Published in final edited form as:

Arch Sex Behav. 2012 April ; 41(2): 441–448. doi:10.1007/s10508-011-9730-8.

Age-Concordant and Age-Discordant Sexual Behavior Among Gay and Bisexual Male Adolescents

Douglas Bruce,

Master of Public Health Program, Department of Psychology, DePaul University, 2219 N. Kenmore, Room 420, Chicago, IL 60614, USA

Gary W. Harper,

Master of Public Health Program, Department of Psychology, DePaul University, 2219 N. Kenmore, Room 420, Chicago, IL 60614, USA, Department of Psychology, DePaul University, Chicago, IL, USA

M. Isabel Fernández,

College of Osteopathic Medicine, Nova Southeastern University, Fort Lauderdale, FL, USA

Omar B. Jamil, and

Department of Psychology, DePaul University, Chicago, IL, USA

Adolescent Medicine Trials Network for HIV/AIDS Interventions

Douglas Bruce: dbruce1@depaul.edu

Abstract

There is evidence that risks for HIV and sexually transmitted infections among adolescent females are higher for those with older male sexual partners. Yet, little empirical research has been conducted with male adolescents who engage in sexual activity with older men. In this article, we summarize in a number of ways the range of sexual activity reported by an ethnically diverse sample of 200 gay and bisexual male youth (15–22 years old) in Chicago and Miami. A general pattern of progression from oral sex with men to both receptive and insertive anal sex with men appeared to characterize the sample during their adolescence. Further, there appeared to be a high degree of “versatile” positioning among the sexually active gay and bisexual young men, in both age-discrepant and age-concordant dyads. Risk analysis revealed having primarily age-concordant partners to be a significant predictor of sexual risk behavior. HIV risk among young gay and bisexual men engaging in sexual activity with older men may occur not only within a distinct biological context from their heterosexual counterparts, but also in a social context that may not as rigidly bound to traditional assumptions about age, gender, and power. The significant associations among participants with partners who were the same age and the risk behavior measures in this analysis have implications for HIV prevention efforts.

Keywords

Adolescents; Gay; Bisexual; Sexual behavior; Older sexual partners

Introduction

Adolescents and young adults continue to be affected disproportionately by HIV/AIDS in the United States, as it has been estimated that up to 35 percent of new HIV infections are among persons 13–29 years old (Centers for Disease Control and Prevention, 2008). Current estimates indicate that 66–74% of adolescents and young adults living with HIV are male while 26–34% are female. For both these groups 80–85% of infections are attributable to sexual activity with men (CDC, 2008). From 2001–2006, 13–24 year old males who have sex with males (MSM) had the greatest proportional increase in new HIV cases compared to all other MSM age groups (CDC, 2008). Although the number of young adults between the ages of 20–24 living with HIV is larger than adolescents 13–19 years of age, there has been a more dramatic increase in the number of adolescents living with HIV among the 13–19 age group from 2001–2005 than among young adults in the 20–24 age group (CDC, 2006). From 1999 to 2003, the number of HIV diagnoses among females 13–24 years of age decreased significantly whereas the number of new HIV diagnoses among males increased significantly (Rangel, Gavin, Reed, Fowler, & Lee, 2006). Although young MSM comprise the majority of adolescent HIV cases, most adolescent HIV prevention research has focused on heterosexual female youth (Harper, 2007).

There is evidence that risks for HIV and sexually transmitted infections (STI) among adolescent females are higher for those with older male sexual partners (Begley, Crosby, DiClemente, Wingood, & Rose, 2003; DiClemente et al., 2002; Harper, Doll, Bangi, & Contreras, 2002; Miller, Clark, & Moore, 1997). A range of risk factors among adolescent females appears to be associated with dating and engaging in sexual relationships with older men, including early sexual onset and unwanted sexual activity (Abma, Driscoll, & Moore, 1998; Marin, Coyle, Gomez, Carvajal, & Kirby, 2000), lower rates of contraceptive use (Miller et al., 1997; Sturdevant et al., 2001), and having a partner who has multiple sex partners (Begley et al., 2003). Miller et al. (1997) have proposed that older male sexual partners pose an increased HIV risk to female adolescents because older men are: (1) more likely to have had sex with multiple partners; (2) more likely to have engaged in HIV risky behaviors (e.g., injection drug use); (3) more likely to be already infected with HIV; and (4) more likely to hold a disproportionately high amount of power in sexual relationships. Further, the power differential present between these older men and female adolescents should thus increase the likelihood of coercion, exploitation, and physical, sexual, and/or emotional abuse.

Despite the growing literature regarding the HIV and STI risks associated with older male sexual partners for female adolescents, there has been much less empirical investigation for male adolescents who engage in sexual activity with older men. Data from a probability sample of young gay men in San Francisco revealed sexual partner selection exclusively with men over 30 to be an independent predictor of HIV seroprevalence among young men ages 18–29 (Service & Blower, 1995, 1996). Findings from the Los Angeles Young Men's Survey found among young African American men significant associations between HIV seroprevalence and having older and African American male sex partners (Bingham et al., 2003). The basis for viewing sex with older men as an HIV risk factor for young gay and bisexual men rests on much of the same assumptions put forth in the older male-younger female research, including the older male partner being more likely to have had more sexual partners and to be infected with HIV. However, assumptions regarding gender, power, coercion, and exploitation as applied to the sexual experiences of female adolescents with older male partners (Miller et al., 1997) may need to be reframed when considering sexual relations between young gay and bisexual men and older male partners. Meta-analysis of nonclinical studies has shown that young men tended to view their sexual contacts as adolescents with adults positively while young women viewed such experiences more

negatively (Bauserman & Rind, 1997). Some studies of gay men have documented retrospective descriptions of age-discrepant childhood sexual experiences as evenly split between positive and negative (Savin-Williams, 1998; Stanley, Batholemew, & Oram, 2004).

One limitation of female-focused studies is that they typically examined only vaginal sex with older partners. Because gay and bisexual male adolescents may have sex with both males and females, studies with these young men should examine a broad range of possible sexual behaviors with both types of partners. Yet, the range of sexual behavior among young gay and bisexual men and age of initiation into various types of sexual behavior is not widely documented. Earlier in the HIV/AIDS epidemic, a sample of young gay and bisexual men (ages 13–21) reported on various types of sexual acts, including lifetime prevalence of oral sex (85%), insertive anal sex with men (68%), receptive anal sex with men (67%), and vaginal sex (42%), and past year prevalence for the same types of sex (oral sex: 80%, insertive anal sex with men: 57%, receptive anal sex with men: 55%, vaginal sex: 19%; Remafedi, 1994). There is evidence when examining cohorts of gay men that age at same-sex sexual debut tends to be earlier among younger generations of men, although these findings did not distinguish among different types of sexual acts (Grov, Bimbi, Nanin, & Parsons, 2006). More recent data among a venue-based sample in Los Angeles has documented among young MSM mean ages of initiation into oral sex with men (at 15.5 years) and insertive and receptive anal sex with men (both at 17.2 years) (Kubicek et al., 2008).

In order to more fully understand gay and bisexual youth's sexual behavior and sexual risk, it becomes necessary to examine oral sex, receptive anal sex with men, insertive anal sex with men, and vaginal sex with and without the use of condoms. Further, most research conducted on age-discrepant sexual relations between adolescent and older men has utilized retrospective data obtained from adult samples of gay men and their childhood sexual experiences. More empirical data are needed from samples of gay and bisexual youth, their sexual partners, and the range of their sexual practices.

In this article, we summarize in a number of ways the range of sexual activity and history reported by an ethnically diverse sample of young gay and bisexual males (15–22 years old) in Chicago and South Florida. First, we summarize the age at initiation into different sexual acts, number of lifetime partners, and partners during the past 90 days reported across the sample. Then, we categorize “typical” sexual partners for each sexual act by identifying trends in the age of participants' last three reported partners for each sexual act. Finally, in order to assess sexual risk behavior present in age-discrepant sexual experiences, we examined associations among the typical sexual partner categories with number of partners, condom use, and sexual activity under the influence of drugs and/or alcohol during the past 90 days.

Method

Participants

The sample comprised 200 African American (35.5%), Latino (34%), and White (30.5%) male adolescents and young adults who self-identified as gay (74%), bisexual (22%), or questioning (4%). Ages of participants ranged from 15 to 22 years at study enrollment ($M = 19.3$ years, $SD = 1.7$). Twenty-one percent of participants had less than a high school education, 31% were high school graduates, and 43.5% had some college education or were college graduates. Fifteen percent were currently in long-term relationships (defined as lasting more than 1 year). The Chicago and South Florida subsamples were similar in terms of ethnicity, sexual orientation, and age (Chicago $M = 19.0$, South Florida $M = 19.5$).

Procedure

Data were taken from a multiphase and multisite mixed-methods study from the Adolescent HIV Medicine Trials Network (ATN) ATN020. The goals of ATN020 were to explore how development of identities (e.g., gay, ethnic, and masculine) impact HIV risk and protective behaviors and to build a conceptual model that could be used to guide development of culturally and developmentally appropriate interventions to reduce risk of HIV infection. From March 2004 to September 2005, participants were recruited from public venues and community agencies in Chicago ($n = 97$) and Miami-Dade and Broward Counties, Florida (South Florida; $n = 103$). Eligible youth were: (1) male; (2) 15–22 years of age; (3) self-identified as African American, Hispanic/Latino, or White non-Hispanic/ European American ancestry; (4) self-identified as gay, bisexual, or questioning; (5) not known to be HIV positive; (6) lived in the metropolitan areas of Chicago or South Florida; and (7) able to read and understand English. In order to examine the primary goals of the larger study, a purposive sampling frame was used to recruit equivalent numbers of African American, Hispanic/Latino, and White participants at both sites. Because the IRB in South Florida did not grant a waiver of parental consent, we did not recruit youth younger than 18 in South Florida to prevent unwarranted disclosure and protect their confidentiality.

Trained, multi-ethnic research staff, who themselves were young gay and bisexual men, recruited participants at community agencies that served young gay and bisexual men and at public venues frequented by or that catered to these youth. At community agencies, staff made presentations describing the study and youth who were interested approached staff to be screened for study participation. In community venues, staff approached youth directly, described the study, and asked if youth were interested in being screened. In both types of venues, we identified private, safe areas in which to conduct study activities (screening, consent, completion of questionnaire). After providing informed consent or assent, participants completed a pencil-and-paper questionnaire and were compensated \$25 for their time and effort. The average time for completion of the questionnaire was 40 min. The study was approved by the Institutional Review Boards of DePaul University, University of Miami, Nova South eastern University, and the funding agency.

Measures

Demographic Variables—Participants reported their age, ethnicity, education, and their self-reported sexual orientation (gay, bisexual, questioning). They also reported whether or not they were currently involved in a long-term relationship that had lasted more than a year.

Sexual Behaviors—Participants reported their sexual behaviors with men and women separately in two time frames. For both lifetime and the past 90 days, participants indicated whether or not they had had insertive anal sex with a man, had receptive anal sex with a man, performed oral sex on a man, and/or had vaginal sex with a woman. Participants indicated the age at initiation of each type of sex act and the age of their three most recent sex partners for each act. For the last 90 days only, participants stated the consistency (“always,” “more than half of the time,” “about half of the time,” “less than half of the time,” “rarely,” “never”) with which they had used condoms for each type of sex act they reported. Additionally, participants reported the consistency with which they had engaged in each sexual act while under the influence of drugs and/or alcohol during the past 90 days using the same response categories as with condom use.

Data Analyses

We first conducted descriptive analyses to summarize the characteristics of the sample and to describe the age at initiation, number of lifetime partners, and number of partners during the past 90 days for the four different types of sexual acts.

To examine the association between age of partner and sexual risk, we conducted posthoc analyses of partner type, condom use, and sex under the influence of alcohol and/or drugs. First, we created a composite variable, “partner age pattern,” for each type of sex act. We calculated the difference between the participant’s age and that of his three most recent sex partners. We then examined the age difference across the three partners to determine whether or not an age pattern was discernable. Based on the age difference across the last three partners, participants were assigned a partner age pattern if the age difference for at least two of their last partners were as follows: (1) younger partner (two or more years younger); (2) same-age partner; (3) older partner (2–4 years older); (4) much older partner (five or more years older). If no pattern was detected, the participant was categorized as having “no partner age pattern.” These age categories are similar to of those utilized in previous studies of adolescent sexual behavior and age of sexual partners (Begley et al., 2003; Ford, Sohn, & Lepkowski, 2002; Ompad et al., 2006).

We then created dichotomous variables to assess condom use (always/not always) and sex while under the influence (never/ever) in the last 90 days for insertive anal sex with men and receptive anal sex with men. Participants who did not engage in the sexual act were classified as no risk. Last, we calculated odds ratios comparing outcome variables by partner age pattern.

Results

Age at initiation for each sex act, number of lifetime partners, and number of partners during the past 90 days are summarized across the four sexual acts and shown in Table 1. The proportions of participants who had engaged in a particular sexual act compared to those who had not engaged were significant with respect to each sexual act: receptive anal sex with men, $\chi^2(1) = 20.5$; $p < .001$, insertive anal sex with men, $\chi^2(1) = 40.5$; $p < .001$, oral sex with men, $\chi^2(1) = 118.6$; $p < .001$, and vaginal sex, $\chi^2(1) = 15.7$; $p < .001$. Age of initiation for oral sex with men was earlier than for insertive anal sex with men and receptive anal sex with men. Number of lifetime male oral sex partners was much higher than for the other three sex acts. Previous analyses conducted with this sample showed African American participants to be significantly more likely than White participants to have ever engaged in vaginal sex and significantly less likely than Hispanic/Latino participants to have ever engaged in receptive anal sex with men (Warren et al., 2008).

Less than 20% of participants reported life time engagement in all four sex acts. We conducted a subgroup analysis of participants who had engaged in all three male-male sex acts over their lifetime to determine in this subgroup exhibited a different pattern in age at initiation and number of partners. The subgroup tended to resemble the larger sample in terms of age at initiation and number of partners, and these variables are also summarized in Table 1.

Categories of partner age pattern are shown across the four sexual acts in Table 2. Oral sex with men was the most commonly reported sex act among the sample, with only 11% of participants reporting having never engaged in oral sex. Conversely, vaginal sex was the least commonly reported sex act, with 66% of participants reporting having never engaged in it. There was a wide distribution of partner age patterns across the different sex acts.

Overall chi-square statistics for partner age patterns within each sexual act were significant: receptive anal sex with men, $\chi^2(4) = 41.58$, $p < .001$, insertive anal sex with men, $\chi^2(4) = 34.48$; $p < .001$, oral sex with men, $\chi^2(4) = 63.57$; $p < .001$, and vaginal sex, $\chi^2(4) = 98.0$; $p < .001$. Decomposition of overall chi-square statistics revealed that significantly higher proportions of sexually active participants engaged in all four sexual acts primarily with

partners their own age, and significantly lower proportions engaged in receptive anal sex, insertive anal sex, and oral sex with men with partners who were younger. A higher proportion of participants reported insertive anal sex with slightly older male partners (16.6%) than receptive anal sex with slightly older male partners (14.0%), while more reported receptive anal sex with much older male partners (28.7%) than insertive anal sex with much older male partners (21.4%). Roughly equal proportions reported insertive anal sex and receptive anal sex with same age male partners. Of the participants who reported a history of vaginal sex, more than two-thirds (67.6%) had vaginal sex primarily with women their own age.

Approximately half of all participants had engaged in insertive anal sex with men in the past 90 days (49.5%), while slightly less had engaged in receptive anal sex with men in the past 90 days (42.5%). Of those engaging in insertive anal sex with men during that period, 42% reported inconsistent condom use. A slightly lower proportion (37.6%) reported inconsistent condom use during receptive anal sex with men in the past 90 days. Incidence of receptive anal sex with men while under the influence of alcohol and/or drugs (47%) was also slightly lower than for insertive anal sex with men while under the influence (52%) during that time period.

The relatively low report of vaginal sex among the sample precluded an examination of variability of condom use among those who reported vaginal sex. Race/ethnicity, sexual orientation identity, and location were entered as predictors of the sexual risk variables (insertive anal sex with men or receptive anal sex with men while under the influence of drugs and/or alcohol, condom use during insertive anal sex with men or receptive anal sex with men), and none of the demographic variables were found to be significant. Odds ratios were calculated for sexual risk variables by partner type and are shown in Table 3.

In general, engaging in sexual risk behavior was significantly predicted by having a male partner the same age or having no trend in partner age. Specifically, insertive anal sex with men while under the influence of drugs and/or alcohol and inconsistent condom use during insertive anal sex with men were both significantly predicted by engaging in insertive anal sex with a same-age partner. Also, receptive anal sex with men while under the influence of drugs and/or alcohol was significantly predicted by engaging in receptive anal sex with a same-age male partner. Receptive anal sex under the influence of drugs and/or alcohol and inconsistent condom use during receptive anal sex were both significantly predicted by having no specific partner age trend in receptive anal sex. Insertive anal sex with men while under the influence of drugs and/or alcohol was also significantly predicted by having no specific partner age trend in insertive anal sex. The only risk behavior outcome that was significantly predicted by having primarily much older partners was receptive anal sex with men while under the influence of drugs and/or alcohol. Having primarily younger male partners and having slightly older male partners were not predictive of any of the sexual risk behavior outcomes.

Discussion

Several noteworthy trends emerged from analysis of these data. First, a general pattern of progression from oral sex with men to both receptive and insertive anal sex with men appeared to characterize the sample. On average, oral sex with men was reported at an earlier age (15.0 years) than the other sexual acts of interest, slightly earlier than the average age of initiation of vaginal sex (although a much smaller proportion of the sample reported any lifetime vaginal sex partners). Receptive and insertive anal sex with men tended to be initiated later in adolescence (16.5 years and 17.0 years, respectively). These mean ages of initiation into distinct types of sexual behavior are consistent with those reported in a

previous study of young MSM (Kubicek et al., 2008) and may imply a Guttman stage sequence among adolescent young MSM from oral sex (and, in some cases, vaginal sex) to anal sex with men. Previous research has documented a Guttman stage sequence of sexual behaviors among heterosexual adolescents ranging from cuddling and petting to inter-course (Hansen, Paskett, & Carter, 1999; Lam, Shi, Ho, Stewart, & Fan, 2002), although such studies did not assess oral sex as part of such a progression.

While considering the age at initiation results, it should be noted that considerable proportions of participants reported never having engaged in receptive anal intercourse (35.5%) or insertive anal intercourse (27.5%). These proportions may seem low when compared to previous studies of sexual experience milestones among gay and bisexual youth (D'Augelli, 2006). Our study differentiated between specific sexual acts in ways that previous research into identity development of gay and bisexual youth has not. In consideration of the participants who reported never having engaged in such types of sex, the mean ages of initiation would presumably increase across the sample once the abstinent individuals engage in these types of sexual activities over time. Participants also reported almost twice as many lifetime male oral sex partners than either type of male anal sex partners, as well as more male oral sex partners during the past 90 days than either type of male anal sex partners. Together with the age at initiation discussed above, these data would also support the progression from oral sex with men to insertive anal sex with men and receptive anal sex with men among this population.

Further, there appeared to be a high degree of “versatile” positioning among the sexually active gay and bisexual young men in the sample, in both age-discrepant and age-concordant dyads. Slightly more participants reported insertive anal sex than receptive anal sex typically with male partners their own age as well as with slightly male older partners. Slightly more participants reported receptive anal sex than insertive anal sex typically with male partners more than 5 years older. These data suggest a sex model (insertive anal sex-receptive anal sex) that may be more bidirectional for young gay and bisexual men than the unidirectional one that is assumed in investigations into sexual activity among older men and young women (penis-vagina). Further, this model may reveal a dynamic among young gay and bisexual men and older partners that is distinct from the older male-younger female model proposed by Miller et al. (1997). While older men may indeed have had more sexual partners and be more likely to be already infected with HIV, the power differential that is assumed present in the older male-younger female unidirectional model may not be as compelling in the older male-younger male bidirectional model suggested by our findings. HIV risk among young gay and bisexual men engaging in sexual activity with older men would seem to occur not only within a biological context (both partners may be receptive) that is distinct from their heterosexual counterparts, but may also occur in a social context that is not as rigidly bound to traditional assumptions about age, gender, and power.

Finally, sexual risk behavior in this sample was significantly associated with having an age-concordant partner or with having no “typical” partner in terms of age; the only significant association with having partners older than 5 years was that of receptive anal sex with men while under the influence of sex and/drugs. The significant associations among participants with partners who were the same age and the risk behavior measures in this analysis have implications for HIV prevention efforts. Seroprevalence data show that older men are more likely to be HIV-infected (CDC, 2008) and young gay and bisexual men may perceive heightened HIV risk when having sex with older men. There is evidence that adolescents’ condom use is significantly associated with their partner-specific risk perception to HIV and STD infection (Reisen & Poppen, 1999). Current seroprevalence data reveal that young gay and bisexual men constitute increasing proportions of new HIV infections (CDC, 2008); therefore, young gay and bisexual men who perceive lower risk among younger partners

may, in fact, be placing themselves at increased risk. Previous research has shown that young men recently testing HIV-positive perceived themselves to be at low risk for HIV infection (Hays et al., 1997; MacKellar et al., 2005).

These findings should be interpreted within the limitations of the study. The data presented here were largely descriptive and the assessment of risk among partner type was meant to be exploratory. The risk measures—condom use and sex under the influence of alcohol and/or drugs—were not event-based and cannot be linked to actual partners and sexual encounters. Condom use was assessed as inconsistent over time, and partner type was collapsed into categories based on the age of the (up to) last three sexual partners regarding each type of sexual act. Also, the data were reported retrospectively and may be subject to recall bias: risk measures were 90-day based, while age at initiation of sexual act and number of lifetime partners required even more retrospective recall. In addition, because the South Florida IRB did not grant a waiver of parental consent for participants under the age of 18, we did not recruit any such participants from that site; therefore, the data for youth under the age of 18 may be biased because they all were recruited from one site. None the less, this study presents descriptive data on the range of sexual practices of young gay and bisexual men that has been rarely described empirically in the literature to date. Based on the results, it is suggested that future research into sexual risk among young gay and bisexual men and their partners should assess various sexual acts in order to more fully understand the range of sexual activity and sexual risk taking among these men.

Acknowledgments

The Adolescent Medicine Trials Network for HIV/ AIDS Interventions (ATN) is funded by Nos. 5 U01 HD 40533 and 5 U01 HD 40474 from the National Institutes of Health through the National Institute of Child Health and Human Development (Bill Kapogiannis, M.D.; Sonia Lee, Ph.D.) with supplemental funding from the National Institutes of Drug Abuse (Nicolette Borek, Ph.D.) and Mental Health (Susannah Allison, Ph.D.). We would like to thank Larry Friedman, M.D., PI of the Miami Adolescent Trials Unit and the staff of the Behavioral Health Promotion Program (Cesar deFuentes, Luis Alzamora, Cristobal Plaza, and Leah Varga) and participating staff at DePaul University (Bianca Wilson, Marco Hidalgo, Rodrigo Sebastian Torres). ATN020 has been scientifically reviewed by the ATN's Behavioral Leadership Group. We would also like to thank individuals from the ATN Data and Operations Center (Westat, Inc.) including Jim Korelitz, Ph.D.; Barbara Driver, R.N., M.S.; and individuals from the ATN Coordinating Center at the University of Alabama including Craig Wilson, M.D.; Cindy Partlow, M.Ed.; and Marcia Berck, B.A. Additionally, we would like to acknowledge the thoughtful input given by participants of our national and local Youth Community Advisory Boards. Finally, we would like to thank the young men who participated in this study, whose willingness to share their stories makes our work possible.

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Table 1

Age at initiation and number of partners for different sexual acts

	Receptive anal sex with men			Insertive anal with men			Oral sex with men			Vaginal sex		
	n	%	M	SD	n	%	M	SD	n	%	M	SD
Age at initiation of sex (in years)	129	64.5	16.5	2.7	145	72.5	17.0	2.1	178	89.0	15.0	3.0
No. of lifetime partners	129	64.5	10.4	22.5	145	72.5	11.3	23.2	178	89.0	19.7	42.4
No. of partners, past 90 days	85	42.5	1.7	3.4	99	47.5	2.0	3.5	146	73.0	2.5	3.1
Age of participants who haven't yet engaged in sex (in years)	71	35.5	19.0	1.7	55	27.5	18.5	1.5	22	11.0	18.5	1.2
Age at initiation of participants who have engaged in all 3 male-male sex acts over lifetime (in years)	117	58.5	16.9	2.3	117	58.5	17.0	2.3	117	58.5	15.1	2.7
No. of lifetime partners for participants who have engaged in all 3 male-male sex acts over lifetime	117	58.5	11.2	23.8	117	58.5	12.0	25.1	117	58.5	23.1	49.8
No. of partners, past 90 days for participants who have engaged in all 3 male-male sex acts over lifetime	114	57.0	1.8	3.6	117	58.5	1.8	3.1	117	58.5	2.8	3.4

Table 2Patterns in partners by sexual act ($N = 200$)

	Receptive anal sex			Insertive anal sex			Oral sex with men			Vaginal sex		
	<i>n</i>	%	(fo = fe) ² /fe	<i>n</i>	%	(fo = fe) ² /fe	<i>n</i>	%	(fo = fe) ² /fe	<i>n</i>	%	(fo = fe) ² /fe
Younger partner pattern	4	3.1	18.42*	8	5.5	15.21*	6	3.4	24.61*	5	7.3	5.44
Same age partner pattern	46	35.7	15.81*	52	35.9	18.24*	65	36.5	24.28*	46	67.6	77.19*
Slightly older partner pattern	18	14.0	2.36	24	16.6	0.86	21	11.8	5.98	8	11.7	2.30
Much older partner pattern	37	28.7	4.86	31	21.4	0.14	53	29.8	8.50	2	2.9	9.89
No partner pattern	24	18.6	0.12	30	20.7	0.03	33	18.5	0.19	7	10.3	3.20
Total	129	100.0	41.58	145	100.0	34.48	178	100.0	63.57	68	100.0	98.02

fo observed frequency, *fe* expected frequency* $p < .001$

Table 3

Odds ratios

	OR	95% CI
Insertive anal sex (ISM) while under the influence of drugs or alcohol		
Younger ISM partner pattern	0.4	(0.1, 3.3)
Same age ISM partner pattern	2.0	(1.0, 4.0)*
Slightly older ISM partner pattern	0.9	(0.4, 2.5)
Much older ISM partner pattern	1.7	(0.8, 3.8)
No ISM partner pattern	3.0	(1.3, 6.8)*
Receptive anal sex (RSM) while under the influence of drugs or alcohol		
Younger RSM partner pattern	1.3	(0.1, 13.2)
Same age RSM partner pattern	2.2	(1.0, 4.6)*
Slightly older RSM partner pattern	0.5	(0.1, 2.1)
Much older RSM partner pattern	2.7	(1.2, 6.0)*
No RSM partner trend observed	2.8	(1.1, 7.0)*
Inconsistent condom use during insertive anal sex (ISM)		
Younger ISM partner pattern	1.2	(0.2, 6.5)
Same age ISM partner pattern	2.4	(1.2, 4.9)*
Slightly older ISM partner pattern	1.7	(0.6, 4.3)
Much older ISM partner pattern	1.7	(0.7, 4.0)
No ISM partner pattern	0.9	(0.4, 2.4)
Inconsistent condom use during receptive anal sex (RSM)		
Younger RSM partner pattern	1.8	(0.2, 17.6)
Same age RSM partner pattern	2.0	(0.9, 4.5)
Slightly older RSM partner pattern	0.6	(0.1, 2.9)
Much older RSM partner pattern	1.9	(0.8, 4.7)
No RSM partner trend observed	3.1	(1.2, 8.2)*

*
 $p < .05$