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Social media use and high-risk sexual behavior among Black men who have sex with men: A three-city study

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Abstract

Black men who have sex with men (MSM) bear a disproportionate burden of HIV incidence in the United States. Little research has focused on the associations between social media use and sexual behavior among Black MSM. 205 Black MSM completed measures assessing social media use and sexual behaviors. Men spent an average of 34 hours per week on social media sites. 53% arranged sexual hookups online in the previous three months, and did so a mean of 10 times. Overall, users of social media and men who arranged sexual hookups online engaged in more risky behaviors than non-users and men who did not arrange sexual hookups online. However, partner-level data indicated that men engaged in fewer risky behaviors with partners met online compared to partners met in other ways such as at bars or through friends. Social media-based interventions designed to decrease HIV transmission among racial minority MSM are needed.

Keywords

men who have sex with men; racial/ethnic minority populations; social media; sexual risk behavior

INTRODUCTION

In the United States, men who have sex with men (MSM) remain at high risk of Human Immunodeficiency (HIV) infection, accounting for approximately 2% of the population, but three-fourths of new HIV infections (1). Additionally, while Black Americans constitute approximately 13% of the United States population as a whole (2), Black MSM account for 39% of new HIV infections among MSM (1). Possible reasons for these racial disparities in HIV incidence include higher levels of sexually transmitted infections (STIs) among Black MSM; lack of access to health care, housing, and HIV prevention services; poverty; discrimination; and homophobia (3-5). Although rates of high-risk sexual behavior are comparable for Black MSM and non-minority MSM, higher disease prevalence within Black MSM social networks, combined with racial homophily in sexual partnerships (6),

increase the probability of having HIV-infected partners. Finally, sexual partners of Black MSM may more often have undiagnosed and untreated HIV infection, and thereby greater infectivity (5).

Another factor that may affect sexual risk among Black MSM is use of social media sites such as Facebook, ManHunt.com and Black Gay Chat (BGC) to find sexual partners. Previous research suggests a link between online partner-seeking and greater risks for STIs and HIV among a predominantly White MSM sample (7). A meta-analysis of majority white MSM samples recruited “offline” indicates that 40% of participants seek sexual partners online and seeking partners online is associated with higher likelihood of unprotected anal intercourse (UAI) (8). In studies with samples of MSM that were 17%, 31%, and 17% Black, results indicate that MSM who seek partners online have higher overall levels of UAI, and are more likely to have multiple partnerships, to engage in any UAI, and to use substances during sex (9-11). In a sample of MSM recruited both online and “offline,” of which 28% were Black MSM, having more sexual partners that were met through social media sites was associated with several sexual risk behaviors, including exchanging sex for food, drugs, or housing and more partners (12).

Previous research on the associations between social media use and sexual behavior is limited by its lack of focus on racial minority MSM, or not reporting results by racial/ethnic groups. In one exception, among 197 Black MSM surveyed in the Boston area, using the Internet to meet sexual partners in the previous 12 months was associated with higher rates of UAI (13). In another study, MSM recruited mainly through Facebook provided information regarding social media use and sexual behavior, and outcomes were reported by racial/ethnic group (14). Of the 33 Black MSM recruited, 22% reported using social media sites to find sexual partners, 47% had met a sexual partner on a social media site in the previous three months, and 68% had used social media sites to discuss HIV/STI status at least once. However, as described above, most research on social media use and risky behavior has been conducted with either predominantly White samples, or with more diverse samples that still do not specifically report on Black MSM. Given the racial disparity in HIV infections, this represents a significant gap in the research. This gap has become more important in recent years due to increasing mobile phone connectivity among Black Americans. The ability of newer mobile phones to connect to the Internet, and their uptake among Black Americans has greatly contributed to shrinking the “digital divide” of Internet access between White and minority populations in the United States. A higher percentage of Black Americans have a smartphone (59%) compared to Whites (53%), and among cell phone owners, more Black Americans access the Internet through their phones (74%) compared to Whites (59%) (15, 16). Therefore, specifically examining associations between social media use and risky sexual behavior among racial minority MSM is greatly needed.

A second limitation of previous research is reliance on global measures of sexual risk as opposed to partner-level analysis. In a study of predominantly white MSM, retrospective survey data showed an association between online partner seeking and engaging in UAI, a greater number of partners, and lack of discussions regarding sexual history (17). In contrast, daily diary monitoring within the same study indicated more condom use with partners met online compared to those met in other venues. Therefore, in the current study

we examine both global measures of social media use and partner-level analysis of risk, with specific attention to comparing sexual behaviors with partners met online and partners met in other ways, such as at bars or through friends.

Lack of discussion of HIV status before intercourse has also been suggested as a factor potentially contributing to racial disparities in HIV infection, which may be especially important when meeting partners online. An online study of MSM (20% Black) recruited through social media sites indicated that Black MSM are less likely than White MSM to have serostatus discussions and more likely to engage in UAI without serostatus discussion, an effect found for both HIV-negative and HIV-positive participants (18). Although this study recruited participants through social media sites, it did not examine whether partners were met online or not. In another study of MSM, however, greater communication with potential sexual partners regarding sexual preferences and HIV status was noted for online partners compared to offline partners (19). Also, discussing one's preference for using condoms was associated with less frequent UAI, regardless of whether the partner was met online or offline. Although this sample was somewhat racially diverse (16% Black), Horvath, Oakes, and Rosser did not examine serostatus discussion or condom preference discussions specifically among Black MSM.

Given the racial disparity in HIV incidence, additional research is needed to understand the relationship between sexual risk behavior and use of social media among Black MSM. In particular, research is needed to determine levels of high-risk sexual behavior with sexual partners met online versus partners met in other ways. Also, the potential of using social media for discussions of serostatus and condom use to mitigate any risks inherent in online sexual partner seeking could provide a useful direction for potential interventions. The current study was conducted to 1) describe how Black MSM in three cities use social media, including arranging sexual hookups; 2) assess global associations between social media use and high-risk sexual behavior; 3) directly compare sexual behavior practices with partners met online versus partners who were met in other ways such as at bars or through friends; and 4) examine reports of online discussions of serostatus and condom use and the potential associations of these discussions with the men's subsequent sexual behavior.

METHODS

Participants

Participants were Black MSM recruited in 2011 in Milwaukee, WI, Cleveland, OH, and Miami, FL, during the formative research phase of the "Connections Creating Change" (C3) study, a randomized trial of a social network-level HIV prevention intervention for Black MSM. Inclusion criteria included self-identifying as a Black or African-American man, being 18 years of age or older, and reporting sex with another man in the past year. 210 participants were recruited, 70 per city. 205 participants responded to questions about their use of social media, and were included in the analyses. Participants were on average 32 years old. One-third of the sample had less than a high school education ($n = 68$), 40% ($n = 83$) had annual incomes under \$10,000, two-thirds ($n = 136$) were not employed full-time, and 11% ($n = 22$) reported unstable housing. Four percent ($n = 9$) reported Hispanic/Latino ethnicity. Thirty-seven percent ($n = 75$) reported that they were HIV positive. Among those

who did not report that they were HIV positive, 86% (n = 112) reporting being tested for HIV in the past year.

Recruitment and Procedures

Institutional review boards at each participating institution approved the study protocol. Project staff employed at community organizations that provided HIV prevention and testing to Black MSM recruited participants. The project staff identified venues for recruitment that were frequented by Black MSM including bars, clubs, pageant events, house parties, parks and “strolls” (cruising areas). Additional venues included university campuses, churches, and community organizations providing services to Black MSM. Participants were recruited through a combination of direct approach by project staff, brochures and recruitment cards, and referrals by friends or acquaintances. Potential participants called a dedicated phone number, were screened for eligibility, and were scheduled for assessments. After providing informed consent, participants individually completed anonymous paper-and-pencil surveys in private rooms in site offices. They received an honorarium of \$80 for their time and travel.

Measures

Demographic characteristics assessed included age, income, education, if participants were currently in school, whether they were currently employed, and ethnicity (Hispanic/Latino or not). Sexual orientation was assessed with a five-point scale from “exclusively gay” to “exclusively straight.” Housing stability was assessed by with a four-point scale from “very stable” to “very unstable” and was dichotomized into “stable” or “unstable” for the analyses reported below. Participants were also asked their HIV status.

Use of social media was assessed for both “generic” social media sites (Facebook, MySpace, and Twitter), and “hookup focused” sites (Adam4Adam, Manhunt, Craigslist, BGC, Grindr, and ooVoo). For each site, participants were asked if they used the site, for how many hours they used the site in a typical week, and how many times have they arranged a sexual hookup in the past 3 months through that site.

Online communication with potential sexual partners was assessed for participants who reported arranging one or more online hookups in the previous three months. They were asked how often they told the person their HIV status, asked the other person's HIV status, and raised the issue of condoms or safer sex with partners on social media sites. Response options were “Never,” “Sometimes,” and “Always.”

Sexual behavior was assessed by asking participants detailed questions about up to five of their most recent male partners in the past three months. Separately for each partner and beginning with the most recent, participants described their relationship with each partner (main, committed, and steady; regular, but not main and committed; casual hookup; or a partner with whom gifts, money, or drugs were exchanged). Some analyses for this study were conducted with all partners, and some included only casual partners, or partners characterized as a casual hookup. Participants were asked how they met the partner (introduced through friends; met in a club, bar, party, hangout or other place; met online; or

met in some other way). For our analyses, these response options were collapsed into “met online” versus “met in some other way.” Finally, participants indicated the number of times they had anal intercourse with each partner in the previous 3 months, and how many times they did not use a condom on those occasions. Additional, aggregated data on sexual behavior was collected (where applicable) on all partners beyond the five most recent, although contextual information on partner type and how they met was not collected beyond the first five partners.

Data Analysis

Demographic differences between users and non-users of social media were assessed using analysis of variance for continuous variables, and Pearson Chi Square tests for categorical variables. Global associations between social media use and risky sexual behavior were assessed using several methods. Different analyses used either a dichotomous dependent variable that indicated whether they engaged in any UAI in the previous 3 months with that partner, the percentage of AI occasions in which a condom was not used, or total number of UAI occasions. Two main social media independent variables were examined: whether participants were users or non-user of social media, and whether they used social media specifically for sexual hookups or not. We employed Pearson Chi Square tests to examine associations of these independent variables with UAI or UAI with casual partners. We employed Kruskal Wallance tests of non-parametric data to examine associations of these independent variables with the number of UAI occasions with all partner types and UAI occasions with casual partners. Additional Kruskal Wallance tests examined the associations for arranging hookups online with total numbers of sexual partners and unprotected intercourse partners in the past 3 months. For all significant univariate analyses, we conducted generalized linear models (GLM), controlling for demographic background covariates on which significant differences between social media users and non-users were found. For dichotomous outcomes, the data were fit to logistic regression models. For counts of intercourse occasions and partners, we analyzed the data using Poisson regression.

A second group of analyses compared the percentage of AI occasions that were unprotected for partners met online versus those met in other ways. For this comparison, a Wilcoxon Sign Rank Test for paired non-parametric data was performed. Critical values of the asymptotic Z statistic were evaluated to determine whether observed differences in frequencies of risk behavior were statistically significant for all partners and for casual hookup partners.

Finally, we compared participants who “never” or “sometimes” discussed serostatus and condom use using social media sites to those who “always” engaged in these discussions using social media sites. The “never” and “sometimes” categories were combined due to low cell counts in the “never” category. This analysis was done only among participants who had arranged a sexual hookup online and had UAI with sexual partners met online. We compared participants’ number of UAI occasions and the percentage of AI occasions that were unprotected. Significance was determined by Mann-Whitney U-tests of dichotomous groups for non-parametric data.

RESULTS

Use of social media

Most men in the sample (83.4%) used social media sites, and users spent an average of 34 hours ($SD = 54$, $Mdn = 19$ hours) in a typical week online on social media sites, and an average of 16 hours/week specifically on hookup sites ($SD = 27$, $Mdn = 10$). Non-users of social media were, on average, older ($M = 44.0$ and 29.3 ; $t(202) = 8.74$, $p < .001$), had lower income ($M = 1.6$ and 2.3 ; $t(203) = -3.56$, $p < .01$), were less likely to be in school (3.0% and 28.2%; $\chi^2(1, N = 203) = 9.59$, $p < .01$) or currently working (24.2% and 58.8%; $\chi^2(1, N = 203) = 13.27$, $p < .001$), and were more likely to be HIV positive than social media users (78.1% and 30.5%; $\chi^2(1, N = 196) = 25.72$, $p < .001$; see Table 1). There were no significant differences in education ($M = 10.9$ and 10.6 ; $t(203) = 0.49$, ns), or being exclusively gay (38.2% and 52.9%; $t(203) = 2.45$, ns). More than 53% ($n = 109$) of participants reported using social media sites to arrange sexual hookups in the 3 months prior to completing the assessment. Of those who reported arranging a hookup, 27.5% ($n = 30$) of men arranged these on hookup sites exclusively and 72.5% ($n = 79$) arranged hookups on both hookup sites and generic sites.

Global associations between social media use, arranging sexual hookups, and high-risk sexual behavior

Users of social media were more likely to have engaged in UAI in the previous 3 months compared to non-users (49.7% and 29.4%; $\chi^2(1, N = 205) = 4.70$, $p < .05$), and overall had a greater total number of UAI acts with all partners ($M = 5.5$ and 1.65 , $Mdn = 30$ and 5 ; Mann Whitney $U = 2.27$, $p < .05$; See Table 2). However, there were no differences between users and non-users of social media in either engaging in UAI with casual partners (17.5% and 14.7%; $\chi^2(1, N = 205) = 0.16$, ns) or the frequency of UAI with casual partners ($M = 0.5$ and 0.4 , $Mdn = 0$ and 0 ; Mann Whitney $U = 0.28$, ns). A generalized linear model revealed that social media use remained a significant predictor of number of UAI occasions with all partners after controlling for demographic differences between users and non-users (Wald $\chi^2 = 23.87$, $p < .001$). The effect of social media use on engaging in UAI in the previous 3 months remained marginally significant after controlling for demographic differences (Wald $\chi^2 = 3.53$, $p = .06$).

Overall, men who arranged any sexual hookup online reported a mean of 10 ($SD = 22$, $Mdn = 4$) sexual hookups in the past 3 months. Associations between having arranged a hookup online and high-risk sexual behavior are presented in Table 3. Men who arranged sexual hookups were more likely to report UAI with casual partners (23.9%) compared to those who had not arranged hookups online (9.4%; $\chi^2(1, N = 205) = 7.56$, $p < .01$), and reported more UAI acts with casual partners ($M = 0.2$ and $M = 0.8$, $Mdn = 0$ and 0 ; Mann Whitney $U = 2.78$, $p < .01$). Also, men who arranged hookups online reported a greater number of sexual partners ($M = 5.2$, $Mdn = 3$) compared to those who had not arranged hookups online ($M = 2.4$, $Mdn = 1$; Mann Whitney $U = 5.15$, $p < .001$) and more partners with whom they had engaged in unprotected intercourse ($M = 0.9$, and 0.9 , $Mdn = 1$ and 0 ; Mann Whitney $U = 2.19$, $p < .05$). Differences between those who arranged hookups and those who did not remained significant in generalized linear models controlling for age, income, currently

attending school, currently working, and HIV-positive status. In these generalized linear models, men who arranged sexual hookups online had more total partners (Wald $\chi^2 = 125.64$, $p < .001$), more unprotected intercourse partners (Wald $\chi^2 = 7.38$, $p < .01$), were more likely to report UAI with casual partners (Wald $\chi^2 = 12.51$, $p < .001$), as well as report more occasions of UAI with casual partners (Wald $\chi^2 = 42.76$, $p < .001$) compared to participants who did not hookup online. Additional analysis showed that greater numbers of sexual hookups arranged using social media in the past 3 months was positively correlated with higher frequency of UAI with casual partners ($\rho = .21$, $p = .003$).

Sexual risk practices for partners met online versus in other ways

We next compared occurrences of high-risk sexual behavior with partners who were met online versus partners who were met in other ways. Participants reported meeting online a mean of 0.75 sexual partners (SD = 1.11, Mdn = 0) out of a total mean of 2.2 sexual partners (SD = 1.53, Mdn = 2) in the previous 3 months. Participants reported a lower percentage of AI acts that were unprotected with partners met online (Mean = 9.71, SD = 23.87, Mdn = 0), compared with partners met in other ways (Mean = 20.40, SD = 35.03, Mdn = 0). The Wilcoxon Sign Rank Test indicated that this difference was significant (Asymptotic $Z = -3.507$, $p < .001$). Men who reported at least one online partner ($n = 85$) characterized about half of their online partners as casual hookups (Mean = 44.9%, Mdn = 50%).

Relationship between use of social media sites for serostatus discussions, sexual safety discussions, and high-risk sexual behavior

Finally, we examined use of social media sites for serostatus discussion or discussion of condom use with online partners and their associations with high-risk sexual behaviors. These analyses were restricted to partners met online only, and examined only global associations, as use of social media sites for these discussions were collected overall, not as partner-specific measures. Disclosing one's HIV status or asking a potential partner about his HIV status using social media sites was not related to sexual behavior with online partners. Men who never or only sometimes disclosed their HIV status to partners met online ($n = 54$) were not significantly different than men who always disclosed their status ($n = 54$) on either total UAI occasions (Mann Whitney $U = 1265.5$, ns) or percentage of AI occasions that were unprotected (Mann Whitney $U = 1244.5$, ns) with these partners. Similarly, men who never or only sometimes inquired about the HIV status of their online partners ($n = 52$) were not significantly different than those who always asked their partners to disclose ($n = 56$) on either total UAI occasions (Mann Whitney $U = 1292.0$, ns) or percentage of UAI occasions (Mann Whitney $U = 1275.0$, ns). There was a trend towards a difference between those men who reported always raising the issue of condoms or safe sex with online hookup partners compared to those who never or sometimes did so. Men who always raised issues reported marginally fewer UAI occasions with online partners (Mean = 1.8, Mdn = 0, $n = 71$) than if they never or sometimes did (Mean = 3.4, Mdn = 0, $n = 37$; Mann Whitney $U = -1.955$, $p = .051$).

DISCUSSION

Black MSM in this sample are intensive users of social media and those men who are using social media engaged in more risky sexual behaviors overall than those who are not. Controlling for demographic differences between social media users and non-users did not change the pattern of associations between social media use and sexual risk. Black MSM in this sample frequently used social media to arrange sexual hookups and those who did reported a higher number of sexual hookups. Men who used social media for arranging sexual hookups also were more likely to engage in risky sexual behaviors with casual partners, had more partners, and had more partners with whom they had engaged in UAI than those who did not. The findings suggest that social media use is associated with increased overall levels of sexual risk in Black MSM, consistent with the findings from previous studies with predominantly non-minority MSM.

In seemingly contradictory results, the percentage of AI occasions that were unprotected was lower with partners met online than with partners met in other ways. However, men who arranged sexual hookups online also reported more partners overall and more partners with whom they had had UAI. Thus, men who use social media sites for sexual partner-seeking may be engaging in more risky behaviors overall, but for these men having sex with partners met online is not inherently more risky than with partners met in other ways. While these global differences between social media users and non-users are not explained by demographic differences between groups, it is possible that social media users may be higher in sensation seeking, sexual adventurousness, or other individual difference variables that were not measured in the current study. Regardless, by directly comparing sexual risk behaviors within partnerships initiated online to partnerships initiated through other venues, these results fill a gap in the previous research and suggest the need for more sophisticated hypotheses and analyses to better understand the role that social media use plays in sexual behavior among racial minority MSM.

Previous research suggests that use of social media for sexual partner-seeking may allow for discussions of serostatus and safer sex, presumably leading to lower levels of high-risk sexual behaviors. Our results do not support this hypothesis, but indicate the need for future research to pursue this line of inquiry further. Using social media sites to discuss serostatus was not associated with sexual risk in this sample and there was only a marginal effect of discussions of condom use with reported high-risk sexual behavior. Yet caution should be taken in drawing any conclusions from these results. First, our sample size for these analyses was limited to only those who used social media sites to arrange sexual hookups, greatly reducing statistical power to detect significant differences. Additionally, some participants who reported that they always raised the issue of condoms or safe sex may actually indicate to potential partners that they do not want to use condoms and discussions of condom use may depend on whether discussions of serostatus also occurred. Finally, participants may have still discussed condom use and serostatus in person, which was not captured with our measures.

These results suggest several avenues for future research. First, the majority of men who arranged sexual hookups online reported using both hookup-focused sites and generic sites

such as Facebook. Further research is needed to understand how partner-seeking behaviors differ among social media sites, especially given the non-anonymous nature of generic sites such as Facebook, and the effect of site type on subsequent sexual behaviors. Second, further research is needed to compare perceived riskiness of unprotected sex with partners met online and partners met in other ways, and how risk perceptions affect sexual risk behavior with these partners over time. Men may perceive partners met online as inherently more risky than those met in other ways, which would explain the lower levels of high-risk sexual behavior found in these encounters. However, relationships initiated online may develop into long-term or committed relationships in which risk perceptions change, and in which condom use becomes less likely. Indeed, in this sample, only half of online partners were characterized as casual hookups, but we did not have the statistical power to directly compare reports of behaviors with casual partners met online and main partners met online. Finally, our survey questions asked about participants' use of social media to discuss serostatus and condom use independently from questions about sexual behaviors with specific partners. Partner-level investigations of online discussions of serostatus and condom use are therefore warranted.

Limitations of the current research include modest sample sizes for some of the subgroup analyses, and the study's cross-sectional design. None of the significant findings provide evidence for a causal effect of social media use or online sexual partner-seeking on risky sexual behavior. Longitudinal research is needed to clarify the direction of causal effects. Additionally, data may be affected by social desirability bias, especially considering that surveys were completed using pen and paper rather than Automated Computer Assisted Self Interviewing (ACASI) techniques that tend to yield higher reports of sensitive behaviors. Finally, our sample represents individuals who were willing to participate in a research study and complete measures of their sexual behavior, and may therefore miss perspectives of Black MSM who are less comfortable with disclosing their sexual orientation or reporting on intimate personal behaviors.

CONCLUSIONS

A more nuanced and sophisticated understanding of the associations between social media use and risky sexual behavior, especially among racial and sexual minority groups, is needed to capitalize upon the potential for harnessing social media for interventions to reduce sexual risk and HIV transmission. Our results corroborate a shrinking digital divide given the heavy use of social media in general and for partner-seeking among Black MSM. Intervention efforts utilizing social media technology are feasible, and interventions to mitigate the riskiness of online partner-seeking are appropriate among racial minority MSM. This research represents a further step towards understanding how social media is currently used within sexual relationships among Black MSM, in order to inform the preparation of social media interventions and evaluate their efficacy in reducing high-risk sexual behavior.

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Table I

Demographic Differences Between Social Media Users and Non-Users

Demographic Variable	Social Media Non-users (n=34)	Social Media Users (n=171)	t / χ^2^a	$p <$
Years of age— <i>Mean (SD)</i> ^b	44.0 (10.1)	29.3 (8.7)	8.74	.001
Years of education— <i>Mean (SD)</i> ^c	10.9 (3.3)	10.6 (4.8)	0.49	<i>ns</i>
Currently in school—% (n) ^b	3.0% (1)	28.2% (48)	9.59	.01
Income last year— <i>Mean (SD)</i> ^{c,d}	1.6 (0.9)	2.3 (1.3)	−3.56	.01
Currently working—% (n) ^b	24.2% (8)	58.8% (100)	13.27	.001
Exclusively gay—% (n) ^c	38.2% (13)	52.9% (90)	2.45	<i>ns</i>
HIV-seropositive—% (n) ^f	78.1% (25)	30.5% (50)	25.72	.001

Notes:^e 4 missing cases.^a Significance for age, education, and income differences was evaluated by Student's T-test. Pearson chi square tests assessed significant differences for currently in school, currently working, exclusively gay, and HIV-seropositive.^b 2 missing cases.^c 1 missing case.^d Income category 1= <\$10K; 2=\$10-\$20K; 3=\$20-30K.^f 9 missing cases.

Table II

Differences in Unprotected Anal Intercourse (UAI) and UAI with Casual Partners in the Past 3 Months Between Social Media Users and Non-Users

Sexual Risk Variable	Social Media Non-users (n=34)	Social Media Users (n=171)	Mann Whitney U/χ^2 ^a	$p <$
Had any UAI—% (n)	29.4% (10)	49.7% (85)	4.70	.05
Total UAI occasions—Mean (Mdn)	1.6 (0)	5.5 (0)	2.27	.05
Had UAI /w casual partners—% (n)	14.7% (5)	17.5% (30)	0.16	ns
UAI occasions /w casual partners—Mean (Mdn)	0.4 (0)	0.5 (0)	0.28	ns

Notes:

^aSignificance for counts of UAI and UAI with casual partners was determined by the Mann Whitney U-test for nonparametric data. Pearson chi square tests assessed significant differences for the UAI indicator variables.

Table III

Differences in Unprotected Anal Intercourse (UAI), UAI with Casual Partners, Total Sex Partners, and Total Partners for Unprotected Intercourse in the Past 3 Months Between Those Who Used Social Media to Hookup and Those Who Did Not

Sexual Risk Variable	Did Not Use Social Media to Hookup (n=96)	Used Social Media to Hookup (n=109)	Mann Whitney U/χ^2^a	$p <^a$
Had any UAI—% (n)	40.6% (39)	51.4% (56)	2.37	ns
Total UAI occasions—Mean (Mdn)	5.0 (0)	4.8 (1)	0.81	ns
Had UAI with casual partners—% (n)	9.4% (9)	23.9% (26)	7.56	.01
UAI occasions with casual partners—Mean (Mdn)	0.2 (0)	0.8 (0)	2.78	.01
Total sex partners—Mean (Mdn)	2.4 (1)	5.2 (3)	5.15	.001
Total unprotected intercourse partners—Mean (Mdn)	0.6 (0)	0.9 (1)	2.19	.05

Notes:

^aSignificance for counts of UAI, UAI with casual partners, and sexual partner variables was determined by the Mann Whitney U-test for nonparametric data. Pearson chi square tests assessed significant differences for the UAI indicator variables.