

# Longitudinal Associations between Police Harassment and Experiences of Violence among Black Men Who Have Sex with Men in Six US Cities: the HPTN 061 Study

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Abstract Interactions with the police may result in police brutality, particularly for people of color. Black men who have sex with men (BMSM) face disproportionate risk of police contact and may experience elevated violence risk. We measured longitudinal associations between discriminatory police harassment (DPH) and subsequent risk of a range of interpersonal violence experiences, including intimate partner violence (IPV). In this study, we estimated associations between DPH motivated by racism, homophobia, or both, and subsequent violent experiences (being physically harassed, hit, threatened with weapons, and intimate partner violence) among BMSM. Bivariate and multivariable regression analyses were used to control for demographic and behavioral factors. Among 1160 BMSM included at

12-month follow-up, experiencing DPH motivated by racism and homophobia was associated with over four times the odds of being threatened with violence (AOR 4.85, 95% CI 3.20, 7.33), four times the odds of or experiencing violence defined as being punched, kicked, or beaten, or having an object thrown at them (AOR 4.51, 95% CI 2.82, 7.19), and nearly three times the odds of physical partner abuse (AOR 3.49, 95% CI 1.69, 7.19). Findings suggest that for BMSM, DPH is associated with the threat and experience of violence, with a dose-response relationship between DPH motivated by one or more causes. Given that BMSM are a population particularly vulnerable to both police harassment related to race and sexual orientation and violence coupled with stigma, additional research evaluating

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The Fenway Institute, Fenway Health and Department of Medicine, Beth Israel Deaconess Medical Center/Harvard Medical School, Boston, MA, USA mechanisms linking these associations is needed in order to develop additional supportive interventions.

**Keywords** Police harassment · Violence · Men who have sex with men (MSM)

## Introduction

Police encounters disproportionately affect racial/ethnic minority communities in many cities in the USA [1] with reports highlighting racial disparities in both police stops and arrests [2, 3]. During a recent 1-year period in San Diego, Black people were recorded as being stopped and arrested at a rate 219% higher than that of White people [4]. This disparity can diminish trust in the police among minority populations, leading to lower levels of crime reporting, which can become a threat to overall public safety [5]. This threat is particularly salient given that crime is typically more likely to occur in urban neighborhoods with higher ethnic minority populations due the high prevalence of disadvantaged individuals residing in many of these neighborhoods and higher rates of previously incarcerated individuals [6-8].

Black and other minority communities are often targeted with hyperpolicing, an aggressive form of policing involving intense police surveillance and designation of neighborhoods and their residents as potential or actual criminals [9]. For instance, under the "zero tolerance" policy enacted in Baltimore in 2005, police officers targeting low-income Black communities with high crime rates arrested over 100,000 people, with 17– 35% of those arrests interpreted as having no probable cause [10]. Research has also shown that law enforcement officers often stereotype Black men as "hypermasculine" and therefore view them to be more dangerous, leading to more violent interactions, necessitating more vigilant police surveillance in neighborhoods with higher proportions of Black men [11]. Among Black men, encounters with police are more likely to result in violent outcomes, while Black men make up only 6% of the US population, they accounted for 33% of the unarmed individuals killed by police in 2016 [12].

Sexual minority populations (which includes lesbian, gay, and bisexual individuals) often experience elevated levels of violence and harassment compared to heterosexual populations. A nationally representative survey among sexual minority adults in the USA found that

over 20% of respondents had reported a violent personal or property crime based on sexual orientation, and over 50% had reported at least one instance of verbal harassment [13]. A qualitative study among 30 BMSM in Philadelphia that examined how intersections of race, gender, and socioeconomic status influenced social inequality at the social and structural level found that one of the main reasons cited for structural inequalities was the high prevalence of police surveillance and harassment [14].

Studies on violent policing in communities show that these practices have many negative effects and not only pose a public health threat to residents but may also, as the multi-level (intersectionality) theory examining race/ethnicity and sexual orientation suggests [15], lead to violence at multiple levels, including at the community level [16] which may result in within-community violence [17]. Disproportionate arrest rates may therefore become a form of structural violence within an affected community [18, 19]; observational learning (behavior learned through others) [20] and stress may encourage local residents to be violent in their communities, since violence has become normalized. These practices, along with measures that include "stop and frisk," arrests for misdemeanor offenses, and intrusive searches and surveillance, also are linked to multiple health issues including depression, anxiety, and stress [21, 22]. There is evidence that the elevated stress and anxiety from events such as police encounters can lead to increased substance abuse [23, 24] as a coping mechanism for these stressors [25], which can in turn influence within-community violence risk [26–29].

Another violent outcome prevalent in these communities is intimate partner violence (IPV), which has been associated with police harassment via the mechanisms previously discussed (including harassment due to race, sexual orientation, or the intersectionality of both). It is well established that rates of IPV are high among MSM [30–32], including BMSM and in urban cities [33, 34]. Studies exploring barriers to reporting IPV identify fear and negative experiences with police as one of the main factors in underreporting these crimes to law enforcement [35]. Additionally, it has been established that sexual minorities, who face challenges due to elevated policing and police violence, are less likely to report domestic and IPV to police [36], making it difficult to address these issues.

Although the BMSM community is comprised of multiple additionally marginalized groups, studies



suggest that sexual minority status may be dominant when identifying self-perceived motivations of police harassment or police violence over other marginalized characteristics [37]. The perception that racial harassment may play a greater role than sexual harassment may be driven by the salience of race compared to sexual orientation among many BMSM [38, 39]. The extent to which police harassment among young BMSM is associated with subsequent negative violent outcomes (such as IPV) has received little attention in the literature, despite the common nature of hyperpoliced urban communities, where many BMSM live [11].

The objective of this study is therefore to examine the association between recent police encounters resulting in harassment due to race or sexual orientation (or the experience of both race and sexual orientation, termed "intersectional harassment") and subsequent violent experiences in a sample of BMSM from six urban cities in the USA. We hypothesize that BMSM experiencing both race and sexual orientation harassment as compared to only race or sexual orientation harassment will have the highest risk of subsequent violence outcomes. Our hypothesis is based on intersectionality theory [40, 41], which places emphasis on intersecting identities and power structures. We view intersectional harassment as a form of intersectional stigma, which is a topic increasingly being studied among BMSM.

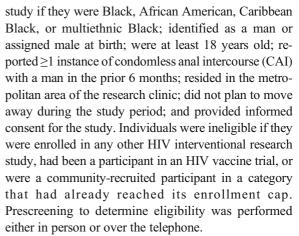
## **Materials and Methods**

Study Design and Participants

Data from the HIV Prevention Trials Network 061 (HPTN 061) study were used for the analysis. The study's enrollment and recruitment methods have been described comprehensively elsewhere [42]. HPTN 061 sought to examine the feasibility and efficacy of interventions to prevent the acquisition and transmission of HIV predominantly among BMSM. Enrollment took place from 2009 to 2010 in six US metropolitan cities: Atlanta, Boston, Los Angeles, New York City, San Francisco, and Washington DC.

Measures and Eligibility

Participants were recruited directly from the community or as sexual network partners referred by index participants. Individuals were eligible to participate in the



Institutional review boards at all participating institutions approved the study. Participants completed an audio computer-assisted self-interview (ACASI) at baseline, 6-month, and twelve-month follow-up that assessed demographic information, HIV risk behaviors, experiences of violence, internalized homophobia, and other characteristics. At these visits, participants were tested for sexually transmitted infections (STI) using blood, urine and rectal swabs, and for HIV using HIV rapid testing with confirmation of results via Western blot testing at the sites. Additional HIV testing was performed retrospectively for quality assurance at the HPTN Laboratory Center. During the 6-month visit, participants were also asked if they had any harassment from police (i.e., during the time since baseline).

*Police Harassment* At the 6-month visit, participants were asked about whether they had experienced harassment from police; if they answered yes, they were asked to report if they attributed the harassment by police due to their race, their sexual orientation, or if they felt the harassment was due to a combination of race and sexual orientation. Participants indicated how much they were bothered by this experience, with the following scale: (1) does not bother me at all, (2) only bothers me a little, (3) bothers me somewhat, (4) bothers me a lot, (5) bothers me extremely, (6) has never happened to me. For the purposes of analysis, responses that indicated the participant was bothered at any level were coded as "yes" for police harassment and those that responded that it had not happened to them/not bothered were coded a "no" for police harassment.

Violent Experiences At the follow-up 12-month visit, participants were asked about experiences of multilevel



violence in the previous 6 months (i.e., the time between the visit that asked about police harassment and the 12-month follow-up visit). The list of questions asked at follow-up are listed in Table 1. For the violence questions related to race or sexuality, the same scale used for police harassment was used for these questions, and for the purposes of analysis, responses that indicated the participant was bothered at any level were coded as "yes" for that violence outcome and those that responded that it did not bother them at all were coded a "no" for that violence outcome. Violence experiences due to race or sexuality were combined into a composite variable for any type of violent experience at the 12-month follow-up visit (related to either race, sexuality, or both race and sexuality).

For questions related to partner violence, the participant indicated how often each of the partner violence outcomes occurred, ranging from (1) no; (2) yes, but this has rarely happened; (3) yes, this has sometimes happened; (4) yes, this has happened often; and (5) yes, this has always happened. For analysis, responses that indicated the participant had experienced the partner violence at least once were coded as "yes" for that partner violence outcome and those that responded that it did not occur at all to them in the last 6 months were coded a "no" for that partner violence outcome.

Covariates Baseline covariates selected a priori based on prior research [42–44] included: age, Hispanic ethnicity, transgender status (measured as yes/no), health

Table 1 List of violent outcomes reported at 12-month follow-up visit

Questions related to race	Questions related to sexuality	Questions related to partner violence
Being threatened with physical violence because of race	Being threatened with physical violence because of sexuality	Ever been stalked by an intimate male partner
Being punched, kicked, or beaten, or having an object thrown at me because of race	Being punched, kicked, or beaten, or having an object thrown at me because of sexuality	Ever experienced physical abuse from an intimate male partner
Being threatened with a gun, knife, and other weapon because of race	Being threatened with a gun, knife, and other weapon because of sexuality	Ever pressured, forced, or intimidated by an intimate male partner

coverage (measured as yes/no), insufficient income (measured as yes/no), involvement in sex trade (measured as yes/no), MSM who also have sex with women (MSMW) (measured as yes/no), unstable housing (measured as yes/no), having social support (measured as yes/no), education (measured as greater than higher school vs less than high school), city of residence, incarceration history (measured as yes/no), hard drug use (measured as yes/no), weekly marijuana use (measured as yes/no), alcohol audit score (measured as a continuous scale), depression (measured as a continuous CES-D scale), history of experiencing racism (measured as yes/no), history of experiencing homophobia (measured as yes/no), HIV serostatus, history of any STI infection (measured as yes/no), and baseline reporting of each of the outcome violence variables (measured as yes/no).

Statistical Analysis The prevalence of baseline demographic information, police experiences, and violent encounters/experiences were calculated for the participants. We also summarized these characteristics for those included in the follow-up 12-month sample. In order to evaluate the association between police encounters at 6 months and subsequent violence measures at the 12-month follow-up, we used logistic regression to estimate adjusted odds ratios (OR) and associated 95% confidence intervals (CI), controlling for baseline experience of violence, multiple demographic, and selfreport behavioral characteristics (a priori variables) described above [42–44]. In order to examine the relationship between police harassment and each of the violent outcomes, we reported adjusted odds ratios associated with police harassment due to race, due to sexuality, or due to both race and sexuality (intersectional harassment). Stata 16 [45] was used for statistical analysis.

#### Results

Demographic Characteristics Of 1553 participants in the baseline sample, 1160 who responded to the questions on police harassment at the 6-month visit were included in the 12-month follow-up analysis. Participant demographics are described in Table 2. At baseline, the majority of participants were non-Hispanic Black and unemployed; approximately, 47.3% had at least a high school education, over 55.4% made less than \$20,000 per year, 9.5% reported unstable housing, and 60.1%



Table 2 Sample demographic, socioeconomic, and health background among baseline and follow-up

	Total sample $N$	Total sample %	12-month follow-up <i>N</i>	Follow- up %
	1553	100	1160	74.7
Age				
18–30	517	33.4	396	34.2
31–50	812	52.4	604	52.1
50 and over	220	14.2	159	13.7
Ethnicity				
Non-Hispanic	1430	92.3	1069	92.2
Hispanic	119	7.7	90	7.8
Education				
Greater than high school	732	47.3	596	51.5
High school	816	52.7	562	48.5
Insufficient incom	ie			
No	690	44.6	512	44.2
Yes	858	55.4	647	55.8
Unstable housing				
No	1401	90.5	1046	90.3
Yes	148	9.6	113	9.7
City of residence				
Washington DC	227	14.6	177	15.3
Atlanta	292	18.8	206	17.8
Boston	237	15.3	171	14.8
Los Angeles	283	18.2	203	17.5
New York City	310	19.9	253	21.8
San Francisco	204	13.1	150	12.9
Health coverage				
No	613	39.6	451	38.9
Yes	936	60.4	708	61.1
History of incarce	ration			
No	607	39.9	464	40.7
Yes	914	60.1	676	59.3
HIV serostatus				
Negative	1167	77.2	927	81.3
Positive	344	22.8	213	18.7
STI (any)				
Negative	1245	86.3	943	86.9
Positive	198	13.7	142	13.1
Depression				
No	759	56.8	588	58.1
Yes	578	43.2	424	41.9

<sup>\*</sup> Covariates with missing values may not add up to total N



reported a lifetime history of incarceration. A total of 43.2% reported a history of depression. We did not note significant differences in those included and those not included in the follow-up sample; the majority of demographic and other risk factors remained consistent among participants.

Table 3 provides prevalence of police harassment due to race, sexuality, or both race and sexuality at baseline, six-, and 12-month follow-up. A history of police harassment was reported by 86.1% of participants while six- and 12-month follow-up police harassment prevalence was 60.6% and 58.1%, respectively (note that these percentages are lower than baseline as they only capture the previous 6 months of experiences vs baseline, which captures lifetime history). Participants were more likely to report police harassment if they had at least high school education vs less than high school (65.7 vs 55.34, p<0.001), reported insufficient income vs not (67.7 vs 51.8%, p<0.001), reported unstable housing vs not (74.3 vs 59/2%, p=0.002), reported any history of incarceration vs not (67.8 vs 49.6%, p<0.001), were HIV negative vs positive (62.4 vs 54.9%, p=0.045), and those reporting a history of depression vs not (66 vs 54.3%, p<0.001)

Table 4 presents baseline, six-, and 12-month violence experiences (including violence due to race, violence due to sexuality, and intimate partner violence) at the six- and 12-month follow-up visits. For violent outcomes, self-reported prevalence remained relatively stable during follow-up (i.e., six- and 12-month follow-up visits).

Table 5 presents the bivariate and multivariate models examining police harassment due to race, sexuality, or intersectional harassment (due to race and sexual orientation) at 6 months, and subsequent violent events reported at the 12-month follow-up visit. Among those who answered the question on police harassment at the 6-month visit, 89.8% reported any type of police harassment. Having been harassed by police due to race or sexuality was associated with being threatened with physical violence due to race or sexuality (OR 1.86, 95% CI 1.23, 2.78); having been harassed by police due to race and sexuality (intersectional harassment) was associated with all outcomes related to violence due to race or sexuality (OR range 5.09-6.18). In multivariate analysis controlling for demographic and behavioral risk factors as well as baseline experiences of the violence outcome, we noted a positive association between having been harassed by police due to race or

Table 3 Police harassment at baseline (history) 6 and 12-month follow-up

Police harassment	Lifetime history (baseline survey) (%)*	Past 6-month history (6- month survey) (%)	Past 6-month history (12- month survey) (%)
No police harassment	13.9	39.4	40.9
Police harassment due to race or sexuality	23.5	14.9	13.7
Police harassment due to both race and sexuality	62.6	45.7	45.4

<sup>\*</sup> Baseline percentages include any lifetime history of police harassment vs 6- and 12-month columns which only report on previous 6 months of follow-up time

sexuality and being threatened with physical violence (AOR 1.80, 95% CI 1.05, 3.09). We also found statistically significant adjusted odds ratios for all outcomes related to violence due to race and sexuality (intersectional harassment) (AOR range 4.24–4.85).

Table 6 shows the results of the bivariate and multivariable models examining police harassment due to race, sexuality, or intersectional harassment (due to race and sexual orientation), and subsequent intimate partner violence reported at the 12-month follow-up visit. Having been harassed by police due to race and sexuality (intersectional harassment) was associated with all intimate partner violence outcomes (OR range 2.69–2.83). In multivariate analysis, having been harassed by police due to race and sexuality (intersectional harassment) was associated with experiencing physical abuse from an intimate male partner (AOR 3.49, 95% CI 1.69, 7.19).

## Discussion

This study is one of the first longitudinal studies to report on associations between recent exposure to police harassment and subsequent experiences of violence, including IPV, in a population-based sample of BMSM in the USA. Specifically, recent police harassment was strongly associated with experiencing physical violence

**Table 4** Violence and partner violence experiences at baseline (history) 6- and 12-month follow-up

(history) 6- and 12-month follow-up				
	Lifetime history (baseline survey) (%)*	Past 6-month history (6- month survey) (%)	Past 6-month history (12- month survey) (%)	
Violence due to race				
Being threatened with physical violence because of race	64.4	40.8	39.1	
Being punched, kicked, or beaten, or having an object thrown at me because of race	50.2	32.3	31.4	
Being threatened with a gun, knife, and other weapon because of race Violence due to sexu	45.4	31.1	29.3	
	-			
Being threatened with physical violence because of sexuality	63.6	42.1	40.1	
Being punched, kicked, or beaten, or having an object thrown at me because of sexuality	50.6	32.3	31.6	
Being threatened with a gun, knife, and other weapon because of sexuality Partner violence	42.0	29.9	29.3	
Ever been stalked by an intimate male partner	26.3	9.6	9.4	
Ever experienced physical abuse from an intimate male partner	28.8	8.7	9.5	
Ever pressured, forced, or intimidated by an intimate male partner	23.6	7.8	7.9	

<sup>\*</sup> Baseline percentages include any lifetime history of police harassment vs 6- and 12-month columns which only report on previous 6 months of follow-up time

including being abuse by an intimate partner. Violence in the context of contact with law enforcement has been



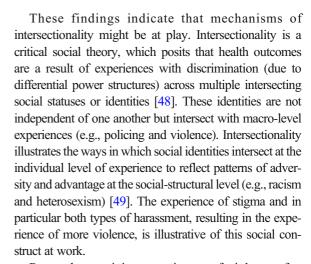
**Table 5** Bivariate and multivariable logistic regression of past 6-month police harassment (measured 6 month follow-up survey) and past 6-month violence experiences (measured 12-month follow-up survey)

	N (%)	OR (95% CI)	AOR (95% CI)*	
Being threatened with physical violence because of race,	sexuality, or both (N=4	133)		
No police harassment	74 (17.9)	1 (Ref)	1 (Ref)	
Police harassment due to race or sexuality	46 (29.5)	1.86 (1.23, 2.78)	1.80 (1.05, 3.09)	
Police harassment due to both race and sexuality	273 (60.3)	6.18 (4.57, 8.35)	4.85 (3.20, 7.33)	
Being punched, kicked, or beaten, or having an object thrown at me because of race, sexuality, or both ( <i>N</i> =341)				
No police harassment	71 (17.1)	1 (Ref)	1 (Ref)	
Police harassment due to race or sexuality	35 (22.2)	1.38 (0.88, 2.17)	1.36 (0.71, 2.60)	
Police harassment due to both race and sexuality	235 (51.9)	5.23 (3.82, 7.18)	4.51 (2.82, 7.19)	
Being threatened with a gun, knife, and other weapon because of race, sexuality, or both (N=317)				
No police harassment	66 (15.9)	1	1	
Police harassment due to race or sexuality	28 (17.7)	1.13 (0.69, 1.84)	0.97 (0.51, 1.85)	
Police harassment due to both race and sexuality	223 (49.2)	5.09 (3.69, 7.03)	4.24 (2.69, 6.71)	

<sup>\*</sup> Adjusted for age, ethnicity, transgender status, health coverage, insufficient income, involvement in sex trade, MSM who also have sex with women (MSMW), unstable housing, social support, education, city of residence, incarceration history, hard drug use, weekly marijuana use, alcohol audit score, depression, history of experiencing racism, history of experiencing homophobia, HIV serostatus, history of any STI infection, and baseline reporting of each of the outcome violence variables

documented historically in current US contexts across numerous US settings [10, 22, 46, 47]. The current study provides empirical evidence to suggest that discriminatory policing is a clear and consistent risk factor for violence in among BMSM at the population level, a group facing disproportionate violence risk due to being both racial/ethnic minority and sexual minority status. The results highlight the need to reduce the exposure of aggressive policing in minority communities including among BMSM to reduce violence exposure in this group, a deleterious outcome which has clear implications for a range of adverse well-being, mental health, and STI/HIV infection risk outcomes.

Reporting police harassment due to both race and sexual orientation was associated with over four times the odds of a range of violent experiences, while police harassment perceived to be motivated by either race of sexual identity alone was associated with subsequent violent experiences, those who were exposed to both forms of discrimination faced the highest odds of violence. These results demonstrate the additive effects of racist and homophobic actions on the part of the police in enhancing risks for subsequent violence/victimization in BMSM. While harassment due to race or sexual orientation was associated with several negative outcomes, the intersection of both harassment experiences appeared to be most strongly associated with many violent experiences.



Research examining experiences of violence after police harassment or negative police encounters is lacking in the literature, with most of the research conducted in the context of cross-sectional studies primarily examining how police encounters affect health conditions including mental health and infectious diseases such as HIV [50–52]. Previous studies among racial/ethnic and sexual minorities have also found important ramifications associated with police harassment and negative police encounters, including trauma and anxiety [21], sexual harassment [13], and community fragmentation [10]. In our study, we specifically address how police



Table 6 Bivariate and multivariable logistic regression of police harassment and subsequent intimate partner violence experiences

	N (%)	OR (95% CI)	AOR (95% CI)*
Ever experienced physical abuse from an intimate male partner ( <i>N</i> =97)			
No police harassment	23 (5.5)	1 (Ref)	1 (Ref)
Police harassment due to race or sexuality	13 (8.2)	1.54 (0.76, 3.11)	2.42 (0.98, 5.93)
Police harassment due to both race and sexuality	61 (13.6)	2.69 (1.63, 4.43)	3.49 (1.69, 7.19)
Ever pressured, forced, or intimidated by an intimate male partner ( <i>N</i> =80)			
No police harassment	18 (4.3)	1 (Ref)	1 (Ref)
Police harassment due to race or sexuality	11 (7.0)	1.66 (0.76, 3.60)	2.28 (0.79, 3.68)
Police harassment due to both race and sexuality	51 (11.4)	2.83 (1.63, 4.94)	1.94 (0.81, 4.67)

<sup>\*</sup> Adjusted for age, ethnicity, transgender status, health coverage, insufficient income, involvement in sex trade, MSM who also have sex with women (MSMW), unstable housing, social support, education, city of residence, incarceration history, hard drug use, weekly marijuana use, alcohol audit score, depression, history of experiencing racism, history of experiencing homophobia, HIV serostatus, history of any STI infection, and baseline reporting of each of the outcome violence variables

encounters and police harassment, in urban locations, are associated with subsequent experiences of violence, including IPV.

These findings are similar to reports that have shown elevated levels of violence faced by sexual minority populations. For instance, a report on young sexual minority populations in the USA found higher levels of police harassment compared to heterosexual youth and reported higher levels of suicidal ideation and suicide attempts in the past year [53]. There are also implications for HIV infection, considering that there have been a number of studies that have found associations between exposure to violence, including community violence, and HIV-related risk behaviors among youth including MSM populations [54–56].

Considering that our results suggest that negative police encounters and police harassment are associated with violence experiences among BMSM, future interventions aimed at reducing police harassment due to race or sexual orientation among minority populations may prevent future experiences of both physical violence and IPV and may also reduce other negative harms such as anxiety, stress, and depression. It is important that law enforcement be prepared to address the needs of sexual minority populations, while providing information on services that are culturally appropriate for BMSM populations, including referrals to counselors for those experiencing family or partner violence. Finally, as BMSM face dual stigma related to race/ethnicity as well as sexual orientation, better understanding of how these stigmas are self-perceived and reported is needed. When these two stigma co-exist, it is often the most overt identity that plays a greater role in self-perceived causes of police harassment; qualitative findings have indicated the primacy of identifying as Black before identifying as a sexual minority [37]. Note that in our sample of BMSM, among those reporting police harassment due to race or sexuality, only 3% reported harassment due to sexuality, compared to 97% who reported harassment due to race only. Given the disproportionate burden of adverse health outcomes experienced by Black MSM, ranging from HIV and STI to behavioral health challenges and violence, further research in how to mitigate these inequities is urgently needed.

## Limitations

There are several important limitations of the current study. First, we cannot rule out residual confounding given exposure to both policing and violence typically co-occur within the context of structural inequalities and social disadvantage. Specifically, higher rates of hyperpolicing and reports of violence are usually concentrated in low resource neighborhoods, locations with significant economic disadvantage, and high levels of unemployment (of note, 54% of or BMSM sample was unemployed, compared to approximately 8–10% for the general population in the USA during the period of data collection) [57].



Despite the potential for residual confounding, the design of this study was among the most robust to date given the longitudinal data structure and the robust set of confounding factors included in attempts to estimate causal effects of policing on violence. An additional concern was low power in some strata of police harassment to isolate effects of particular harassment forms. Specifically, less than 20% of the participants felt that they had been harassed by the police due to their sexual orientation alone. This small number prevented meaningful analysis of associations between harassment due to sexuality alone and subsequent violent outcomes. In addition, many of the variables collected were based on self-report, there may have been recall bias or social desirability bias in some of the responses, particularly those related to substance use and sexual risk behaviors. As this is a sample of predominately BMSM, these findings may not be generalizable to non-MSM populations.

## Conclusion

To our knowledge, this study is one of the first to specifically assess police harassment in relation to experiences of violence, including partner violence, among a sample of BMSM in the USA. The results from this study indicate the need for more research to better understand the intersection of harassment due to race or sexual orientation, and how these harassment types may be synergistically associated with experiences of violence, including intimate partner violence, among BMSM.

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