Racial/Ethnic Differences in the Association between Arrest and Unprotected Anal Sex among Young Men Who Have Sex with Men: The P18 Cohort Study

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ABSTRACT *This analysis aimed to determine whether the relationship between a history of arrest and unprotected anal sex (UAS) is the same for Black/Latino gay, bisexual, and other young men who have sex with men (YMSM) as compared to White/Asian/Pacific Islander (API) YMSM in New York City (NYC). Baseline audio-computer-assisted self-interview (ACASI) and interviewer-administered survey data from a sample of 576 YMSM aged 18–19 years old who self-reported being HIV-negative were analyzed. Data included history of arrest and incarceration as well as UAS in the past 30 days. Race/ethnicity was an effect modifier of the association between arrest and UAS among YMSM: White/API YMSM with a lifetime arrest history were more than three times as likely to report UAS, and Black/Latino YMSM with a lifetime history of arrest were approximately 70 % less likely to report UAS as compared with White/API YMSM with no reported arrest history. Race/ethnicity may modify the relationship between arrest and sexual risk behavior because the etiology of arrest differs by race, as partially evidenced by racial/ethnic disparities in police stop, arrest, and incarceration rates in NYC. Arrest could not only be an indicator of risky behavior for White/API YMSM but also an indicator of discrimination for Black/Latino YMSM. Further research is needed to assess whether the differential associations observed here vis-à-vis race/ethnicity are robust across different populations and different health outcomes.*

KEYWORDS *Homosexuality, Male, Arrest, Sexual behavior, Race, Ethnicity*

Gay, bisexual, and other men who have sex with men (MSM) experience the highest burden of HIV in the USA, accounting for 61.8 % of people diagnosed with HIV between 2008 and 2011.¹ Of the approximately 31,000 HIV cases diagnosed among MSM in 2011, 61.7 % were among Black and Hispanic/Latino men.¹ Thus, Black and Hispanic/Latino MSM are particularly burdened by HIV.

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Minority stress (i.e., psychosocial stress occurring as a result of minority status)² may explain some of the inequities in HIV burden among MSM and Black and Hispanic/Latino gay, bisexual, and other MSM in particular. Black and Hispanic/Latino gay, bisexual, and other MSM have at least two minority identities subject to discrimination, stigma, and violence within society. In the multiple minority stress framework, individuals and communities with multiple identities which are more likely to be subjected to discrimination and stigma may experience multiple stressors that interact to affect health.³ Examples of such stressors include internalized homophobia and gay- or race-related discrimination.^{2,3} There is some evidence for this in an analysis of the 2004–2005 National Epidemiologic Survey of Alcohol and Related Conditions (NESARC). Bostwick et al.⁴ reported more than a twofold increase in the odds of a past-year mental health disorder among those who had experienced both racial and sexual orientation discrimination related to those who had never experienced discrimination; racial and sexual orientation discrimination individually were not significantly associated with mental health.

Black and Hispanic/Latino men are also disproportionately involved in the US criminal justice system compared to their White peers. Of the approximately 1.5 million individuals in federal or state prisons in 2011, 36.1 % were Black men and 21.6 % were Latino men⁵ while accounting for 6.2 and 8.3 % of the US population, respectively.⁶ Black men are more likely to have a history of incarceration compared to White men.⁷ Racial/ethnic minority men are also more likely to be arrested.^{8–10} For example, the New York City Police Department's (NYPD) stop, question, and frisk (SQF) policies have been criticized for being biased and unfairly targeting minorities,¹¹ and racial disparities in SQFs have been documented.^{12,13} Thus, NYPD SQF policies are a potential source of minority stress.

While there is a robust body of literature examining the relationship between incarceration and health outcomes, there is limited knowledge about the impact of arrest on the health outcomes. Studies targeted to substance-using or economically disadvantaged MSM report high (55–65 %) prevalence of lifetime arrest histories.^{14,15} Among MSM in the National HIV Behavioral Surveillance System (NHBS), 6.8 % had been arrested in the past 12 months.¹⁶ One study has suggested that male youth who report same-sex attraction or a same-sex relationship are more likely to be stopped by the police as compared to heterosexuals.¹⁷

Arrest has been associated with HIV risk behaviors. Among juvenile arrestees in Florida, 10.2 % reported multiple concurrent partners, 41.7 % had three or more partners in their lifetime, and 15.3 % reported using condoms seldom or never; 13.2 % tested positive for gonorrhea and/or chlamydia.¹⁸ Among a community-based sample of high-risk adolescents and young adult men and women, lifetime arrest histories were associated with substance use, substance use during sex, unprotected sex, and a lifetime history of sexually transmitted infections (STIs).¹⁹ Among MSM in the NHBS, arrest in the past 12 months was significantly associated with a higher odds of non-injection and injection drug use, unprotected anal sex (UAS), exchanging sex, and six or more male sex partners in the last 12 months.¹⁶ Additionally, Fisher et al.¹⁴ reported that MSM with a history of arrest were more likely to have had an STI and have paid or been paid for sex, and Kurtz et al.¹⁵ found substance-using MSM in Miami were more likely to experience high levels of sex sensation seeking.

This analysis of arrest and sexual risk behavior among YMSM is guided by the multiple minority stress framework.²⁰ YMSM of color may experience racism, homophobia, and/or heterosexism, which can work interactively to impact health

outcomes. Previous studies document (1) racial and ethnic disparities in incarceration and arrest (a form of structural racism)²¹ as well as (2) an association, primarily between incarceration and sexual risk behaviors, among heterosexuals and MSM. However, there is a dearth of literature on the impact of arrest (a stressor for minority men) on sexual risk behaviors in general and among young MSM (YMSM) specifically. Moreover, it is unclear whether the association between arrest and sexual risk behaviors is the same across races/ethnicities. Understanding this relationship more clearly would help elucidate the determinants of racial/ethnic disparities in HIV and others STIs, as there are well-established disparities in HIV prevalence rates among Black and Latino men relative to White and Asian/Pacific Islander (API) men.¹ The aim of this analysis was to examine the following question: Is the relationship between a history of arrest and UAS the same for Black and Latino YMSM as compared to White and API YMSM? We hypothesized that Black/Latino YMSM with an arrest history would be more likely to report UAS relative to White/API YMSM.

METHODS

Sample

This analysis utilizes data from an ongoing prospective study of YMSM in New York City (NYC) locally known as Project 18 (P18). The methods have been described in detail previously.^{22,23} Briefly, participants were recruited through venue-based outreach as well as flyers and internet advertisements between 2009 and 2011. Eligibility criteria included being aged 18–19 years old, biologically male, and a resident of the NYC metropolitan area. Eligible participants also had to self-report sex with another man in the last 6 months and being HIV seronegative. All participants underwent HIV testing and counseling; six were HIV seropositive. A total of 594 confirmed seronegative YMSM were enrolled in the study, 592 of whom had complete data. This study was reviewed and approved by New York University's Institutional Review Board.

Data Collection

The baseline data was collected through audio-computer-assisted self-interview (ACASI). Data were collected on sociodemographics, relationship status, arrest and incarceration histories, childhood abuse and neglect, and psychosocial characteristics.

The dependent variable was UAS. Data on recent sexual behaviors were collected using the Timeline Followback measure (TLFB).²⁴ Interviewers administered the TLFB through face-to-face interviews and collected the frequency of UAS during the 30 days preceding baseline assessment.²² Because many men did not report UAS at baseline and the frequency distribution was non-normal, we dichotomized UAS as ever versus never.

The main independent variables of interest were race (i.e., Asian or Asian American, Black or African American, White or Caucasian, American Indian or Native American, and other), ethnicity (i.e., Hispanic or Latino), and arrest/incarceration history. Among the sample enrolled at baseline and with data allowing race/ethnicity to be categorized ($n=576$), 88 identified as Black, 225 identified as Hispanic/Latino, 173 identified as White, 29 identified as Asian or Pacific Islander, 52 identified as mixed or biracial, and nine identified as some other race. Race/

ethnicity were collapsed into a binary variable of Black/Latino ($n=357$) versus White/API ($n=219$) in order to be able to explain differences because SFQ policies in NYC are more likely to target Black and Latino males over White and Asian males.¹³ Participants identifying as multiple races were categorized as Black/Latino if they identified as Black race and/or Latino ethnicity. For those who identified as mixed, biracial, or some other race, data from an open-ended statement eliciting self-reported ethnicity ("In terms of ethnic group, I consider myself to be...") was used. This allowed us to categorize 37 of those identifying as mixed or biracial as Black/Latino and 15 as White/API. Seven of those identifying as some other race were recategorized as Black/Latino and two as White/API.

Arrest and incarceration were the psychosocial stressors of interest. Participants were asked if they had been arrested or spent time in jail or prison in their lifetime and in the last 6 months, as well as what they were arrested for. Participants were also asked if their parents or guardians been arrested, spent time in jail, and/or been convicted. With respect to illegal behaviors, questions addressed trading sex for money or drugs, illicit drug use, and selling drugs. A composite variable, "any illegal activity," was created by combining the four illegal behaviors into an indicator where "no" means the participant did not engage in any of the illegal behaviors and "yes" means they had engaged in at least one of the behaviors.

Additional sociodemographic and economic characteristics included current school enrollment (enrolled or not), perceived socioeconomic status (SES: lower, lower middle, middle, upper middle, or upper), sexual orientation, relationship status (currently in a relationship with a male or female), residential instability, and foreign-born status (yes or no). Perceived SES was trichotomized as lower (lower and lower middle), middle, and upper (upper middle and upper). Sexual orientation was measured with the Kinsey scale,²⁵ which was dichotomized as exclusively homosexual versus not exclusively homosexual. Residential instability was assessed by the question, "In how many places have you lived since birth?" This variable was dichotomized into low (i.e., one to three moves) and high (i.e., four or more moves) residential instability.

Several psychosocial characteristics were measured. Additional potential minority stressors included public and personalized gay-related stigma and internalized homophobia. Gay-related public and personalized stigma were measured with two subscales adapted from Berger et al.²⁶ The two-item public stigma subscale score ranged from 2 to 8 and was dichotomized into low (i.e., less than 5) and high (i.e., 5 to 8). The three-item personalized stigma subscale score ranged from 3 to 12 and was dichotomized into low (i.e., less than 6) and high (i.e., 6 to 12). Internalized homophobia was measured with a four-item scale from Thiede et al.²⁷ The score had a range of 4 to 20 and was dichotomized into low (i.e., less than 12) and high (i.e., 12 to 20).

Because childhood abuse and neglect have been consistently associated with sexual risk behaviors,^{28–30} we controlled for it in the multivariable analyses. Child abuse and neglect was measured using the National Longitudinal Study of Youth (Add-Health) mistreatment by adults scale.^{31,32}

Potential resilience factors included racial/ethnic identity and gay community affinity. Racial identity was measured with the 14-item Multigroup Ethnic Identity Measure (MEIM),^{33,34} with higher scores indicating higher ethnic identity. Gay community affinity was measured with one item assessing the degree to which a participant felt part of the gay community in NYC using a Likert scale and was dichotomized into low (i.e., neither agree nor disagree, disagree, or strongly disagree) and high (i.e., strongly agree or agree).

Analysis

All analyses were conducted with STATA 13.1. Bivariable analyses used χ^2 statistics to compare history of arrest, incarceration, and selected illegal activities by race, except when cell sizes were less than five, in which case we used Fisher's exact tests. Correlates of a lifetime history of arrest and UAS were also examined. Multivariable logistic regression models were constructed to examine the relationship between lifetime experience of arrest and any UAS in the past 30 days. Variables significantly associated with arrest and/or UAS in the bivariable analyses were entered into models if they were significant at $p \leq 0.10$. An interaction between lifetime arrest and race was tested using a product term in the model. Variables were retained in the model if they were significant at $p \leq 0.05$. The final models are the most parsimonious models. Pearson χ^2 goodness-of-fit tests were run for each model.

RESULTS

In this sample of YMSM, 85 (14.8 %) reported a history of lifetime arrest of whom 23 (27.1 %) reported a recent arrest in the 6 months preceding baseline visit (Table 1). Reasons for the most recent arrest varied; the most common reasons were assault/fighting, theft/fraud, and possession (sale or use) of drugs. With regard to incarceration, 4.2 % ($n=24$) and 1.6 % ($n=9$) of the sample reported lifetime and past 6-month incarceration, respectively. The main reasons cited for recent incarceration were similar to those provided for recent arrest. Black/Latino YMSM were more likely to report both lifetime (χ^2 ($df=1$)=8.8862, $p=0.003$) and recent arrest (Fisher's exact $p=0.016$) as well as history of incarceration (Fisher's exact $p=0.028$). Additionally, while 27 % ($n=154$) of this sample reported knowledge of a parent/guardian being arrested, Black/Latino YMSM were more than three times more likely to report a family history of arrest compared with White/API YMSM (χ^2 ($df=1$)=35.9649, $p<0.001$). However, with regard to engagement in illegal activities, White/API YMSM were more likely to report engaging in any illegal activity (χ^2 ($df=1$)=5.5514, $p=0.018$), overall, as well as specifically around the use of illicit drugs (χ^2 ($df=1$)=2.4841, $p=0.012$) compared with Black/Latino YMSM.

Using bivariate analyses, we provide sociodemographic and psychosocial characteristics by race (Table 2). White/API YMSM were significantly more likely to be in school (χ^2 ($df=1$)=24.9927, $p<0.001$) and have higher perceived SES relative to Black/Latino YMSM (χ^2 ($df=2$)=86.3881, $p<0.001$). Black/Latino YMSM scored higher on the racial/ethnic identity measure (χ^2 ($df=1$)=44.3351, $p<0.001$) and were more likely to experience childhood neglect (χ^2 ($df=1$)=4.9864, $p=0.026$), physical abuse (χ^2 ($df=1$)=19.9446, $p<0.001$), and sexual abuse (Fisher's exact test, $p<0.001$). Black/Latino YMSM also reported higher gay community affinity (χ^2 ($df=1$)=44.19.4738, $p<0.001$), higher public gay-related stigma (χ^2 ($df=1$)=80.0758, $p<0.001$), and higher residential instability (χ^2 ($df=1$)=5.1558, $p=0.019$).

Associations between sociodemographic characteristics and psychosocial factors with a history of arrest were examined next (Table 3). Individuals not enrolled in school at baseline (χ^2 ($df=1$)=35.0738, $p<0.001$), not born in the USA (χ^2 ($df=1$)=7.5437, $p=0.006$), and who reported a history of arrest/incarceration among a parent/guardian (χ^2 ($df=1$)=6.1313, $p=0.013$) were more likely to report a history of arrest. Additionally, those who reported a non-exclusively homosexual orientation were also more likely to report a history of arrest compared with those self-identifying as exclusively homosexual (χ^2 ($df=1$)=6.6887, $p=0.010$), as were those

TABLE 1 History of arrest, incarceration, and selected behaviors among 576 YMSM, NYC, 2009

	Total	Black/Latino	API/White			
	<i>N</i> = 576	<i>N</i> = 357	<i>N</i> = 219			
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	χ^2	<i>df</i>	<i>p</i> value ^a
Arrest history						
Lifetime				8.8862	1	0.003
No	491 (85.2)	292 (81.8)	199 (90.9)			
Yes	85 (14.8)	65 (18.2)	20 (9.1)			
Past 6 months				—	—	0.023 ^b
No	554 (96.2)	338 (94.7)	216 (98.6)			
Yes	22 (3.8)	19 (5.3)	3 (1.4)			
Reason for recent arrest				—	—	
Assault or fighting	5 (22.7)	—	—			
Theft or fraud	7 (31.8)	—	—			
Possession, sale, or use of drugs	4 (18.2)	—	—			
Other	5 (22.7)	—	—			
Refused or missing	1 (4.6)	—	—			
Incarceration						
Lifetime				—	—	0.031 ^b
No	552 (95.8)	337 (94.4)	215 (98.2)			
Yes	24 (4.2)	20 (5.6)	4 (1.8)			
Past 6 months				—	—	0.164 ^b
No	567 (98.4)	349 (97.8)	218 (99.5)			
Yes	9 (1.6)	8 (2.2)	1 (0.5)			
Reason for recent incarceration				—	—	
Assault or fighting	2 (22.2)	—	—			
Theft or fraud	3 (33.3)	—	—			
Possession, sale, or use of drugs	2 (22.2)	—	—			
Other	2 (22.2)	—	—			
Refused or missing	0	—	—			
Parent/guardian arrested/incarcerated				35.9649	1	<0.001
No	416 (73.0)	226 (64.2)	190 (87.2)			
Yes	154 (27.0)	126 (35.8)	28 (12.8)			
Illegal activities, lifetime						
Any illegal activity				5.5513	1	0.018
No	133 (23.1)	94 (26.3)	39 (17.8)			
Yes	443 (78.9)	263 (73.7)	180 (82.2)			
Sex for drugs				2.5348	1	0.111
No	556 (96.5)	348 (97.5)	208 (95.0)			
Yes	20 (3.5)	9 (2.5)	11 (5.0)			
Sex for money				1.0341	1	0.309
No	483 (83.9)	295 (82.6)	188 (85.8)			
Yes	93 (16.2)	62 (17.4)	31 (14.2)			
Selling drugs				2.4841	1	0.115
No	517 (89.8)	326 (91.3)	191 (87.2)			
Yes	59 (10.2)	31 (8.7)	28 (12.8)			
Any illicit drug use				6.3363	1	0.012

TABLE 1 Continued

	Total	Black/Latino	API/White			
	N= 576	N= 357	N= 219			
	n (%)	n (%)	n (%)	χ^2	df	p value ^a
No	141 (24.5)	100 (28.0)	41 (18.7)			
Yes	435 (75.5)	257 (72.0)	178 (81.3)			

^aPearson's χ^2 unless otherwise indicated

^bFisher's exact test

reporting a current relationship with a female as compared to those who did not (χ^2 (df=1)=12.0773, $p=0.010$). In terms of early childhood experiences, experience of childhood neglect (χ^2 (df=1)=9.5530, $p=0.002$) as well as childhood physical (χ^2 (df=1)=4.4457, $p=0.035$) and sexual abuse (χ^2 (df=1)=20.0492, $p<0.001$) were all associated with increased likelihood of history of arrest. In terms of psychosocial factors, experiences of gay-related stigma in the public domain (χ^2 (df=1)=4.4959, $p=0.034$) as well as experiences of higher levels of internalized homophobia (χ^2 (df=1)=4.2491, $p=0.039$) were associated with an increased likelihood of reporting a history of arrest. Finally, those reporting a history of arrest were also more likely to report recently engaging in UAS (χ^2 (df=1)=3.8876, $p=0.049$).

Next, associations between drug use behaviors and arrest history were examined. Any lifetime involvement in illegal activities (χ^2 (df=1)=18.1957, $p<0.001$), exchange of sex for drugs or money (χ^2 (df=1)=20.3112, $p=0.050$ and χ^2 (df=1)=12.9614, $p<0.001$, respectively), illegal sale of illicit drugs (χ^2 (df=1)=26.5275, $p<0.001$), as well as illicit drug use (χ^2 (df=1)=18.6541, $p<0.001$) were all significantly associated with a history of arrest.

Finally, a series of multivariable regression analyses were constructed to examine the relationship between lifetime experience of arrest and UAS (Table 4). Each model controlled for a distinct type of illegal activity while examining the association between UAS in relation to the interaction between race/ethnicity and arrest history as well as other statistically significant variables from the bivariate analyses. Only childhood sexual abuse remained significant in multivariable models.

Across all three models, there was a statistically significant interaction between race/ethnicity and arrest history; specifically, White/API YMSM with a lifetime arrest history were more than three times as likely to report engaging in UAS compared to White/API YMSM with no arrest history. On the other hand, Black/Latino YMSM with no self-reported lifetime history of arrest were almost 70 % less likely to report engaging in UAS compared with White/API YMSM with no reported arrest history. Finally, also consistent across all three models, YMSM who reported experiences of childhood sexual abuse were almost three times more likely to report engaging in UAS. The Pearson χ^2 tests revealed good model fit for each model ($p_{\text{model 1}}=0.2456$, $p_{\text{model 2}}=0.1725$, $p_{\text{model 3}}=0.5169$).

DISCUSSION

Almost 15 % of this sample of YMSM had been arrested in their lifetime and 4.2 % had been incarcerated. This is slightly lower than estimates from the 1997–2008 Add-Health surveys where between 15.9 and 26.8 % of youth have been arrested by

TABLE 2 Sociodemographic and psychosocial characteristics among 576 YMSM by race, NYC, NY 2009

	Total <i>n</i> (%)	Race		χ^2	<i>df</i>	<i>p</i> value ^a
		Black/ Latino	API/ White			
		<i>N</i> = 357 <i>n</i> (%)	<i>N</i> = 219 <i>n</i> (%)			
School enrollment				24.9927	1	<0.001
Enrolled	497 (86.3)	288 (80.7)	209 (95.4)			
Not enrolled	79 (13.7)	69 (19.3)	10 (4.6)			
Perceived SES				86.3881	2	<0.001
Lower	194 (33.7)	159 (44.5)	35 (16.0)			
Middle	211 (36.6)	138 (38.7)	73 (33.3)			
Upper	171 (29.7)	60 (16.8)	111 (50.7)			
Sexual orientation				2.0838	1	0.149
Exclusively homosexual	236 (41.0)	219 (61.3)	121 (55.3)			
Not exclusively homosexual	340 (59.0)	138 (38.7)	98 (44.8)			
Currently in relationship with a male				0.3221	1	0.570
No	421 (73.1)	258 (72.3)	163 (74.4)			
Yes	155 (26.9)	99 (27.7)	56 (25.6)			
Currently in relationship with a female				0.8640	1	0.353
No	546 (94.8)	336 (94.1)	210 (95.9)			
Yes	30 (5.2)	21 (5.9)	9 (4.1)			
Foreign-born				2.6803	1	0.102
No	513 (89.1)	312 (87.4)	201 (91.8)			
Yes	63 (10.9)	45 (12.6)	18 (8.2)			
Racial/ethnic identity				44.3351	1	<0.001
Low	353 (61.3)	181 (50.7)	172 (78.5)			
High	223 (38.7)	176 (49.3)	47 (21.5)			
Childhood neglect				4.9864	1	0.026
No	491 (85.2)	318 (89.1)	207 (94.5)			
Yes	85 (14.8)	39 (10.9)	12 (5.5)			
Childhood physical abuse				19.9446	1	<0.001
No	236 (41.0)	122 (34.2)	114 (52.1)			
Yes	340 (59.0)	235 (65.8)	105 (48.0)			
Childhood sexual abuse						<0.001 ^b
No	542 (94.1)	326 (91.3)	216 (98.6)			
Yes	34 (5.9)	31 (8.7)	3 (1.4)			
Gay Community Affinity				19.4738	1	<0.001
Low	333 (57.8)	181 (50.7)	152 (69.4)			
High	243 (42.2)	176 (49.3)	67 (30.6)			
Gay-related stigma (personal)				0.3737	1	0.541
Low	301 (52.3)	183 (51.3)	118 (53.9)			
High	275 (47.7)	174 (48.7)	101 (46.1)			
Gay-related stigma (public)				80.0758	1	<0.001
Low	305 (53.0)	137 (38.4)	168 (76.7)			
High	271 (47.1)	220 (61.6)	51 (23.3)			
Internalized homophobia				0.2215	1	0.638
Low	425 (73.8)	261 (73.1)	164 (74.9)			

TABLE 2 Continued

	Total <i>n</i> (%)	Race		χ^2	<i>df</i>	<i>p</i> value ^a
		Black/ Latino	API/ White			
		<i>N</i> = 357 <i>n</i> (%)	<i>N</i> = 219 <i>n</i> (%)			
High Residential instability	151 (26.2)	96 (26.9)	55 (25.1)	5.1558	1	0.019
Low	251 (43.6)	142 (39.8)	109 (49.8)			
High Unprotected anal intercourse	325 (56.4)	215 (60.2)	110 (33.9)	0.3704	1	0.543
No	465 (80.7)	291 (81.5)	174 (79.5)			
Yes	111 (19.3)	66 (18.5)	45 (20.6)			

^aPearson's χ^2 unless otherwise indicated

^bFisher's exact test

age 18.³⁵ Consistent with numerous other studies^{12,13,36} and federal data,⁷ Blacks/Latinos were significantly more likely to have been arrested and incarcerated as compared to Whites/API peers. There were no significant differences in a circumscribed set illegal behaviors (i.e., sex for money or drugs, selling drugs) by race; however, Whites/APIs were more likely to report illicit drug use as compared to Black/Latino YMSM. This has been observed in another study, where minority males in college were more likely to be stopped while driving despite the fact that White males were more likely to be carrying drugs in their cars.⁸

It is unclear if the differences in arrest by race are due to differences in unmeasured illegal activities (e.g., property or violent crimes) or racial disparities in the implementation of criminal justice policies. With regard to the former, illegal activity data typically come from arrest or incarceration data and likely underestimate the proportion of people who engage in illegal activities. In this study, only 18 % of those who reported engaging in the limited set of illegal behaviors queried had ever been arrested. The proportion who had been arrested varied by specific activities: 30 % of those who had sex for drugs, 26.9 % of those who had sex for money, 37.3 % who had sold drugs, and 18.4 % who had used any history of illicit drugs had ever been arrested. With respect to racial disparities in policy implementation in NYC, stops of Blacks and Latinos are less likely than those of Whites to lead to arrest.⁸ Moreover, racial/ethnic disparities in marijuana arrests, pre-trial detentions related to marijuana in plain view (MPV) arrests, and MPV convictions have been documented.⁹

In this exploration of the relationship between arrest history and UAS among urban YMSM aged 18–19, a significant race by arrest qualitative interaction was observed. According to Szklo and Nieto,³⁷ qualitative interaction occurs when “... the effects of variable A on the outcome Y are in opposite directions (crossover) according to the presence of the third variable Z or when there is an association in one of the strata formed by Z but not in the other.” A history of arrest increased the odds of UAS in the past 30 days for White/API YMSM more than threefold relative to White/API YMSM without arrest histories. For Black/Latino YMSM, arrest histories decreased the odds of UAS approximately 70 % as compared to White/API

TABLE 3 Sociodemographic and psychosocial correlates of lifetime arrest among 576 YMSM, NYC, NY 2009

	Total <i>n</i> (%)	Lifetime history of arrest		χ^2	<i>df</i>	<i>p</i> value
		No (<i>n</i> =491) <i>n</i> (%)	Yes (<i>n</i> =85) <i>n</i> (%)			
School enrollment				35.0738	1	<0.001
Enrolled	497 (86.3)	441 (88.7)	56 (11.3)			
Not enrolled	79 (13.7)	50 (63.3)	29 (36.7)			
Perceived SES				2.0849	2	0.353
Lower	194 (33.7)	161 (83.0)	33 (17.0)			
Middle	211 (36.6)	179 (84.8)	32 (15.2)			
Upper	171 (29.7)	151 (88.3)	20 (11.7)			
Sexual orientation				6.6887	1	0.010
Exclusively homosexual	236 (41.0)	212 (89.8)	24 (10.2)			
Not exclusively homosexual	340 (59.0)	279 (82.1)	61 (17.9)			
Currently in relationship with a male				0.2462	1	0.620
No	421 (73.1)	357 (72.7)	64 (75.3)			
Yes	155 (26.9)	134 (27.3)	21 (24.7)			
Currently in relationship with a female				12.0773	1	0.001
No	546 (94.8)	472 (96.1)	74 (87.1)			
Yes	30 (5.2)	19 (3.9)	11 (12.9)			
Foreign-born				7.5437	1	0.006
No	513 (89.1)	430 (83.8)	83 (16.2)			
Yes	63 (10.9)	61 (96.8)	2 (3.2)			
Parent/guardian arrested or incarcerated				6.1313	1	0.013
No	416 (73.0)	364 (87.5)	52 (12.5)			
Yes	154 (27.0)	122 (79.2)	32 (20.8)			
Racial/ethnic identity				2.9257	1	0.087
Low	353 (61.3)	308 (87.3)	45 (12.8)			
High	223 (38.7)	183 (82.1)	40 (17.9)			
Childhood neglect				9.5530	1	0.002
No	491 (85.2)	455 (86.7)	70 (13.3)			
Yes	85 (14.8)	36 (70.6)	15 (29.4)			
Childhood physical abuse				4.4457	1	0.035
No	236 (41.0)	210 (89.0)	26 (11.0)			
Yes	340 (59.0)	281 (82.7)	59 (17.4)			
Childhood sexual abuse				20.0492	1	<0.001
No	542 (94.1)	471 (86.9)	71 (13.1)			
Yes	34 (5.9)	20 (58.8)	14 (41.2)			
Gay community Affinity				0.0418	1	0.838
Low	333 (57.8)	283 (85.0)	50 (15.0)			
High	243 (42.2)	208 (85.6)	35 (14.4)			
Gay-related stigma (personal)				0.3687	1	0.544
Low	301 (52.3)	254 (51.7)	47 (55.3)			
High	275 (47.7)	237 (48.3)	38 (44.7)			
Gay-related stigma (public)				4.4959	1	0.034

TABLE 3 Continued

	Total <i>n</i> (%)	Lifetime history of arrest		χ^2	<i>df</i>	<i>p</i> value
		No (<i>n</i> =491)	Yes (<i>n</i> =85)			
		<i>n</i> (%)	<i>n</i> (%)			
Low	305 (53.0)	269 (88.2)	36 (11.8)	4.2491	1	0.039
High	271 (47.1)	222 (81.9)	49 (18.1)			
Internalized homophobia				0.0001	1	0.992
Low	425 (73.8)	370 (87.1)	55 (12.9)			
High	151 (26.2)	121 (80.1)	30 (19.9)	3.8876	1	0.049
Residential instability						
Low	251 (43.6)	214 (85.3)	277 (14.7)	18.1957	1	<0.001
High	325 (56.4)	37 (85.2)	48 (14.8)			
Unprotected anal intercourse (last 30 days)				20.3112	1	0.050
No	465 (80.7)	403 (86.7)	88 (13.3)			
Yes	111 (19.3)	62 (79.3)	23 (20.7)	12.9614	1	<0.001
Illegal activities, lifetime						
Any illegal activity				26.5275	1	<0.001
No	133 (23.1)	96.2	3.8			
Yes	443 (76.9)	81.9	18.1	18.6541	1	<0.001
Sex for drugs						
No	556 (96.5)	85.8	14.2	26.5275	1	<0.001
Yes	20 (3.5)	70.0	30.0			
Sex for money				26.5275	1	<0.001
No	483 (83.9)	87.6	12.4			
Yes	93 (16.2)	73.1	26.9	18.6541	1	<0.001
Selling drugs						
No	517 (89.8)	87.8	12.2	18.6541	1	<0.001
Yes	59 (10.2)	62.7	37.3			
Any illicit drug use				18.6541	1	<0.001
No	141 (24.5)	96.5	3.6			
Yes	435 (75.5)	81.6	18.4			

YMSM without arrest histories. This qualitative interaction was unexpected and contrary to our hypothesis that Black/Latino YMSM with an arrest history would be more likely to report UAS relative to White/API YMSM and has not been seen in other studies. The limited repertoire of explanatory variables makes it difficult to fully explain why the relationship between arrest and UAS is different by race. One explanation is confounding by drug use. Whites are more likely to use drugs, and drug use is strongly linked to UAS. We conducted secondary race-stratified analyses of the relationship between illicit drug use and UAS [data not shown] and found no significant associations among both White/API YMSM ($p=0.270$) and Black/Latino YMSM ($p=0.096$).

Another explanation for the associations between arrest history and UAS may be that arrest is a marker of other risky behaviors for White/API YMSM but not for Black/Latino YMSM. As mentioned previously, police stops and arrests are more common for Black/Latino men and may be more likely reflect

racial profiling by police rather than actual criminal behavior. There could also be unmeasured confounding. A test to see if internalized homophobia and personal gay-related stigma were confounders was conducted, but these variables were not significant in the full models [data not shown] and were removed from the final models.

There were several limitations to this study. This is a cross-sectional analysis and thus we cannot determine causality. Non-probability recruitment methods were used, so the sample may not be generalizable to the general population of YMSM. Data concerning timing of arrests and incarcerations were not available. The arrest rate was relatively low among this sample of YMSM, and as such, we have limited power to explore additional interactions. Because the parent cohort study was not designed to specifically investigate the relation between criminal justice involvement and sexual risk behaviors, a limited number of variables with which to investigate this phenomenon are available. The sample is young (aged 18–19 years), and many had not initiated anal sex yet. Finally because Black/Latino versus White/API YMSM were compared, based upon documented disparities in NYC SQF policies,¹³ important variation related to race/ethnicity may be obscured.

Despite the study limitations, these findings are important for enhancing understanding of the relationship between criminal justice involvement and sexual risk behavior. This study suggests race/ethnicity is an effect modifier of this association among YMSM and works differently for different racial/ethnic groups. This could be because the etiology of criminal justice system involvement differs by race, partially evidenced by well-established racial/ethnic disparities in police stop, arrest, and incarceration rates. Moreover, police have been shown to rely on both

TABLE 4 Logistic regression models for unprotected anal intercourse in the last 30 days, adjusting for illegal behaviors

	Model 1	Model 2	Model 3
	Adjusted OR	Adjusted OR	Adjusted OR
	(95 % CI)	(95 % CI)	(95 % CI)
Lifetime arrest × race/ethnicity			
White/API, no arrest	1.0	1.0	1.0
White/API, arrest	3.42 (1.31, 8.95)	3.48 (1.33, 9.12)	3.28 (1.25, 8.62)
Black/Latino, no arrest	0.93 (0.58, 1.51)	0.93 (0.57, 1.49)	0.90 (0.56, 1.45)
Black/Latino, arrest	0.30 (0.09, 0.96)	0.30 (0.09, 0.96)	0.30 (0.09, 0.08)
Childhood sexual abuse			
No	1.0	1.0	1.0
Yes	2.93 (1.37, 6.30)	2.93 (1.36, 6.28)	2.83 (1.32, 6.10)
Any illegal activity			
No	1.0		
Yes	1.26 (0.74, 2.16)		
Any illicit drug use			
No		1.0	
Yes		1.13 (0.67, 1.89)	
Sex for money			
No			1.0
Yes			1.68 (0.99, 2.84)

behavioral and non-behavioral cues (e.g., “driving while black or brown”) to inform their decisions to stop, search, or arrest men of color and rely more on behavioral cues for White men.^{8,10,12,38} Thus, arrest may be an indicator of risky behavior for White and API men but not for Black and Latino men. For Black and Latino men, arrest may be an indicator of discrimination. The multiple minority stress framework is useful for examining and understanding these relations.³ Young MSM of color are members of multiple communities and networks (for example, young, male, gay and/or bisexual, and ethnic communities) who may experience stress related to social position, discrimination, and lack of cultural competency on the part of law enforcement.

These findings do not explain disparities in HIV infection among Black and Latino YMSM relative to White and API YMSM. This could be because the disparities in HIV are driven more by HIV prevalence within social networks or STI infections rather than sexual risk behaviors *per se*.^{39–41} Indeed, MSM of color have been shown to be less likely to engage in UAS and have fewer sex partners as compared to White MSM.^{39,40} A life course perspective makes the case for cumulative exposure to stressors over time playing an important role in health.⁴² We may not have observed a positive association among Black/Latino YMSM because they have not had enough cumulative exposure to racial and sexual minority stressors (i.e., discrimination and stigma) at ages 18 and 19, and these associations may change as the cohort ages.

The experience of arrest has implications across the life course. Wiley and colleagues⁴³ have shown that being stopped or arrested is associated with higher levels of delinquency. Kirk and Sampson⁴⁴ have demonstrated that juvenile arrest is associated with educational attainment; arrested youth are more likely to drop out of high school and less likely to enroll in college. In 2013, NYC’s stop-and-frisk policy was ruled unconstitutional by a federal court, and the current mayor has indicated he will not appeal the decision.^{45,46} As a result, arrests have decreased.⁴⁷ The arrest rates and the relationship between arrest and sexual behavior should continue to be monitored as NYC’s stop-and-frisk policy is rolled back to determine whether these associations are robust in the face of hopefully lower arrest rates among young Black and Latino men.

These findings have implications for future research and interventions. More research is needed to assess whether the differential associations observed vis-à-vis race/ethnicity are robust across different populations (i.e., older MSM, non-MSM populations) and different health behaviors. Arrest could function as a psychosocial correlate of sexual risk behavior for White and API YMSM and a structural correlate of HIV rates for Black and Latino YMSM. With respect to interventions, these findings highlight the need to target White and API YMSM at risk for arrest as well as those with a history of arrest with sexual risk reduction interventions.

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