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Stigma on the streets, dissatisfaction in the sheets: Is minority stress associated with decreased sexual functioning among young men who have sex with men?

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Abstract

Background—Sexual function and satisfaction are understudied aspects of adolescent and young adult sexual wellbeing, and even less is known about sexual minority youth who are vulnerable to unique LGBT-related stigma.

Aim—We aimed to describe sexual functioning (sexual interest, erectile function, orgasm satisfaction, global satisfaction with one's sex life, and anal discomfort) and examine its associations with demographics, sexual and relationship behavior, and minority stressors (internalized stigma, victimization, microaggressions, and perceived LGBT acceptance within residential neighborhood) among a cohort of young men who have sex with men (YMSM) aged 16–29.

Methods—Data for this cross-sectional analysis came from of an ongoing longitudinal study of HIV and substance use among YMSM (analytic $N=678$). We conducted univariate and bivariate analyses as well as multivariable linear regression, controlling for age, race/ethnicity, and sexual orientation as well as sexual and relationship characteristics that were significant at the bivariate level.

Outcomes—We assessed sexual functioning in the past 30 days using the Patient-Reported Outcomes Measurement Information System (PROMIS) Sexual Function and Satisfaction Measures Brief Profile for Males.

Results—YMSM in our sample reported high levels of sexual functioning that were significantly greater than an adult clinical reference population. However, 13.9% of the sample reported having any difficulty with erections, 6.9% reported having less than “good” satisfaction with orgasms, 20.0% reported being “somewhat” or less satisfied with their sex lives, and 9.1% reported

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experiencing problems during receptive anal sex at least “sometimes.” Most associations between minority stressors and sexual functioning domains that were significant at the bivariate level attenuated to non-significance in multivariable analyses. Internalized stigma remained negatively associated with global satisfaction while perceived neighborhood acceptance remained positively associated with orgasm satisfaction. Being sexually active was significantly associated with increased sexual interest and orgasm satisfaction. Having had a recent serious partner was significantly associated with sexual interest and global satisfaction. Negative effects were found for having had casual partners and being HIV-positive.

Clinical Implications—Although most YMSM have high sexual functioning, a minority report problems and dissatisfaction that may warrant intervention.

Strengths & Limitations—Our study was limited by its cross-sectional design, measurement limitations, and generalizability to other populations, but it is one of the first to examine sexual functioning among YMSM, using a large, diverse community sample.

Conclusion—Public health research and practice must continue to combat LGBT stigma and include sexual functioning as integral to healthy sexuality.

Keywords

Sexual and gender minorities; Sexual dysfunctions, Psychological; Erectile dysfunction; Homophobia; Social stigma; Adolescent; Social discrimination

Introduction

Sexual interest, function, comfort, and satisfaction (hereafter collectively referred to as “sexual functioning”) are essential components to the sexual health and wellbeing of individuals.^{1,2} However, these topics are critically understudied in public health research among adolescents and young adults. Described as a “near paralysis of a science of healthy adolescent sexuality development,”³ this lack of research creates a gap in our understanding of young people’s lived experiences as well as a missed opportunity to promote aspects of sexual health beyond the absence of disease.^{4,5} Although it is often assumed that young people have normal sexual functioning, recent work by O’Sullivan, Byers, Brotto, Majerovich, and Fletcher has shown that sexual functioning problems (also termed in the literature as “sexual difficulties”⁶) are actually normative among sexually active Canadian youth aged 16–21.⁷ In their sample, 78.6% of male youth and 84.4% of female youth reported at least one problem in desire, function, satisfaction, or pain across 2 years. When considering whether individuals felt distress associated with sexual problems (also described as “sexual dysfunction” in the literature and often tied to clinical diagnostics⁶), 41.7% of males and 47.8% of females in that sample were classified as having a distressing sexual problem. A study by Moreau, Kagesten, and Blum found that 23% of male and 52% of female French youth aged 15–24 reported one or more “sexual dysfunctions” (i.e., sexual problems/difficulties) in the past year; 9% and 31%, respectively, reported one or more “sexual dysfunctions hindering sexuality.”⁸ Differences in definitions, measurement, and follow-up periods preclude meaningful comparisons, but these studies begin to fill the gap in knowledge regarding youth’s sexual functioning. However, both samples were primarily heterosexual (90% and 97%, respectively), leaving much in question about the sexual

functioning of sexual minority youth. The current study sought to provide insight into this understudied population by exploring sexual functioning among a sample of young men who have sex with men (YMSM).

Though one of the only studies comparing sexual minority and heterosexual samples found no significant differences in sexual satisfaction and (clinical) dysfunction among gay, bisexual, and heterosexual men (mean age = 38) in the Netherlands,⁹ the underlying issues that contribute to sexual difficulties appear to differ between the groups, driven by differences in sexual attitudes, behaviors, roles, and expression as well as social stigma.^{10,11} The sexual functioning of young sexual minorities in the U.S. warrants specific inquiry because these youth may be more susceptible to the unique effects of LGBT-related stigma during the development of their sexual identities. Chronic LGBT-related stigmatization, known as minority stress, is commonly experienced by sexual minorities and has been linked to numerous risk behaviors and negative mental and physical health outcomes^{12–15} as well as lower relationship and life satisfaction.^{16,17} Poor mental health can in turn negatively affect sexual functioning.^{18–20} A small number of studies among adult MSM have identified associations between various minority stressors and sexual difficulties/dysfunction/dissatisfaction. Internalized homonegativity, or negative feelings one has towards one's self as a sexual minority, and other forms of self-stigma (e.g., conflict about one's sexual identity, difficulty being intimate with someone of the same gender) are more consistently related to both difficulties/dysfunction and dissatisfaction.^{9,11} In contrast, the evidence for perceived and enacted/external stigmas (e.g., harassment, discrimination, victimization) is mixed: Kuyper and Vanwesenbeeck reported no associations with concealment of sexual orientation or negative social reactions whereas Schwartz, Stratton, and Hart found an indirect effect of discriminatory events on a latent sexual functioning variable.^{9,21} It is unknown how external minority stressors may affect sexual functioning among YMSM given that enacted stigma may have greater salience on mental health in younger populations.²²

There is limited research on other factors related to sexual functioning among sexual minorities. Having a steady or serious relationship appears to have a positive effect among adult MSM.^{9,20,23} Relatedly, a study among YMSM aged 18–24 found that having a more intimate partner (i.e., friend or romantic partner) at first anal intercourse was associated with greater emotional satisfaction with the experience.²⁴ Being HIV-positive has been shown among adult MSM to have a negative effect on sexual functioning,¹⁹ particularly erectile function,^{11,25,26} but results are mixed; there is also evidence of no relationship between HIV status and sexual functioning.²⁰

The current study aimed to (a) describe sexual functioning among YMSM and (b) examine the associations between sexual functioning and demographic characteristics, sexual behavior and relationship types, and minority stressors in this sample. Based on previous literature, we hypothesized that having a serious partner would be related to greater functioning whereas being HIV-positive would be related to worse functioning. We also hypothesized that all forms of LGBT stigma would be related to reduced sexual functioning.

Methods

Design, Setting, and Procedures

Data for the current study came from RADAR, an accelerated longitudinal study²⁷ of HIV and substance use among YMSM and transgender women. Detailed descriptions of the cohort formation has been previously published.^{28–30} In brief, the RADAR cohort comprises individuals recruited from three different studies conducted in 2007–2008, 2010–2013, and 2015. Participants were aged 16–20 at the time they were recruited into those other cohort studies and were eligible to join the RADAR cohort if they were between the ages of 16–29 at their baseline RADAR visit; were assigned male at birth; spoke English; and either reported a sexual encounter with a man in the previous year or identified as gay, bisexual, or another sexual minority label. The RADAR cohort was expanded with serious partners of cohort members and up to three incentivized peer referrals who met inclusion criteria.

Once enrolled in RADAR, participants were interviewed semi-annually in person. Individuals provided written consent to participate, and parental/guardian consent was waived for individuals under 18 years of age. Data reported here were collected through computer-assisted self-interviews; other unreported data included participant interviews and collection of biological specimens. All study activities were conducted with the approval of the Institutional Review Board at Northwestern University. Baseline data collection began in February 2015 and concluded in April 2017; follow-up visits are ongoing. Sexual functioning measures were first administered to the cohort during the fourth wave of follow-up (18 months after baseline); consequently, the current study used data collected between August 2016 and April 2018. Gender minorities were not a focus of the validation efforts of these measures,³¹ so those participants were excluded from analysis. The resulting analytic sample comprised 678 cisgender men.

Measures

Sexual functioning—Four domains of sexual functioning were assessed using the 8-item Patient-Reported Outcomes Measurement Information System (PROMIS) Sexual Function and Satisfaction Measures (SexFS) Brief Profile for Males, Version 1.0,^{31,32} which asked about participants' experiences in the past 30 days. Interest in sexual activity was measured by two items asking how interested participants had been in sexual activity, from 1 (*not at all*) to 5 (*very*), and how often they had wanted to have sex, from 1 (*never*) to 5 (*always*). Erectile function was measured by three items: Two items asked how difficult it had been to get and keep an erection when participants wanted to, reverse-scored from 5 (*not at all*) to 1 (*very*), with an option for not having tried to get an erection. One item asked participants to rate their ability to have an erection from 1 (*very poor*) to 5 (*very good*). Orgasm satisfaction was measured by one item asking participants to rate their ability to have a satisfying orgasm/climax from 1 (*poor*) to 5 (*excellent*), with an option for not having tried to have an orgasm. Global satisfaction with sex life was measured by two items that asked how much participants had enjoyed and been satisfied by their recent sexual activity, scored from 1 (*not at all*) to 5 (*very much*), with an option for no recent sexual activity. Across domains, higher scores represented greater functioning or satisfaction.

Among participants who indicated having receptive anal sex in the past 30 days, a fifth domain, anal discomfort, was assessed via the 4-item PROMIS-SexFS Anal Discomfort instrument, Version 1.0.^{31,32} Participants were asked how often they had (a) had discomfort or pain in their rectum during anal sex, (b) stopped having anal sex because of anal discomfort or pain, (c) stopped having anal sex because of anal bleeding or irritation, and (d) had bleeding or irritation in their rectum after anal sex when they were “the bottom.” Response options ranged from 1 (*never*) to 5 (*always*). Higher scores represented greater discomfort.

Sexual minority individuals were engaged in the development and validation of the PROMIS-SexFS measures.³¹ Sum scores for sexual interest, erectile function, and global satisfaction domains are calibrated to provide *T*-scores that can be compared to a normalized reference group (based on adult male cancer survivors) with a mean of 50 and a standard deviation of 10; the PROMIS-SexFS orgasm satisfaction and anal discomfort measures have not yet been calibrated. Mean scores for all five domains were used in subsequent analyses.

Minority stress—LGBT-related stigma was represented by four minority stressors. Internalized stigma was assessed using a previously validated 8-item subscale that queried participants’ desire to be straight, scored on a Likert scale from 1 (*strongly disagree*) to 4 (*strongly agree*).³³ LGBT victimization was assessed via six items that asked how many times, from 0 (*never*) to 3 (*3 or more times*), participants experienced a form of victimization, such as assault or vandalism, in the past 6 months.³⁴ Nine items from the Sexual Orientation Microaggression Inventory assessed how often participants experienced microaggressions in the past 6 months, scored from 1 (*not at all*) to 5 (*about every day*).³⁵ Finally, four items asking how comfortable participants felt with their neighbors knowing about their sexual orientation or gender identity, rated on a 4-point Likert scale, assessed perceived neighborhood LGBT stigma.³⁶ Mean scores were calculated for each construct. Higher scores represented greater minority stress except for perceived neighborhood stigma, which was reverse coded (and will hereafter be referred to as “perceived neighborhood acceptance” for ease of interpretation).

Demographics and sexual/relationship behaviors—Age; race/ethnicity; sexual orientation (gay, bisexual, other); sexual abuse before age 17; and anal/vaginal sex in the past 6 months were assessed via self-report. Known HIV status was determined using the results from the laboratory-confirmed HIV test conducted at the previous visit (Wave 3; 12-month follow-up). Participants provided partner-level data for up to four of their most recent sexual partners using the HIV Risk Assessment of Sexual Partnerships.³⁷ From that information, we extracted whether a participant had a serious partner(s) and/or a casual partner(s) in the past 6 months. Among those with serious partners, we asked if they had a sexual agreement with those partners regarding sex with others outside of the relationship.

Analyses

All analyses were conducted using IBM SPSS Statistics, Version 25 (IBM Corporation, Armonk, NY). *T*-scores for sexual interest, erectile function, and global satisfaction were compared to a mean of 50 using *t*-tests. Mean sexual functioning scores were compared

across demographic and sexual/relationship characteristics using one-way analysis of variance (ANOVA) for sexual interest and (nonparametric) Kruskal–Wallis ANOVA for the other 4 domains. Pairwise nonparametric correlations between mean sexual functioning scores and mean minority stress scores were also calculated. Variables that were significant at $p < .1$ in bivariate analyses were carried forward into multivariable linear regression models with robust standard errors; age, race/ethnicity, and sexual orientation were entered into all models regardless of bivariate statistical significance.

Results

Sample characteristics

Descriptive statistics for the analytic sample are presented in Table 1. At Wave 4, RADAR participants were on average 22.7 years old; racially diverse; and majority gay (74.0%), HIV-negative at their previous visit (80.7%), and sexually active in the past 6 months (81.5%). Over a quarter reported experiencing childhood sexual abuse. Approximately half of participants reported having at least one serious partner over the previous 6 months, and more than half also reported having at least one casual partner. Of the former, the vast majority (82.3%) had some type of specified sexual agreement, with most relationships being monogamous.

Mean scores for minority stress indicated low levels of LGBT stigma experienced by the sample overall: On average, participants did not feel internally stigmatized, did not experience victimization, experienced microaggressions less than a few times, and felt comfortable in their neighborhoods. Mean scores for sexual functioning indicated generally good outcomes: Participants were more than “somewhat”/“sometimes” interested in sex, experienced almost no erectile difficulties, rated their orgasms as “very good,” were “quite a bit” satisfied with their sex lives, and “rarely” experienced anal discomfort during receptive anal sex. Mean *T*-scores for sexual interest ($M = 53.4$, $SD = 8.8$, $n = 646$, $t = 9.86$, $p < .001$), erectile function ($M = 64.1$, $SD = 4.8$, $n = 599$, $t = 71.78$, $p < .001$), and global satisfaction ($M = 57.0$, $SD = 7.9$, $n = 576$, $t = 21.26$, $6p < .001$) were significantly greater and had less variance than the normalized distribution ($M = 50$, $SD = 10$). However, 13.9% of the sample reported having on average “a little bit” or more difficulty with erections, 6.9% reported having less than “good” satisfaction with orgasms, 20.0% reported being “somewhat” or less satisfied by their recent sexual activity, and 9.1% reported experiencing problems during receptive anal sex “sometimes” or more frequently.

Bivariate Analyses

Table 2 presents unadjusted means for sexual functioning scores by participant characteristics. Sexual interest, followed by orgasm satisfaction, differed the most across demographic and sexual partner characteristics. A significant difference by sexual orientation was observed for sexual interest, with bisexual participants reporting the lowest interest, but no sexual orientation differences were seen in the other PROMIS-SexFS domains. Having one or more casual partners was significant across four domains and marginally significant ($p = .09$) for the last one (anal discomfort), with those who responded affirmatively indicating greater sexual interest but poorer erectile function, orgasm

satisfaction, and global satisfaction and greater anal discomfort. In contrast, having at least one serious partner had positive effects on interest and the two satisfaction measures. Differences by relationship agreement were found only for orgasm satisfaction, with those who had monogamous partnerships (i.e., no sex with outside individuals) reporting the highest satisfaction and those who explicitly allowed outside partners reporting the lowest.

Table 3 presents pairwise nonparametric correlations among the minority stress and sexual functioning variables. In general, correlations between the two sets of domains were small ($< .2$) but in the expected directions. Internalized stigma significantly correlated with erectile function, both measures of satisfaction, and anal discomfort. Victimization correlated with anal discomfort whereas perceived neighborhood acceptance correlated with orgasm and global satisfaction. No significant relations were found between any minority stressor and sexual interest and between microaggressions and any sexual functioning.

Multivariable Analyses

Table 4 presents results from the multiple regressions except for the model for anal discomfort, which did not significantly differ from the null model (omnibus $p = .54$). In other words, none of the independent variables explained the variance in anal discomfort better than an intercept-only model. Because the relationship agreement measure was limited to only those with serious partners, it was excluded as a covariate.

In terms of participant characteristics, being sexually active, identifying with an “other” sexual orientation, and having had a serious partner were associated with increased sexual interest, but identifying as Black and having a positive HIV serostatus had significant negative effects. To contextualize the magnitudes of these effects, a half-point change in mean sexual interest score equated to approximately a 5.5-point change in the corresponding T -score,³¹ which is over half of a standard deviation. Being sexually active was associated with increased orgasm satisfaction, and having had a serious partner was associated with increased global satisfaction. Conversely, having had a casual partner was associated with decreased orgasm satisfaction and erectile function.

Regarding minority stress, most effects that were significant at the bivariate level attenuated to non-significance in the multivariable models. Internalized stigma remained negatively associated with global satisfaction while perceived neighborhood acceptance remained positively associated with orgasm satisfaction.

Discussion

YMSM in the RADAR cohort generally had high levels of sexual functioning (as indicated by the PROMIS-SexFS mean scores) that were significantly above those of the reference population of adult male cancer survivors. Notably, the mean T -score for erectile function was 1.4 standard deviations above PROMIS-SexFS norms, which is consistent with findings of better erectile function at younger ages.³⁸ However, a portion of our sample reported experiencing sexual dissatisfaction and problems, with 1 in 5 indicating moderate-to-low satisfaction with and nearly 1 in 7 indicating some erectile difficulties during recent sexual activity. More research is needed to continue improving our understanding of sexual

functioning in sexual minority youth populations and how it may potentially affect other health outcomes.

Contrary to our hypothesis, minority stress was not associated with sexual interest or erectile function. Our sample reported low levels of minority stress, and it may be that sexual interest and erectile function, which have strong biological bases in addition to social ones,³⁹ are less sensitive to the effects of stigma. In contrast, our measures of satisfaction with orgasm and one's sex life were associated with perceived neighborhood acceptance and internalized stigma, respectively. The latter finding makes intuitive sense: If individuals engage in sexual activities that they feel negatively about, their enjoyment of sex may be diminished. Alternatively, individuals with greater internalized stigma may avoid seeking out same-sex sexual partners and thus become unsatisfied with their sex lives. The relation between perceived neighborhood acceptance and orgasm satisfaction may work in the same way. If individuals perceiving less neighborhood acceptance are concerned about being seen or heard with a male sex partner, it could lead to greater anxiety, which would in turn affect the pleasure they receive from individual sex acts. A previous study among Chinese MSM similarly identified an independent association between perceived discrimination against MSM and self-reporting any sexual problem, controlling for experienced social discrimination, which was not significant, and sexual identity self-acceptance.⁴⁰ Still, more research is needed to examine the mechanisms by which perceptions of the social environment affect sexual functioning.

Several other characteristics emerged as having significant effects on sexual functioning, including race, sexual orientation, HIV status, and sexual partner characteristics. Non-Hispanic Black participants reported significantly less interest in sex but greater erectile function than White participants. The PROMIS-SexFS was validated among a majority White sample,^{31,32} so it is possible that the measure may be less culturally appropriate for or interpreted differently by Black YMSM. Participants identifying with a sexual orientation other than gay or bisexual reported significantly greater sexual interest. Because this group comprises various identities (e.g., queer, pansexual, demisexual), it is difficult to draw conclusions based on these results. However, recent work examining non-heterosexual individuals who eschew traditional sexual orientation labels suggests that those who adopt newer terms are younger and have more fluid views of gender and gendered attraction.⁴¹ This may in turn affect how our measures of sexual interest are interpreted. That having a positive HIV status was negatively associated with sexual interest but not erectile function is consistent with some previous studies that found decreased interest among HIV-positive MSM¹⁹ but inconsistent with others that found effects on erectile function.^{11,18,25,26} There may be possible age and generational factors (e.g., shift in perception of HIV from fatal infectious disease to manageable chronic illness) that may explain this inconsistency.

Unsurprisingly, participants who reported recent anal/vaginal sex also reported greater sexual interest and orgasm satisfaction. However, reporting at least one recent casual partner was negatively associated with erectile function and orgasm satisfaction. One explanation may be that individuals may have less opportunity to discuss topics such as intimacy and pleasure with a casual partner. Having a serious partner, in contrast, was positively associated with interest and global satisfaction. Previous research among both sexual

minority and general samples of youth has demonstrated the positive effect of serious partnerships on emotional wellbeing.^{42–44} In addition, having a regular partner increases availability of sex, which may then increase global satisfaction with one's sex life. It is also possible that those with higher interest in sexual activity may seek out a serious partner so that sex is more readily available. The bivariate findings for relationship agreements suggest that YMSM in monogamous relationships may have significantly greater orgasm satisfaction and marginally better global satisfaction than those in relationships which allow outside partners. Possible reasons include increased trust, communication about pleasure, and regularity of sex as well as decreased condom use. Among older MSM, Parsons, Starks, Gamarel, and Grov similarly found lower sexual satisfaction in open (allow sex with outside partners individually) relationships compared to monogamous or "monogamish" (allow sex with outside partners only when together) relationships at the bivariate level, but the difference attenuated to non-significance after controlling for covariates.⁴⁵ More research is needed to tease apart the complexities of sexual relationships and their effects on sexual functioning.

It is also important to consider our negative findings. The fully adjusted model for anal discomfort did not perform better than the null model, meaning none of the covariates was significantly associated with the dependent variable, despite race and having a recent casual partner being associated at the bivariate level. One previous study among 277 gay men found a relation between anal pain and internalized homonegativity, but frequency of pain was also found to be normally distributed.⁴⁶ Given low levels of both minority stress and anal discomfort in our sample, the correlation may be too small to detect. Sexual orientation was not associated with four out of five domains of sexual functioning in our sample. This finding stands in contrast to Kuyper and Vanwesenbeeck,⁹ who found that bisexual men had significantly greater sexual satisfaction than gay men after controlling for minority stress. More research is needed to determine whether, in which direction, to what magnitude, and in which contexts such a difference may exist and whether it is clinically meaningful. Neither microaggressions nor victimization was a salient correlate of sexual functioning, contrary to our hypothesis. This may be because of low levels of both in our sample or because enacted stigmas, which involve external actors, are less "potent" in the context of an intimate sexual setting (in contrast to internalized stigma, which is ever present).

Our study was limited by its cross-sectional design, precluding conclusions around temporality or causality. Second, our minority stress measures may not have fully captured all forms of LGBT stigma experienced by different subgroups, such as biphobia.⁴⁷ Third, the PROMIS-SexFS assesses the frequency/severity of sexual functioning problems but does not have validated cutoffs for clinical diagnoses; more research is needed on the correspondence between the measure and its clinical implications. Fourth, the reference population for Version 1.0 of the PROMIS-SexFS Brief Profile for Males was adult male cancer survivors, whose sexual functioning may have been adversely affected by their illness and/or their treatment.³² Although a later version of these measures was calibrated against a nationally representative sample,³¹ our current findings that YMSM in RADAR scored higher than the Version 1.0 reference population is insufficient evidence to conclude that they would also score better than men in general. Fifth, the RADAR cohort is a community sample living in a progressive, urban area; findings may not be generalizable to YMSM living in other kinds

of areas. Sixth, we excluded transgender and other gender minorities from analyses because the appropriateness of the PROMIS-SexFS measures for these groups is still unknown, and the RADAR cohort comprises only individuals assigned male at birth. More research is needed to better understand sexual functioning among gender minorities assigned male at birth as well as sexual and gender minorities assigned female at birth.

Conclusions

Despite these limitations, our study is one of the first to examine sexual functioning specifically among YMSM and thus begins to fill the gap currently missing from the literature. Future research should continue to explore different non-pathological aspects of sexual health and wellbeing among these populations and related groups, such as gender minorities for whom we still know very little. Our work adds another perspective to the substantial evidence around the negative effects of minority stress across numerous domains within the lives of sexual and gender minorities. Thus, interventions and policies for YMSM should continue to combat individual and structural LGBT stigmas wherever possible. Finally, our findings on sexual partner characteristics support the inclusion of discussions about sexual satisfaction within sexual health interventions, particularly interventions for couples. Sexual wellbeing is not merely the absence of disease, difficulties, or dysfunction; public health research and practice must be pushed toward a new paradigm in which interest, function, comfort, and satisfaction are central to a healthy sexuality.

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Table 1.Descriptive statistics for YMSM in RADAR (*N*=678)

	% or <i>M</i>	<i>n</i> or (<i>SD</i> ; range)	<i>N</i>
Demographics			
Age	22.72	(2.93; 17.46-31.19)	678
Race/ethnicity			
Non-Hispanic White	23.0%	156	678
Non-Hispanic Black	34.8%	236	678
Hispanic/Latino	31.7%	215	678
Other	10.5%	71	678
Sexual orientation			
Gay	74.0%	502	678
Bisexual	17.6%	119	678
Other	8.4%	57	678
Experienced sexual abuse before age 17	25.6%	173	675
HIV-positive (based on Wave 3 testing)	19.3%	131	678
Sexual behavior /relationship types in past 6 months			
Had anal/vaginal sex	81.5%	548	672
Had a serious partner(s)	52.1%	341	654
Had a casual partner(s)	57.2%	374	654
Sexual agreement			
No sex outside of relationship	64.2%	145	226
Sex allowed outside of relationship	18.1%	41	226
No sexual agreement	17.7%	40	226
Minority stress (mean scores)			
Internalized stigma	1.56	(0.61; 1.00-4.00)	638
Victimization	0.07	(0.23; 0.00-2.50)	671
Microaggressions	1.81	(0.72; 1.00-5.00)	677
Perceived neighborhood acceptance	3.01	(0.75; 1.00-4.00)	640
Sexual functioning (mean scores)			
Sexual interest	3.25	(1.06; 1.00-5.00)	646
Erectile function	4.71	(0.53; 2.33-5.00)	599
Orgasm satisfaction	4.13	(1.00; 1.00-5.00)	612
Global satisfaction with sex life	4.10	(0.92; 1.00-5.00)	576
Anal discomfort	1.80	(0.74; 1.00-5.00)	331

Table 2.

Sexual functioning mean scores by participant characteristics ($N=678$)

	Interest			Erectile function			Orgasm satisfaction			Global satisfaction			Anal discomfort		
	M	SD	n	p^a	M	SD	n	b	p	M	SD	n	M	SD	n
Race/ethnicity				<.001				.129					.051		.025
Non-Hispanic White	3.52	0.92	146		4.63	0.57	145			4.18	0.90	145		1.94	0.70
Non-Hispanic Black	3.03	1.10	227		4.77	0.45	194			4.26	0.99	211		1.72	0.84
Hispanic/Latino	3.32	1.01	207		4.72	0.59	200			4.11	1.00	199		1.79	0.68
Other	3.17	1.19	66		4.76	0.41	60			3.65	1.13	57		1.76	0.57
Sexual orientation				.019				.445					.392		.759
Gay	3.26	1.06	478		4.70	0.55	444			4.16	1.00	452		1.79	0.75
Bisexual	3.06	1.07	112		4.78	0.44	103			4.05	1.05	106		1.87	0.72
Other	3.54	1.00	56		4.74	0.43	52			4.07	0.91	54		1.72	0.60
Childhood sexual abuse				.031				.109					.869		.964
No	3.30	1.05	477		4.71	0.52	444			4.14	0.98	453		1.79	0.72
Yes	3.10	1.09	167		4.74	0.55	153			4.10	1.05	157		1.81	0.77
Known HIV status				<.001				.339					.069		.540
Negative	3.32	1.05	521		4.71	0.53	490			4.11	0.99	498		1.80	0.71
Positive	2.95	1.06	125		4.75	0.51	109			4.25	1.04	114		1.79	0.82
Any anal/vaginal sex				<.001				.728					.007		.349
No	2.69	1.02	118		4.75	0.47	98			3.90	1.03	103		1.63	0.67
Yes	3.38	1.03	523		4.71	0.54	497			4.18	0.99	504		1.80	0.74
Any serious partner(s)				<.001				.914					<.001		.920
No	3.05	1.08	308		4.71	0.53	284			4.00	1.00	289		1.78	0.67
Yes	3.43	1.01	338		4.72	0.53	315			4.26	0.98	323		1.81	0.78
Any casual partner(s)				.042				<.001					.003		.088
No	3.15	1.08	276		4.79	0.47	245			4.27	0.92	257		1.71	0.72
Yes	3.32	1.04	370		4.66	0.56	354			4.03	1.04	355		1.84	0.74
Relationship agreement				.366				.288					.048		.248
Cannot have outside partners	3.55	1.00	144		4.76	0.52	134			4.45	0.87	139		1.69	0.64
Can have outside partners	3.79	0.83	41		4.76	0.39	41			4.10	0.97	41		2.07	1.01

	Interest			Erectile function			Orgasm satisfaction			Global satisfaction			Anal discomfort		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
No agreement	3.59	1.01	40	4.70	0.51	38	4.22	1.03	37	4.20	0.81	38	1.80	0.73	24

Note. Bold indicate ssignificant at the $p<.05$ level.

^aOne-way ANOVA.

^bKruskal–Wallis ANOVA.

Table 3.
Correlations (Kendall's τ) between minority stress and sexual functioning mean scores ($N=678$)

	Sexual interest	Erectile function	Orgasm satisfaction	Global satisfaction with sex life	Anal discomfort	Internalized stigma	Victimization	Micro-aggressions
Erectile function	.090**							
Orgasm satisfaction	.117***	.298***						
Global satisfaction with sex life	.221***	.234***	.368***					
Anal discomfort	.075 [†]	-.150**	-.108*	-.098*				
Internalized stigma	-.017	-.078*	-.102**	-.127***	.093*			
Victimization	-.002	-.036	.016	.029	.149**	.070*		
Microaggressions	.011	-.023	-.009	-.009	.016	.131***	.216***	
Perceived neighborhood acceptance	.017	.053	.114***	.080*	-.051	-.221***	-.081*	-.081**

[†] $p < .10$.

* $p < .05$.

** $p < .01$.

*** $p < .001$

Table 4.

Multiple regression of sexual functioning mean scores on demographics, sexual/relationship behaviors, and minority stressors ($N=678$)

	Sexual interest $n=639$			Erectile function $n=563$			Orgasm satisfaction $n=564$			Global satisfaction with sex life $n=530$		
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>
Age	0.02	0.01	.302	0.00	0.01	.720	0.01	0.02	.418	0.00	0.01	.761
Race/ethnicity (Ref=Non-Hispanic White)												
Non-Hispanic Black	-0.39	0.11	<.001	0.14	0.06	.024	0.13	0.11	.248	0.11	0.11	.309
Hispanic/Latino	-0.14	0.10	.157	0.08	0.06	.221	0.00	0.11	.975	0.10	0.10	.307
Other	-0.26	0.16	.110	0.15	0.07	.036	-0.41	0.17	.015	-0.07	0.14	.621
Sexual orientation (Ref=Gay)												
Bisexual	-0.16	0.11	.121	0.08	0.06	.144	0.01	0.11	.941	0.12	0.11	.243
Other	0.27	0.14	.046	0.04	0.07	.531	-0.05	0.14	.713	0.17	0.13	.176
Experienced childhood sexual abuse	-0.15	0.09	.096	--	--	--	--	--	--	--	--	--
HIV-positive	-0.28	0.10	.007	--	--	--	0.01	0.12	.941	--	--	--
Had anal/vaginal sex in past 6 months	0.55	0.12	<.001	--	--	--	0.36	0.13	.006	--	--	--
Had a serious partner(s) in past 6 months	0.28	0.09	.003	--	--	--	0.03	0.10	.740	0.27	0.08	<.001
Had a casual partner(s) in past 6 months	0.03	0.10	.766	-0.12	0.04	.008	-0.28	0.10	.006	-0.10	0.09	.241
Internalized stigma	--	--	--	-0.06	0.04	.117	-0.09	0.08	.218	-0.16	0.07	.032
Victimization	--	--	--	--	--	--	--	--	--	--	--	--
Perceived neighborhood acceptance	--	--	--	--	--	--	0.17	0.06	.009	0.09	0.06	.124

Note. Bold indicates variables significant at the $p < .05$ level. Missing values (--) represent variables excluded due to non-significance at the bivariate level; age, race/ethnicity, and sexual orientation were retained in all models. The model for anal discomfort did not significantly differ from the null model and is thus not presented.