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Exploring and Adapting a Conceptual Model of Sexual Positioning Practices and Sexual Risk among HIV-Negative Black Men Who Have Sex with Men

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Abstract

Estimates show a 50% lifetime HIV risk among Black men who have sex with men (BMSM) in the U.S. Studying the dynamics of sexual positioning practices among BMSM could provide insights into the disparities observed between U.S. MSM groups. This study explored sexual positioning dynamics among HIV-negative BMSM and how they aligned with a theoretical model of sexual positioning and HIV/STI risk among MSM. In-depth qualitative interviews were conducted with 29 HIV-negative BMSM between ages 25 and 35 in Los Angeles. Comments related to sexual behaviors were reviewed for relevance regarding oral or anal sexual positioning practices. Data presented represent the range of themes related to decision-making regarding sexual positioning. Personal preference, partner attraction, HIV avoidance, and feeling obligated to practice partner preferences influenced sexual positioning. Drug use also affected decision-making and was sometimes preferred to practice receptive anal intercourse. These variables build upon the conceptual model of sexual positioning practices and sexual risk and add understanding to the relationship between preferences, practices, and risk management. Future research on risk among HIV-negative BMSM should quantify the relative impact of personal preferences, partner attraction, partner type, compromise, and substance use on sexual positioning practices and risk.

Keywords

sexual positioning; Black MSM; HIV risk; STI risk

Introduction

Estimates suggest that, at current infection rates, one in two Black men who have sex with men (BMSM) in the U.S. will contract HIV in their lifetime (Hess, Hu, Lansky, Mermin, & Hall, 2017). However, BMSM engage in fewer risk behaviors than MSM of other ethnicities, including having fewer male sexual partners (Magnus et al., 2010; Millett et al., 2012; Sullivan et al., 2014), lower levels of drug use before or during sex (Millett et al., 2012; Sullivan et al., 2014), and less condomless anal sex (Magnus et al., 2010; Millett et al., 2012; Sullivan et al., 2014). Still, despite lower behavioral risks, BMSM continue to be disproportionately impacted by HIV.

Potential explanations for this counterintuitive circumstance among BMSM include same-race sexual networks (Berry, Raymond, & McFarland, 2007; Newcomb & Mustanski, 2013; Sullivan et al., 2014), higher prevalence of sexually transmitted infections (STIs) (Maulsby et al., 2013), and different patterns of serosorting (Marks et al., 2010; Wilton et al., 2015). The role of sexual positioning is one potential influence on the sexual risk of BMSM that has not been thoroughly explored.

Sexual risk for HIV and STIs via condomless anal sex varies per sexual positioning practices. Men who participate in condomless receptive anal intercourse (RAI) are more likely to acquire HIV and rectal STIs than men who only participate in condomless insertive anal intercourse (IAI) (Baggaley, White, & Boily, 2010; Jin et al., 2010; Kingsley et al., 1987). MSM who practice both condomless RAI and IAI—referred to as versatility—are also at higher risk for HIV and rectal STIs than men who only practice IAI, and might potentiate subsequent risk of infections for partners (Lyons, Pitts, & Grierson, 2012; Tieu et al., 2013).

Versatility practices vary widely among MSM; some practice RAI and IAI within the same sexual encounter with the same partner, some practice RAI and IAI within different sexual encounters with the same sexual partner, and some practice RAI with some types of male partners and IAI with other types of male partners (Dangerfield II, Smith, Williams, Unger, & Bluthenthal, 2016; Lyons et al., 2012; Meng et al., 2015; Tieu et al., 2013). Practices of sexual positioning and versatility are informed by a variety of considerations: power relations (Dworkin et al., 2017; Hoppe, 2011; Johns, Pingel, Eisenberg, Santana, & Bauermeister, 2012; Pachankis, Battenwieser, Bernstein, & Bayles, 2013), pleasure preferences (Hoppe, 2011; Pachankis et al., 2013), and strategic positioning—also referred to as seropositioning, where men engage in certain positions to reduce their risk for HIV—as part of a seroadaptive strategy to remain HIV-negative (Irvin et al., 2015; Marks et al., 2010; Snowden, Wei, McFarland, & Raymond, 2014; Wilton et al., 2015). Some MSM also practice oral sex as sexual positioning (Xu et al., 2010; Young, Szekeres, & Coates, 2013).

Sexual positioning within some same-sex relationships are often “gendered” by a top and bottom relational dynamic (Dworkin et al., 2017; Hoppe, 2011; Johns et al., 2012). For example, some MSM who are the receptive partners assume the role of a “woman” (as described by MSM) during the sexual relationship, accept risk during sex, and relinquish the responsibility of initiating condom use to their partners who “top” them (Hoppe, 2011;

Johns et al., 2012). Some MSM—who give their partners the responsibility of initiating condom use—waive their negotiation prerogative in part for the pleasure of their partners; other MSM who are receptive partners manage their role as the “pleasure producer” and successfully negotiate condom use (Hoppe, 2011). Still, other MSM identify as “power bottoms” who are able to decide how much control they relinquish in the sexual encounter (Johns et al., 2012). Versatility, where receptive and insertive roles are interchangeable, can lead to shared power between MSM (Dangerfield II et al., 2016; Dworkin et al., 2017; Johns et al., 2012; Malebranche, Fields, Bryant, & Harper, 2009). Among MSM, Black sexual partners are perceived as sexually aggressive, hyper-masculine, and are expected to be “tops” (Husbands et al., 2013; Lick & Johnson, 2015; Malebranche & Bryant, 2005).

For BMSM, like other MSM groups, studies have consistently found that “masculine” partners are preferred, and that masculine partners are often perceived as more powerful and less likely to be HIV-positive (Dworkin et al., 2017; Fields et al., 2012; Malebranche et al., 2009; Malebranche & Bryant, 2005). This could lead to increased vulnerability to HIV infection among BMSM because masculine partners, who may be responsible for condom use, may be incorrectly perceived as HIV-negative (Fields et al., 2012). Preferences for sexual positioning and condom use are not always expressed between partners; Gagnon and Simon’s (1984) theory of sexual scripting suggests that sexual interactions can be informed by sexual ‘scripts’ derived from cultural scenarios, interpersonal interactions, and intrapersonal characteristics that frame the way people experience different sexual interactions. While studies have illuminated sexual preferences among BMSM, less is known about the dynamics related to sexual positioning among BMSM or about the extent to which some MSM choose positions (i.e., RAI, IAI, or oral sex) to lower their risk for HIV.

Seropositioning refers to choosing a sexual position depending on the HIV status of the sexual partner within serodiscordant sexual partners (i.e., relationships in which one partner is HIV-positive and the other partner is HIV-negative) (Eaton, Kalichman, O’Connell, & Karchner, 2009; Parsons et al., 2006). Strategic positioning is practiced with the belief that the risk of HIV acquisition is lessened when “topping” (i.e., practicing IAI) an HIV-positive partner (Lyons et al., 2011; Murphy, Gorbach, Weiss, Hucks-Ortiz, & Shoptaw, 2013; Parsons, Halkitis, Wolitski, Gómez, & Seropositive Urban Men’s Study Team, 2003; Van de Ven et al., 2002). Some HIV-negative men therefore adopt an intentional strategy of only engaging in IAI with partners they either know or believe are HIV-positive (Grov, Rendina, Moody, Ventuneac, & Parsons, 2015; McFarland et al., 2011; Murphy et al., 2013). However, the value of seropositioning as an HIV prevention tactic has been widely debated (Eaton et al., 2009; Jin et al., 2009; Parsons et al., 2006; Van de Ven et al., 2002).

Although men who practice strategic positioning are at significantly less risk for HIV than those who engage in condomless RAI (Jin et al., 2009), data have shown that the risk of HIV infection is higher among MSM who engage in strategic positioning than among those who do not (Millett et al., 2012). However, data have also suggested that BMSM are actually less likely than other MSM groups to endorse this kind of serosorting behavior (Eaton, Kalichman, & Cherry, 2010; Eaton et al., 2009; Marks et al., 2010; Maulsby et al., 2013; Wei et al., 2010). More data are needed about the reasons for sexual positioning among BMSM who are HIV-negative.

Importantly, substance use increases the risk of condomless sex (Jacobs et al., 2010; Vosburgh, Mansergh, Sullivan, & Purcell, 2012), but few studies have examined how substance use factors into sexual positioning practices in general or among BSM in particular. Studies have documented associations among condomless IAI and RAI, binge alcohol use, and recreational drug use among BSM (Bruce, Kahana, Harper, Fernández, & ATN, 2013; Jacobs et al., 2010; Mimiaga et al., 2010; Vosburgh et al., 2012; Woolf & Maisto, 2009). However, research has typically explored the relationship between substance use and condomless sex versus condom use during sex, regardless of positioning practice; specifically, where drug or alcohol use was associated with condom use for RAI or IAI (Jacobs et al., 2010; Mimiaga et al., 2010; Vosburgh et al., 2012). Little is known about the role of substance use in the sexual positioning decision-making process among BSM.

Studying the reasons why certain positions are selected by BSM could ultimately contribute to understanding the racial disparities in HIV and STI incidence observed between MSM groups in the U.S. For example, among BSM who engage with partners perceived to be more masculine than themselves, power dynamics could result in RAI practice and less condom use negotiation, thereby substantially increasing HIV risk. Substance use could reduce negotiation even more. To further understand the role of sexual positioning practices in HIV risk among BSM at high risk for HIV, this study explored reasons for sexual positioning practices among substance-using, HIV-negative BSM.

The purpose of this study is to explore and potentially adapt a conceptual model of sexual positioning practices and HIV/STI risk proposed by Dangerfield II et al. (2016). The model hypothesizes how the interplay between sexual positioning preferences, same-sex power dynamics, seropositioning, and substance use impact subsequent HIV/STI risk among MSM. It also suggests that distal normative power dynamics such as masculinity stereotypes, age, and HIV status might inform both sexual positioning preferences (i.e., “top,” “bottom,” “versatile”) and the ability to negotiate sexual positioning preferences and condom use within a sexual encounter or sexual relationship. Proximal factors, which occur within a sexual encounter and include substance use, partner masculinity, and partner HIV status, in turn could dynamically impact the capacity of an individual to negotiate sexual positioning and condom use.

According to the model, this relationship subsequently results in the practice of RAI or IAI with or without a condom, which ultimately leads to varying HIV and STI risk (Dangerfield II et al., 2016). The present study explored variables in the conceptual model that influence sexual positioning practices among substance-using, HIV-negative BSM and the extent to which participants’ experiences with these variables aligned with or suggested revisions to the model.

Method

This study utilized secondary data from qualitative interviews conducted as part of a larger study (Project Discover) that used a “positive deviance” framework to understand whether HIV-negative BSM were engaging in adaptive risk-reduction behaviors that helped them remain HIV-negative (Ober et al., 2017). The overarching study explored adaptive ways in

which HIV-negative BMSM may be managing their behaviors (i.e., sexual behaviors, drug and alcohol use) given their high-risk context.

Participants

Participants were a convenience sample of HIV-negative Black men (i.e., men who described themselves as Black, African American, Caribbean, or African) in Los Angeles between ages 25 and 35 who reported anal sex with another man in the previous six months and who reported drug use (powder or crack cocaine, methamphetamine, methylenedioxy-methamphetamine (MDMA), Gama Hydroxybutyric Acid (GHB), ketamine, rohypnol, amyl nitrite and other versions of “poppers”) or heavy alcohol use. A score of greater than 3 on the AUDIT-C (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998) scoring was modified so that men who reported one to two glasses of alcohol four or more times a week during screening did not qualify as heavy alcohol users. Rather, they were considered heavy alcohol users if they also “binged” with six or more drinks on one occasion at least once a month in the previous six months. Participants aged 25 to 35 were recruited in the overarching study to explore the behaviors of HIV-negative BMSM who had been exposed to risk for a longer period than younger BMSM (i.e., those under 25) but who had remained HIV-negative.

Procedure

Participants (n=29) were recruited through fliers and palm cards posted at a variety of entertainment, health care, and substance use treatment venues throughout Los Angeles, CA, in addition to Craig’s List advertisements and Facebook posts on sites of community organizations that serve BMSM. Interested participants were screened by phone for preliminary eligibility. Participants who met the telephone screening requirements were then asked to schedule an appointment to complete an additional in-person screening. Upon completion of in-person eligibility screening and informed consent, participants were given a free rapid HIV test (OraQuick®) to verify HIV-negative status.

Men who self-reported being HIV-negative but tested HIV-positive were not eligible for the study (n=1), but were given a confirmatory Western blot test and assisted with getting access to counseling and treatment services. Confirmed HIV-negative participants completed an ~90-minute audio-recorded in-depth qualitative interview conducted by a study coordinator (the first author). Interviews and HIV tests were conducted at the UCLA Vine Street Clinic between October 2013 and May 2014. All study procedures were approved by the RAND Corporation Human Subjects Protection Committee.

Measures

Demographics and STIs.—Prior to the in-depth qualitative interview, all participants provided demographic and health history information in a short quantitative survey: age (year of birth), highest year of education completed, annual income, living arrangements, partnership status, sexual identity, and history of STIs.

Qualitative Interview Guide.—The Project Discover research team developed an initial guide for conducting in-depth qualitative interviews and is described in more detail elsewhere (Ober et al., 2017). Briefly, the interview covered three primary domains: life

management (i.e., employment, housing, free time), social networks, sexual partners, sexual behaviors, drug use, and STI and general health history. The interviewer also asked targeted questions related to the motivations for sexual positioning practices and HIV/STI risk.

Qualitative Data Analysis

Data were analyzed in a series of iterative steps that are also described with greater detail elsewhere (Ober et al., 2017). Interviews were audio-recorded and transcribed. Two coders read all transcripts to identify overarching themes related to sexual behaviors and adaptive strategies looking for repetitions across interviews and developed a codebook listing each theme (Ryan & Bernard, 2003). Themes were identified as patterns that were associated with specific research questions, or expressions that provided examples (Denzin & Lincoln, 2011; Ober et al., 2017; Ryan & Bernard, 2003) describing reasons for sexual positioning practices.

Transcript coding was conducted using *Atlas.ti 7.1*. Areas of text related to each theme for the first five interviews were coded independently by the two coders and inter-rater reliability was measured to ensure consistency between transcript coding (Kappa = 0.68). Inter-rater reliability was measured twice to confirm coding consistency; inconsistencies were reviewed and showed minor differences in the lengths of quoted text but not overall quality of text. Team members then reviewed all coded text, examined the most frequently mentioned themes, and then, of these, selected those that were directly relevant to sexual behaviors before and during a sexual encounter (Ryan & Bernard, 2003). Coded text included dialogue about motivations for sexual positioning practices with male partners, condom use, substance use, and explicit references to behaviors intentionally used to avoid HIV infection.

For the present exploratory study, all themes related to sexual behaviors before and during sexual encounters with male partners were reviewed for relevance regarding oral or anal sexual positioning practices and reasons for doing so. The findings of these data presented in this article represent the range of themes related to the selection of sexual positions, including factors that could contribute to imbalances in power and the ability to negotiate preferred positions as described by substance-involved, HIV-negative BMSM. Discussion of these findings include the extent to which these data align with the existing conceptual model.

Results

Demographic and Behavioral characteristics

Of the 29 participants interviewed, 11 reported a high school diploma or GED as their highest level of education, 9 said they worked full time, and 9 reported an annual income of \$10,000 or less. Regarding partnership status, 21 reported being single or not in a committed relationship; 7 reported having a significant other, such as a boyfriend or were married. Additionally, 19 self-identified as “gay, homosexual, or same gender-loving,” 9 identified as “bisexual,” and 1 identified as “something else” (Table 1).

Regarding sexual positioning, 28 men reported at least one lifetime episode of IAI, 21 reported at least one episode of RAI, and 21 reported some degree of versatility, that is, either RAI and IAI with the same partner within the same sexual encounter, RAI and IAI with the same partner within different sexual encounters, or RAI with partners and IAI with other partners. Almost half reported practicing insertive and/or receptive oral sex, and none reported using condoms during this practice.

Emerging Themes

A range of themes emerged from the data related to BSM's reasons for sexual positioning (i.e., oral sex, IAI, and RAI). These themes are organized relative to their potential alignment with the conceptual model from Dangerfield II et al. (2016). An adaptation of the model is presented in Figure 1 to illustrate the concepts that emerged from this study and the extent to which these data might build upon the original model given. Themes that emerged around reasons for engaging in sexual positions (i.e., oral sex, IAI, and/or RAI) included personal preferences, partner type, and substance use, which align with the model (see Sections B and C, respectively, Figure 1). Additional themes that could be considered proximal variables within the sexual event and could contribute to one partner having more power than the other were foreplay prior to intercourse, compromise and obligation, partner attraction, and HIV avoidance (see Figure 1, Section C). Each theme is discussed below and illustrative quotes as reported by BSM regarding their same-sex sexual relationships are provided.

Themes Supporting the Original Conceptual Model

In alignment with the conceptual model, preferences for sexual positioning, partner type, and substance use were themes that participants described as influencing their sexual positioning practices and subsequent condom use within sexual encounters. Partner type and substance use seemed to influence subsequent sexual positioning practices that did not always align with participants' preferences.

Sexual Positioning Preferences—Nine of the men who reported IAI practice described “topping” partners because they preferred it, not because they saw it as a means for lowering their risk for contracting HIV, even though they were aware that the practice could lower their risk. Even when explicitly asked about sexual positioning practices with HIV-positive partners, they mentioned they preferred IAI regardless of their partner's HIV-status. When asked about whether he would “bottom” for an HIV-positive partner, one participant, who mentioned IAI preference, said, *“Just top... Well, that's just the way I usually do it anyway. And you have less risk though too... I'm usually on top, yeah, regardless of the situation.”* Another put it this way, *“Oh, I usually always top. So if there's someone who's also a top, we usually don't have sex. Or if we just meet up, we would just like jack off or something since I always just top anyways, if they're positive it's the same position. Yeah.”*

Interviews did not yield explicit, intentional strategies to avoid RAI practice with partners for HIV risk reduction beyond a convenience that allowed them to maintain their preference. Among participants who preferred IAI, avoiding RAI with HIV-positive partners was an added incentive not to “bottom” in sexual relationships. Seropositioning was not a salient

adaptive strategy for HIV avoidance among these participants. Instead, the practice was nested within other adaptive strategies used to maintain HIV-negative serostatus, including having one partner or avoiding HIV-positive partners (Ober et al., 2017).

Partner Type—Participants mentioned being more flexible in their sexual positioning practices with boyfriends/romantic partners (i.e., partners with whom they described an emotional attachment and romantic relationship agreement), describing both IAI and RAI experiences with boyfriends/romantic partners because they were attracted to them, but they did not necessarily describe that the romantic relationship context was the reason why they chose IAI or RAI practice. For example, one participant mentioned usually “topping” in relationships, but mentioned mostly RAI for his current boyfriend. When describing his sexual practices with this partner, he mentioned, “*For him, because he’s the top, so that night, usually [I] top in my relationships, but he’s atop. I like him, so I do it [bottom]...I had to tell him I wanted top, for him to know...*” This fits with the conceptual model, as the model shows how partner types can affect the relationship between ideal preferences and subsequent sexual practices (See Figure 1, Section C).

Substance Use—Participants also mentioned that the use of alcohol and/or drugs before or during sex influenced their desire to have sex, and two participants described how substance use specifically influenced their sexual positioning practices. One mentioned that alcohol and drugs not only affected his practices, but that drugs particularly influenced RAI practice with partners. When asked about his preferences, he mentioned,

Top mostly. Bottom is, like, second is the bottom. Like, if I’m bottoming, for sure, I’m most likely on drugs. I am not into bottoming and being sober unless I’ve already messed around with him or I feel comfortable enough with them, but a stranger off the bat, sober, they’re not fucking me. That’s not going to happen. It’s just probably not going to happen (laughs). It’s just not going to happen.

Another participant described how methamphetamine use increased his willingness to follow the preferences of his partners for both oral and anal sex. When asked about how drugs affected his behaviors with partners, he stated,

Oral sex, anal sex. Hardcore sex. Usually without ever really—usually without any protection at all. Like I would—because I actually like to be on the top sometimes, but sometimes all those guys want to be the top, so I would also get fucked or I would have sex with them, I would fuck them. Oral sex. I would suck, you know, their dicks, they would suck mine... Yeah, so when you’re using meth and when you’re a bottom, it actually feels very good to—for me at least and of course this is my opinion—it feels good to actually put some meth in your ass, which is called like you know, “booty bumping.”

These comments revealed how, although they might enter the sexual relationship with a preference for sexual positioning, substance use affected their ultimate practice. These align with the model which shows how substance use can influence sexual positioning practices within sexual relationships despite having preferences (See Figure 1, Section C).

Themes that Build upon the Conceptual Model

Factors within the sexual encounter—such as foreplay prior to intercourse, partner pleasure and feelings of compromise/obligation, partner attraction, and intentional HIV avoidance—were salient themes that participants described as influencing sexual positioning practices and subsequent condom use that were not in the original model. Participants suggested that these dynamics influenced their decision to engage in sexual positioning, and that their behaviors did not always align with their ideal preferences. Relative to the conceptual model, these themes build upon the concepts previously identified as proximal factors that influence subsequent sexual positioning practices, which ultimately influence HIV/STI risk (See Figure 1, Section C).

Foreplay Prior to Intercourse—Some participants who reported oral sex practice referenced oral sex as a part of a standard practice that is incorporated into the sexual experience prior to and leading to anal intercourse. When asked about the decision process involving when to engage in oral sex, one participant, who preferred IAI, noted, “*There was really no decision process, it just kind of happened. I guess that’s what I always do, so that’s normal.*” Another mentioned, “*I guess we usually start with him giving oral sex and then I give him oral sex and then we’ll have anal sex and, with him, I’ve always been top and it’s kind of like as we’re going kind of through the motions...*” Comments such as these highlighted an understanding and willingness to practice oral sex without necessarily negotiating preferences for sexual positioning or condom use. The concept of foreplay dynamics could be included in the proximal factors that influence the relationship between sexual positioning preferences and subsequent practice, which builds upon the existing model (See Figure 1, Section C). These descriptions about oral sex practice also provide additional considerations for the model and its relationship to anal sex practice and STI risk (See Figure 1, Sections E and F).

Compromise and Obligation for Partner Pleasure—Some participants alluded to sexual positioning practices not as adaptive strategies to avoid HIV per se or as sexual preferences, rather, they described these practices as a compromise or obligation in the sexual relationship for the sole purpose of giving their partner pleasure. For example, when describing why oral sex was practiced in a sexual encounter with a new sexual partner met on a mobile app, one participant mentioned, “*I wasn’t in a right mood to have sex. That’s all I was willing to do. And I made sure he knew that before I got there, before I left my house... I usually talk about exactly what’s going to happen so there are no expectations.*” Some participants also mentioned feeling like they “had to” compromise and do what their partners wanted them to do to get what they wanted in return. When asked about times when partners wanted to “top” him, one participant mentioned, “*It was like, well, I hope they hurry up because I want to get on top next. It happened like— It was like you could do me first and then I’ll do you after that.*”

Descriptions like this suggested that this kind of versatility sometimes resulted from participants feeling like they had to do what their partners wanted in order to experience reciprocal treatment during the sexual event. However, they did not describe that their partners suggested this type of compromise during the encounter. Men who mentioned

feelings of obligation for partner pleasure assumed that this type of compromise was necessary and “fair” in order to maintain the relationship or continue the sexual encounter. This builds upon the conceptual model as it offers additional insight into concepts that influence sexual positioning practices (See Figure 1, Section C).

Partner Attraction—Although some participants had clear preferences for sexual positioning practices, their behaviors sometimes changed relative to their attraction to their partners. Specifically, some participants mentioned practicing a sexual position that they did not necessarily prefer but did not mind because they wanted to continue engaging in the sexual encounter or sexual relationship. One participant, who preferred IAI, reported an atypical RAI experience with a casual partner because “*They asked. They asked to, and it was someone that ‘You’re fucking amazing, so I’ll try it once for you.’*” Another participant mentioned IAI preference particularly in casual relationships, but when asked about the times he “bottomed” for partners, he said, “*I thought they were attractive, so in my mind it was like ‘why not?’*” This theme of partner attraction influencing sexual positioning practices builds upon the conceptual model. Specifically, understanding partner attraction within sexual relationships could contribute to deeper understanding of the proximal factors within the sexual events that influence sexual positioning practices (See Figure 1, Section C).

Intentional HIV Risk Avoidance—Some of the participants who reported oral sex and IAI referred to their behaviors as a part of an intentional practice to avoid HIV. Specifically, some men suggested that they perform oral sex for partners instead of engaging in anal intercourse, particularly when describing encounters with casual partners that they “did not know well,” and with whom they did not discuss HIV status. One participant described his behavior this way: “*I try to get to know them before we get into actual anal sex. So just like we have a little sort of kind of [referring to oral sex] see how it was going to go.*” Oral sex was also mentioned as a specific form of strategic positioning when participants mentioned meeting partners in places they believed were high-risk environments, particularly bathhouses. One participant, who reported mostly RAI practice when meeting partners at places other than bathhouses, suggested that while he’s not discussing HIV with partners in the bathhouses, he’s “*not having sex with them either,*” stated,

So I never—I probably never bring it up only because I’m not having sex with them, top or bottom. I just turn it down. But the oral I’m fine with. Where I go, like my—I say my rules stay the same. When I go to the bathhouse, I’m there for the oral. I’m not there—rarely am I there for like the sex because I just don’t want it there.

Here, the participant alluded to oral sex practice as a part of a strategy to reduce risk with casual partners by limiting the range of his casual sexual experiences in bathhouses to oral sex, in part because of their unknown HIV status. Some participants mentioned “topping” particularly casual partners as part of a strategy to avoid HIV. When asked about why he thinks he has remained HIV-negative, one participant, who mentioned IAI preference, said, “*...I don’t bottom, that’s just rule number one. Number two is if you do bottom, do it with a*

condom. That's pretty much my biggest fear is just doing anything like that without a condom..."

Another participant mentioned not "bottoming," particularly for casual partners as an HIV risk-reduction strategy. Specifically, as part of his strategy to avoid HIV, he mentioned, *"When I was single, it was just topping. [Now] It's having one partner. But I don't even think about HIV now, to be honest. I think because I have one partner."* This theme of oral and anal sex practice as influenced by a desire to avoid HIV offers additional considerations for the conceptual model of factors that influence sexual positioning practices (See Figure 1, Section C). Oral sex practice could also be considered as sexual positioning in the model (See Figure 1, Section E).

Discussion

The present study explores a range of variables that could influence sexual positioning practices as reported by HIV-negative BSM who use substances and whether these concepts fall within a model of same-sex sexual dynamics that contribute to HIV/STI risk taking. Findings supporting the original model presented by Dangerfield II et al. (2016) suggest that personal preferences, partner type, and substance use influence sexual positioning practices. Findings also suggest that feelings of compromise and obligation, partner attraction, and HIV avoidance could all influence sexual positioning practices and HIV/STI risk, and that the original model should be adapted to include these factors. Concepts related to masculinity and conscious power dynamics, which are factors in the original model, did not emerge as salient themes in this study. Participants did not explicitly mention seeking masculine partners, nor using versatility practices as a means of regaining power within same-sex relationships.

Regarding the role of personal preference in sexual positioning, these data suggest that preferences can be maintained, meaning that MSM who have a personal sexual positioning preference might be able to maintain this preference through the sexual event, possibly regardless of other factors. However, data from the present study also show that other, potentially mutable factors (i.e., those that may change depending on the context) such as partner type and substance use also contribute to subsequent sexual positioning practices and risk. Other potentially mutable contextual factors that could build upon the concepts in the model include foreplay prior to intercourse, compromise/obligation, and partner attraction.

Although the present study found support for and builds upon the conceptual model, data do not inform ways in which the distal concepts of power and masculinity, as suggested by the original model, affect sexual positioning preferences or practices among BSM. Moreover, the data do not reveal whether other variables in the model, such as masculinity stereotypes, age, and partner race/ethnicity, might also affect the ability to negotiate positioning practices and subsequent condom use as the original model suggests. This could be because the larger study was not intended to elicit questions to validate the model; it could also suggest that these factors might not be as important to HIV/STI risk-taking as originally proposed. Indeed, some studies have found that age differences do not necessarily influence sexual

behaviors (Jin et al., 2009; Prestage et al., 2009). Further study is needed to better understand the role of these factors in the conceptual model.

Of note, interviews suggested that relationships with main partners with whom participants were in a romantic relationship created a challenge in negotiating condom use. Although this does not directly reflect power dynamics, it could suggest that these dynamics are at play within romantic relationships. Also potentially relevant to power dynamics, while participants described the varying ages and ethnicities of their partners in their interviews, they did not articulate whether or how these factors influenced sexual positioning. Research shows that partner age and ethnicity can also influence subsequent sexual positioning practices (Carballo-Diéguez et al., 2004; Dangerfield II et al., 2016; Han, 2008; Husbands et al., 2013; Wilton et al., 2015). However, data from this study do not show whether the ability to negotiate sexual positioning preferences were impacted by these proximal factors, and, importantly, these findings do not reveal how issues of power were impacted by the concepts that emerged.

Together, findings from the present study support and expand the original model of HIV/STI risk behavior and suggest that identification with “top,” “bottom,” or versatility roles does not necessarily determine the increased or decreased risk within sexual encounters or relationships. Rather, the often unconscious motivations and unspoken assumptions made about partners in the sexual relationship require more attention (Dangerfield II et al., 2016). Perhaps increasing awareness of these dynamics among BMSM might increase individuals’ ability to maintain their personal preferences and negotiate subsequent risks. These data suggest that some dynamics within the same-sex sexual encounter might not be power referring to physical or verbal ability, but could refer to power regarding personal agency regarding maintaining sexual preferences.

Of note, oral sex practice was common in this sample. Future research should continue to explore the role of oral sex in the sexual positioning behaviors among BMSM because of the relationship between oral sex and STIs. Research has shown that pharyngeal gonorrhea infections in particular have been concerning for public health because they perpetuate the risk of developing multidrug-resistant bacteria (Bissessor et al., 2014; Deguchi, Yasuda, & Ito, 2012; Levy et al., 2016). Data have shown the synergistic relationship between HIV and STIs, with particular emphasis on gonorrhea (Bernstein, Marcus, Nieri, Philip, & Klausner, 2010; Craib et al., 1995; Fleming & Wasserheit, 1999). Extragenital STIs are often untreated because they are asymptomatic, patients do not always request screening for them (Pinsky et al., 2012), and providers are not always knowledgeable or comfortable evaluating same-sex sexual behaviors (Bernstein et al., 2008; Patton et al., 2014). Additionally, some BMSM do not always feel comfortable disclosing same-sex practices to providers (Arnold et al., 2014; Doshi, Malebranche, Bowleg, & Sangaramoorthy, 2012; Konkle-Parker, Amico, & Henderson, 2011), which might perpetuate an unhealthy cycle of patients not engaging in health care, providers not asking appropriate questions, and discomfort among both parties. Introducing concepts that have been learned from this research to patients and providers could provide an additional opportunity to combat HIV, STI incidence, and the development of drug-resistant bacteria. For example, providers could discuss potential discrepancies

between MSM's sexual positioning preferences and practices and offer HIV/STI risk-reduction strategies that include condom and positioning negotiation.

Potential implications of the study and the adapted model of HIV/STI risk are that HIV and STI prevention interventions should consider the factors influencing sexual positioning and the sexual risk for HIV-negative BMSM. Specifically, interventions should consider the fact that some men do not practice their preferred position, which may heighten their risk for HIV/STIs. Tragically, most behavioral interventions to date have failed to substantially lower HIV incidence among BMSM. Only one of the evidence-based behavioral interventions identified by the CDC specifically addressed the role of "tops" and "bottoms" in same-sex dynamics (Wilton et al., 2009). Still, behavioral interventions have not adequately explored the wide range of contexts that lead some BMSM into sometimes unwanted and unconscious sexual positioning practices and increase their risk for HIV and STIs.

Introducing concepts of self-efficacy, sexual communication, and risk negotiation might help BMSM manage risk related to sexual positioning (Wilton et al., 2009) that, in turn, could serve to lower risk-taking behaviors. Introducing the concepts found in this adapted conceptual model could decrease unconscious participation in sexual risk based upon partner preferences or relationship dynamics. With the onset of biomedical interventions as the current paradigm for prevention programming, the role of sexual positioning practices in the sexual risk of BMSM cannot be overlooked. Many BMSM are not adequately engaged in healthcare services for HIV testing or treatment (Maulsby et al., 2013), and pre-exposure prophylaxis (PrEP) uptake for HIV-negative BMSM remains a challenge (Cahill et al., 2017; Eaton, Driffin, Bauermeister, Smith, & Conway-Washington, 2015; Kirby & Thornber-Dunwell, 2014). Yet sexual positioning practices remain a salient part of the lives and risk of BMSM. The findings of the present study highlight an opportunity to incorporate the role of the factors related to sexual positioning in intervention programs.

Future research should further test the original model in which these concepts and factors are explored among larger groups of BMSM. Research could quantify the relative impact of HIV status, partner attraction, partner type, compromise, and substance use on sexual positioning practices and sexual risk. Future efforts could also explore these dynamics and practices among other ethnic groups of MSM in the U.S. and abroad where issues of masculinity, partner type, and HIV might also coalesce to create power dynamics leading to varying degrees of RAI, IAI, versatility, and sexual risk (Carballo-Diéguez et al., 2004; Dangerfield II et al., 2016; Hoppe, 2011; Husbands et al., 2013).

Limitations

There are limitations to consider with this study. This sample was a small qualitative study within a specific group of BMSM with specific risk characteristics (i.e., substance using), and therefore it was not representative of all BMSM in the U.S. All data were self-reported (except for HIV status), and is subject to recall and socially desirable responding. Additionally, the overarching study from which data for the current paper were drawn was focused on identifying a range of adaptive strategies that kept men HIV negative and may not have fully explored issues of sexual positioning that are the interest of this research. The

aim of the overarching study from which these data were derived was to develop an intervention considering a wide range of strategies that could be protective, and was not designed to capture sexual positioning negotiation ability per se. Additionally, the original study was not designed around the conceptual model. Therefore, the present study explores a range of variables that were in the existing study to help validate and adapt the conceptual model, but may not adequately explore all potential variables in the model. Nevertheless, the present study provides a foundation for a more targeted study that might better capture the relationships between these factors in sexual encounters. Therefore, these findings cannot determine the extent to which the concepts as proposed in the model affect HIV or STI risk.

Limitations notwithstanding, this study provides useful information on sexual positioning among BSM and supports and expands concepts from the conceptual model from Dangerfield II et al. (2016) on the proximal factors within sexual encounters that influence sexual positioning practices and sexual risk among BSM (Figure 1). This study also suggests that sexual positioning results from a dynamic process involving multiple factors in need of further study. The findings of this study add to a more comprehensive understanding of the sexual lives of HIV-negative BSM who are engaged in high-risk practices (i.e., substance use). This study provides a foundation for larger, more focused studies on sexual positioning practices and sexual risk among substance-using, HIV-negative BSM.

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Figure 1.

Adaptation of conceptual model from Dangerfield II et al. (2016) incorporating study findings.

* - indicates concepts that were expressed by Black MSM in the current study that are found in the conceptual model from Dangerfield II et al. 2016.

** - indicates concepts that were expressed by Black MSM in the current study that build upon the original conceptual model from Dangerfield II et al. 2016

Table 1:

Demographic characteristics of HIV-negative black men who have sex with men (MSM) (n=29)

Demographic Variables	Mean (SD)	N	%
Age	28.7 (3.5)		
Highest Education Completed			
Less than high school diploma		5	17%
High school diploma or GED		11	38%
Some college, no degree		9	31%
College degree		2	7%
Some graduate school, no degree		2	7%
Current Living Arrangement			
Rent or own house or apartment		24	83%
Friend or relative's home (pays little rent)		3	10%
Publicly subsidized housing		1	3%
Homeless (sleeping in shelter or on the street)		1	3%
Employment Status			
Full-time		9	31%
Part-time		7	24%
Unemployed or not working		8	28%
Other		5	17%
Annual Gross Income			
No income		2	7%
0 - \$10,000		9	31%
\$ 10,001 - \$20,000		5	17%
\$20,001 - \$30,000		6	21%
\$30,001 - \$40,000		4	14%
Over \$40,000		3	10%
Marital or Partnership Status			
Single, not married, or not in a committed relationship		21	72%
Significant other, partner, lover (steady boyfriend or girlfriend)		5	17%
Legally Married		2	7%
Don't Know		1	3%
Sexual Orientation			
Gay, homosexual or same gender-loving		19	66%
Bisexual		9	31%
Something else		1	4%