?* Following the nominal technique, we invited each participant to answer these questions, and worked collectively to identify a list of key problems that participants believed were the most pressing. In order to maintain a safe environment, and to gain a sense of overall trends in relationship dynamics and risk behaviors, we initially asked participants hypothetical questions about the needs and

experiences of Latino male couples as a community. As focus group discussions progressed, we tailored questions to the particular couples present. Participants also drew frequently upon personal experiences as a means of identifying and analyzing issues pertinent to Latino MSM couples more broadly.

Providers (N=10) were asked for input regarding the major health challenges affecting Latino MSM and Latino male couples, as well as barriers keeping participants from participating in a couples intervention. We used open-ended questions with follow-up prompts, such as, “*As far as you know, what are the major challenges and health concerns affecting Latino MSM? What do you believe are the two or three most important issues facing Latino men in same-sex relationships?*” and “*What problems do you anticipate we might face in keeping participants in an intervention? What kinds of problems have you had trying to engage Latino MSM and their same-sex partners?*”

Two co-facilitators (including the PI) conducted the focus groups. Five note-takers were present during the sessions and recorded any comments related to relationship status and dynamics. These individuals were matched with study participants to the best of our ability based on gender, race/ethnicity, and sexuality. Both facilitators and four of the five note-takers were bilingual Latino gay men; the remaining note-taker was a bilingual white gay man. With couples and providers, we continued to seek input from focus group participants until no new information resulted; all focus group sessions lasted between 2 and 3 hours. All quotations were translated from Spanish to English, using pseudonyms to ensure participants' anonymity. Facilitators and note-takers debriefed after each focus group, and their reflections were recorded. Content and notes related to relationship status and dynamics were extracted and analyzed for the present study.

Given the exploratory nature of this research, and our interest in identifying community-level concerns as efficiently as possible given budgetary and time constraints, focus groups served as an ideal research method (Stewart, Shamdasani, & Rook, 2007). Participants may engage in collective processes to construct meanings and identify shared interests and concerns as they work to identify and reconcile variation among individual and couple perspectives (Belzile & Öberg, 2012; Freeman, 2006). However, focus groups can be challenging to conduct. It is possible for some participants to monopolize conversations, and for others to feel left out or silenced. Facilitators must be mindful of their own interactions with participants, as well as group dynamics among participants (Farnsworth & Boon, 2010). Bearing these concerns in mind, our co-facilitators received specialized training prior to conducting any focus group sessions. We further selected specific strategies, such as the nominal group technique described above, to ensure active engagement among all participants in this phase of research.

## Results

### Summary Statistics

Descriptive demographic characteristics of the sample are provided in Table 1. A total of 240 individuals were initially recruited. Most of the participants were recruited through social media (n=139, 60%). However, some were recruited through community-based



organizations and study participant referrals to friends and other couples. The majority (n=223, 93%) self-identified as Hispanic or Latino. Most of the participants reported being in a relationship (n=175, 73%). Seventy-one percent of these participants had been in their primary relationships for at least one year (n=124), with a mean relationship duration of 49 months (SD=61.19). Most participants self-identified as gay (n=199, 83%), and a smaller but substantial number self-identified as heterosexual, bisexual, transgender or other (n=40, 17%). A substantial minority reported being under the age of 30 (n=93, 39%). In terms of language preference, more than half of the participants reported being predominantly Spanish-speaking, by reporting reading and writing only in Spanish or doing so in Spanish better than English (n=151, 63%).

Most participants reported at least one act of condomless anal intercourse (n=134, 60%) and having more than 1 male partner in the past 3 months (n=122, 55%). Participants reported an average of 12.98 incidents of CAI (SD=27.20; range [0, 168]) and 6.82 sexual partners in the past three months (SD=17.11, range [0, 120], not shown in a table). Among participants in same-sex relationships (n=175), approximately half reported multiple partners in the previous three months (n=85, 49%) and more than two-thirds reported CAI in this time period (n=117, 68%; see Table 2). Those in relationships reported an average of 17.12 incidents of CAI (SD=30.70, range [0, 168]) and a mean of 6.66 sexual partners in the previous three months (SD=16.40, range [0, 120], not shown in a table). This indicates that participants who reported the highest frequencies of CAI and sexual partners were also in (primary) same-sex relationships. Almost half of the sample (53%) reported engaging in high-risk alcohol consumption (binge or heavy) in the past month. Participants reported high levels of marijuana, rock or crack cocaine, and party drugs use in the past month, 27%, 10%, and 33% respectively.

### Phase 1: Quantitative Data

**Bivariate Analyses**—As reported in Table 2, six covariates were significantly associated with relationship status in  $\chi^2$  analyses. Participants who reported being in a relationship with another man were more likely to be at least 30 years old ( $p < .01$ ), less likely to have been recruited via social media ( $p < .001$ ), and more likely to report at least one incident of CAI in the prior three months ( $p < .001$ ) than those who were not in such relationships. Participants in same-sex partnerships were also more likely to report at least one incident of high-risk alcohol consumption in the past month, crack or powder cocaine use in the past three months, and club or party drug use in the past three months ( $p < .01$ ,  $p < .05$ , and  $p < .05$  respectively).

As reported in Table 3, six measures were significantly associated with CAI in  $\chi^2$  analyses. Participants who reported engaging in at least one act of CAI in the previous three months were more likely to be in a relationship ( $p < .001$ ), more likely to have engaged in anal intercourse with multiple male partners in the past three months ( $p < .05$ ), and less likely to have been recruited via social media ( $p < .01$ ) than those who did not report CAI. This variable was also significantly associated with all substance use measures. Participants who reported engaging in CAI were more likely to report high risk alcohol consumption ( $p < .$

01), marijuana use ( $p < .01$ ), crack or powder cocaine use ( $p < .001$ ), and the use of club or party drugs ( $p < .001$ ) in the previous three months.

### Multivariate Analyses

Findings from our multivariate logistic regression are presented in Table 4. Consistent with our hypothesis, relationship status was a significant predictor of CAI. When controlling for a range of demographic characteristics, engagement with multiple partners, and substance use behaviors, participants in same-sex relationships were approximately five times as likely as their peers to report at least one incident of CAI in the previous three months (OR: 4.95,  $p < .001$ ). Two substance use control variables were also significant: use of crack or powder cocaine (OR: 8.23,  $p < .05$ ) and use of club or party drugs (OR: 2.10,  $p < .05$ ). However, the confidence interval for cocaine use was considerable (1.01 to 66.92).

### Phase 2: Qualitative Data

Several themes emerged in our focus groups with Latino male couples and providers. We limit our analysis here to those most directly relevant to relationship dynamics, and its influence on sexual risk behavior. These included changes in the characteristics of “typical” relationships among Latino MSM, difficulties associated with and intervention opportunities for working with this population, and resilience among Latino male couples in the face of social and structural challenges.

### Relationship Dynamics and Sexual Behavior

Using the nominal group technique described above, participants identified five key issues affecting Latino male couples, many of which emphasized dynamics within relationships: infidelity, trust, lack of communication, coming out to family as a couple and related concerns about family acceptance, and jealousy. Overall, most participants acknowledged that the concept, dynamics and characteristics of male same-sex partnerships are distinct and in constant transformation. Monogamous and open relationship agreements, as well as clear and effective communication between primary partners, emerged as key themes in regards to contemporary relationship dynamics among Latino MSM. One participant explained: *“The concept of being in a ‘relationship’ has changed, ya no es tan tradicional (not that traditional any more), and couples are united through an emotional bond that relies less on fidelity.”* Another participant expanded *“The couple dynamics change over time, it is all about figuring out how we as a couple can adapt to [these changes] – love changes.”* (Pedro). While drawing attention to increasing fluidity and openness among Latino MSM relationships, most focus group participants emphasized the need for clear and respectful communication within primary partnerships. For example, Gabriel explained that, *“when there is a lack of negotiation in couples, this can lead to problems.”* One such problem concerned disagreements and miscommunication about safer sex practices, particularly for MSM in nonmonogamous partnerships. While participants consistently drew on their personal experiences to contribute to discussions, including current and prior relationships, it is important to note that these comments concerned their perceptions of overall trends in Latino male partnerships. For example, in the comment reported above, Pedro was not simply indicating that “couple dynamics change[d] over time” in his current relationship.

Rather, he indicated that Latino MSM in same-sex relationships should expect their dynamics, and the nature of their love for one another, to change over time.

Although HIV was not identified as among the top five issues affecting Latino male couples, it was mentioned as an auxiliary issue. Several participants expressed concerns about infections occurring within primary relationships, both for serodiscordant couples and concordant HIV-negative couples in non-monogamous partnerships, who might acquire infections through outside sexual encounters. Carlos stressed the need to focus on HIV prevention: *“We need to help Latino couples maintain and sustain long-term relationships and deal with HIV.”* David elaborated that, *“We need more information about viral load suppression, PrEP, and risk reduction. We should be talking about this. People get tired of using condoms and this information can help a lot of people.”*

Many participants mentioned that the use of drugs and alcohol often resulted in risk taking behaviors, including sexual-risk behavior, and was an unwritten rule in relationships. Justin stated: *“Drugs and alcohol abuse can affect a person's self-control; we need programs that help us find a balance.”* Overall, there was a consensus among participants that syndemic conditions, including high-risk alcohol consumption, childhood sexual abuse, domestic violence, and depression, interact synergistically contributing to health risk. Yosmar described this in the following manner: *“It is not useful to talk about them independently of one another. They all have something in common that needs to be identified.”*

### Opportunities to Intervene on HIV Risk

Having identified key issues affecting Latino male couples, several participants further expressed interest in receiving support from community-based organizations to address them. Couples might benefit from such support when navigating challenges together, such as negotiating relationship agreements and learning to communicate clearly and respectfully. This reinforced several participants' assertions that relationship dynamics change over time; this may include changes for the better, as Latino MSM develop the skills to share their interests and boundaries regarding fidelity, safer sex practices, and communication. Michael noted the value of ongoing access to providers for managing the day-to-day stresses that might arise within partnerships: *“We need a hot line or a live chat to speak about unique couples' situations with a professional – for example, fights, arguments, etc.”* As indicated by his comment (echoed by other focus group participants), social media and e-health tools were identified as promising avenues for service provision. Supplementing on-site care with live chat and other web-based services might considerably expand providers' capacity to address the needs of Latino male couples, on those couples' own terms and timelines. Moreover, these services might be made available to a broader population than those who meet the criteria for specific on-site programs. Building on the recruitment strategies for this study, such services might also be advertised through nontraditional venues such as Facebook and Grindr, and thereby reach Latino MSM individuals and couples who would otherwise not pursue services or participate in formal interventions.

Providers also echoed couples' concerns regarding safer sex practices, and the potential for infections within primary relationships. One corroborated David's comment about the inadequacy of condoms for HIV prevention: *“Condoms don't work for Latino couples. Data,*

*as presented here, bears out what we are seeing in our agency.*”Several providers identified PrEP as a particularly promising prevention tool for this community. However, they also expressed reservations about distributing PrEP and other biomedical tools without also providing education about proper use. One argued that *“PrEP should be an incentive towards the latter part of the study, once participants have received information, knowledge, and counseling around PrEP. However, PrEP shouldn't be passed out like candy and should especially be promoted for serodiscordant couples.”*To be clear, this individual was not suggesting that providers withhold resources or subject clients to extensive training or obstacles, but rather that PrEP's potential as a prevention tool cannot be realized if individuals lack basic information about proper use, potential benefits, and limitations (e.g. the fact that PrEP is effective for preventing HIV, but will not protect against STIs). Overall, providers seemed confident that couple-based interventions would be an effective avenue for addressing sexual risk among Latino MSM, but that such interventions must be comprehensive and strategic in regards to providing education about and access to PrEP and other biomedical prevention tools.

While our focus groups aimed to collect data regarding challenges among Latino male couples, most of the participants also expressed tremendous resilience. Some drew attention to individual and collective strength, and rejected portrayals of Latino MSM as inherently unhealthy or defined solely by marginalization. For example, Carlos pointed out that, *“We are criticized as being ‘unhealthy,’ but often we are healthier than our straight counterparts who criticize us.”*Expanding on this position, Esteban expressed determination to work for social change, to improve the life circumstances as well as public conceptions of Latino male couples: *“We need to follow our path and be out there and continue to enjoy some of the benefits we have. We need to fight and continue our fight for visibility and rights.”*Other participants emphasized their desire and ability to engage outside resources, through participating in interventions and/or simply pursuing knowledge, as a means of countering some of the obstacles they face. Providers and researchers might consider such resilience as a resource for designing and implementing effective interventions. A combined approach to interventions, incorporating onsite as well as web-based services, seemed particularly promising in this regard. Yusnabi described interventions as empowering couples to address their own struggles: *“A couple-based project gives you tools to overcome [the] problems and challenges you face as a couple, helping each other learn to negotiate and communicate better.”*Dayan reinforced this perspective with his simple, yet powerful insistence that, *“Information is power, power is change.”*

## Discussion

This study was one of the first mixed-methods investigations to examine relationship dynamics, as well as the association between relationship status and sexual risk behavior, among Latino MSM. In bivariate analyses, participants in same-sex relationships reported more condomless anal intercourse than those who were not in such relationships, in addition to more high-risk alcohol consumption, more use of crack and powder cocaine, and more use of club and party drugs such as ecstasy. In multivariate analysis, participants in same-sex relationships were approximately five times as likely as those not in such relationships to report engaging in CAI. This is consistent with previous research (Hoff et al., 2012)

indicating that individuals are more likely to engage in CAI within relationships. While we did not collect data regarding whether incidents of CAI occurred within or outside of primary relationships, we determined that half of participants in relationships reported multiple partners. Moreover, the highest frequencies of sexual partners (120) and incidents of CAI (168) in this study were both reported by participants in primary same-sex relationships.

Focus group participants indicated that interventions that focus on relationship dynamics, and are mindful and supportive of a range of agreements regarding (non)monogamy and fidelity, are sorely needed. Participants' observations about the changing dynamics of relationships are consistent with previous research (Hoff et al., 2012). Both providers and Latino MSM expressed concerns regarding HIV transmission within relationships. Many couples are not monogamous, and are inconsistent with condom use within and outside of primary relationships. These trends, along with a lack of information regarding prevention strategies, contribute to sexual risk behavior among Latino MSM. Some individuals might use condoms more consistently if they had the skills to negotiate more effectively with primary and casual partners. Those who are uninterested or otherwise unlikely to use condoms consistently could protect themselves by using biomedical strategies such as PrEP and HIV self-testing kits. However, many individuals lack knowledge of and access to such tools. Many Latino MSM and couples may feel discouraged or disempowered by discrimination and other barriers to care.

At the same time, many of our participants demonstrated resilience in the face of such obstacles, and a desire to affect social change. They did not merely perceive social and health services as avenues toward improving personal and couple wellbeing, but as resources for building knowledge and communal ties. Our participants expressed interest in promoting public education, and in changing popular perceptions of Latino MSM. Many acknowledged stereotypes of ill health and poor decision making, and portrayals of Latino MSM grounded only in suffering and marginalization, and demonstrated a commitment to challenging them. Researchers and providers might work to support and build on such resilience. Those who work with Latino MSM might empower clients/participants to promote communal wellbeing, perhaps by supplementing individual and couple-based interventions with opportunities to take part in public education and other forms of community activism.

Taken together, these findings speak to the potential value of couple-based interventions for Latino MSM. Quantitative data indicate that Latino men in same-sex relationships are more likely than their peers to engage in CAI; consequently, providers must be prepared to screen for relationship status and to provide services specifically for couples. For those couples who are disinterested in condom use but interested in HIV prevention, which was a notable theme in focus group discussions, couple-based interventions will provide an opportunity to educate about biomedical strategies such as PrEP, and to ensure that such strategies are only made available to individuals and couples with sufficient knowledge to use them properly. Given focus group participants' suggestion that the increasingly open nature of Latino MSM partnerships has intensified the burdens of communication within relationships, including negotiations regarding fidelity and safer sex practices, providers can offer ongoing support for these matters as well. Phone and internet-based services, as well as devoted time to

discuss relationship concerns within in-person interventions, could go a long way to addressing couples' needs. Finally, as indicated by our focus group participants, couple-based services may offer an opportunity for providers to highlight and utilize the resilience of Latino MSM in relationships. Providers may empower couples to negotiate boundaries and prevention strategies, and to counter the feelings of invisibility and social marginalization that contribute to risk behavior.

There are some limitations to the present study. First, the quantitative component was limited to a cross sectional sample, and the qualitative component also had a relatively small sample size. Second, the present study did not track couple's relationships with substance use, specifically in regards to whether use within relationships was linked to one or both partners. In addition, we did not measure whether or not individuals who reported high-risk alcohol consumption and other substance use were in open or closed relationships, information that is important for creating interventions. Additionally, we omitted some potentially relevant variables, such as socioeconomic status markers such as income and employment status, from our survey due to the scope of the adaptation study. Future research should also explore the impact of relationship status and dynamics on the consumption of alcohol and other substances prior to sexual encounters. Such work might explore the impact of cultural taboos for some Latinos surrounding anal sex and different cultural attributes (e.g., machismo) that can conflict with same-sex relationship dynamics, potentially leading to sexual risk behavior and high-risk alcohol consumption. For example, researchers have found that behaviorally bisexual Latino men navigate their same-sex relationships in secrecy (Garcia, Muñoz-Laboy, Parker, & Wilson, 2014). Machismo also dictates that men must avoid "feminine behaviors," be perceived as powerful and prove their manhood by taking risks (Ayala et al., In press; Rhodes et al., 2009; Royster, Richmond, Eng, & Margolis, 2006). Having multiple partners and not using condoms may imply masculinity for some. Sexual and gender minority Latinos/as may feel further compelled to take risks to "overcome" perceived external assumptions and internal negative feelings about their orientation and masculinity (Rhodes, Yee, & Hergenrather, 2006; Sandfort, Melendez, & Diaz, 2007).

Further limitations concern our operationalization of condomless anal intercourse. While we based these measures on previous research, including some focused specifically on MSM of color (Wu et al., 2011; Reece et al., 2010), they only captured a portion of relevant behaviors and risk factors: total number of anal sex partners, total number of anal sex encounters, and total number of CAI encounters over the previous three months; we then dichotomized participants as reporting "no CAI" or "any CAI" in this time period. Practically speaking, we also relied on participants' ability to accurately recall three months' worth of sexual behaviors, as well as their comfort in sharing this information. We did not distinguish between insertive and receptive behaviors. We did not capture information regarding whether participants engaged in CAI with primary partners, casual partners, or both; nor did we capture information regarding associations between participants and partners' serostatus and decisions regarding safer sex practices. Finally, we did not inquire as to whether incidents of CAI might be still be protected (e.g., through the use of PrEP). Future research should assess sexual behaviors in greater detail, incorporating nuances regarding the associations among relationship status, relationship agreement, sexual role (i.e., insertive,

receptive, or both), and considerations in regards to serostatus. It may also be worth collecting data for behaviors over shorter time periods, such as 30 days, to mitigate concerns about accurate recall.

## Conclusion

The present study has increased understanding of the dynamics of Latino MSM relationships with regard to CAI and alcohol and other substances. The study's finding that Latino MSM in relationships are more likely to engage in CAI, and that the effects of alcohol and other substance use on CAI may be mediated by relationship status, can help inform interventions and programs. Furthermore, the resilience of Latino male couples and the steps this group has already taken to increase their knowledge of and access to care should be leveraged in future interventions with this population. In addition, providers must adapt and be responsive to the needs of the Latino MSM and work to develop culturally appropriate and affirming interventions. It is clear that there is a need for culturally grounded, couple-based HIV/AIDS prevention interventions as a means of addressing sexual and substance use risk behavior. These concerns are pressing considering that Latino MSM continue to be disproportionately affected by HIV.

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**Table 1**  
**Characteristics of the sample (N=240)**

Characteristics	<i>n</i> (%) or <i>m</i> ( <i>SD</i> )
Self-identify as Hispanic/Latino Identity	
No	16 (7)
Yes	223 (93)
Relationship Status (same-sex only)	
Not being in a relationship	65 (27)
Being in a relationship	175 (73)
Relationship Duration (n=175)	
Length of primary relationship (months, M)	49 (61)
In primary relationship for 12+ months	124 (71)
Sexual Identity	
Gay	199 (83)
Heterosexual, bisexual, transgender or other	40 (17)
Age	
Under 30	93 (39)
30 or older	146 (61)
Language	
Predominantly Spanish-speaking	151 (63)
Predominantly English-speaking	89 (37)
Condomless acts of anal intercourse in the past 3 mos	
No	96 (40)
Yes	134 (60)
Having more than one partner in the past 3 mos	
No	110 (45)
Yes	122 (55)
High-risk alcohol consumption in past 3 mos	
No	114 (47)
Yes	126 (53)
Marijuana use in past 3 mos	
No	174 (73)
Yes	66 (27)
Coke or Crack use in past 3 mos	
No	218 (90)
Yes	22 (10)
Club or Party Drugs in past 3 mos	
No	161 (67)
Yes	79 (33)
Recruitment venue	

Characteristics	<i>n</i> (%) or <i>m</i> ( <i>SD</i> )
Social Media	139 (60)
Other	96 (40)

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**Table 2**  
**Characteristics of a sample of Latino MSM by Relationship Status (N=240)**

Characteristics	In A Relationship	Not in A Relationship
	<i>n</i> (%)	<i>n</i> (%)
Sexual Identity		
Gay	147 (84)	52 (81)
Heterosexual, bisexual, transgender or other	28 (16)	12 (19)
Age **		
Under 30	57 (33)	36 (55)
30 or older	117 (67)	29 (45)
Language		
Predominantly Spanish-speaking	109 (62)	42 (65)
Predominantly English-speaking, or speaks both equally	66 (38)	23 (35)
Condomless act of anal intercourse in the past 3 mos ***		
No	56 (32)	40 (70)
Yes	117 (68)	17 (30)
Having more than one partner in the past 3 mos		
No	88 (51)	22 (37)
Yes	85 (49)	37 (63)
High-risk alcohol consumption in past 3 mos **		
No	72 (42)	42 (65)
Yes	103 (58)	23 (35)
Marijuana use in past 3 mos		
No	122 (70)	52 (80)
Yes	53 (30)	13 (20)
Coke or Crack use in past 3 mos *		
No	154 (88)	64 (99)
Yes	21 (12)	1 (1)
Club or Party Drugs in past 3 mos *		
No	111 (63)	50 (77)
Yes	64 (37)	15 (23)
Recruitment venue ***		
Social Media	79 (47)	60 (92)
Other	91 (53)	5 (8)

\*  $p < .05$ ,

\*\*  $p < .01$ ,

\*\*\*  $p < .001$  in  $\chi^2$  analyses

**Table 3**  
**Characteristics of a sample of Latino MSM by Reports of Condomless Anal Intercourse (CAI) (N=240)**

Characteristics	CAI in Past 3 Mos	No CAI in Past 3 Mos
	<i>n</i> (%)	<i>n</i> (%)
Sexual Identity		
Gay	106 (80)	85 (89)
Heterosexual, bisexual, transgender or other	27 (20)	11 (12)
Age		
Under 30	48 (36)	40 (42)
30 or older	85 (64)	56 (58)
Language		
Predominantly Spanish-speaking	84 (63)	60 (63)
Predominantly English-speaking, or speaks both equally	50 (37)	36 (38)
Relationship Status ***		
Not in a same-sex relationship	17 (13)	40 (42)
In a same-sex relationship	117 (87)	56 (58)
Having more than one partner in the past 3 mos *		
No	54 (41)	56 (57)
Yes	79 (59)	43 (43)
High-risk alcohol consumption in past 3 mos **		
No	50 (37)	56 (58)
Yes	84 (63)	40 (42)
Marijuana use in past 3 mos **		
No	87 (65)	78 (81)
Yes	47 (35)	18 (19)
Coke or Crack use in past 3 mos ***		
No	113 (84)	95 (99)
Yes	21 (16)	1 (1)
Club or Party Drugs in past 3 mos ***		
No	75 (56)	76 (79)
Yes	59 (44)	20 (21)
Recruitment venue **		
Social Media	65 (49)	65 (70)
Other	67 (51)	28 (30)

\*  $p < .05$ ,

\*\*  $p < .01$ ,

\*\*\*  $p < .001$  in  $\chi^2$  analyses

**Table 4**  
**Logistic regression of engagement in condomless anal intercourse (CAI) in the past three months**

	OR	95% CI	Wald	p
Relationship status (in same-sex relationship) ***	4.95	2.17-11.30	14.41	<.001
Multiple sexual partners in past three months	1.57	0.78-3.16	1.57	0.210
Sexual identity (gay)	0.42	0.16-1.07	3.32	0.069
Age (30+ years)	0.73	0.37-1.44	0.81	0.368
Language (predominantly Spanish)	1.35	0.68-2.67	0.74	0.390
High-risk alcohol consumption in past three months	1.58	0.84-2.97	2.03	0.154
Marijuana use in past three months	1.38	0.60-3.17	0.57	0.451
Crack or powder cocaine use in past three months *	8.23	1.01-66.92	3.88	0.049
Club or party drug use in past three months *	2.10	1.00-4.41	3.88	0.049
Recruited through social media	0.68	0.33-1.39	1.13	0.289

\*  $p < .05$ ,

\*\*\*  
 $p < .001$