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Sexual Behaviors and Experiences among Behaviorally Bisexual Men in the Midwestern United States

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Abstract

Research examining the sexual behaviors and experiences of behaviorally bisexual men is limited. Most studies focus primarily on highlighting sexual risk behaviors among groups of "men who have sex with men (MSM)" or "gay and bisexual men," which may not be appropriate in terms of behaviorally bisexual men's sexual repertoires with both men and women. This study aimed to assess a broad range of sexual behaviors and associated experiences among bisexual men living in the midwestern United States. An interviewer-administered questionnaire containing items from the National Survey of Sexual Health and Behavior assessed lifetime and recent (i.e., past six months and last event) sexual behaviors and experiences with both male and female partners among a diverse sample of 75 behaviorally bisexual men. Responses were quantified and analyzed using descriptive and multivariate statistics. A wide range of sexual behaviors with partners of both genders was found. Vaginal intercourse and oral sex with both men and women were the most commonly reported behaviors. Subjective reports of pleasure, arousal, and sexual function during sexual activity were similar with both male and female partners. Many participants reported using condoms during insertive sexual behaviors with male and female partners, but less during oral sex. Unprotected receptive anal sex was less commonly reported. Overall, participants reported a variety of sexual behaviors and experiences; however, unlike other populations, they shared these with partners of both genders. Results have implications for interventions targeting the sexual behaviors and associated issues among behaviorally bisexual men.

Keywords

Bisexual; Sexual Behavior; Sexual Experience; Men Who Have Sex with Both Men and Women (MSMW)

INTRODUCTION

Much previous HIV/STI research has dichotomized "heterosexual" transmission (from male-to-female partners) and "homosexual" transmission (from male-to-male partners)

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without investigating the potential overlap between these routes through individuals who routinely engage in both "heterosexual" and "homosexual" behaviors (Doll & Beeker, 1996; Doll, Myers, Kennedy, & Allman, 1997). In most studies, men who have sex with both men and women (MSMW) have been combined with exclusively homosexual men under the label of "men who have sex with men (MSM)" without being considered independently in terms of their specific risk and prevention needs. To avoid issues associated with the complexities of sexual self-identity labels, researchers initially developed the term "MSM" to describe men who engage in same-sex practices; same-sex behavior could be exclusive or could include sexual interactions with women. However, in most studies of "MSM" bisexual behaviors have received little to no attention (Muñoz-Laboy, 2004; Sandfort & Dodge, 2009).

The limited research to date that has focused on behaviorally bisexual men highlights unique HIV/STI risk factors and prevention needs relative to both exclusively homosexual and exclusively heterosexual men. For example, early studies showed that bisexual men often use condoms inconsistently with both male and female partners, were unlikely to disclose their bisexuality to their female partners, and were more likely than exclusively homosexual men to engage in multiple high risk behaviors, including transactional sex and injecting drug use (Doll & Beeker, 1996; Doll et al., 1992, 1997). In comparison to exclusively homosexual men, bisexual men have also been found to report significantly lower intentions to use condoms, higher number of sexual partners, hold weaker peer norms favoring risk avoidance and safer sex, ascribe more to culturally-specific gender roles and norms, and have lower safer sex self-efficacy scores (Goodenow, Netherland, & Szalacha, 2002; Heckman et al., 1995; Thomas & Hodges, 1991).

Given the significance of the epidemic, an emphasis on the factors related to risk of HIV infection and transmission for bisexual men and their partners has been critical (Doll et al., 1997). However, a limitation of disease-focused research is that much of the contemporary knowledge related to the sexual behaviors of bisexual men has been constructed almost exclusively in the context of "risk" (Malebranche, 2008; Sandfort & Dodge, 2008). The narrow focus on sexual risks, often confounded by being conducted on "high risk" samples such as sex workers and injecting drug users, has created critical gaps in our understanding of the broad range of sexual behaviors and experiences among bisexual men. In many previous studies across two decades, bisexual men have been presented as little more than "bridges" of disease transmission between MSM and heterosexual sexual networks (Chu, Peterman, Doll, Buehler, & Curran, 1992; Doll & Beeker, 1996; Doll et al., 1992; Hollander, 2009; Mercer, Hart, Johnson, & Cassell, 2009; Zule, Bobashev, Wechsberg, Costenbader, & Coomes, 2009). Additionally, recent sensationalized mass media attention on undisclosed bisexuality among Black men has shifted the focus away from a comprehensive understanding of male bisexuality to a distorted focus on bisexuality as a social and moral risk factor (King, 2004; Malebranche, 2003; Millett, Malebranche, Mason, & Spikes, 2005). The sexual lives of bisexual men of diverse racial/ethnic groups, including White men, remain incompletely described in recent scientific research (Dodge, Jeffries, & Sandfort, 2008; Muñoz-Laboy & Dodge, 2007).

Research has not yet explored male bisexual behavior and experiences for their potential contributions to sexual health beyond "risky" and negative consequences. Outside the context of disease transmission, little is known about the prevalence of a detailed range of bisexual men's sexual behaviors with both male and female partners, including insertive and receptive oral sex, vaginal sex, insertive and receptive anal sex, and other sexual activities. When examined separately from combined samples of "gay and bisexual men" or "MSM," behaviorally bisexual men's behaviors are often summarized as "having sex with both men and women," without specifying what "sex" may be. Additionally, data are limited

regarding factors associated with bisexual men's overall sexual experiences with their male and female partners, including pleasure, arousal, and function particularly as they relate to the individual's subjective experience. While some research has examined sexual arousal among self-identified bisexual men using psychophysiological measures, an understanding of pleasure, arousal, and function as a subjective experience is still lacking (Rieger, Chivers, & Bailey, 2005). Current rates of behaviorally bisexual men's sexual behaviors would be of great utility to public health professionals and others seeking to understand patterns of sexual behaviors and how to appropriately intervene. The aim of this study was to offer a comprehensive overview of the sexual behaviors and other factors related to sexual experience during lifetime and recent sexual interactions in a diverse sample of bisexual men in the U.S.

METHOD

Participants

A total of 75 men participated in the study. Table 1 provides information on the demographic characteristics of this sample. The average age was 33.3 years (SD = 11.5), with a range from 19 to 70 years old. Equal numbers of Latino (n = 25, 33.3%), Black (n = 25, 33.3%), and White (n= 25, 33.3%) men took part in the study. Most participants indicated that they "lived with someone else" (n = 57, 76.0%) and within the city limits of Indianapolis (n = 66, 88.0%). In terms of marital status, the majority of the participants (n = 55, 73.0%) were currently single. Just under half of the participants had at least one child (n = 34, 45.0%) and, of those, 19 had more than one child. The majority of men had at least a high school (or equivalent) level of education (n = 59, 78.0%) with an average monthly income, of those currently employed, of USD $1,836.86 (SD = $1,450.07) ranging from $350.00 to $8,500.

Our sample was composed of males from the Indianapolis, Indiana, area who engaged in bisexual behaviors within the past six months regardless of sexual identity. Previous work suggests that bisexual behavior, more than sexual identity, places men and their partners at elevated HIV/STI risk (Malebranche, 2008; Muñoz-Laboy & Dodge, 2007). To ensure relevance in terms of bisexual behaviors, we recruited a sample of men who engaged in oral, vaginal or anal sex with at least one male and at least one female partner during the past six months. Studies have varied greatly in the time period for which sexual behavior may be classified as "bisexual," but we chose six months as the duration for defining bisexual behavior to obtain a more accurate sample of participants who were currently behaviorally bisexual (and therefore distinct from currently exclusively homosexual or exclusively heterosexual men).

Based on recommendations from our study's Community Advisory Committee, which included bisexual men as well as members of several community-based organizations who serve the needs of diverse groups of men in Indianapolis, we made efforts to recruit an ethnically diverse sample. All categorizations of race/ethnicity were based on self-identification. A broad age group was warranted since sexual relationships and risk behaviors among bisexual men likely differ significantly based on age. We did not exclude men based on whether or not they used protection (i.e., condoms) inconsistently. HIV status was neither an inclusion nor an exclusion criterion.

Recruiting men who were both representative of the range of experiences of bisexual behavior and diverse in terms of relevant demographic and behavioral characteristics required an eclectic sampling plan. Thus, we used targeted sampling techniques for clinic-based recruitment, Internet-based recruitment, and participant referral. Recruitment materials were intentionally vague and instructed men who were interested in taking part in

a study on “sexual health” to contact the investigators. The word “bisexual” did not appear on any recruitment materials. While these general procedures involved pre-screening dozens of potentially ineligible participants, and involved a great deal of work on behalf of the research assistants, they enabled our research team to reach a diverse sample of participants that could not have been reached otherwise. Indeed, when asked about how they came to participate in the study, the vast majority of men (n = 65, 87.7%) indicated that they would not have taken recruitment materials that contained the words “bisexual” or “gay.”

A small number of initial participants were recruited from the patient population of Bell Flower Clinic, a sexually transmitted infections clinic operated by the Marion County Health Department (Marion County is entirely occupied by the city of Indianapolis). Based on prior intake and pilot data, this population had sufficiently high self-reported bisexual behavior to allow for recruitment (Dodge et al., 2010; Rosenberger et al., 2009). Although STI clinic samples are well represented in the research literature related to risk behaviors, relatively little research directly addresses the factors associated with male bisexuality in clinical samples.

Based on a recent assessment of sexual health among MSM conducted in Indianapolis, as well as the insight of our Community Advisory Committee, we determined that physical venues geared specifically toward bisexual men were non-existent in the area (Dodge et al., 2008b; Satinsky et al., 2008). In this assessment, approximately 30% of MSM reported using the Internet for social and sexual purposes and that, as with other samples, men recruited via the Internet in Indianapolis were more likely to report engaging in bisexual behavior during the previous year than those recruited from gay-identified venues. Thus, recruitment from virtual Internet spaces further diversified the types of men we were able to recruit for this study. Recruiting potential participants from postings on a variety of general social and sexual networking Internet sites (e.g., Craigslist–Men for Men and Women) allowed us to reach a diverse cross-section of men, including those who may not frequent gay-oriented websites.

The third recruitment strategy relied on participant referral. Upon completion, we distributed recruitment materials to study participants. Each participant who agreed to assist with recruitment was given three to five postcards to distribute to potentially eligible members of his social network In previous research, we found that this method of recruitment was particularly important given the sometimes secretive social and sexual networks of bisexual men, as they may not be easily recruited from traditional venues where exclusively homosexual men congregate (Dodge et al., 2008a).

Procedure

After meeting the eligibility requirements and agreeing to take part, participants were scheduled for a confidential 90-minute interview and optional self-collected STI screening. Results from participants’ STI testing, including experiences of self-sampling, have been reported elsewhere (Dodge et al., in press). Interviews were conducted in English (n = 60) or Spanish (n = 15) by trained members of the research team. All participants were required to give written informed consent to the study procedures, including digital audio-recording, before the interviews took place. No identifying information, with the exception of broad demographic characteristics, was collected. We conducted interviews at locations that were both convenient and comfortable to the participant, as well as consistent spaces that allowed for standardization of setting (including private offices at a variety of community-based organizations and other public and semi-public settings that offered a reasonable level of privacy and were conducive for audio recording). Potential participants were informed of all study procedures prior to data collection. Upon completion of the interview, and STI specimen collection when agreed upon, participants received $50. This amount was in line

with similar studies that have been recently conducted in this study setting. All protocols for the study were approved by the institutional review boards of the researchers' academic institutions.

Measures

This article presents findings from quantified responses to an interviewer-administered questionnaire used to assess sexual behaviors and a variety of other contextual factors associated with recent sexual experiences with both male and female partners. The measures for the interviewer-administered questionnaire were taken directly from the National Survey of Sexual Health and Behavior (NSSHB), a study examining recent and lifetime prevalence of sexual behaviors in a nationally representative probability sample of 5,865 men and women ages 14 to 94 in the U.S. (Reece et al., 2010).

Participants responded to a series of questions regarding their lifetime sexual behaviors. Table 2 presents a summary of measures from the study. They were asked, "How often have you done the following?" and then indicated whether or not they had engaged in a wide variety of behaviors within the past 30 days, within the past 90 days, within the past year, or more than a year ago. They could also indicate if they had never engaged in a particular behavior.

For behaviors at last sexual event, participants also responded to a series of questions indicating their experiences associated with pleasure and arousal. These were asked first based on the gender of the most recent sexual partner (male or female) and then repeated for the most recent partner of the other gender. For example, in relation to pleasure, participants were asked "How pleasurable was this most recent sexual act with a man?" and were given the option of indicating their response on a Likert-type scale ranging from not at all pleasurable (0) to extremely pleasurable (4). Participants were asked about their experiences of orgasm (and perceived partner orgasm), erectile functioning, and whether or not they used any medications designed to attain or maintain an erection. Last, men indicated whether or not (and to what extent) they used condoms with male and female partners.

Data Analysis

Participants' interview responses were quantified and coded. All analyses were conducted using SPSS version 17.0. Descriptive statistics were used to report frequencies of sexual behaviors, factors associated with sexual experience, and condom use. Logisitic regressions were constructed to examine the influence of demographics on engagement in sexual behaviors with both male and female partners at least event. McNemar tests were utilized to determine whether significant differences were present for parallel sexual behaviors, condom use, as well as alcohol and drug use with both male and female partners at last sexual event. Condom use was dichotomized into "condom use" and "condom non-use" for these analyses with those indicating any use during the entire sexual event as "condom use." This method of analysis follows similar research conducted by Lansky, Thomas, and Earp (1998) and their examination of sexual behaviors with both steady and casual partners. Bivariate correlations were used to examine the relationships between continuous demographic variables such as number of children, age, experiences of sexual pleasure, arousal, and erectile dysfunction (ED) medication use. Additionally, paired sample *t*-tests were used to examine differences between experiences of sexual arousal, pleasure, and ED medication use.

RESULTS

Sexual Behaviors

Lifetime Sexual Behaviors—Table 3 shows the participants' range of sexual behaviors, in addition to when they had engaged in these behaviors. In terms of lifetime experience, all men reported engaging in solo masturbation. Additionally, nearly all men reported vaginal intercourse (n = 74, 98.7%), receiving oral sex from a female partner (n = 74, 98.7%) or a male partner (n = 72, 96%), and giving oral sex to a female partner (n = 70, 93.3%). The majority indicated being the insertive partner during anal sex with a male partner (n = 67, 89.3%) and mutual masturbation with both male (n = 63, 84.0%) and female (n = 57, 76.0%) sexual partners.

Fewer men reported (n = 56, 74.7%) having performed oral sex on a male partner or being the receptive partner during anal sex with a male partner (n = 51, 68.0%). Just over a third of participants (n = 28, 37.3%) had engaged in a sexual interaction with someone while online. Additionally, very few participants reported giving something in exchange for sex, but nearly identical numbers for male (n = 12, 16.0%) and female (n = 15, 20.0%) sexual partners were indicated, as were reports of receiving something in exchange for sex from male (n = 15, 20%) and female (n = 10, 13%) sexual partners.

Sexual Behaviors during the Past Year—Findings regarding recent sexual behavior are shown in Table 3. Vaginal sex was the most frequently reported (n = 74, 98.7%) sexual behavior engaged in during the past year, with almost half of participants reporting engaging in this behavior within the past 30 days. Similar numbers of men reported solo masturbation (n = 71, 94.7%), receiving oral sex from a male partners (n = 70, 93.3%) and female partners (n = 68, 90.6%) as well as insertive anal sex (n = 62, 82.6%). Fewer men reported performing oral sex on a female partner (n = 59, 78.7%), partnered masturbation with a male partner (n = 58, 77.3%), performing oral sex on a male partner (n = 54, 72.0%), partnered masturbation with a female partner (n = 52, 69.3%), and receptive anal sex with a male partner (n = 36, 48%). Far fewer men indicated sexual activity with partners online (n = 20, 26.7%), giving something to a male (n = 11, 14.7%) or female (n = 8, 10.7%) sexual partner for sex, or receiving something from a male (n = 8, 10.7%) or female (n = 6, 8.0%) for sex during the past year.

Sexual Behaviors at Last Event—Findings related to sexual behaviors during the most recent sexual activity with a male or female partner are shown in Table 4. When asked about their most recent sexual encounters with male partners, the vast majority of participants (n = 60, 80.0%) reported engaging in oral sex, followed by performing oral sex (n = 48, 64.0%), rubbing genitals (n = 47, 62.7%), and being the insertive partner during anal sex 61.3% (n = 46). Only a quarter (n = 19, 25.3%) reported being the receptive partner during anal sex with their most recent male partner. The majority of men (n = 72, 96.0%) reported engaging in vaginal sex during their most recent sexual activity with a female partner, followed by 78.7% (n = 59) receiving oral sex, 73.3% (n = 55) rubbing genitals, and 52.0% (n = 39) performing oral sex. Fewer men reported insertive anal sex (n = 6, 8.0%) during their most recent sex with a female partner. A smaller number of men (n = 3, 4.0%) reported a recent experience with a female partner inserting something (e.g., dildo) into their anus.

A series of binary logistic regression models were constructed to assess the influence of participant demographics on sexual behaviors during their last sexual event with both male and female partners. No associations were found between participant demographics and sexual behaviors with male and female partners at last sexual event.

Regarding parallel sexual behaviors with male and female partners, only vaginal and anal behaviors were found to be significantly different. For example, men who had vaginal sex or were the insertive partner during anal sex with a male partner at last sexual event were compared to those participants who were the insertive partner during anal sex with a male, but did not have vaginal sex. This comparison was made in order to determine the frequencies and whether there were significant differences.

Using a McNemar test, a significant difference was found regarding participants engaging in vaginal sex and insertive anal sex with a male partner at last event ($p < .001$) with 34.7% (n = 26) of men engaging in vaginal sex with a female partner but not anal sex with a male partner and none of the men engaging in insertive anal sex with a male partner but not vaginal sex at last event. Likewise, a significant difference was found with participants engaging in receptive anal sex with a male partner and vaginal sex at last event ($p < .001$). Nearly three-quarters of participants (n = 53, 70.7%) reported engaging in vaginal but not receptive anal sex with a male partner at last event; further, none of the participants indicated engaging in receptive anal sex with a male partner but not engaging in vaginal sex at last event.

In terms of receptive anal behaviors, a significant difference was found regarding male and female partners during last sexual event ($p < .001$). Nearly a quarter of the participants (n = 19, 25.3%) indicated they had been the receptive partner during anal sex with a male partner, but not with a female partner (i.e., not being penetrated anally by a female). A smaller number of participants (n= 3, 4.0%) engaged in receptive anal sex with a female partner and, interestingly, none of these men engaged in receptive anal sex with a male partner at last sexual event. Over half (n = 43, 57.3%) of participants reported engaging in insertive anal sex with a male partner, but not with a female partner. Last, 4.0% (n = 3) engaged in insertive anal sex with a female partner, but not with a male partner, at last sexual event ($p < .001$).

Experiences of Sexual Behaviors at Last Event—Findings related to sexual pleasure, arousal, orgasm, and function are shown in Table 5. Overall, results were similar in regards to sexual pleasure and arousal with both male and female partners. The majority reported at least “quite a bit” of pleasure during their most recent sexual experience with a male (n = 46, 61.3%) or female (n = 42, 56.0%) sexual partner. Similar to sexual pleasure, participants’ reports of arousal were at least “quite a bit” during last sex with male (n = 50, 66.7%) or female (n = 43, 57.3%) sexual partner. Similar numbers were found regarding having an orgasm during most recent sex with male (n = 65, 86.7%) or female (n = 66, 88.0%) sexual partners. Participants were slightly less likely to report that their male (n = 59, 78.7%) and female (n = 58, 77.3%) partners had achieved orgasm.

When asked about difficulty of attaining and maintaining an erection during their most recent sexual event, about three quarters indicated no difficulty during sexual activities with male partners (n = 57, 76 .0%) and slightly less indicated this during sexual activities with female partners (n = 52, 69.3%). Furthermore, very few participants indicated use of any medication for erectile dysfunction during sex with either male (n = 1, 1.3%) or female (n = 4, 5.3%) sexual partners at last sexual event. Paired *t*-tests were used to assess differences between these variables with male and female partners. No significant differences in self-reported levels of arousal, pleasure or ED medication use were found with either male or female partners during last sexual event.

Condom Use at Last Event—Results for condom use at last event are shown in Table 6. Reported condom use was relatively frequent among our participants during sex with both male and female partners. The majority of participants indicated they had used a condom at

some point during their most recent sexual encounter with their male (n = 50, 66.7%) and female (n = 48, 64.0%) sexual partners. About a third of men indicated they did not use a condom at any time during their most recent sexual event with male (n = 25, 33.0%) and female (n = 27, 36.0%) sexual partner. Additionally, about half of participants indicated they had not used a condom or barrier specifically when giving or receiving oral sex with their most recent male (n = 36, 48%) and female (n = 40, 53.3%) sexual partners. Using a McNemar test, no significant difference was found regarding condom use with a male or female partner during last sexual event.

DISCUSSION

Overall, participants reported a diverse array of behaviors with both male and female partners. The wide variety of sexual behaviors and experiences with both male and female partners indicate that behaviorally bisexual men cannot be placed into dichotomous categories of “homosexual” or “heterosexual.” Our data showed similar patterns of sexual behaviors with both male and female partners. Most commonly reported behaviors included vaginal sex and oral sex with both male and female partners. Interestingly, reported rates of vaginal sex and insertive anal sex with a male partner greatly exceeded the frequency of receptive anal intercourse with a male partner. Preliminary analysis of qualitative data indicated that, similar to other research, insertive behaviors may be suggestive of concerns of the desire to maintain a masculine image, as well as other factors, while engaging in sexual activity with other male partners (Carballo-Dieguez, et al, 2004; Muñoz-Laboy & Dodge, 2005; Schnarrs et al., in press).

It was interesting that no significant differences in terms of sexual behaviors and demographic characteristics, including ethnicity, were present in this study (although statistical power may be an issue). We are beginning to examine qualitative data specific to the lived experiences of our Latino, White, and Black participants elsewhere (Martinez et al., 2011) and, although sexual behaviors were relatively similar across ethnic groups, participants’ expressions of bisexuality likely differ in relation to their ethnicity.

There were no significant differences found between frequencies of sexual behaviors such as oral sex, mutual masturbation, and rubbing genitals together at last sexual event based on the gender of the sexual partner. There were, however, significant differences between vaginal and anal sexual behaviors. Initially, differences in anal sex indicated that these behaviors were more common with male partners compared to female partners. A small proportion of participants reported engaging in receptive anal sexual behaviors with female partners (i.e., being penetrated with a dildo, strap on, fist, or other object) but not with male partners. This may be a protective behavior against HIV infection, given that receptive anal sex with a male partner carries an increased risk of infection. However, this discordance of receptive behavior may also be related to more nuanced factors. Of the participants who engaged in this behavior, several reported being specifically sexually aroused by being penetrated by a female partner but not by a male partner. This finding may indicate the actual act of being penetrated is not wanted, but being penetrated by a female partner is desirable. Future research should examine the different meanings associated with being penetrated by male or female partners among men who engage in these behaviors.

None of the participants reported engaging in insertive anal sex with a male partner and not engaging in vaginal sex with a female partner at last sexual event. This may be due to the fact that vaginal sex is a very common behavior overall among all our participants. These men may simply enjoy being the penetrating partner during sexual behavior with either orifice. However, it may also be indicative of normative expectations. Some behaviorally bisexual men who engage in anal sex with male partners may also engage in vaginal sex

with female partners as way to buffer against feelings of stigma associated with anal sex with other men.

Further, insertive behaviors with both male and female partners may be an outcome of the "coital imperative," which suggests that perceptions of normative sexual interactions with women ultimately end in vaginal intercourse (McPhillips, Braun, & Gavey, 2001). It may be that some behaviorally bisexual men hold this belief concerning both male and female partners (i.e., insertive sex with either gender must end in either vaginal or anal intercourse), with more men taking on a normative gender role of being the insertive partner and less men taking on the non-normative role of receptive partner with both genders. As such, men engaging in anal and vaginal behaviors may feel that a "successful" sexual event needs to end in, or at least partially include, some form of insertive sexual behavior with both male and female partners.

We found that condom use was reported for a majority of anal and vaginal sexual events, but less often for oral sex. We found little difference in reported patterns of condom use with male and female partners, in contrast to findings in other samples (Dodge et al., 2008b). Additionally, our participants were relatively aware of increase risk of HIV infection associated with receptive anal sex with male partners. As a protective measure, both for themselves and their female partners, they avoided engaging in unprotected receptive anal sex with male partners.

Our participants reported that the levels of subjective pleasure, arousal, and orgasm were comparable for both male and female partners, which suggests that they found sexual experiences with both male and female partners to be positive. No significant differences were found regarding self-reported sexual arousal, pleasure or erectile function with either gender, suggesting that, overall, behaviorally bisexual men in our sample experienced these similarly with men and women. The reported rates of erectile difficulties and medication use in this sample were similar to those in a recent national probability study analyzing sexual characteristics of adults in the U.S. (Herbenick et al., 2010). That the majority of men reported little to no difficulty in attaining and maintaining erections or using medication for erectile dysfunction at last sexual even, regardless of their sexual partner's gender, adds dialogue to recent psychophysiological assessments of self-identified bisexual men's arousal to heterosexual and homosexual sexually explicit materials in laboratory settings (Rieger etal., 2005). Additionally, participants described a variety of sexual scenarios, including group sex with both male and female partners and relationship configurations beyond traditional "monogamous" or other dyadic relationships. This reinforces that these men participated in diverse sexual behaviors that may not conform to dominant forms of heterosexual, homosexual, and gendered sexual categories that are often used in research on sexual risk.

The results of this study must be considered while taking into consideration its limitations. As probability samples of behaviorally bisexual men are exceedingly difficult to obtain (Jeffries & Dodge, 2007), we relied on convenience sampling techniques in order to attain study participants. In collaboration with a formal Community Advisory Committee, which included behaviorally bisexual men and individuals who serve the health needs of these men, we recruited a diverse sample of that was reflective of the wide range of these men in Indianapolis. However, because probability samples were not feasible, we do not know how well our approach sampled the wide array of existing sub-populations of behaviorally bisexual men. For example, even though we included a good number of married men, and men with children, it is possible these men are even more difficult to reach and require sampling methods other than those we employed. Additionally, although we collected data on a wide range of sexual health issues (including participants' sexual identities, how sexual

desires were focused on specific partner genders for a given event, and how communication with partners about bisexuality occurs, when it occurs), exploring these issues in relation to sexual behavior and experience was beyond the scope of this study. Last, the way in which some of the qualitative data were quantified related to condom usage may have skewed the results in terms of overestimating condom usage in this sample. Condom usage was quantified by grouping together those who used condoms the entire time, those who used condoms part of the time, those who did not use condoms during oral sex, and those who did not use condoms at all. Because these groupings oversimplify the context of condom use, it is difficult to understand how condoms were actually used with male and female partners during their last sexual event, especially considering that only oral sex may have occurred.

For the majority of our participants, various aspects of their sexuality, including sexual behaviors as well as subjective experiences of pleasure, arousal, function, and orgasm, were markedly similar whether they were with a male or female partner. However, these men were unique by virtue of that fact that they shared these experiences with both male and female partners. Since vaginal intercourse and oral sex with both genders were the most commonly reported behaviors in terms of both frequency and recency, MSM-oriented messages (i.e., avoiding unprotected receptive anal sex with male partners) may not target the most relevant behaviors of these men, including sexual behaviors with female partners. Previous programs that seek to achieve traditional outcomes for other groups of MSM may be less relevant to behaviorally bisexual men. Given the high rates of oral sex among our participants, our data support the importance of providing relevant information in terms of possible STI transmission during oral sex with both male and female partners, as well as testing and treatment options available.

In addition to safer sex information, intervention efforts may seek to focus on skills building with behaviorally bisexual men in order to assist them with disclosing potential sexual risk behaviors with both male and female partners. Since current social support for bisexuality is scarce, such exercises must be grounded in the reality that not all sexual partners will be open to relationships with behaviorally bisexual men. Future research should investigate the development, implementation, and evaluation of sexual health interventions tailored for behaviorally bisexual men in order to determine their utility and effectiveness in meeting the unique needs of this underserved population.

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Table 1

Participant Characteristics (N = 75)

	n	%
Age		
19 – 24	24	32.0
25 – 29	12	16.0
30 – 39	13	17.3
40 – 49	21	28.0
50 +	5	6.6
Race/Ethnicity		
Black	25	33.3
Latino	25	33.3
White	25	33.3
Living Situation		
Living Alone	18	24.0
Living with Someone	57	76.0
Marital Status		
Single	55	73.3
Married	13	17.3
Divorced/Separated	7	9.3
Children		
None	41	54.7
One	15	20.0
Two	10	13.3
Three or More	9	12.0
Highest Level of Education		
Less than High school	16	21.3
High school/GED	22	16.0
Some College/Associate Degree	16	21.3
Bachelor Degree	14	18.7
Graduate/Professional School	7	9.4
Employment		
Yes	56	74.7
No	19	25.3
Monthly Income		
< 1,000	31	41.3
1,000 – 1,999	20	26.7
2,000 – 2,999	13	17.3
3,000 +	11	14.7

Table 2

Measures of Sexual Behavior and Experience Used Separately with Male and Female Sexual Partners.

Now we would like to ask you some questions about the types of sexual experiences you have had over the course of your lifetime. How often have you done the following?

Done in the past 30 days (past month)

Done in the past 90 days (three months)

Done in the past year

Done more than a year ago

- **a.** Masturbation alone (you stimulated your body for sexual pleasure, whether or not you had an orgasm)
- **b.** Masturbation with a female partner
- **c.** Masturbation with a male partner
- **d.** Received oral sex from a woman
- **e.** Received oral sex from a man
- **f.** Gave oral sex to a woman
- **g.** Gave oral sex to a man
- **h.** Vaginal intercourse
- **i.** "Bottomed" (someone put their penis in you anus/butthole)
- **j.** "Topped" (putting your penis in someone else's anus/butthole)
- **k.** Sexual interaction on the internet (masturbating with an online partner)
- **l.** Given something to a woman in exchange for sex (paid for sex with a woman)
- **m.** Given something to a man in exchange for sex (paid for sex with a man)
- **n.** Was given something from a woman in exchange for sex (Received payment for sex with a woman)
- **o.** Was given something from a man in exchange for sex (Received payment for sex with a man)
- **p.** Engaged in group sex (describe)
- **q.** Attended a sex party
- **r.** Engaged in sex in a public sex environment (bathhouse, park, restroom, other cruising areas)
- **s.** Other ———?

The last time you had sex with a [man/woman], how pleasurable was this most recent sexual act?

Not at all pleasurable	A little pleasurable	Moderately pleasurable	Quite a bit pleasurable	Extremely pleasurable

How sexually aroused did you feel during this most recent sexual act?

Not at all aroused	A little aroused	Moderately aroused	Quite a bit aroused	Extremely aroused

During this most recent sex act, did you have an orgasm?

Yes	No	Not Sure

During this most recent sex act, did you partner have an orgasm?

Yes	No	Not Sure

During this sexual act, were you using any medication designed to help you attain or maintain an erection (such as Viagra, Cialis, Levitra, etc)?

Yes	No	Unsure	(If used, why?)

During this sexual act, how difficult was it to maintain your erection?

Yes	No

Table 3

Reported Recency of Sexual Behaviors (N = 75)

Recency of Reported Behavior	Never Done		Past 30 Days		Past 90 Days		Past Year		Over A Year	
Sexual Behaviors	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Solo Masturbation	0	0	68	90.7	1	1.3	2	2.7	4	5.3
Partnered Masturbation with Male	12	16.0	29	38.7	19	25.3	10	13.3	5	6.7
Partnered Masturbation with Female	18	24.0	19	25.3	16	21.3	17	22.7	5	6.7
Received Oral Sex from Male	3	4.0	43	57.3	18	24.0	9	12.0	2	2.7
Received Oral Sex from Female	1	1.3	33	44.0	16	21.3	19	25.3	6	8.0
Gave Oral Sex to Male	19	25.3	35	46.7	13	17.3	6	8.0	2	2.7
Gave Oral Sex to Female	5	6.7	21	28.0	17	22.7	21	28.0	10	13.3
Vaginal Sex	1	1.3	36	48.0	20	26.7	18	24.0	0	0.0
Insertive Anal Sex	8	10.7	33	44.0	13	17.3	16	21.3	5	6.7
Receptive Anal Sex	24	32.0	15	20.0	10	13.3	11	14.7	15	20.0
Sex Online	47	62.7	11	14.7	8	10.7	1	1.3	8	10.7
Gave Something for Sex with Male	63	84.0	6	8.0	2	2.7	3	4.0	1	1.3
Gave Something for Sex with Female	60	80.0	2	2.7	3	4.0	3	4.0	6	1.3
Received Something for Sex with Male	60	80.0	4	5.3	2	2.7	2	2.7	7	9.3
Received Something for Sex with Female	65	86.7	4	5.3	2	2.7	0	0.0	4	5.3

Table 4

Sexual Behaviors Performed During Most Recent Event (N = 75)

	Yes		No	
	n	%	n	%
Rubbed Genitals with Male	47	62.7	28	37.3
Rubbed Genitals with Female	55	73.3	20	26.7
Performed Oral Sex on Male	48	64.0	27	36.0
Performed Oral Sex on Female	39	52.0	36	48.0
Received Oral Sex from Male	60	80.0	15	20.0
Received Oral Sex from Female	59	78.7	16	21.3
Vaginal Sex	72	96.0	3	4.0
Receptive Anal Sex with Male	19	25.3	56	74.7
Receptive Anal Sex with Female	3	4.0	72	96.0
Insertive Anal Sex with Male	46	61.3	29	38.7
Insertive Anal Sex with Female	6	8.0	69	92.0

Table 5

Pleasure, Arousal, Orgasm, and Erectile Difficulty During Most Recent Sexual Event by Partner Gender (N = 75)

	Male Partner		Female Partner	
	n	%	n	%
Pleasure				
Extremely	16	21.3	22	29.3
Quite a bit	30	40.0	20	26.7
Moderately	20	26.7	25	33.3
A little	7	9.3	5	6.7
Not at All	2	2.7	3	4.0
Arousal				
Extremely	24	32.0	22	29.3
Quite a bit	26	34.7	21	28.0
Moderately	17	22.7	24	32.0
A little	6	8.0	8	10.7
Not at All	2	2.7	0	0.0
Orgasm				
Participant Orgasm	65	86.7	66	88.0
Sexual Partner Orgasm	59	78.7	58	77.3
Erectile Difficulty				
Not at all	57	76.0	52	69.3
A little bit	9	12.0	14	18.7
Somewhat	1	1.3	5	6.7
Very	6	8.0	4	5.3
Extremely	2	2.7	0	0.0
Erectile Medication Use	1	1.3	4	5.3

Table 6

Condom Use at Last Event by Partner Gender (N = 75)

	Male Partner		Female Partner	
	n	%	n	%
The entire time	13	17.3	6	8.0
Part of the time	1	1.3	2	2.7
Not during oral sex	36	48.0	40	53.3
Not at all	25	33.3	27	36.0