

# Gay and Bisexual Men's Perceptions of HIV Risk in Various Relationships

American Journal of Men's Health  
2018, Vol. 12(4) 655–665  
© The Author(s) 2018  
Reprints and permissions:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/1557988317745759  
journals.sagepub.com/home/jmh



John Shaver<sup>1</sup>, Ryan Freeland<sup>1</sup>, Tamar Goldenberg<sup>1,2</sup>,  
and Rob Stephenson<sup>1</sup>

## Abstract

Men who have sex with men (MSM) bear a disproportionate burden of HIV incidence in the United States. Previous study of sexual decision-making and HIV risk among MSM has not accounted for relationship dynamics. Further research must examine this connection between relationship dynamics and sexual decision-making, especially regarding condomless anal intercourse. This study analyzes data gathered from gay and bisexual men regarding their sexual partners and sexual decision-making over a 10-week period through personal relationship diaries (PRDs) and a follow-up in-depth interview (IDI). Through coding and extraction of relationship dynamics, key patterns of participants' sexual decision-making processes were examined based on relationship type, which was categorized by commitment, formality, and sexual agreement. Participants' sexual relationships can be divided into five categories: (a) Uncommitted, one time, (b) Uncommitted, ongoing, (c) Transitioning or unknown commitment, (d) Committed, nonmonogamous, and (e) Committed, monogamous. These five categories correspond to patterns in sexual decision making and consequent sexual risk-taking behaviors. Each of these influence HIV risk within male–male sexual encounters in a particular manner, and understanding these is important for appropriately tailored HIV prevention interventions for MSM. Recommendations are included for interventions seeking to address HIV risk across a wide variety of MSM sexual relationships.

## Keywords

HIV/AIDS, physiological and endocrine disorders, gay, special populations, bisexual, special populations, male relationships, psychosocial and cultural issues

Received August 22, 2017; revised October 25, 2017; accepted November 2, 2017

Men who have sex with men (MSM) continue to be disproportionately affected by HIV in the United States. In 2014, approximately 67% of new HIV infections were attributable to MSM sexual contact, and HIV incidence has risen among this population each year since 2010 (CDC, 2016). The majority of interventions aimed at reducing the transmission of HIV have focused on reducing sexual risk-taking with the primary aim of reducing HIV exposure through unprotected anal intercourse, either through condom use or, more recently, through a combination of condom use and prophylactic use of antiretrovirals (PrEP). Recent research has drawn attention to the role of male dyads in the U.S. HIV epidemic, with primary partners identified as the source of approximately one third (Goodreau et al., 2012) to two thirds (Sullivan, Salazar, Buchbinder, & Sanchez, 2009) of new HIV infections. Both HIV prevention and research have traditionally focused on MSM, in particular gay-identifying men,

as individuals and have included messaging regarding the HIV risks associated with casual sex. The identification of being in a partnership as an important risk for HIV infection among MSM represents a significant paradigm shift in HIV prevention thinking. Investigations through this lens of dyadic prevention have led to important findings, including high rates of sexual risk behavior for HIV (with primary and casual partners), low rates of disclosure of potentially risky episodes with casual partners to primary

<sup>1</sup>Center for Sexuality and Health Disparities, University of Michigan School of Nursing, Ann Arbor, MI, USA

<sup>2</sup>Health Behavior and Health Education, University of Michigan School of Public Health, Ann Arbor, MI, USA

## Corresponding Author:

Rob Stephenson, PhD, School of Nursing, University of Michigan, 400 North Ingalls, Room 2236, Ann Arbor, MI 48109, USA.  
Email: rbsteph@med.umich.edu



partners, and reduced frequency of HIV testing among male couples (Gomez et al., 2012; Hoff, Beougher, Chakravarty, Darbes, & Neilands, 2010; Stephenson, White, Darbes, Hoff, & Sullivan, 2015).

Given these findings about MSM sexual relationships, prevention research has progressed toward a focus on couple-based interventions for male–male primary partnerships (Beougher et al., 2015; Duncan, Prestage, & Grierson, 2015; Gamarel, Comfort, Wood, Neilands, & Johnson, 2015; Stephenson et al., 2015). Couple-based interventions allow for the tailoring of individually efficacious behavioral and biomedical interventions to the needs and preferences of the couple (Crepaz, Tungol-Ashmon, Vosburgh, Baack, & Mullins, 2015). This approach of targeting both individuals within the main partnership as a single unit has been identified as more efficacious than similar individual efforts in promoting protective sex behaviors (Crepaz et al., 2015; El-Bassel et al., 2011; El-Bassel et al., 2010; El-Bassel et al., 2003; Jones, Kashy, Villar-Loubet, Cook, & Weiss, 2013; Sullivan et al., 2013) and adherence to certain antiretrovirals (Becker, Mlay, Schwandt, & Lyamuya, 2010; Conkling et al., 2010; Crepaz et al., 2015). Despite this recent recognition of the role of male dyads in shaping HIV transmission, and the resultant research into the factors shaping HIV transmission risk within male couples (Gomez et al., 2012; Hoff et al., 2010; Stephenson et al., 2015), research efforts have largely focused on a binary of primary or secondary partnerships (Chakravarty, Hoff, Neilands, & Darbes, 2012) and have largely ignored the variety of relationships that may exist along both an emotional and a time commitment spectrum. Focusing on only primary or nonprimary partners fails to address the diversity of MSM sexual relationships that have been documented, with variable levels of formality, commitment, and sexual behavior (Bauermeister, 2012; Coelho, 2011; Hoff & Beougher, 2010).

The development of interventions tailored to the needs of the various types of MSM sexual relationships is necessary to ensuring the minimization of HIV transmission risk (Hoff & Beougher, 2010). Before interventions can be developed and specified across the spectrum of relationship types, information must be gathered to understand how HIV risk perception and behavior exist within and across the relationship spectrum (Hoff & Beougher, 2010). The limited existing literature regarding HIV risk within various male–male relationships categorizes HIV risk perceptions based on criteria such as level of commitment, perceived seriousness, and frequency of sexual encounters (Lachowsky et al., 2015; Newcomb, Ryan, Garofalo, & Mustanski, 2014). There is a dearth of literature regarding how perception of risk and risk behaviors may vary across those relationship types. The relationship characteristics that underlie perception of risk or engagement in condomless anal intercourse (CAI) are

further understudied. These characteristics may provide valuable information for the tailoring of interventions. This article presents qualitative data gathered from MSM to examine individuals' perceptions and manifestations of sexual risk within and across a variety of male–male relationships. The resulting information has the potential to further improve MSM relationship-specific interventions by targeting sexual decision-making at the individual and dyadic levels, while accounting for the specific risk and risk perceptions within various male–male relationship types.

## Methods

### Demographics

Ethical approval for this study was provided by the Institutional Review Board at University of Michigan. A total of 25 participants were recruited through existing lists of men who had previously participated in research at University of Michigan. After the initial 20 participants had completed baseline IDIs, transcripts were analyzed to determine saturation and variation across race and age demographics. The final five participants were recruited strategically to meet identified variation and saturation needs based on age and race. Eligible men were  $\geq 18$  years, identified as gay or bisexual, lived in the Atlanta metropolitan area, and reported CAI in the 3 months prior to study involvement. All men provided informed consent. Participants were 19 to 50 years old, with a mean age of 32.2 years. The majority, 23 (92%), of the participants identified as gay, while 2 (8%) identified as bisexual. Of this sample, 11 were African American/Black (44%), 12 participants were White (48%), and 2 participants identified with more than one race (8%).

### Data Collection

Data were collected from November 2012 through February 2013, with each participant's involvement lasting 10 weeks. Across the 10 weeks of study participation, participants completed an initial baseline IDI, three PRDs, and a debrief IDI at the end of the 10-week period. All participants completed each of the three components of the study. This novel approach built upon established methods of dialogical interview (Montoya & Kent, 2011) along with life history calendars (Axinn, Pearce, & Ghimire, 1999; Martyn & Belli, 2002) in the form of PRDs in order to facilitate in-depth conversation regarding sexual relationships over the study period. Full procedures for this study have been previously published (Goldenberg, Finneran, Andes, & Stephenson, 2016).

Following a semistructured interview guide, interviewers guided each participant through the creation of a

**Table 1.** Quantity of Each Relationship Type Discussed.

Relationship type reported	Number of participants reporting each type	Number of relationships discussed
Uncommitted, one time	6	18
Uncommitted, ongoing	15	32
Transitioning or unknown commitment	11	11
Committed, nonmonogamous	5	5
Committed, monogamous	8	8
Total	25	74

visual timeline, using stickers to indicate information about each identified romantic or sexual partner. Data collected included relationship definitions (e.g., “boyfriend,” “hookup,” “friends with benefits”), level of commitment, exclusivity, emotions (e.g., “trusting,” “excited,” “insecure”), and experiences of sexual intercourse with or without a condom.

Participants completed PRDs at the third, sixth, and ninth week of study involvement. Each diary was a web-based, quantitative, and Health Insurance Portability and Accountability Act (HIPAA)-compliant survey administered through SurveyGizmo (SurveyGizmo, Boulder, Colorado). Each survey asked participants to report on sexual or romantic partners during the previous 3-week period and the survey assessed elements of each relationship, including perceived HIV risk, occurrences of sex (oral, anal with a condom, and CAI), and how well the participant knew the partner.

At the 10th week of study involvement, each participant completed a debrief IDI. Visual timelines were constructed according to the information collected through the PRDs. Following a semistructured interview guide, interviewers guided each participant through the visual timeline. Participants were asked to place stickers on the timeline to indicate information about up to seven sexual and/or romantic partners from the 10-week experience. Reported partners were limited to seven for feasibility of discussion within an approximately 2-hr debrief IDI. Men were prompted to elaborate on their responses, as well as answer additional questions, including information regarding sexual decision-making processes (e.g., decisions about sexual positioning, condom negotiation, relationship agreements), terminology used to describe sexual encounters (e.g., “hooking up,” “being intimate,” “fooling around”), emotions associated with sex (e.g., “in control,” “bored,” “pleasured”), and self-determined definition of the relationship (e.g., “boyfriend,” “partner,” “trick”).

### Data Analysis

All IDIs were audio recorded and transcribed verbatim by an external transcription service. Data from PRDs and

debrief IDIs were initially reviewed by a team of three analysts to determine repetitive relationship characteristics. Initial readings were performed while listening to audio files, in order to determine quality of transcriptions. After multiple close readings, four key characteristics were identified as defining factors of relationship types: the number of sexual encounters, intention to continue the relationship, identified commitment (via the answer to the question “Are you currently in a relationship with a man you feel committed to above all others? Some people might call this a boyfriend, life partner, husband, or significant other”), and sexual agreements. After close readings and discussion, the three analysts determined five unique relationship types according to the identified defining characteristics: (a) *Uncommitted, one time*, (b) *Uncommitted, ongoing*, (c) *Transitioning or unknown commitment*, (d) *Committed, nonmonogamous*, and (e) *Committed, monogamous* (Table 1). During the debrief IDIs, the 25 participants described a total of 74 sexual and/or romantic partners that had occurred throughout the 10 weeks of study participation. Thick descriptions were written for each of the 74 relationships. A thick description is a document in which all collected qualitative data about a given phenomenon are conglomerated for greater depth and clarity of investigation (Geertz, 1973). Using these thick descriptions, the 74 relationships were then individually categorized according to the relationship types described earlier. Analysts responsible for relationship categorization cross-checked one another’s categorization of relationships, and disagreements were discussed and reconciled. The determined relationship types were applied to the transcripts, and definitions were adjusted through further close reading of the transcripts. Criteria for categorization are displayed in Table 2.

Close readings of the individual thick descriptions were then performed, leading to the creation of a preliminary codebook. Provisional definitions were given to each code and the codes were applied to each of the texts. Coded transcripts were then compared by three analysts, resulting in revisions of code definitions where disagreement existed. Two coders then recoded all transcripts, applying the finalized definitions. Two reviewers conducted thematic analysis

**Table 2.** Relationship Category Definitions.

Relationship type	Criteria for categorization
Uncommitted, one time	<ul style="list-style-type: none"> <li>· Singular sexual encounter<sup>a</sup></li> <li>· No identified intention to continue this relationship (<i>one time</i>)<sup>b</sup></li> <li>· No identified commitment to this partner (0)<sup>c</sup></li> <li>· No agreement of monogamy with this partner (0)<sup>d</sup></li> </ul>
Uncommitted, ongoing	<ul style="list-style-type: none"> <li>· Singular or multiple sexual encounters<sup>a</sup></li> <li>· Identified intention to continue this relationship (<i>short term or long term</i>)<sup>b</sup></li> <li>· No identified commitment to this partner (0)<sup>c</sup></li> <li>· No agreement of monogamy with this partner (0)<sup>d</sup></li> </ul>
Transitioning or unknown commitment	<ul style="list-style-type: none"> <li>· Singular or multiple sexual encounters<sup>a</sup></li> <li>· Identified intention to continue this relationship (<i>short term or long term</i>)<sup>b</sup></li> <li>· Stated unknown or transitioning commitment to this partner (1/0)<sup>c</sup></li> <li>· No agreement of monogamy with this partner (0)<sup>d</sup></li> </ul>
Committed, nonmonogamous	<ul style="list-style-type: none"> <li>· Multiple sexual encounters<sup>a</sup></li> <li>· Identified intention to continue this relationship (<i>long term</i>)<sup>b</sup></li> <li>· Identified commitment to this partner (1)<sup>c</sup></li> <li>· No agreement of monogamy with this partner (0)<sup>d</sup></li> </ul>
Committed, monogamous	<ul style="list-style-type: none"> <li>· Multiple sexual encounters<sup>a</sup></li> <li>· Identified intention to continue this relationship (<i>long term</i>)<sup>b</sup></li> <li>· Identified commitment to this partner (1)<sup>c</sup></li> <li>· Agreement of monogamy with this partner (1)<sup>d</sup></li> </ul>

Note. <sup>a</sup>Sexual encounters were categorized on a binary scale (0 = singular sexual encounter; 1 = multiple sexual encounters). <sup>b</sup>Identified intention to continue the relationship was categorized as *one time*, *short term*, or *long term*. <sup>c</sup>Commitment was measured on a binary scale rating (0 = no commitment, 1 = commitment, 0/1 = transitioning/unknown commitment). <sup>d</sup>Agreements of monogamy were categorized on a binary scale (0 = no agreement of monogamy, 1 = agreement of monogamy).

using a constant comparative method of the inductive and deductive themes (Charmaz, 2006; Strauss & Corbin, 1990). Inductive themes resulted from the incorporation of topics explicitly included in the semistructured survey guide, while deductive themes surfaced through prolific occurrences within each of the five relationship types. Thick descriptions were developed after the two reviewers agreed on a set of themes that were connected with individual-level sexual decision-making present among the coded transcripts. Conglomerated patterns, statements, and qualities related to each theme were described and analyzed. Participant quotes are presented with pseudonyms to ensure confidentiality.

## Results

Each of the 25 participants completed all components of the study, providing quantitative and qualitative data regarding a total of 74 sexual relationships. Each of the described relationships was examined and categorized based on number of sexual encounters, intention to continue the relationship, identified commitment to the partner, and agreements of monogamy. Each relationship was placed into one of five categories: (a) *Uncommitted, one time*, (b) *Uncommitted, ongoing*, (c) *Transitioning/unknown commitment*, (d) *Committed, nonmonogamous*, and (e) *Committed, monogamous*. The themes are presented in the following text by relationship type:

### *Uncommitted, One Time*

Six participants shared information regarding one or more *uncommitted, one-time* partners. These were partners with whom the participant had only had one casual, sexual encounter and with whom the participant had not expressed intentions of continuing a sexual relationship. A total of 18 uncommitted, one-time relationships were described. Five of these relationships involved CAI. The terms participants most often selected for this type of partner were "Hookup" and "Booty Call."

Among the participants who experienced uncommitted, one-time sexual encounters, discussion of HIV status played an important role in determining perceptions of sexual risk and sexual behavior. Seroconcordance between participant and partner was discussed in relation to the decision not to use a condom. For example, one participant described the discussion of HIV status with his partner: "For like three seconds, [we discussed HIV status]. He's like 'I'm negative, are you?' I was like 'Yes'" (Participant 116, Partner 4), which was provided as reason for CAI. One-time occurrences that did not have communication of HIV status between men were not explicitly linked to condom use or CAI but were often characterized by an understanding that "[HIV risk] is high anytime . . . you don't know your status or you don't know what a person has" (Participant 108, Partner 1). Although an explicit connection between not discussing HIV status and condom use

was not present in the transcripts, nearly all of the participants who did not report discussion of HIV status within this type of relationship also reported no CAI in that relationship during the study period.

Within this type of relationship, another pattern that emerged was familiarity with a sex partner. A large number of participants in one-time partnerships expressed that they “*don’t know that [they] could pick him [partner] out in a crowd*” (Participant 124, Partner 2), “*Don’t even know his [partner] real name*” (Participant 114, Partner 2), or that he was otherwise unfamiliar. Participants frequently directly connected their unfamiliarity with their partner to the decision to use condoms during a sexual encounter. For example, one participant stated he did not know his partner; thus, he used a condom:

*Interviewer: “How did you decide to use a condom when you had anal sex with [Partner 4]?”*

*Participant: “Because I didn’t know him. It just was the natural thing to do.” (Participant 111, Partner 4)*

Among those participants who reported CAI within this relationship type, a small number of participants associated the incidence of CAI with sexual impulsivity.

*Participant: “We kind of got a little hot and heavy and into it and then afterwards we were like well yes, we missed a step in there but.”*

*Interviewer: “What step did you miss?”*

*Participant: “The condom.” (Participant 116, Partner 2)*

### Uncommitted, Ongoing

The most common relationship type across this sample was *uncommitted, ongoing*, with 32 such relationships reported. CAI was reported in 12 of these relationships. Uncommitted, ongoing relationships were casual, with multiple sexual occurrences, and without a formal commitment between partners. Participants commonly referred to these partners as “Friends with Benefits,” “Hookup,” or “Fuck Buddy.”

Participants discussing uncommitted, ongoing relationships relayed the theme of discussion of HIV status. It was frequently mentioned that discussing HIV status was an important factor in the decision to engage in this type of relationship, or that it was perceived to be important by one’s partner. One participant exemplified this by endorsing serosorting within this relationship type: “*Well that’s also something that most guys, well, I look for in a guy initially is . . . do you have HIV or any STDs?*” (Participant 104, Partner 3). Multiple participants expressed concern that discussion of HIV status would change dynamics and perhaps lead to the cessation of their uncommitted,

ongoing relationship. Many participants further stated that because conversations regarding HIV status were not being engaged, condom use was preferred. One participant shared his method of ensuring his own sexual safety, after perceiving an uncommitted, ongoing partner was HIV positive:

*“He wasn’t vulnerable enough to divulge or tell himself, tell and be honest with someone about his status. And that’s probably why he didn’t want a relationship because he know he would have to tell that, and be honest. So it’s just best to be friends with a person and keep it safe and, you feel, you’re safe enough and you don’t have to tell anything.” (Participant 108, Partner 2)*

Familiarity between participant and partner was also salient across this relationship type. Participants expressed that the dynamic of these relationships can be such that “*although I’ve known him a number of years, I don’t really know him in terms of his inner most thoughts and feelings*” (Participant 113, Partner 4). Participants often expressed that the limited degree of familiarity within these relationships was a reason to ensure condom use within uncommitted, ongoing relationships:

*“And you’re, getting ready to have sex with him and you’re like . . . what am I hopping into bed with? . . . So I guess that’s primarily why the anal sex was always with a condom.” (Participant 103, Partner 1)*

Within this relationship type, there were a number of instances in which sexual impulsivity was expressed. Participants explained that there is a “*struggle I’m having with what my brain is telling me to not do versus like what my eyes want and the hands want to do*” (Participant 104, Partner 5) regarding the tension between knowledge of risk-limiting methods of sexual behaviors and the momentary decision whether to utilize those methods with a partner. One participant explicitly stated that “[CAI] *was wrong but it was like spur of the moment type thing*” (Participant 105, Partner 1). In addition to CAI, participants described lapses in judgment as underlying certain acts of sexual positioning or instances of any type of sex generally within uncommitted, ongoing relationships.

### Transitioning or Unknown Commitment

Relationships in which a *transitioning or unknown commitment* was expressed were those within which participants expressed that the formality or commitment level of the relationship was changing at the time of the debrief IDI or was unknown to the participant at that time. In total, participants reported 11 partners of transitioning or unknown commitment. CAI was reported in two of these

relationships. Participants often changed the titles of these partners throughout the study period to express their unique ongoing relational change, such as "Friends with Benefits" later changed to "My Man," or to express the potential for change: "Potential Boyfriend" or "Seeing Each Other."

Within transitioning or unknown relationships, participants ubiquitously expressed that discussion of HIV status between participant and partner was necessary for assessing risk and sexual decision-making. One participant shared that in his burgeoning relationship, knowledge of HIV status ensured both partners were "safe":

*"My priority when asking those questions [about HIV and STIs] is to make sure that I'm still safe. Well not just me but both of us but more so me. So your feelings are non-existent. I mean, if it offend you that I want to get tested with you, then that's an issue." (Participant 125, Partner 1)*

Another participant, in explaining his low estimation of HIV risk within a transitioning relationship, said that he felt risk was low because "we shared each other's status before we did anything. So I think that was good" (Participant 108, Partner 3).

Transitioning or unknown relationships were also conveyed in relation to familiarity. The relative amount of familiarity between participant and partner often helped to determine decisions regarding sexual risk-taking, such as oral or anal sex, topping or bottoming, or condom or non-condom use. One participant shared that familiarity determines his positioning during some sexual acts:

*"I mean, the thing is, like, if I am giving oral sex, it's going to be with someone that I know that I at least feel comfortable enough to actually have oral sex without a condom, but if I'm just receiving it, I'm a little more comfortable, just in that, it's slightly less, it's less invasive . . . I wouldn't give a blow job without wearing a condom with someone that I don't know that well." (Participant 124, Partner 4)*

The same participant again confirmed the importance of familiarity in this relationship when discussing why he chose to perform oral sex with a partner of this relationship type:

*Interviewer: "So what made you give oral sex in this situation?"*

*Participant: "I knew him more, a little bit more intimately. Like, I didn't, I can't say that I know him perfectly well but I know him well enough to know that, like, he's, it's a safe situation, like, and so I felt more comfortable and enough to give oral sex." (Participant 124, Partner 4)*

## Committed, Nonmonogamous

Among committed relationships, some relationships did not have a formal agreement regarding monogamy or were described as featuring an explicit agreement of non-monogamy. These relationships were categorized as *committed, nonmonogamous*. Five of these relationships were described in this study. Among the five committed, non-monogamous relationships, three partnerships included at least one instance of CAI during the study period. These relationships contained multiple sexual encounters and participants called these partners "Boyfriend," "Lover," and "Most Significant Person."

Discussion of HIV status was present within multiple committed, nonmonogamous relationships. Discussion of both partners' statuses was often viewed as a necessary part of the agreement of non-monogamy and an assurance of safety between partners. One participant assessed the HIV/STI risk within his open relationship as minimal because both partners were regularly tested together:

*"Because we were always safe and, we got tested, we always, every 6 months we got tested together and we were just safe. We never had like any slip ups or nothing like that. So we just really just looking out for each other." (Participant 105, Partner 2)*

Familiarity was also discussed as an important element of relationships of this type. Committed, nonmonogamous partners were generally discussed as familiar to the participants, but with frequent caveats about the fluidity of familiarity.

*"Well, in the beginning, we were having unprotected sex, but in the end we started having more protective sex so that's why I said a 1, I said in the beginning he's a 1 because it was a risk I was taking but I was willing to take that risk because we was together. But now, you gonna wrap it up (chuckling). It's just simple as that, I mean, because I didn't know who you was having sex with. So that was it." (Participant 111, Partner 1)*

Long-term ideation was a theme present within only the committed relationships. Among committed, nonmonogamous relationships, participants linked long-term ideation with conversations about condom use. One participant associated it with cessation of condom use in his relationship:

*"Basically, when we started out, we were using condoms. So, again, we initially agreed that we weren't having sex with anyone and this sex club thing came a little bit later. And so after a period of time and both being tested and testing negative, we decided not to. Initially even he was kind of more not wanting to than I was. But I, all my past relationships, at a certain point, have progressed to that stage." (Participant 114, Partner 1)*

This participant described the decision to engage in CAI beyond his current relationship. CAI was characterized as a part of the natural progression and solidification of any long-term relationship.

### Committed, Monogamous

Similar to committed, nonmonogamous relationships, *committed, monogamous* relationships were characterized by a formal commitment that existed between the two partners. However, these formal commitments further included an agreement of monogamy between partners. Eight committed, monogamous relationships were described. Six of the relationships involved CAI throughout the study period. Multiple sexual encounters were reported in each committed, monogamous relationship, and participants titled their partner “Husband,” “Boyfriend,” or “Partner.”

Within the discussions of committed, monogamous relationships, disclosure of HIV status between a participant and his partner was described most frequently as having occurred early in the relationship, but not having reoccurred recently:

*“At first, we started off with a condom and then we knew each other status and then we both was checked out for any other disease, HIV positive, you know, hepatitis, syphilis, gonorrhea and stuff like that. He came back negative which he knew he would and I did too. So then we did not do it with the condoms, you know.” (Participant 108, Partner 6)*

The lack of recent discussion of HIV status was generally addressed by saying that partners of this type “*don’t take part in any questionable activity that could cause . . . a wrong turn towards STDs or HIV [so] there’s no risk*” (Participant 117, Partner 1). The majority of participants who endorsed having discussed HIV status early in their committed, monogamous relationship without recently revisiting the topic concurrently reported CAI with this partner during the study period.

Committed, monogamous partners were frequently characterized as very familiar to the participant. For example, one participant mentioned: “*Know[ing] him inside and out, I know what he stands for. I know where he wants to go in life, who he is as a person*” (Participant 115, Partner 1). This level of familiarity was also connected to a belief of decreased risk as well as engaging in CAI:

*“But yes, we don’t use the condoms because of the trust and the knowledge of neither one of us are putting ourselves in that risky situation.” (Participant 117, Partner 1)*

Long-term ideation was present in the discussion of every committed, monogamous relationship. Multiple participants expressed that the ongoing maintenance of a long-term

relationship plays a role in sexual decision-making. The long-term nature of these relationships was generally described as a reason to feel comfortable engaging in CAI:

*“So, because at first with [Partner 1] we joked and we said after we’re married we’ll stop using condoms and everyone kind of jokes that in the gay world after 2 years you are married. So, that’s the kind of the point we started [CAI].” (Participant 119, Partner 1)*

### Discussion

Patterns were present in participant understanding of HIV risk and engagement in CAI within and across each of the five relationship types reported by participants. These patterns emphasize the need for HIV prevention efforts targeting male couples that recognize the diversity of decision-making mechanisms employed regarding sexual risk across relationship types. Tailoring interventions to a main partnership, rather than an individual’s behavior, has been effective in reducing HIV-risk behaviors (Crepaz et al., 2015). Given the results presented here, further tailoring of interventions beyond simple dichotomization of main and outside partnerships may be a promising direction for future interventions to reduce HIV transmission. Of particular note in this regard is that the most commonly reported relationship type was uncommitted, ongoing. Although these relationships do not form the primary dyad that is the subject of typical couple-focused HIV prevention interventions (Gomez et al., 2012; Hoff et al., 2010; Stephenson et al., 2015), these enduring relationships, many of which included multiple occurrences of CAI, may represent an unexplored avenue of HIV prevention methodology (Beougher et al., 2015; Duncan et al., 2015; Gamarel et al., 2015; Stephenson et al., 2015).

Efforts to assess the effectiveness of HIV status disclosure between male–male couples and resulting serosorting have reported mixed results in the prevention of HIV seroconversion (Golden, Stekler, Hughes, & Wood, 2008; Jin et al., 2012; Kennedy et al., 2013; Marks et al., 2010; Philip, Yu, Donnell, Vittinghoff, & Buchbinder, 2010). While the practice appears to mediate risk (Kennedy et al., 2013), it has been reported to be less effective than consistent condom use in reducing HIV transmission (Kennedy et al., 2013). Research regarding HIV-positive MSM has also identified barriers to serodisclosure that may limit the effectiveness or applicability of this practice in all scenarios (Przybyla et al., 2014). Many of the identified barriers appear to be enhanced in the context of casual sexual relationships (Przybyla et al., 2014), such as assumption of decreased HIV risk with casual partners who also have sex with women (Goldenberg, Finneran, Sullivan, Andes, & Stephenson,

2016). In this study, partner report of seroconcordance was frequently associated with CAI in uncommitted relationships. While conclusions cannot be drawn from the data presented here regarding whether the reported seroconcordance in these relationships is the cause, result, or otherwise related to CAI, it is apparent that there is an audience for whom intervention programming is still lacking in this regard. Men in same-gender, uncommitted relationships may benefit from risk reduction programming regarding the reality of risk and potential for error with seroreporting and serosorting. Additionally, there is further research warranted, which would determine methods of HIV risk reduction that can easily be partnered with seroreport and serosorting, such as the use of PrEP between perceived serodiscordant couples (WHO, 2012), which can reliably reduce risk for HIV among men who prefer to engage in CAI.

Familiarity between partners was frequently connected either to decisions about which sexual acts (oral, anal, etc.) to perform and whether to engage in CAI. This characteristic was also connected by participants to lower perceived HIV risk among each of the ongoing relationship types. This dynamic of linking familiarity of a partner with decreased perceived risk and engaging in CAI has been identified in previous investigation with MSM (Matser et al., 2014; Newcomb et al., 2014). Risk of transmission, however, has been reported at higher levels when more sexual acts between two individuals have occurred, meaning that those partners with whom a man is most familiar may pose the greatest risk of HIV transmission (Sullivan et al., 2009). In addition to its connection to increased risk behavior, a 2011 study of American MSM couples reported that relationship quality and sexual quality were two of the leading reasons cited for willingness to participate in couples HIV testing (Stephenson et al., 2011). By framing couples testing within a narrative of increasing familiarity, couples HIV testing and counseling may be understood as complementary to other ongoing mechanisms for greater familiarity between committed or transitioning partners, while simultaneously reducing risk within uncommitted partnerships by improving the accuracy of seroreporting. Couples testing may further serve as an appropriate venue for an individual living with HIV to reveal his status to his partner with the guidance and direction afforded by professional testing support (Stephenson et al., 2011), which was reported as a potentially difficult endeavor within this study.

A recent review of the literature regarding relationship-based factors for HIV among MSM reported that, summarily, enhancement of long-term, positive primary relationship qualities would serve as appropriate first-line defense against HIV transmission. This was due to an inverse association between ratings of positive relationship qualities and incidence of CAI with non-primary

partners (Hoff, Campbell, Chakravarty, & Darbes, 2016). Within the data presented here, the conceptualization of both nonmonogamous and monogamous committed relationships as long-term was at times connected to CAI. Conversely, within select committed, nonmonogamous relationships, condom use was communicated as a mechanism of assuring the health and safety of the relationship. While it is not the business of health professionals to incentivize a certain relationship type (i.e., committed, monogamous) above others, supporting the healthy development of these relationships among MSM who desire them may prove to be an effective method of decreasing HIV risk by both decreasing likelihood of CAI with outside partners and increasing self-efficacy in safer sex decisions within the primary relationship (Hoff et al., 2016; Wu et al., 2011).

Reported among the uncommitted, one-time and uncommitted, ongoing relationships were sexual decisions, including CAI, that were retrospectively described as lapses in judgment or sexual impulsiveness by the participant. This knowledge builds upon the existing research regarding sexual decision-making that has revealed that MSM do not engage in HIV-risk or HIV-preventive behaviors in an emotional vacuum (Goldenberg, Finneran, Andes, & Stephenson, 2015). Significant associations have been identified between sexually impulsive practices and numerous factors including depression (Storholm, Satre, Kapadia, & Halkitis, 2015), personal norms of condom use (van Kesteren, Hospers, van Empelen, Van Breukelen, & Kok, 2007), and expressed need for physical and emotional intimacy (van Kesteren et al., 2007). The information presented here adds an additional layer of nuance by examining this phenomenon as stratified by relationship type, as concerns of sexual impulsivity were reported only in regard to uncommitted relationships. Findings reported here regarding sexually impulsive behaviors are consistent with preliminary conclusions drawn from previous investigations, which purport that individuals who report sexually impulsive behaviors may be more likely to engage in casual sexual relationships and may have more CAI with casual partners than those who do not report such behaviors (Emond, Nolet, Cyr, Rouleau, & Gagnon, 2016). These findings suggest that intervention efforts to promote informed sexual decision-making, which tailor to uncommitted relationships may be efficacious.

### *Limitations*

There were several limitations in this study. Limitations include sorting participants' relationships according to a variety of reported elements, rather than explicitly asking participants to classify their relationships according to their own understanding. Though participants were asked to



describe their relationships in detail, classification by participants may provide additional nuance for further study investigating risk perception and CAI across a variety of types of relationships. Additionally, these data cannot be generalized beyond the urban Atlanta region from which they were collected. As participants were self-identified gay and bisexual men, the data may not be generalizable to all MSM. Given the period of data collection, no questions were asked regarding use of pre-exposure prophylaxis (PrEP); future investigations may be aided by integrating such data. Although limitations were present, this study incorporated innovative methodology for the collection of relationship data across a variety of sexual relationship types, which provided unique insights into the perception of HIV risk and sexual decision-making.

### Recommendations and Conclusions

This study has demonstrated that there are patterns of varying perceived HIV risk and sexual decision-making across the spectrum of MSM sexual and/or romantic partnerships. The unique constellation of factors present within any relationship type may provide specific challenges and opportunities to decrease HIV-risk behavior, including CAI, among MSM. Evidence presented here would preliminarily suggest several appropriate recommendations for interventions seeking to reduce risk for HIV transmission among a broad range of MSM sexual relationships: (a) treating uncommitted, ongoing relationships as ongoing relationships, but with a distinctly different risk profile than committed relationships; (b) framing HIV testing as an appropriate mechanism for familiarity between partners of transitioning or unknown commitment, rather than exclusively for those with a formal commitment; (c) facilitation of risk reduction within nonmonogamous, committed relationships by encouragement of consistent condom use, HIV testing, and open communication between partners as a manner of strengthening the primary partnership(s); and (d) integration of emotion examination and regulation skills as well as teaching regarding sexual decision-making to avoid sexual impulsivity, particularly in one-time and ongoing uncommitted sexual relationships. Further study into both individually focused and couple-based interventions should investigate how relationship typology may be connected with increased sexual risk. By addressing the variety of MSM sexual relationships and practices without considering a hierarchical ranking of relationships, interventions may become increasingly accessible and acceptable to the audience of MSM.

### Acknowledgments

Data for this study were collected at Emory University Rollins School of Public Health.

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Funding for conduction of this research was supported by the University Research Committee at Emory University and the Center for AIDS Research at Emory University (grant number P30AI050409; PI: Stephenson). Views expressed in this manuscript do not necessarily represent the views of the funding agency.

### References

- Axinn, W. G., Pearce, L. D., & Ghimire, D. (1999). Innovations in life history calendar applications. *Social Science Research, 28*(3), 243–264.
- Bauermeister, J. A. (2012). Romantic ideation, partner-seeking, and HIV risk among young gay and bisexual men. *Archives of Sexual Behavior, 41*(2), 431–440.
- Becker, S., Mlay, R., Schwandt, H. M., & Lyamuya, E. (2010). Comparing couples' and individual voluntary counseling and testing for HIV at antenatal clinics in Tanzania: A randomized trial. *AIDS and Behavior, 14*(3), 558–566.
- Beougher, S. C., Bircher, A. E., Chakravarty, D., Darbes, L. A., Mandic, C. G., Neilands, T. B., ... Hoff, C. C. (2015). Motivations to test for HIV among partners in concordant HIV-negative and HIV-discordant gay male couples. *Archives of Sexual Behavior, 44*(2), 499–508.
- CDC. (2016). *HIV infection risk, prevention, and testing behaviors among men who have sex with men: National HIV behavioral surveillance 20 U.S. cities, 2014* (HIV Surveillance Special Report 15). Retrieved from <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-hssr-nhbs-msm-2014.pdf>
- Chakravarty, D., Hoff, C. C., Neilands, T. B., & Darbes, L. A. (2012). Rates of testing for HIV in the presence of serodiscordant UAI among HIV-negative gay men in committed relationships. *AIDS and Behavior, 16*(7), 1944–1948.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative research*. London: Sage Publications.
- Coelho, T. (2011). Hearts, groins and the intricacies of gay male open relationships: Sexual desire and liberation revisited. *Sexualities, 14*(6), 653–668.
- Conkling, M., Shutes, E. L., Karita, E., Chomba, E., Tichacek, A., Sinkala, M., ... Allen, S. A. (2010). Couples' voluntary counselling and testing and nevirapine use in antenatal clinics in two African capitals: A prospective cohort study. *Journal of the International AIDS Society, 13*(1), 10.
- Crepaz, N., Tungol-Ashmon, M. V., Vosburgh, H. W., Baack, B. N., & Mullins, M. M. (2015). Are couple-based interventions more effective than interventions delivered to individuals in promoting HIV protective behaviors? A meta-analysis. *AIDS Care, 27*(11), 1361–1366.

- Duncan, D., Prestage, G., & Grierson, J. (2015). Trust, commitment, love and sex: HIV, monogamy, and gay men. *Journal of Sex & Marital Therapy, 41*(4), 345–360.
- El-Bassel, N., Gilbert, L., Wu, E., Witte, S. S., Chang, M., Hill, J., & Remien, R. H. (2011). Couple-based HIV prevention for low-income drug users from New York City: A randomized controlled trial to reduce dual risks. *JAIDS Journal of Acquired Immune Deficiency Syndromes, 58*(2), 198–206.
- El-Bassel, N., Jemmott, J. B., Landis, J. R., Pequegnat, W., Wingood, G. M., Wyatt, G. E., & Bellamy, S. L. (2010). National Institute of Mental Health multisite Eban HIV/STD prevention intervention for African American HIV serodiscordant couples: A cluster randomized trial. *Archives of Internal Medicine, 170*(17), 1594–1601.
- El-Bassel, N., Witte, S. S., Gilbert, L., Wu, E., Chang, M., Hill, J., & Steinglass, P. (2003). The efficacy of a relationship-based HIV/STD prevention program for heterosexual couples. *American Journal of Public Health, 93*(6), 963–969.
- Emond, F. C., Nolet, K., Cyr, G., Rouleau, J.-L., & Gagnon, J. (2016). Sexual impulsivity and problematic sexual behaviors in adults: Towards innovative domain-specific behavioral measures. *Sexologies, 25*(4), e77–e82.
- Gamarel, K. E., Comfort, M., Wood, T., Neilands, T. B., & Johnson, M. O. (2015). A qualitative analysis of male couples' coping with HIV: Disentangling the "we". *Journal of Health Psychology, 21*(10), 2125–2137.
- Geertz, C. (1973). *The interpretation of cultures* (Vol. 5019). New York, NY: Basic Books.
- Golden, M. R., Stekler, J., Hughes, J. P., & Wood, R. W. (2008). HIV serosorting in men who have sex with men: Is it safe? *JAIDS Journal of Acquired Immune Deficiency Syndromes, 49*(2), 212–218.
- Goldenberg, T., Finneran, C., Andes, K. L., & Stephenson, R. (2015). 'Sometimes people let love conquer them': How love, intimacy, and trust in relationships between men who have sex with men influence perceptions of sexual risk and sexual decision-making. *Culture, Health & Sexuality, 17*(5), 607–622.
- Goldenberg, T., Finneran, C., Andes, K. L., & Stephenson, R. (2016). Using participant-empowered visual relationship timelines in a qualitative study of sexual behaviour. *Global Public Health, 11*(5–6), 699–718.
- Goldenberg, T., Finneran, C., Sullivan, S. P., Andes, K. L., & Stephenson, R. (2016). "I consider being gay a very high risk factor": How perceptions of a partner's sexual identity influence perceptions of HIV risk among gay and bisexual men. *Sexuality Research and Social Policy, 14*(1), 32–41.
- Gomez, A. M., Beougher, S. C., Chakravarty, D., Neilands, T. B., Mandic, C. G., Darbes, L. A., & Hoff, C. C. (2012). Relationship dynamics as predictors of broken agreements about outside sexual partners: Implications for HIV prevention among gay couples. *AIDS and Behavior, 16*(6), 1584–1588.
- Goodreau, S. M., Carnegie, N. B., Vittinghoff, E., Lama, J. R., Sanchez, J., Grinsztajn, B., ... Buchbinder, S. P. (2012). What drives the US and Peruvian HIV epidemics in men who have sex with men (MSM)? *PLoS One, 7*(11), e50522.
- Hoff, C. C., & Beougher, S. C. (2010). Sexual agreements among gay male couples. *Archives of Sexual Behavior, 39*(3), 774–787.
- Hoff, C. C., Beougher, S. C., Chakravarty, D., Darbes, L. A., & Neilands, T. B. (2010). Relationship characteristics and motivations behind agreements among gay male couples: Differences by agreement type and couple serostatus. *AIDS Care, 22*(7), 827–835.
- Hoff, C. C., Campbell, C. K., Chakravarty, D., & Darbes, L. A. (2016). Relationship-based predictors of sexual risk for HIV among MSM couples: A systematic review of the literature. *AIDS and Behavior, 20*(12), 2873–2892.
- Jin, F., Prestage, G. P., Templeton, D. J., Poynten, I. M., Donovan, B., Zablotska, I., ... Grulich, A. E. (2012). The impact of HIV seroadaptive behaviours on sexually transmissible infections in HIV-negative homosexual men in Sydney, Australia. *Sexually Transmitted Diseases, 39*(3), 191–194.
- Jones, D. L., Kashy, D., Villar-Loubet, O. M., Cook, R., & Weiss, S. M. (2013). The impact of substance use, sexual trauma, and intimate partner violence on sexual risk intervention outcomes in couples: A randomized trial. *Annals of Behavioral Medicine, 45*(3), 318–328.
- Kennedy, C. E., Bernard, L. J., Muessig, K. E., Konda, K. A., Akl, E. A., Lo, Y.-R., ... O'Reilly, K. R. (2013). Serosorting and HIV/STI infection among HIV-negative MSM and transgender people: A systematic review and meta-analysis to inform WHO guidelines. *Journal of Sexually Transmitted Diseases, 2013*, 1–8.
- Lachowsky, N. J., Saxton, P. J., Hughes, A. J., Dickson, N. P., Summerlee, A. J., Milhausen, R. R., & Dewey, C. E. (2015). Younger gay and bisexual men's condom use with main regular sexual partner in New Zealand. *AIDS Education and Prevention, 27*(3), 257–274.
- Marks, G., Millett, G. A., Bingham, T., Lauby, J., Murrill, C. S., & Stueve, A. (2010). Prevalence and protective value of serosorting and strategic positioning among Black and Latino men who have sex with men. *Sexually Transmitted Diseases, 37*(5), 325–327.
- Martyn, K. K., & Belli, R. F. (2002). Retrospective data collection using event history calendars. *Nursing Research, 51*(4), 270–274.
- Matsier, A., Heijman, T., Geskus, R., de Vries, H., Kretzschmar, M., Speksnijder, A., ... van der Loeff, M. S. (2014). Perceived HIV status is a key determinant of unprotected anal intercourse within partnerships of men who have sex with men in Amsterdam. *AIDS and Behavior, 18*(12), 2442–2456.
- Montoya, M. J., & Kent, E. E. (2011). Dialogical action: Moving from community-based to community-driven participatory research. *Qualitative Health Research, 21*(7), 1000–1011.
- Newcomb, M. E., Ryan, D. T., Garofalo, R., & Mustanski, B. (2014). The effects of sexual partnership and relationship characteristics on three sexual risk variables in young men who have sex with men. *Archives of Sexual Behavior, 43*(1), 61–72.
- Philip, S. S., Yu, X., Donnell, D., Vittinghoff, E., & Buchbinder, S. (2010). Serosorting is associated with a decreased risk of HIV seroconversion in the EXPLORE study cohort. *PLoS One, 5*(9), e12662.
- Przybyla, S., Golin, C., Widman, L., Grodensky, C., Earp, J. A., & Suchindran, C. (2014). Examining the role of serostatus

- disclosure on unprotected sex among people living with HIV. *AIDS Patient Care and STDs*, 28(12), 677–684.
- Stephenson, R., Sullivan, P. S., Salazar, L. F., Gratz, B., Allen, S., & Seelbach, E. (2011). Attitudes towards couples-based HIV testing among MSM in three US cities. *AIDS and Behavior*, 15(1), 80–87.
- Stephenson, R., White, D., Darbes, L., Hoff, C., & Sullivan, P. (2015). HIV testing behaviors and perceptions of risk of HIV infection among MSM with main partners. *AIDS and Behavior*, 19(3), 553–560.
- Storholm, E. D., Satre, D. D., Kapadia, F., & Halkitis, P. N. (2015). Depression, compulsive sexual behavior, and sexual risk-taking among Urban young gay and bisexual men: The p18 cohort study. *Archives of Sexual Behavior*, 45(6), 1431–1441.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research* (Vol. 15). Newbury Park, CA: Sage Publications.
- Sullivan, P. S., Salazar, L., Buchbinder, S., & Sanchez, T. H. (2009). Estimating the proportion of HIV transmissions from main sex partners among men who have sex with men in five US cities. *AIDS*, 23(9), 1153–1162.
- Sullivan, P. S., White, D., Rosenberg, E. S., Barnes, J., Jones, J., Dasgupta, S., ... Wingood, G. (2013). Safety and acceptability of couples HIV testing and counseling for US men who have sex with men a randomized prevention study. *Journal of the International Association of Providers of AIDS Care (JIAPAC)*, 13(2), 135–144.
- van Kesteren, N. M., Hospers, H. J., van Empelen, P., Van Breukelen, G., & Kok, G. (2007). Sexual decision-making in HIV-positive men who have sex with men: How moral concerns and sexual motives guide intended condom use with steady and casual sex partners. *Archives of Sexual Behavior*, 36(3), 437–449.
- WHO. (2012). *Guidance on oral Pre-Exposure Prophylaxis (PrEP) for serodiscordant couples, men and transgender women who have sex with men at high risk of HIV: Recommendations for use in the context of demonstration projects*. Geneva: WHO.
- Wu, E., El-Bassel, N., McVinney, L. D., Hess, L., Remien, R. H., Charania, M., & Mansergh, G. (2011). Feasibility and promise of a couple-based HIV/STI preventive intervention for methamphetamine-using, Black men who have sex with men. *AIDS and Behavior*, 15(8), 1745–1754.