CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

Men Who Have Sex With Men:

Safe-Sex Knowledge, Sexual Behavior, and Drug Use

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By

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Abstract

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Information about safe-sex behavior can inform individuals' choices about healthy sexual behavior. While research demonstrates the role of the correctness of information provided to individuals, the role of the source of the information is largely unknown. In addition to accuracy, the perceived correctness, status of the source, as well as other factors may contribute to how information is processed and utilized by an individual. This thesis examines the role that the source of the information plays in the sexual behavior choices of gay men. Obtaining information from some sources do contribute positively to healthy sexual behavior in terms of condom use and getting tested for sexually transmitted infections (STI's), while other sources seem to act as a detriment.

Introduction

Evidence suggests that condom use can help to prevent the spread of HIV and other sexually transmitted infections. Numerous studies have demonstrated an association between demographic characteristics and condom use, among those who are sexually active. Furthermore, other factors, such as knowledge about HIV, STIs, and condoms, have also been linked to condom use rates (Morrison, Baker, & Gillmore, 1993). This study expands the sparse literature concerning the role of the source of information regarding safe-sex practices (i.e., where one primarily learned about safe sex), in predicting sexual behavior, measured by (a) rates of safe sex practice among those who are sexually active and not in long-term, committed, monogamous relationships, and (b) likelihood of being tested for HIV/AIDS, within a social-structural context. The target population for this study is men who have sex with men. As new incidences of HIV are high among this population, this study is particularly relevant.

This paper examines the descriptive results of a survey administered to men who have sex with men in Kern County, California. Information for the full sample is provided, followed by breakdowns according to gender and sexual orientation, and then by race, age and HIV status. The first set of tables presents basic demographics of the sample. The following set of tables presents information on sex related behaviors. The next set of tables provides information on the places where the respondents like to meet sex partners. The last set of tables exhibits HIV knowledge of the sample.

Background and Significance

The *source of information* regarding safe-sex practices may impact its effect on the recipient in a number of ways. Perhaps obviously, the true accuracy and completeness of information may impact what is or is not done by the learner. The nature of the source may also lead the learner to regard the information with differing levels of seriousness. Uncomfortably delivered information from a parent, for instance, may not be taken as seriously as information from a health care provider or friend. Of course, which information is taken seriously an be impacted by the individual's circumstances, socio-demographics, self-esteem, and so on.

Numerous research studies delve into the accuracy and amount of knowledge regarding sex safe practices that individuals acquire (Fliesher, Senie, Minkoff, & Jaccard, 1994; Morrison, et al., 1993). However, there is relatively little work done that deals directly with the nature of the source as a predictor of an individual's sexual behavior (i.e., condom use, or getting tested for STIs). While a number of studies do seek to ascertain the source of safe-sex knowledge, it is often in order to directly determine if the individual actually increases knowledge from that source, and the correctness of knowledge distributed at or by that source. One study among university students does reveal that source of safe-sex information can impact healthy sexual behavior, controlling for other factors (Wagner, 2011).

Research on college sociology students revealed that most females received their knowledge of AIDS from both newspapers and magazines; most males, however, received their knowledge of AIDS from school and television. Only 46 percent of the sample of students perceived themselves to be high in their knowledge of AIDS. The

sample was made up of mostly white and Protestant, so generalizability is limited (Lance, Morgan, & Columbus, 1998).

Yi (1998) studied knowledge about HIV/AIDS among college students. This study focused on Vietnamese-American college students. A formidable 90 percent of the sample reported that they believed using condoms would lower the risk of contracting HIV/AIDS. On the other hand, only about 54 percent of the students sampled indicated that one could not get HIV/AIDS from sitting on a toilet seat. This leaves many concerns about where and how individuals acquire knowledge about HIV and STIs in general. The source of information regarding safe-sex practices is clearly a point of contact that needs investigation.

Demographics

In Yi's (1998) work, there was a significant relationship between gender and knowledge of HIV/AIDS. On the HIV/AIDS questionnaire that was administered, females scored considerably higher than males. Twenty-four percent of women responded incorrectly, while roughly 40 percent of men provided incorrect responses. While this tells us about level of knowledge, it does not provide direct insight into source of knowledge.

Steele, Richmond-Reese, & Lomax (2006) shed light on some reasons why condom use varies between women of difference racial and ethnic backgrounds. White women are more likely to use condoms, as well as other methods of birth control, than both Latino and African-American women.

Race, ethnicity, and gender are all characteristics which locate an individual

within the social structure. As a result of that "location," access to resources and experiences vary. These differences, among others, can impact sexual behavior directly (measured by condom use) as seen above (Steele, et al., 2006). They can also play a role indirectly as discussed throughout this paper.

Self-esteem

It is known that self-efficacy is an important factor in the negotiation between partners concerning condom use. In fact, research demonstrates that self-efficacy is significant in relation to condom use as well as intent to not engage in illegal substance use (Goh, Primavera, & Bartalini, 1996). This research also illustrates that females actually show higher levels of self-efficacy than males. However, one must use caution when generalizing these findings, since this research was limited to mainly white, middle-class, suburban students.

Self-efficacy is comprised generally of peer and media influences, social norms, and support (Bandura, 1982). *Self-esteem* is, of course, a critical determinant of self-efficacy when it comes to sexual behavior. Among other things, esteem is dependent upon socialization and structural conditions under which an individual has lived. Demographic characteristics play a role in determining esteem levels (Cheng & Furnham, 2003).

One must have the positive self-esteem (e.g., confidence, assertiveness) needed to be able to bring up condom use with a partner, while remaining prepared and able to handle any negative responses the introduction of the condom. Similarly, one must be able to respond to stress every step of the way from condom purchase to usage (Gabler,

Kropp, Silvera, & Lavack, 2004).

Self-esteem might also deter an individual from getting tested for STIs. Low self-esteem has been correlated with negative self-image and failure to seek adequate health care in general, even in addition to reduced condom self-efficacy (Brafford & Beck, 1991).

Risky Behaviors

Low self-esteem has been shown to lead to risky behavior (e.g., alcoholism.) In work carried out by Steffenhagen & Steffenhagen (1985), low self-esteem was determined to be a cause of alcoholism, via depression. Low self-esteem plays a role in fostering behaviors that can be self-detrimental, directly and indirectly. Leigh (1993) found that respondents were more likely to engage in high-risk behaviors, such as unprotected sex, when they are under the influence of drugs or alcohol. One risky behavior can often lead to or be associated with another.

Drug and alcohol use may actually contribute to less knowledge about STIs. Though, it is uncertain whether this impacts the source of knowledge regarding safe-sex practices. People who smoke and drink alcohol are less knowledgeable about HIV/AIDS than non-smokers and those who do not drink alcohol, according to work by Yi (1998). Furthermore, those studied who use marijuana have less knowledge than those individuals who never use marijuana.

Research Design and Methods

This study uses a cross-sectional survey design to obtain information about the impact of the source of safe-sex knowledge upon sexual behavior of MSM's (men who have sex with men).

The Survey Instrument

A self-administered questionnaire was utilized in this survey. It was taken by the respondents in the presence of the researcher or an associate of the researcher. Upon completion of the survey a reward was given to each respondent (see Sampling & Data Collection for more information on sampling and rewards). The questionnaire was designed to measure variables for this study as well as other studies (e.g., identity vs. behavior). Overall, the questionnaire measures demographics, including but not limited to race/ethnicity, age, income, and education level.

For this study, particularly, the questionnaire measures these key variables: source of information, risky behaviors, and sexual behaviors. To measure source of safe-sex information, respondents were asked to list the 3 primary sources from which they obtained safe-sex information. Risky behaviors were measured by asking respondents about the frequency of their drinking (to the point of being drunk) and drug use histories over the past 6 months. Sexual behavior was measured by asking about whether the respondent used a condom and/or discussed safe-sex practices prior to engaging in sex with his sex partner(s). Another dimension of sexual behavior was captured by asking about the respondent's record of having been tested for HIV/STI's. A copy of the finalized questionnaire is included in Appendix A.

The questionnaire ultimately went through nine revisions, based on feedback from colleagues and staff at the Community Action Partnership of Kern. The questionnaire will fulfill data needs for at least two research studies, but also fulfill information-gathering needs of CAPK. Students at CSU Bakersfield and their families were offered rewards (movie tickets, Maglite flashlights, etc.) for participating in the survey pre-testing. Participants were screened to fit categories such that respondents would answer questions differently. I conducted cognitive interviews to verify measurement validity of the instrument. These interviews contributed to the process of revisions that ultimately led to the final version of the questionnaire used in this study.

Sampling and Data Collection

The data for this analysis come from a survey administered in cooperation with the Community Action Partnership of Kern. Since the population, men who have sex with men, is semi-hidden it is not possible to obtain a random sample. Quota sampling can help ensure that, demographically, the sample looks like the population. However, in this case there is the added burden of simply gaining access to the hidden portions of the population in a way that does not rely entirely on self-selecting characteristics. Respondent driven sampling (RDS) was employed to build a sample of the population (Heckathorn, 1997). Using RDS, I was able to start with an initial sample of openly gay men and expand the sample to include men who are both actively and passively "closeted."

Actively closeted men are those who specifically direct action to exclude their sexual orientation from their identity. These men are often married to women, or have

regular or serial girlfriends, though not necessarily. Passively closeted men less often replace a part of their orientation with a heterosexual feature of sexuality (such as a wife). These men are more apt to avoid discussions or situations that would risk exposure, and more likely to be vague or non-responsive in efforts to conceal identity.

In this study, the target population is MSM's (men who have sex with men) in Kern County, California. Therefore the intended population of study includes openly gay men, actively closeted men, and passively closeted men. Note that the defining characteristic of this population is based upon behavior, not identity. The relationship between behavior and identity is important and ties in a variety of other factors; this shall be pursued in another study using these collected data. It was important to make certain that the sample included men from all of these categories to effectively represent this population.

Starting with an initial pool of 20 gay men through passive recruiting (advertising with contact information provided) at the Community Action Partnership of Kern, the RDS sampling was started. Each respondent was offered a reward (from among flashlights, movie tickets, etc.) for each additional qualified MSM who contacted us and completed a questionnaire. That respondent, too, was offered a reward for completion of his questionnaire.

This double incentive process increases the likelihood of participation by those who would otherwise (a) not be contacted and (b) refuse to answer. Also, the referrer has an incentive to not only alert the others to the survey, but to follow up and make sure they participate. More robust rewards tend to be more effective, but given budget considerations, the rewards offered were targeted toward the economic status level and

interests of the target population. Each person referred was then offered the opportunity to refer others, up until the end of the data collection period.

The study was advertised on the web and at local relevant events and establishments. Open referrals, those men who learned of the study without having a specific referral, were also permitted. The data were planned to be collected over the course of 30 days to ensure that there would be sufficient time for multiple level referrals, which have the effect of obtaining members of different parts of the population for the sample. However, the time period was extended an additional two weeks to collect data from a sizable number of promised referrals.

Sampling error is a concern, particularly since this is not a random sample. Budget restrictions on rewards for respondents, as well as time restrictions on staff (including myself) to be available to provide and collect the self-administered questionnaires, did limit the sample size. While power analysis yielded a best sample size of just over 300 (.80; alpha = 0.05), the sample size was, in part, determined by the ratio of openly gay men continuing to be added to the sample. It was important to have sufficient numbers of actively and passively closeted men in the sample; however, there is no known proportion of existence in the population. These strata are used for group comparison and general representation. With quotas in mind, the option was available to screen out candidates as the questionnaires continued to be collected. Variables including demographic characteristics and identity management (open/closeted) were monitored daily. Since the demographic variables were generally in line with the Kern County general population, there was no need to institute a screen. Use of a detailed quota screen can also undermine the effectiveness of RDS sampling. The data collection,

constrained by time, ended with 201 respondents. While more would have (always) been welcomed, this amount is sufficient for analysis.

Results

Demographics

Sample demographics can be found in Table 1. There were 201 completed surveys. The majority of respondents self identified as gay men (73 %) and the second largest group consists of those reporting themselves as bisexual (16 %). Straight/heterosexual men and transgender persons each make up just 4 % of the sample. Women and "other" identified men each make up about 2 % of the sample. The age of the respondents ranges from 16 to 69 with an average age of 36.1. Seventy-five percent of the respondents are white, 9 percent are "other," which combines Native American, Asian, and Pacific Islander; the "multiracial" category includes those who marked more than one race. Thirty-eight percent of the sample is of Hispanic ethnicity. Ten percent of the sample has not completed a high school education, but this reflects, to some extent, the several respondents who are under age 19—as thirty percent of the sample reports currently being a student. Twenty-eight percent have either a GED or a high school diploma, forty-seven percent have attended some college and 14 percent have at least a college degree. Average income for the sample is just over 25 thousand. Income was asked in a series of brackets and for this report was recoded using midpoints, thus the range is 5,000 to over 75,000.

Table 1. Sample Descriptive Statistics for Full Sample

	Mean /Proportion	Standard deviation	Range
Gay Men	.73	.45	0-1
Bi-sexual Men	.16	.36	0-1
Straight Men	.04	.20	0-1
Other men	.02	.12	0-1
Females	.02	.14	0-1
Transgender	.04	.20	0-1
White	.75	.43	0-1
Black	.09	.29	0-1
Multiracial	.06	.24	0-1
Other	.09	.29	0-1
Hispanic	.38	.49	0-1
Age	31.6	11.5	16-69
Less than High school	.10	.30	0-1
High school diploma	.28	.45	0-1
Some college	.47	.50	0-1
College degree or more	.14	.35	0-1
Currently a student	.30	.46	0-1
Income	25,657	21,347	5,000-75,000+

Table 2 provides demographic information by gender and by sexual orientation for men. Unfortunately, there are so few 'other' sexual orientation men and they are not included in the table. The largest group is gay men and they are primarily white. There are few straight men and they are over-represented by blacks. The females are primarily white and the Transgender persons are primarily of Hispanic ethnicity. Bisexual men and gay men are much younger than the other groups on average, 27 and 31 respectively.

The straight men have the lowest levels of educational attainment with 57 percent having only a GED or a high school diploma.

Table 2. Demographic Statistics by Gender and Sexual Orientation

	Gay men (n=145)	Bisexual men (n=31)	Straight men (n=8)	Females (n=4)	Transgender (n=8)
White	.80 (.40)	.68 (.48)	.50 (.55)	.75 (.50)	.33 (.58)
Black	.05 (.23)	.12 (.33)	.33 (.52)	.25 (.50)	.33 (.58)
Other	.08 (.27)	.12 (.33)	.17 (.41)	0.0 (0.0)	.33 (.58)
Multiracial	.06 (.24)	.08 (.49)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Hispanic	.35 (.48)	.37 (.49)	.38 (.52)	0.0 (0.0)	.86 (.38)
Age	31 (11.3)	27 (10.6)	39.3 (12.5)	40 (5.5)	40 (11.5)
Income	26,693 (22,027)	25,703 (18,027)	20,000 (26,925)	29,250 (28,848)	9,285 (5,345)
High school degree	.27 (.45)	.20 (.41)	.57 (.53)	0.0 (0.0)	.57 (.53)
Some College	.49 (.50)	.57 (.50)	0.0 (0.0)	.50 (.58)	.14 (.38)
BA or more	.15 (.36)	.10 (.31)	.14 (.38)	.50 (.58)	0.0 (0.0)

Table 3 presents demographic statistics by race and ethnicity. White respondents have a high level of educational attainment and income as do the other races. Multiracial and other racial groups are the youngest of the race and ethic groups. Blacks and Hispanics have the lowest levels of educational attainment. Multiracial respondents and blacks have the lowest income levels.

Table 3. Demographic Statistics by Race/Ethnicity

	White (n=103)	Black (n=14)	Other (n=5)	Multiracial (n=8)	Hispanic (N=70)
Age	32 (11.7)	37 (10.9)	24 (8.7)	27 (11.8)	30 (10.9)
Income	30,780 (23,704)	15,000 (12,792)	28,000 (30,7)1	15,000 (14,142)	20,806 (16,022)
Less than high school	.07 (.26)	0.0 (0.0)	.20 (.45)	.13 (.35)	.16 (.37)
High school degree	.26 (.44)	.57 (.51)	0.0 (0.0)	0.0 (0.0)	.30 (.46)
Some College	.45 (.50)	.35 (.49)	.50 (.58)	.86 (.38)	.46 (.)50
BA or more	.21 (.41)	.07 (.27)	.25 (.50)	0.0 (0.0)	.06 (.25)

Table 4 presents demographic statistics by three age groups, under age 25, between age 25 and 40 and over age 40. The under age 15 group earns significantly less income than the two older age groups, approximately 16 thousand versus over 30 thousand. Interestingly, those over age 40 have greater college completion rates or advanced education than those age 25 to 40. The youngest group includes high school students and college students, which explains the low levels of educational attainment.

Table 4. Demographic Statistics by Age Group

	Age under 25 (n=80)	Age 25-40 (n=65)	Age over 40 (n=54)
Income	15,821 (10,240)	31,033 (21,937	33,725 (26,818)
Less than high school	.13 (.33)	.11 (.31)	.06 (.23)
High school degree	.37 (.49)	.23 (.42)	.21 (.41)
Some College	.49 (.50)	.50 (.50)	.40 (.49)
BA or more	.01 (.11)	.16 (.37)	.33 (.48)

Table 5 presents demographic statistics by HIV status. None of the bisexual men reported being HIV positive. Straight men are slightly over represented in the HIV positive category. Hispanics are slightly underrepresented among those who are HIV positive and Blacks are over represented among the HIV positive group. Those who are HIV positive are older on average compared to those who are HIV negative, and they earn approximately $7,000 less.

Table 5. Behaviors by HIV status

	HIV negative (n=151)	HIV positive (n=33)
Gay men	.73 (.44)	.73 (.45)
Bisexual men	.18 (.39)	0.0 (0.0)
Straight men	.01 (.16)	.09 (.29)
Females	.02 (.14)	.03 (.17)
Transgender	.03 (.16)	.12 (.33)
White	.74 (.44)	.73 (.45)
Black	.08 (.27)	.19 (.40)
Other	.11 (.31)	.04 (.20)
Multiracial	.07 (.26)	.04 (.20)
Hispanic	.39 (.49)	.30 (.46)
Age	30 (10.9)	40 (8.3)
Income	26,893 (22,023)	19,322 (17,358)
Less than high school	.08 (.26)	.15 (.36)
High school degree	.29 (.45)	.21 (.42)
Some College	.47 (.50)	.57 (.51)
BA or more	.16 (.37)	.16 (.37)

Drug Use and Social Networks

(Gay Men Who Use Methamphetamine and/or use the Internet and Social Networks to find their Partners)

Table 6 presents sex related behaviors for the full sample. On average, 45 percent of the sample has a primary partner. Of those who have a primary partner, 11 percent have an HIV positive primary partner. Of the respondents themselves, 18 percent are HIV positive. Approximately 6 % of the sample has never had an HIV test, and over half have taken an HIV test either in the last month or within the last six months. On average, the respondents have had 6.3 sex partners in the last six months, and number of partners range from 0 to 100. For those that have had at least 1 sex partner in the last six months, 91 percent of respondents have had male sex partners, 72 percent have had openly gay sex partners, and 54 percent discussed HIV or STDs with a sex partner. The majority of the sample has gotten drunk in the last six months (72 %) but only a quarter of them have

been regularly drunk in the last six months and 54 percent have had sex while under the influence in the last six months. Fewer individuals used injection or other drugs in the last 6 months (12 %) and used them less than once in the last 6 months (.74 times), and less than one fifth have had sex while using injection drugs.

Table 6. Three Top Places to meet sex partners

	First	Second	Third
No pick up place	18 %	38 %	49 %
Bars	18 %	12 %	8 %
Online	29 %	27 %	17 %
HIV clinic	0.5 %	0 %	0 %
Park	2 %	0.5%	2.5 %
Church	1 %	0 %	0 %
restaurant	0.5 %	0 %	0 %
Social groups /friends	6.5 %	4.5 %	5.5 %
School	2.5 %	3 %	6 %
Private parties	13 %	6 %	4.5 %
jail	0.5 %	0 %	0 %
Mall/shopping, streets	4.5 %	5 %	5.5 %
Work	2.5 %	2 %	2.4 %
Gym	0 %	0.5 %	5.5 %
Empowerment/rehab	1 %	1 %	5.5 %

Table 7 presents sex related behaviors by gender and by sexual orientation for men. Bisexual men (.33) and transgender persons (.35) are significantly less likely to have a primary partner compared to the full sample while straight men (.63) are more likely to have a primary partner. Straight men are more likely to have a primary partner that is HIV positive. Females and transgender persons report that none of their primary partners are HIV positive. Bisexual men are more likely to not get tested for HIV compared to the other groups. Straight men are more likely to not have been tested recently compared to the other groups. Transgender persons have had the most sex

partners in the last 6 months at 22 while straight men have had the least at less than one. Straight men and females are less likely than average to discuss HIV or STDs with their sex partners in the last 6 months. Gay men are more likely to have had sex with other men and with openly gay men compared to the overall average while straight men, females and transsexuals are less likely to sleep with men and sleep with openly gay men compared to the overall average. There are no significant differences in getting drunk in the last six months or in having sex while under the influence between the gender and sexual orientation categories. There are differences in IV or other drug use, however. Transgender persons use drugs much more often than the average, using at least 4 days in the last 6 months. Bisexual men were more likely to have sex while under the influence of drugs however.

Table 7. Three Top Places to meet sex partners By Various Subgroups

	First	Second	Third	% with none
Gay Men	Online	Bars	Private parties	20
Bisexual Men	Online	Bars	Social groups/ friends	3
Straight men	Malls, streets, shopping	Online	Bars	50
Females	Online	Church	Social groups/ friends	50
Transgender	Online	Malls, Streets, shopping	Bars	0
HIV Negative	Online	Bars	Private parties	17
HIV Positive	Online	Bars	Privates parties	24
Age under 25	Online	Bars	Private parties	10
Age 25-40	Online	Bars	Private parties	22
Over 40	Online	Bars	Malls, streets, shopping	28
White	Online	Bars	Social groups/ friends	21
Black	Online	Malls, streets, shopping	Bars	7
Hispanic	Online	Bars	Private parties	19
Other	Online	Private parties	School	20
Multiracial	Online	Bars	Private parties	0

Table 8. Sex Related Behaviors for the full sample

	Mean /Proportion	Standard deviation	Range
Have a partner	.45	.50	0-1
If yes, Partner HIV positive	.11	.31	0-1
R is HIV positive	.18	.38	0-1
R HIV test in last month	.17	.38	0-1
R HIV test in last 6 months	.34	.47	0-1
R HIV test in last year	.28	.45	0-1
R HIV test over one year ago	.16	.37	0-1
R HIV test never	.06	.23	0-1
Number of sex partners	6.3	12.8	0-100
If at least one, Proportion of sex partners that are male[a]	.91	.27	0-1.0
If at least one, Proportion of sex partners that were openly gay	.72	.38	
If at least one, Proportion of sex partners with whom discussed HIV	.54	.46	0-1.0
Ever Drunk in last 6 months	.72	.45	0-1
Regularly Drunk in last 6 months	.26	.44	0-1
Use Alcohol with sex partners in last 6 months	.54	.50	0-1
Ever used IV Drug in last 6 months	.12	.32	0-1
# of times used IV Drug in last 6 months	.74	3.29	0-30
Use Drugs with sex partners in last 6 months	.19	.40	0-1

Note: R means respondent

[a] limited to those that had at least 1 sex partner in the last 6 months

Table 9. Sex Related Behaviors by Gender and Sexual Orientation

	Gay men (n=145)	Bisexual men (n=31)	Straight men (N=8)	Females (n=4)	Transgender (n=8)
Have primary partner	.48 (.50)	.33 (.48)	.63 (.52)	.50 (.57	.25 (.46)
If yes, Partner HIV+	.11 (.31)	.09 (.30)	.20 (.44)	0.0 (0.0)	0.0 (0.0)
R HIV positive	.18 (.39)	0.0 (0.0)	.43 (.53)	.25 (.50)	.50 (.53)
Never HIV tested	.05 (.21)	.13 (.34)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
HIV test last month	.17 (.38)	.17 (.38)	0.0 (0.0)	.33 (.57)	.25 (.46)
HIV test last 6 months	.35 (.48)	.33 (.48)	0.0 (0.0)	0.0 (0.0)	.38 (.52)
HIV test in last year	.30 (.46)	.10 (.31)	.50 (.55)	.67 (.58)	.38 (.52)
HIV test over one year ago	.14 (.35)	.27 (.45)	.50 (.55)	0.0 (0.0)	0.0 (0.0)
# of sex partners last 6 months	6.0 (11.4)	5.9 (9.1)	.57 (.53)	1.0 (.81)	22 (37)
If at least one, % of sex partners discussed HIV	.59 (.45)	.42 (.45)	.25 (.50)	.17 (.29)	.51 (.54)
If at least one, % of sex partners male	.96 (.20)	.85 (.31)	0.0 (0.0)	.67 (.58)	1.0 (0.0)
If at least one, % of sex partners openly gay	.79 (.33)	.70 (.39)	0.0 (0.0)	0.0 (0.0)	.05 (.07)
Ever drunk in last 6 months	.76 (.43)	.74 (.44)	.25 (.46)	1.0 (0.0)	.29 (.49)
Regularly drunk in last 6 months	.26 (.44)	.39 (.50)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Sex while drunk in last 6 months	.54 (.50)	.66 (.48)	.43 (.53)	.25 (.50)	.63 (.52)
Ever IV drug use in last 6 months	.09 (.29)	.25 (.44)	0.0 (0.0)	0.0 (0.0)	.14 (.38)
# times IV drug use in last 6 months	.51 (2.73)	1.1 (2.07)	0.0 (0.0)	0.0 (0.0)	4.3 (11.3)
Sex while drug use in last 6 months	.20 (.40)	.28 (.45)	0.0 (0.0)	0.0 (0.0)	.13 (.35)

Blacks and other or multi racial groups are least likely to have a primary partner while whites are more likely than average to have a primary partner. Of those with a primary partner, blacks and multiracial persons are most likely to have a primary partner that is HIV positive. Black respondents are most likely to be HIV positive (36 %) and other racial groups did not report being HIV positive. Members of other racial groups are most likely to never have taken an HIV test at 20 percent. Other racial groups and multiracial persons had the least sex partners in the last 6 months at 2.4 and 2.25 respectively. Hispanics had the greatest number of sex partners at 8.3 on average in the last 6 months. Multiracial persons and Hispanics on average were more likely to discuss HIV and STD's with their sex partners at 83 percent and 60 percent on average. Blacks were least likely to discuss HIV with their sex partners at only 20 percent. Blacks were also least likely to sleep with an openly gay man compared to the overall average at 28 %. Blacks were less likely to be drunk or regularly drunk in the last 6 months but were not less likely to have sex while under the influence of alcohol. Blacks were more likely to use IV drugs, about 1.6 times on average in the last 6 months and have sex while using drugs.

Table 10. Sex Related Behaviors by Race/ Ethnicity

	White (n=103)	Black (n=14)	Other (n=5)	Multiracial (n=8)	Hispanic (N=70)
Have primary partner	.54 (.46)	.14 (.36)	.20 (.45)	.25 (.46)	.42 (.50)
If yes, Partner HIV+	.13 (.34)	.50 (.71)	0.0 (0.0)	.50 (.71)	0.0 (0.0)
R HIV positive	.20 (.39)	.36 (.50)	0.0 (0.0)	.13 (.35)	.14 (.35)
Never HIV tested	.05 (.21)	0.0 (0.0)	.20 (.45)	0.0 (0.0)	.08 (.27)
HIV test last month	.04 (.21)	.17 (.39)	.20 (.45)	.43 (.53)	.17 (.38)
HIV test last 6 months	.30 (.46)	.33 (.49)	.60 (.55)	.29 (.49)	.36 (.48)
HIV test in last year	.31 (.46)	.42 (.51)	0.0 (0.0)	.14 (.38)	.27 (.45)
HIV test before last year	.21 (.41)	.08 (.29)	0.0 (0.0)	.14 (.38)	.12 (.33)
# of sex partners last 6 months	5.3 (11.2)	6.8 (11.9)	2.4 (2.2)	2.25 (1.16)	8.3 (15.5)
If at least one, % sex partners discussed HIV	.54 (.46)	.22 (.34)	.46 (.42)	.83 (.35)	.60 (.46)
If at least one, % sex partners male	.92 (.27)	.82 (.37)	.88 (.25)	.94 (.18)	.92 (.26)
If at least one, % sex partners openly gay	.78 (.35)	.28 (.36)	.88 (.25)	.91 (.19)	.66 (.41)
Ever drunk in last 6 months	.79 (.41)	.46 (.52)	.80 (.45)	.88 (.35)	.66 (.48)
Regularly drunk in last 6 months	.27 (.44)	.08 (.28)	.20 (.45)	.38 (.52)	.26 (.44)
Sex while drunk in last 6 months	.53 (.50)	.50 (.52)	.60 (.55)	.43 (.53)	.57 (.50)
Ever IV drug use in last 6 months	.07 (.26)	.38 (.51)	0.0 (0.0)	.25 (.47)	.13 (.34)
# times IV drug use in last 6 months	.52 (3.14)	1.6 (2.3)	0.0 (0.0)	1.25 (2.3)	.91 (3.85)
Sex while drug use in last 6 months	.17 (.38)	.36 (.50)	.20 (.45)	.29 (.49)	.19 (.40)

Table 11 presents sex related behaviors by age group. Persons age 25-40 are twice as likely to have a primary partner compared to those under age 15 (61 % and 31 % respectively. The oldest group is most likely to be HIV positive and the youngest group is least likely to be HIV positive. The youngest group is also more likely to have never been tested for HIV at 10 percent compared to 2 percent for the oldest age group. The oldest age group is least likely on average to have had sex with men and least likely to have had sex with openly gay men in the last six months. The oldest group is least likely to get drunk or be drunk regularly in the last 6 months or have sex while drunk compared to the other age groups. The oldest group was most likely to use IV or other drugs—about 1.6 times in the last six months on average.

Table 11. Sex related Behaviors by Age Group

	Age under 25 (n=80)	Age 25-40 (n=65)	Age over 40 (n=54)
Have primary partner	.31 (.47)	.61 (.49)	.47 (.50)
If yes Partner HIV+	. 17 (.38)	0.0 (0.0)	.20 (.40)
R HIV positive	.03 (.17)	.20 (.40)	.38 (.49)
Never HIV tested	.10 (.30)	0.2 (.13)	.02 (.15)
HIV test last month	.14 (.35)	.21 (.41)	.19 (.39)
HIV test last 6 months	.36 (.48)	.34 (.48)	.28 (.45)
HIV test in last year	.23 (.42)	.31 (.47)	.33 (.47)
HIV test over one year ago	.18 (.38)	.13 (.33)	.19 (.39)
# of sex partners last 6 months	6.4 (13.0)	6.6 (10.0)	5.7 (15.5)
If at least one, % sex partners discussed HIV	.58 (.45)	.64 (.43)	.35 (.46)
If at least one, % sex partners male	.97 (.17)	.92 (.25)	.81 (.38)
If at least one, % sex partners openly gay	.80 (.33)	.75 (.38)	.54 (.43)
Ever drunk in last 6 months	.86 (.35)	.81 (.40)	.42 (.50)
Regularly drunk in last 6 months	.33 (.47)	.26 (.44)	.15 (.36)
Sex while drunk in last 6 months	.63 (.49)	.63 (.49)	.32 (.47)
Ever IV drug use in last 6 months	.09 (.28)	.13 (.34)	.16 (.37)
# times IV drug use in last 6 months	.40 (1.32)	.51 (1.5)	1.64 (6.0)
Sex while drug use in last 6 months	.22 (.42)	.18 (.39)	.18 (.39)

Table 12 provides information on sex related behaviors by HIV status. Those who are HIV positive are more likely than those who are HIV negative to have a primary partner who is HIV positive (26 % compared to 8 %). Forty-two percent of those who are HIV positive were tested in the last month; only 4 percent were tested more than one year ago. HIV positive persons had about sex partners in the last 6 months compared to 5.6 sex partners for HIV negative persons. HIV positive persons were more likely to discuss HIV and STDs with their sex partners than HIV negative persons. HIV positive persons were less likely to have sex with openly gay men compared to HIV negative persons (56 % compared to 74 %). HIV positive persons were less likely to be drunk or have sex while drunk in the last 6 months compared to HIV negative persons.

Table 12. Sex Related Behaviors by HIV Status

	HIV negative (n=151)	HIV positive (n=33)
Have primary partner	.45 (.50)	.41 (.50)
If yes Partner HIV+	.08 (.27)	.36 (.50)
Never HIV tested	.06 (.23)	--
HIV test last month	.14 (.35)	.42 (.50)
HIV test last 6 months	.38 (.49)	.25 (.44)
HIV test in last year	.30 (.46)	.29 (.46)
HIV test over one year ago	.13 (.33)	.04 (.20)
# of sex partners last 6 months	5.6 (11.8)	8.8 (19.3)
If at least one, % sex partners discussed HIV	.54 (.46)	.75 (.39)
If at least one, % sex partners male	.91 (.27)	.92 (.28)
If at least one, % sex partners openly gay	.74 (.33)	.56 (.41)
Ever drunk in last 6 months	.77 (.43)	.57 (.50)
Regularly drunk in last 6 months	.26 (.44)	.23 (.43)
Sex while drunk in last 6 months	.56 (.50)	.35 (.49)
Ever IV drug use in last 6 months	.11 (.31)	.23 (.43)
# times IV drug use in last 6 months	.79 (3.66)	.90 (1.9)
Sex while drug use in last 6 months	.17 (.38)	.32 (.48)

Table 13 lists all the places where respondents mentioned as having picked-up sex partners. Table 12 lists the top 3 places for various sub groups. The main place that the respondents pick up sex partners is online. This is followed by bars and private parties. But not all respondents pick up sex partners; 18 percent do not have any favorite places to pick up sex partners. Another 20 % only have 1 place and a further 11 % have 2 places to pick up sex partners. When this is broken out by subgroup, we find that there are several small groups that deviate. Fifty percent of straight men and all females do not have a top place to pick-up a sex partner. For the females, one quarter of those with a place chose online, church or social groups as their top pick-up places; thus there is no true first, second or third. This is the same for straight men as well. Transgender and bisexual men are most likely to have sex partner pickup places. In terms of age, the older age groups are less likely to have sex partner pick-up places, as are African Americans and multiracial groups.

Table 13. Three Top Places to meet sex partners

	First	Second	Third
No pick up place	18 %	38 %	49 %
Bars	18 %	12 %	8 %
Online	29 %	27 %	17 %
HIV clinic	0.5 %	0 %	0 %
Park	2 %	0.5%	2.5 %
Church	1 %	0 %	0 %
restaurant	0.5 %	0 %	0 %
Social groups /friends	6.5 %	4.5 %	5.5 %
School	2.5 %	3 %	6 %
Private parties	13 %	6 %	4.5 %
jail	0.5 %	0 %	0 %
Mall/shopping, streets	4.5 %	5 %	5.5 %
Work	2.5 %	2 %	2.4 %
Gym	0 %	0.5 %	5.5 %
Empowerment/rehab	1 %	1 %	5.5 %

Table 14. Three Top Places to meet sex partners By Various Subgroups

	First	Second	Third	% with none
Gay Men	Online	Bars	Private parties	20
Bisexual Men	Online	Bars	Social groups/ friends	3
Straight men	Malls, streets, shopping	Online	Bars	50
Females	Online	Church	Social groups/ friends	50
Transgender	Online	Malls, Streets, shopping	Bars	0
HIV Negative	Online	Bars	Private parties	17
HIV Positive	Online	Bars	Privates parties	24
Age under 25	Online	Bars	Private parties	10
Age 25-40	Online	Bars	Private parties	22
Over 40	Online	Bars	Malls, streets, shopping	28
White	Online	Bars	Social groups/ friends	21
Black	Online	Malls, streets, shopping	Bars	7
Hispanic	Online	Bars	Private parties	19
Other	Online	Private parties	School	20
Multiracial	Online	Bars	Private parties	0

Information About Safe-Sex Practices & HIV/AIDS

Table 15 presents information on where respondents have learned the most about HIV/AIDS. The top informational places are schools (42 %) doctors (39 %), friends (32%) and pamphlets or flyers (32%). Educational programs (28 %), community or social groups (27%) and television (26 %) also provide information regarding HIV/AIDS.

Table 15. Knowledge of where Respondents learned about HIV/AIDS

	Mean/Proportion	Standard Deviation	Range
School	.42	.49	0-1
Doctors	.39	.49	0-1
Church	.05	.22	0-1
Friends	.32	.47	0-1
Pamphlets/ flyers	.32	.47	0-1
Billboards	.07	.26	0-1
Boy or girl friends	.11	.32	0-1
Role Models/Mentors	.07	.26	0-1
Websites	.14	.35	0-1
Television	.26	.44	0-1
Radio	.07	.26	0-1
Newspaper/magazine	.18	.38	0-1
Parent/adult relative	.06	.25	0-1
Sister/brother/teen relative	.02	.14	0-1
Educational program	.28	.45	0-1
Sex partner-not boy or girl friend	.03	.18	0-1
Community/social group	.27	.45	0-1

Table 16 presents information on where respondents would like to find more information regarding HIV/AIDS. The top informational places are educational programs (22%) schools, social groups, and television (21 %), websites (17 %), and doctors (16 %).

Table 16. Places respondents would like to find information about HIV/AIDS

	Mean/Proportion	Standard Deviation	Range
School	.21	.41	0-1
Doctors	.16	.37	0-1
Church	.07	.26	0-1
Friends	.10	.31	0-1
Pamphlets/ flyers	.14	.35	0-1
Billboards	.09	.29	0-1
Boy or girl friends	.06	.25	0-1
Role Models/Mentors	.10	.31	0-1
Websites	.17	.38	0-1
Television	.21	.41	0-1
Radio	.14	.35	0-1
Newspaper/magazine	.13	.34	0-1
Parent/adult relative	.07	.26	0-1
Sister/brother/teen relative	.03	.17	0-1
Educational program	.22	.41	0-1
Sex partner-not boy or girl friend	.02	.16	0-1
Community/social group	.21	.41	0-1

Table 17 presents information on where respondents have learned the most about HIV/AIDS by gender and sexual orientation. The top informational places are schools and doctors. Gay men learned from their friends. Transgender persons tend to have learned from community groups and role models as well. Females learned from pamphlets and billboards and 38 percent of straight men learned from television.

Table 17. Where Respondents learned about HIV/AIDS by gender and sexual orientation

	Gay men (n=145)	Bisexual men (n=31)	Straight men (N=8)	Females (n=4)	Transgender (n=8)
School	.43 (.50)	.45 (.50)	.38 (.52)	.25 (.50)	.38 (.52)
Doctors	.38 (.49)	.26 (.44)	.38 (.52)	1.0 (0.0)	.75 (.46)
Church	.05 (.22)	.03 (.18)	.13 (.35)	0.0 (0.0)	.13 (.35)
Friends	.38 (.49)	.23 (.43)	.13 (.35)	0.0 (0.0)	.25 (.46)
Pamphlets/ flyers	.30 (.46)	.32 (.48)	.50 (.53)	.75 (.50)	.50 (.53)
Billboards	.08 (.28)	0.0 (0.0)	0.0 (0.0)	.50 (.58)	0.0 (0.0)
Boy or girl friends	.15 (.36)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Role Models/Mentors	.07 (.25)	.06 (.25)	0.0 (0.0)	0.0 (0.0)	.13 (.35)
Websites	.14 (.35)	.19 (.40)	0.0 (0.0)	.25 (.50)	0.0 (0.0)
Television	.30 (.46)	.13 (.34)	.38 (.52)	.25 (.50)	0.0 (0.0)
Radio	.08 (.28)	0.0 (0.0)	.13 (.35)	.25 (.50)	0.0 (0.0)
Newspaper/magazine	.19 (.40)	.10 (.30)	.13 (.35)	.25 (.50)	.25 (.46)
Parent/adult relative	.06 (.23)	.10 (.30)	.13 (.35)	0.0 (0.0)	0.0 (0.0)
Sister/brother/teen relative	.03 (.16)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Educational program	.27 (.44)	.29 (.46)	.13 (.35)	0.0 (0.0)	.75 (.46)
Sex partner-not boy or girl friend	.04 (.20)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	.13 (.35)
Community/social group	.28 (.45)	.32 (.45)	.13 (.35)	0.0 (0.0)	.38 (.52)

Table 18 presents information on where respondents would like to find more information regarding HIV/AIDS. The top informational places are community social groups—except for females. Females would like information from doctors, billboards and from television.

Table 18. Places respondents would like to find information about HIV/AIDS by gender and sexual orientation

	Gay men (n=145)	Bisexual men (n=31)	Straight men (N=8)	Females (n=4)	Transgender (n=8)
School	.23 (.43)	.10 (.30)	.13 (.35)	.25 (.50)	.25 (.46)
Doctors	.17 (.37)	.13 (.34)	.13 (.35)	.50 (.58)	.13 (.35)
Church	.07 (.25)	.10 (.30)	.13 (.35)	0.0 (0.0)	.13 (.35)
Friends	.12 (.32)	.13 (.34)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Pamphlets/ flyers	.15 (.36)	.13 (.34)	0.0 (0.0)	.25 (.50)	.13 (.35)
Billboards	.10 (.31)	.03 (.18)	0.0 (0.0)	.50 (.58)	.13 (.35)
Boy or girl friends	.08 (.27)	.03 (.18)	.13 (.35)	0.0 (0.0)	0.0 (0.0)
Role Models/Mentors	.12 (.32)	.10 (.30)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Websites	.18 (.38)	.19 (.40)	0.0 (0.0)	.25 (.50)	0.0 (0.0)
Television	.23 (.43)	.16 (.37)	0.0 (0.0)	.50 (.58)	.25 (.46)
Radio	.14 (.35)	.16 (.37)	.13 (.35)	.25 (.50)	.13 (.35)
Newspaper/magazine	.16 (.37)	.03 (.18)	.13 (.35)	0.0 (0.0)	.13 (.35)
Parent/adult relative	.08 (.27)	.06 (.25)	0.0 (0.0)	0.0 (0.0)	.13 (.35)
Sister/brother/teen relative	.03 (.18)	.03 (.18)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Educational program	.23 (.42)	.19 (.40)	.13 (.35)	0.0 (0.0)	.38 (.52)
Sex partner-not boy or girl friend	.02 (.14)	.03 (.18)	0.0 (0.0)	0.0 (0.0)	.13 (.35)
Community/social group	.21 (.41)	.23 (.43)	.25 (.46)	0.0 (0.0)	.38 (.52)

Table 19 presents information on where respondents have learned the most about HIV/AIDS by race/ ethnicity. Blacks are least likely to learn about HIV in schools and most likely to learn about it from doctors. Other racial groups learn mostly from websites and community social groups.

Table 19. Where Respondents learned about HIV/AIDS by race/ethnicity

	White (n=103)	Black (n=14)	Other (n=5)	Multiracial (n=8)	Hispanic (N=70)
School	.41 (.49)	.21 (.42)	.40 (.55)	.38 (.52)	.48 (.50)
Doctors	.35 (.48)	.64 (.50)	.20 (.45)	.50 (.53)	.40 (.50)
Church	.03 (.17)	.07 (.27)	0.0 (0.0)	0.0 (0.0)	.09 (.28)
Friends	.35 (.48)	.14 (.36)	.20 (.45)	.25 (.46)	.34 (.48)
Pamphlets/ flyers	.31 (.47)	.57 (.51)	.60 (.55)	.25 (.46)	.26 (.44)
Billboards	.06 (.24)	.07 (.26)	0.0 (0.0)	0.0 (0.0)	.10 (.30)
Boy or girl friends	.11 (.31)	.07 (.26)	0.0 (0.0)	.38 (.52)	.11 (.32)
Role Models /Mentors	.06 (.24)	.07 (.26)	0.0 (0.0)	.13 (.35)	.09 (.28)
Websites	.12 (.32)	.29 (.47)	.40 (.55)	.25 (.46)	.16 (.37)
Television	.24 (.43)	.07 (.26)	.40 (.55)	.13 (.35)	.34 (.48)
Radio	.04 (.19)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	.13 (.33)
Newspaper/ magazine	.18 (.39)	.07 (.26)	0.0 (0.0)	.25 (.46)	.19 (.39)
Parent/adult relative	.04 (.19)	.07 (.26)	0.0 (0.0)	.25 (.46)	.09 (.28)
Sister/brother/teen relative	.01 (.10)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	.04 (.20)
Educational program	.27 (.45)	.29 (.47)	.40 (.55)	.25 (.46)	.29 (.46)
Sex partner-not boy or girl friend	.01 (.10)	0.0 (0.0)	0.0 (0.0)	.13 (.35)	.07 (.26)
Community/social group	.26 (.44)	.29 (.47)	.40 (.55)	.38 (.52)	.27 (.45)

Table 20 presents information on where respondents would like to find more information regarding HIV/AIDS by race/ethnicity. Blacks are interested in learning about HIV/AIDS from community social groups and educational programs. Other racial groups would like to learn more about HIV from community social groups, television and websites. Multiracial groups would like to learn about HIV from educational programs, websites and doctors.

Table 20. Places respondents would like to find information about HIV/AIDS by race/ethnicity

	White (n=103)	Black (n=14)	Hispanic (N=70)	Other (n=5)	Multiracial (n=8)
School	.26 (.44)	0.0 (0.0)	.17 (.38)	.20 (.44)	.25 (.46)
Doctors	.17 (.38)	0.0 (0.0)	.17 (.38)	0.0 (0.0)	.38 (.52)
Church	.10 (.30)	0.0 (0.0)	.07 (.26)	0.0 (0.0)	0.0 (0.0)
Friends	.14 (.34)	0.0 (0.0)	.07 (.26)	0.0 (0.0)	.25 (.46)
Pamphlets/ flyers	.18 (.39)	.14 (.36)	.07 (.26)	.20 (.44)	.13 (.35)
Billboards	.10 (.30)	0.0 (0.0)	.11 (.32)	0.0 (0.0)	.13 (.35)
Boy or girl friends	.07 (.25)	0.0 (0.0)	.07 (.26)	0.0 (0.0)	.13 (.35)
Role Models /Mentors	.16 (.36)	.07 (.27)	.04 (.20)	0.0 (0.0)	.13 (.35))
Websites	.18 (.39)	.07 (.27)	.13 (.34)	.40 (.55)	.38 (.52)
Television	.20 (.40)	.14 (.36)	.23 (.42)	.40 (.55)	.25 (.46)
Radio	.16 (.36)	.07 (.27)	.14 (.35)	.20 (.44)	.13 (.35)
Newspaper/magazine	.16 (.36)	.14 (.36)	.09 (.28)	.20 (.44)	.13 (.35)
Parent/adult relative	.07 (.25)	. 0.0 (0.0)	.09 (.28)	0.0 (0.0)	.25 (.46)
Sister/brother/teen relative	.03 (.17)	0.0 (0.0)	.04 (.20)	0.0 (0.0)	0.0 (0.0)
Educational program	.17 (.37)	.29 (.47)	.24 (.43)	.20 (.44)	.63 (.52)
Sex partner-not boy or girl friend	.01 (.10)	.07 (.27)	.03 (.17)	0.0 (0.0)	.13 (.35)
Community/social group	.21 (.41)	.29 (.47)	.17 (.38)	.40 (.55)	.38 (.52)

Table 21 presents information on where respondents have learned the most about HIV/AIDS by age group. Younger persons are more likely to have learned about HIV from school or educational programs or community social groups, and older groups are more likely to have learned from newspapers.

Table 21. Where Respondents learned about HIV/AIDS by age group

	Age under 25 (n=80)	Age 25-40 (n=65)	Age over 40 (n=54)
School	.64 (.48)	.38 (.39)	.15 (.35)
Doctors	.29 (.46)	.48 (.50)	.44 (.50)
Church	.08 (.27)	.05 (.21)	.02 (.14)
Friends	.36 (.48)	.29 (.43)	.28 (.45)
Pamphlets/ flyers	.28 (.49)	.37 (.49)	.31 (.47)
Billboards	.04 (.19)	.12 (.33)	.06 (.23)
Boy or girl friends	.16 (.37)	.11 (.31)	.06 (.23)
Role Models /Mentors	.09 (.28)	.06 (.24)	.06 (.23)
Websites	.15 (.36)	.14 (.35)	.13 (.34)
Television	.21 (.41)	.32 (.47)	.28 (.45)
Radio	.01 (.11)	.15 (.36)	.06 (.23)
Newspaper/magazine	.05 (.24)	.22 (.41)	.31 (.47)
Parent/adult relative	.09 (.28)	.05 (.21)	.04 (.19)
Sister/brother/teen relative	.03 (.16)	.03 (.17)	0.0 (0.0)
Educational program	.34 (.48)	.28 (.45)	.20 (.41)
Sex partner-not boy or girl friend	.06 (.24)	.02 (.12)	.02 (.14)
Community/social group	.30 (.46)	.28 (.45)	.20 (.41)

Table 22 presents information on where respondents would like to find more information regarding HIV/AIDS by age group. The oldest group is least interested in learning from bill boards, church, and family, and most interested in learning from educational programs, schools and doctors. The youngest group is most interested in learning from educational programs and television, school and community social groups.

Table 22. Places respondents would like to find information about HIV/AIDS by age group

	Age under 25 (n=80)	Age 25-40 (n=65)	Age over 40 (n=54)
School	.21 (.41)	.28 (.45)	.13 (.34)
Doctors	.14 (.35)	.22 (.41)	.15 (.36)
Church	.08 (.27)	.11 (.31)	.04 (.19)
Friends	.11 (.32)	.09 (.29)	.09 (.29)
Pamphlets/ flyers	.16 (.37)	.15 (.36)	.09 (.29)
Billboards	.11 (.32)	.12 (.33)	.04 (.19)
Boy or girl friends	.10 (.30)	.05 (.21)	.04 (.19)
Role Models /Mentors	.10 (.30)	.12 (.33)	.09 (.29)
Websites	.19 (.39)	.20 (.40)	.11 (.32)
Television	.26 (.44)	.21 (.41)	.15 (.36)
Radio	.14 (.35)	.17 (.38)	.13 (.33)
Newspaper/magazine	.16 (.33)	.09 (.29)	.11 (.32)
Parent/adult relative	.13 (.27)	.08 (.27)	0.0 (0.0)
Sister/brother/teen relative	.05 (.22)	.03 (.17)	0.0 (0.0)
Educational program	.26 (.44)	.18 (.39)	.20 (.41)
Sex partner-not boy or girl friend	.05 (.22)	0.0 (0.0)	.02 (.14)
Community/social group	.24 (.43)	.22 (.41)	.19 (.39)

Table 23 presents information on where respondents have learned the most about HIV/AIDS where respondents would like to find more information regarding HIV/AIDS by HIV status. HIV positive persons have learned the most from doctors while HIV negative persons have learned the most from school and friends. HIV positive persons would like more information from community social groups, schools and educational

programs while HIV negative persons would like more information from television, community social groups, and educational programs.

Table 23. Where Respondents learned about HIV/AIDS by age group and where they would like more information about HIV/AIDS

	Have learned from these places		Would like more info from these places	
	HIV Negative	HIV Positive	HIV Negative	HIV Positive
School	.47 (.50)	.15 (.36)	.21 (.41)	.21 (.42)
Doctors	.34 (.48)	.79 (.41)	.17 (.38)	.12 (.33)
Church	.07 (.25)	0.0 (0.0)	.08 (.27)	.06 (.24)
Friends	.35 (.48)	.24 (.44)	.11 (.32)	.09 (.29)
Pamphlets/ flyers	.36 (.48)	.27 (.45)	.15 (.36)	.09 (.29)
Billboards	.07 (.26)	.03 (.17)	.09 (.29)	.12 (.33)
Boy or girl friends	.11 (.32)	.12 (.33)	.07 (.26)	.09 (.29)
Role Models /Mentors	.06 (.24)	.09 (.29)	.09 (.29)	.09 (.29)
Websites	.14 (.35)	.18 (.39)	.19 (.40)	.06 (.39)
Television	.32 (.47)	.06 (.24)	.24 (.43)	.12 (.33)
Radio	.07 (.25)	.09 (.29)	.15 (.36)	.09 (.29)
Newspaper/magazine	.19 (.38)	.18 (.39)	.13 (.34)	.09 (.29)
Parent/adult relative	.07 (.25)	.03 (.17)	.08 (.27)	.06 (.24)
Sister/brother/teen relative	.03 (.16)	0.0 (0.0)	.03 (.18)	0.0 (0.0)
Educational program	.26 (.44)	.30 (.47)	.23 (.42)	.18 (.39)
Sex partner-not boy or girl friend	.04 (.20)	0.0 (0.0)	.03 (.16)	0.0 (0.0)
Community/social group	.26 (.44)	.24 (.44)	.23 (.42)	.21 (.42)

Regression Analysis

The variable, propdisc, was created to capture the proportion of the respondent's sexual partners with whom he had discussed safe sex practices in some way prior to engaging in sex. By operationalizing the dependent variable as a proportion, a more accurate comparison can be made that by simply examining a never/ever or similar dichotomy. As a result, OLS (ordinary least squares) regression emerges as the appropriate statistical technique to examine the relationships between the independent variables and this proportion.

Table 24, below, presents the OLS model that best fits the predictors of the proportion of partners with whom respondents discuss safe sex. The saturated model is also provided as a baseline. Two "source of safe-sex knowledge" variables emerge as noteworthy predictors. Those who cited doctors/health care providers as a primary source of safesex information were likely to have a greater proportion of sexual partners (on average 21.6% more) with whom they discussed safe sex prior to sex or engaged in safe sex. While not statistically significant at the 0.05 level, there is a statistical trend ($p <= 0.077$) for those who reported a primary source of safe-sex knowledge as church, as well. In this case, however, the direction is negative; those who learned about safe-sex from church are likely to have a lower proportion of sexual partners with whom they've discussed safe sex and/or engaged in safe sex—on average 28.5% less.

Drug use and age are also retained in the predictor model. While drug use is not significant at the 0.05 level, there is a statistical trend ($p <= 0.076$) indicating that those who engage in drug use are likely to have a lower proportion (on average 16% less) of sexual partners with whom they have discussed safe sex prior to sex and/or engaged in

safe sex among those in this sample. Age was statistically significant and reveals that with each additional year of age, there is an increasing likelihood that the respondent will have a lower proportion of partners with whom he discusses safe sex prior to sex or engages in safe sex by 0.8% per year of advancing age.

The coefficient of determination indicates that 11.3% of the variation in proportion of sex partners with whom the respondent discussed safe-sex before sex or engaged in safe sex is accounted for by the variation in (a) whether health care providers were a primary source of safe-sex information, (b) whether church was a primary source of safe-sex information, (c) drug use, and (d) age.

Table 24. OLS Regression of Proportion with Whom Respondents Discuss Safe Sex

	Coeff.	*p-value*	*Coeff.*	*p-value*
Learned most about HIV…				
School			-0.014	0.883
Doctors	0.216	0.007	0.242	0.011
Church	-0.285	0.077	-0.268	0.203
Friends			0.013	0.892
Pamphlets/Flyers			-0.023	0.801
Billboards			0.011	0.963
Boyfriend/Girlfriend			0.009	0.947
Role Models/Mentors			0.117	0.584
Websites			0.021	0.877
Other			-0.016	0.923
Television			0.045	0.700
Radio			-0.158	0.557
Newspaper/magazine			0.071	0.566
Parent/adult relative			0.085	0.691
Sister/brother/teen relative			0.028	0.928
Educational Program			0.007	0.942
Sex partner, not bf/gf			-0.216	0.357
Community/social group			0.055	0.613
Income			-0.106	0.273
White			0.035	0.706
Education			0.154	0.260
Drug use	-0.160	0.076	-0.159	0.129
Age	-0.008	0.022	-0.009	0.070
Drunk			0.027	0.817
(constant)	0.791	0.000	0.779	0.002
r^2	.113		.161	
N	191		191	
df	5		25	

Conclusion

While accuracy of safe-sex information is clearly an important factor in the implementation of safe-sex behavior, the source itself can be a determining factor, as well. Health care providers provide information that seems to be incorporated by MSMs into their sexual behavior resulting in healthier sexual behavior. On the flip side, MSMs who report "church" as a primary source of safe-sex information actually turn out to have *less* healthy sexual behavior.

This tells us that, on average, MSMs seem to regard the information they get from health care providers to be valid and actionable, that this source of information is one that is having a positive impact on the overall sexual health of the MSM community. On the other hand, church as a source of safe-sex information is having quite the opposite impact on the MSM community. The mechanism for this impact is worthy of further investigation and could range from inaccurate information distribution by this source to a lack of credibility of the source among the information recipients in the MSM community, or a combination of these and other factors. This could suggest that stronger linkages between healthcare providers and church organizations that provide safe-sex information to members (particularly MSM's).

While perhaps not surprising that drug use (a loose proxy for risky behavior) is negatively associated with healthier sexual behavior, it is surprising that among this population older individuals are likely to be engaging a greater proportion of sexual partners in sex without either discussion safe sex or practicing safe sex. Possible explanations, that warrant further investigation, include the larger community

environment. Kern County, California, is a very politically and socially conservative county where gay men—particularly older gay men remain socially isolated from many community institutions and therefore may not have access to information and the social structures that reinforce the norms of healthy sexual behavior. This clearly presents a target for public health departments in terms of age but also for the types of interventions that my be needed. It is not simply information that is lacking, but again, the social structure to maintain norms. Community groups, activities, networking, and such are the kinds of interventions that can begin to affect positive change in this regard.

Ultimately, due to the semi-hidden nature of the MSM population, particularly in a conservative place like Kern County, California, there are challenges both with gathering data and helping improve public health in this community. Understanding the particular subgroups most at risk and the point at which the information is or is not having a positive effect, can help inform public health interventions which can also have a long-term behavior stabilizing effect if social structural issues are addressed.

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Appendix A: Survey Instrument

1. What is your **gender**?
   Male___ Female___ Transgender___ Other___
   If "Other," please explain:_____

2. Do you **identify** as:
   Gay___ Bisexual___ Straight___ Other___(what?_____) Not Sure___

3. Do you consider yourself either **Hispanic** and/or **Latino**?
   Yes___ No___ Don't Know___ Not Sure___

4. What is your **race**? *(check all that apply)*
   Black or African American ___
   Asian ___
   Hawaiian or Pacific Islander ___
   Alaska Native ___
   White ___
   American Indian ___
   Don't Know ___

5. As of this week, are you **working**…
   Full-time___ Part-time___ Not working now___ On Disability___ Retired___

6. Are you currently a **student**? Yes___ No___
   If Yes, where: High School___ College___ Other (where?_____)

7. What is the *highest* level of **education** you have completed?
   Highest grade completed____
   High school diploma or GED____
   Some college classes taken, but no degree yet____
   Associate's degree *(AA, etc.)* ____
   Bachelors's degree *(BA, BA, etc.)* ____
   Advanced degree *(MA, MS, MD, MBA, JD, EdD, PhD, etc.)* ____

8. What is your current **annual income**?
   $0-$10,000___ $10,000-$20,000___ $20,000-$30,000___
   $30,000-$40,000___ $40,000-$50,000___ $50,000-$75,000___
   $75,000++___ Don't Know ___

9. What is your **date of birth** *(Please DO NOT put today's date)*?
   Month_____ Day____ Year_____

10. When was the last time you were **tested** for HIV/AIDS?
    Within the last month___ Within six months___ Within a year___
    Over a year___ Never___

11. Are you **HIV+** (positive)?
    Yes___ No___ Don't Know___

12. With how many *different* people have you had sexual contact ***in the last 6 months***?
    Enter **number** of people: _____

13. Of those people with whom you had sexual contact ***in the last 6 months***, with how many did you discuss STD's and/or HIV prior to the sexual contact? *(This could include asking about protection for this sexual contact or asking if the person had any STD's or had been tested.)*
    Enter **number** of people: _____

14. Of those people with whom you had sexual contact ***in the last 6 months***, how many were males?
    Enter number of **males**: _____

15. Of those people with whom you had sexual contact ***in the last 6 months***, how many of them identified as gay men? In other words, they are openly gay, or "out."
    Enter number of **openly** gay men: _____

16. What three ***places*** do you meet most of the people with whom you have sexual contact? #1 being the most often, and #3 being the least often of the three places. Be as specific as you would like.
(examples: *bar/clubs, internet, public park, work, school, private parties; or El Rio, Casablanca, Yokuts Park, Gay.com, MySpace.com, America Online, College, etc.)*
    1) _____
    2) _____
    3) _____

17. ***In the last 6 months,*** how often have you used injection drugs (examples: heroin, crystal meth.)
    Not at all___ Once___ A few times___ Regularly___ Don't Know___

18. ***In the last 6 months,*** how often have you drank alcoholic beverages to the point of being drunk?
    Not at all___ Once___ A few times___ Regularly___
    Don't Know___

19. ***In the last 6 months,*** have you been drunk or used any drugs with sex partners?
    Drunk one or few times___ Drunk regularly___
    Injection drugs one or few times___ Injection drugs regularly___
    Other drugs one or few times___ Other drugs regularly___

20. Do you have a **primary sex partner (e.g., boyfriend, husband, wife)**?
    Yes___ No___
    If so, for how long? _____

21. What is your primary sex partner's **HIV status**?
    HIV+___ HIV-___ Don't Know___

22. Please check up to **3 places** where you have learned the most about HIV/AIDS:

School___
Doctors___
Church___
Friends___
Pamphlets/flyers___
Billboards___
Boyfriend/girlfriend___
Sex partner other than boyfriend/girlfriend___
Role models/mentors___
Web sites___ (Which one(s)?_____)
Other___ (What?_____)

Television___
Radio___
Newspaper/magazine___
Parent/Adult Relative___
Sister/brother, teen relative___
Educational program___
Community/social group___

23. Now **circle** the items in #20 *(above)* that you would most like to have available to you to learn about HIV/AIDS and other STD risk information, testing, prevention and treatment.

24. What **comments** do you have about the available HIV/AIDS resources & information available in Kern County? What would you like to see available for yourself and/or others? What would you like to see done in Kern County to improve services currently available?