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## **SUBSTANCE USE AMONG SEXUAL AND GENDER MINORITIES: ASSOCIATION WITH POLICE DISCRIMINATION AND POLICE MISTRUST**

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### **ABSTRACT**

We investigated associations between experiences with police discrimination, police mistrust, and substance use in a convenience sample of 237 sexual and gender minority (SGM) adults in California. In a cross-sectional survey, collected between January 2016 and July 2017, participants reported substance use, lifetime experiences with SGM-related police discrimination, police mistrust, demographics and SGM visibility. In adjusted logistic regression models, we found a positive association between lifetime police discrimination and past-two-week heavy episodic drinking. Police mistrust also was positively associated with past-month marijuana use. Several significant interactions between lifetime police discrimination or police mistrust with other socially stigmatized identities including being African American, insecure housing, and being a gender minority on a few substance use outcomes suggest that effects of police discrimination and mistrust on substance use are stronger among participants with multiple stigmatized identities. Results suggest the importance of policies and interventions that focus on eliminating police discrimination and increasing police legitimacy to reduce risk of substance use among SGM individuals.

**KEY WORDS:** Gay/lesbian/bisexual/transgender; Substance Use; Police discrimination; Stigma; Intersectionality.

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## INTRODUCTION

Sexual and gender minority (SGM) adults experience tremendous inequities in health compared to cisgender, heterosexual adults, including increased risk of tobacco, alcohol, and other substance use and related problems (Johnson et al. 2016, Green and Feinstein 2012, Branstrom, Hatzenbuehler, and Pachankis 2016, Hatzenbuehler, Corbin, and Fromme 2008, Dermody et al. 2014, Hatzenbuehler, McLaughlin, and Slopen 2013, Blosnich, Lee, and Horn 2013). For example, estimates from the 2015 California Adult Tobacco Survey (California Department of Public Health 2015) found that sexual minority adults smoke more than twice as much as heterosexual adults in the state (27.4%, 12.9% respectively). Also, data from a US nationally representative sample of adults (18-49 years old) showed that the unadjusted prevalence of substance use and disorder were consistently higher among SMs relative to their same-age and same-gender heterosexual peers (Schuler et al. 2018). For example, in young adults (18-25 years old), rates of past month heavy episodic drinking among lesbian (51%) and bisexual women (42%) were significantly higher compared to heterosexual young adult women (36%). In adults ages 35-49 years old, rates of past year marijuana use among gay men (27%) and bisexual men (24%) were significantly higher compared to heterosexual men (14%). Among gender minorities, a recent national study showed that transgender adults reported higher past 30-day tobacco use (39.7%) compared with cisgender adults (25.1%) (Buchting et al. 2017). In another US study, gender nonconforming people had about twice the odds of heavy drinking and binge drinking compared to cisgender women, and trans women were more likely to binge drink than cisgender women (Azagba, Latham, and Shan 2019).

In accordance with minority stress models, the stress to which individuals from stigmatized social categories are exposed contributes to adverse outcomes including substance

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use and related problems (Meyer 2003, Link and Phelan 2014). Stigma is the social process of labeling, stereotyping, and rejecting human difference as a form of social control, and it operates at three levels: structural (e.g., societal norms, laws, and institutional limited resources), interpersonal (e.g., verbal harassment and physical violence), and individual (e.g., expectations of rejection and hiding and concealing sexual or gender identity) (Link and Phelan 2014, Hatzenbuehler et al. 2014). Research suggests that SGM adults' experiences with stigma and discrimination from different sources (e.g., health care providers, families, schools) can lead to behaviors that are health compromising, including tobacco and other substance use and misuse (Pachankis, Hatzenbuehler, and Starks 2014, Burgess et al. 2007, Hatzenbuehler et al. 2015, Duncan, Hatzenbuehler, and Johnson 2014, Coulter et al. 2018, McCabe et al. 2010, Huebner, Thoma, and Neilands 2015, Lee et al. 2016, Mereish, O'Cleirigh, and Bradford 2014, Pascoe and Smart Richman 2009, Reisner et al. 2015). For example, a national study of sexual minority adults found that the odds of past-year substance use disorders were nearly 4 times greater among adults who reported past year discrimination compared to those who did not report any discrimination (McCabe et al. 2010). Though research is continuing to expand on the relationship between SGM stigma and health inequities, more attention is needed on identifying the different sources of SGM stigma that are present in the everyday lives of SGM populations to direct prevention efforts towards these sources of stigma and ultimately alleviate inequities in health.

The police, as a potential source of both interpersonal and structural stigma, has yet to be sufficiently investigated despite recent data showing that discrimination and harassment by law enforcement officers based on SGM identities is pervasive in the United States (Mallory, Hasenbush, and Sears 2015). Previous US research has shown that SGM adults have long been

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and continue to be the recipients of discriminatory treatment by law enforcement, including profiling, false arrests, harassment, and verbal and physical assault (Mallory, Hasenbush, and Sears 2015, Dario et al. 2019, Ritchie and Jones-Brown 2017, Cain 1993). For example, a nationwide survey of 2,376 LGBTQ or HIV positive participants found that among those who reported a personal experience with law enforcement in the past 5 years, 25% reported at least one type of police misconduct or harassment such as verbal assault, being accused of an offense they did not commit, sexual harassment or physical assault (Lambda Legal 2015).

Not only does homophobia and transphobia manifest in the direct experiences that SGM adults have with law enforcement, but it may also contribute to reluctance to call the police due to mistrust. Research suggests widespread beliefs among SGMs that the police exhibit little interest in responding to their calls for assistance and exhibit a general disinterest in their needs (Dwyer 2011, Williams and Robinson 2004, Farrell and Cerise 2007, Jones and Newburn 2001, Department of Justice Report 2011). For example, SGM youth report that when the police are called, they show little concern in pursuing the complaint and often fail to take further action (Bernstein and Kostelac 2002, Berrill 1992, Peel 1999, Williams and Robinson 2004, Wolff and Cokely 2007, Buhrke 1996). Under-policing and related perceptions are a critically important issue given evidence on the extent to which SGM individuals are subjected to violence and victimization and may need police assistance and protection (Edwards and Sylaska 2013, Dank et al. 2014, Porter and Williams 2011, Freedner et al. 2002, Halpern et al. 2004, Messinger 2011, Walters, Chen, and Breiding 2013).

Taken together, previous research has suggested the importance of SGM discrimination for understanding health inequities for SGM adults as well as the problematic relationship between the police and SGM groups. However, scant research has investigated the public health

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consequences of discriminatory policing for SGM adults including substance use. To address this gap in the literature, we examined how experiences with police discrimination and perceived police mistrust are associated with SGM substance use. Moreover, since limited research has shown that overlapping stigmatized identities increase experiences with discrimination, stress, and unhealthy behaviors (Meyer 2003, McCabe et al. 2010, Diaz et al. 2001, Mereish and Bradford 2014, Lipperman-Kreda, Antin, and Hunt 2018), we also considered effects of stigma for those with multiple stigmatized social identities (e.g., race and economic disadvantage). Intersectionality is a framework that emphasizes how people's multiple social identities intersect and intensify oppression and inequities for some subgroups of people (Bowleg et al. 2013, Crenshaw 1991). Therefore, in the current study, we tested the following hypotheses:

1. Lifetime experience of police discrimination and police mistrust will be positively associated with substance use including daily cigarette smoking, past month alcohol use, past two-week heavy episodic drinking, and past month marijuana use.
2. The associations between substance use and police discrimination and police mistrust will be moderated by other socially stigmatized identities including being African American, being a gender minority (GM), and economic disadvantage, such that these associations will be stronger among African American SGMs, GMs, and economically-disadvantaged SGMs compared with non-African American SGMs, sexual minorities (SM) only, and non-economically-disadvantaged SGMs.

## METHODS

### Study Sample and Methods

Cross-sectional survey data for the study were collected between January 2016 and July 2017 as a complement to a larger qualitative study on SGM adults and smoking stigma. The

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study targeted sexual and gender minority current or former cigarette smokers in California (19-65 years old), oversampling African American participants. We used a multi-tiered approach to recruit participants including posting messages on social media sites catering to SGM adults (e.g., Facebook, twitter), posting flyers in places and organizations where SGM adults may be highly represented (e.g., community-based organizations, bars, coffee shops, clothing stores, universities, and community colleges), and by referrals. We limited the number of referrals from any one participant to three to minimize selection bias. Twenty-two participants were recruited through referrals.

During recruitment, we briefly described the study to participants and screened for eligibility (i.e., age, living in California, English speaker, sexual and gender identity, and cigarette smoking). We used the following questions to assess sexual and gender identity. First, in addition to asking participants about sex assigned at birth, we asked whether they consider themselves (1) a man, (2) a woman, (3) transgender, (4) genderqueer, or (5) other. Participants could select more than one option. Those who identified as transgender were also asked which of the following applies to them including (1) transgender, male to female (2) transgender, female to male (3) transgender, gender non-conforming, or (4) other. To assess sexual identity, we asked participants if they had to select just one identity, which would most closely fit how they self-identify. Response options included (1) gay/lesbian, (2) bisexual, (3) queer, (4) asexual, (5) straight/heterosexual, or (6) other. SGM adults included all sexual and gender identities other than straight/heterosexual, cisgender man or woman. Participants were also screened for smoking at least 100 cigarettes in their lifetime and either smoking cigarettes in the past 30 days (i.e., current smokers) or not (i.e., former smokers).

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Prior to the qualitative interviews, participants were asked to respond to a 30-minute online survey. The survey was offered in English and administered through SurveyGizmo.com. We generated a unique URL for each survey entry and sent the link to participants via email or text. Within five days of receiving the initial invitation, we emailed or texted a reminder notice and made a reminder phone call to all eligible participants who had not completed the online survey. A second reminder was sent before the in-person interview to improve response rates. Participants who did not complete the survey prior to the interview were asked to complete it at the beginning of the interview. Participants were compensated for completing the online survey. Institutional review board approval was obtained prior to implementation of the study.

Overall, survey data were collected from 295 SGM current and former smokers, of whom 200 also participated in open-ended in-person interviews. The current analysis is based on survey data from 237 participants who provided complete data for all study measures ( $M$  age = 37.0 years,  $SD=12.6$ ). Of the 237 participants, 143 (60%) identified as a sexual minority only and 94 (40%) identified as gender minority only or both a sexual and a gender minority. Sample characteristics are in Table 1.

#### Measures

*Substance use.* We included four outcome measures of substance use. First, to measure daily cigarette smoking, we asked participants “During the past 30 days, on how many days did you smoke part or all of a cigarette?” Responses to this item were coded to indicate past-month daily cigarette smoking (0=No, 1=Yes). Second, to measure past-month alcohol use, we asked participants if they have ever had a drink of alcohol in their life. A drink of alcohol was defined as “a 12-ounce glass, bottle or can of beer, a 5-ounce glass of wine, a one-ounce shot of liquor such as vodka, whiskey, gin, or malt liquor.” Those who responded yes were then asked,

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“During the past 30 days, on how many days did you drink any kind of alcoholic beverage -- a glass of beer, wine, or a drink with hard liquor?” Responses to this item were coded to indicate any past-month alcohol use (0=No, 1=Yes). Third, we asked participants to report any heavy episodic drinking in the past two weeks. Specifically, we asked lifetime alcohol users, “In the last two weeks, on how many days did you have five or more drinks in a row?” Responses to this item were coded to indicate any past two-week heavy episodic drinking (0=No, 1=Yes). Finally, we considered past month marijuana use by asking participants “During the past 30 days, on how many days did you use marijuana or hashish?” Responses to this item were coded to indicate any past-month marijuana use (0=No, 1=Yes).

*Experiencing police SGM discrimination in lifetime.* We asked participants to indicate whether they have had any of the following experiences in their interactions with the police because they were assumed to be a part of LGBTQ+ communities: (1) officers generally have treated me with disrespect, (2) officers have harassed me, (3) officers have physically assaulted me, (4) officers have sexually assaulted me, (5) other (Grant et al. 2011). We used responses to these items to indicate any lifetime experience with police SGM discrimination (0=No, 1=Yes).

*Police mistrust.* Using an adapted measure (Grant et al. 2011), we asked participants “In general, as a person who is LGBTQ+, how comfortable do you feel seeking help from the police?” Response options were on a five-point Likert scale ranging from very comfortable to very uncomfortable. We recoded these responses to indicate feeling uncomfortable or somewhat uncomfortable seeking help from the police (0=No, Yes=1).

*Demographics.* Participants reported their age, race, and ethnicity. Age was treated as a continuous measure, we coded race as being African American (yes or no), and race/ethnicity as being Non-Hispanic White (yes or no) to test study hypotheses. Also, we asked participants

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whether in the past 30 days they have spent at least one night (1) in a shelter, (2) in a public space not intended for sleeping (e.g., bus station, car, abandoned building), (3) on the street or anywhere outside (e.g., park, sidewalk), (4) temporarily doubled up with a friend or family member, (5) in a temporary housing program, and (6) in a welfare or voucher hotel/motel. We used responses to these items to indicate any past month housing insecurity.

*SGM visibility.* Since some SGM individuals may experience more discrimination because of visible characteristics that signal to others sexual or gender minority identities (Maddox 2004, Tomori et al. 2018), we asked participants to indicate how often people who do not know them assume that they are SGM based on their appearance or affect. Possible response options were (1) never, (2) occasionally, (3) sometimes, (4) most of the time, or (5) always.

#### Data Analysis

Analyses were limited to participants who provided complete data for all study measures ( $N=237$ ). Descriptive statistics were used to describe the study sample and measures. To examine hypothesis 1, we used logistic regression models to investigate associations of lifetime experiences with police SGM discrimination and police mistrust with daily cigarette smoking (Model 1), past-month alcohol use (Model 2), past-two-week heavy episodic drinking (Model 3), and past-month marijuana use (Model 4). All these models controlled for a range of demographic and individual characteristics including age, race/ethnicity, gender minority identity, SGM visibility, and economic disadvantage. Further, to examine hypothesis 2, we investigated interactions of other stigmatized social identities (i.e., African American, gender minority, and economic disadvantage) and lifetime experiences with police SGM discrimination and police mistrust on substance use outcomes, controlling for all demographic and individual characteristics noted above. Analyses were conducted with Stata version 15.0.

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## RESULTS

### Description of Study Sample and Measures

Sample characteristics are in Table 1. Participants were 37.0 years old on average ( $SD=12.6$ ), 44.0 percent were African American, 30.0 percent were non-Hispanic White, and 32.0 percent reported any past-month housing insecurity. Focusing on police SGM discrimination, 45.0 percent of study participants reported experiencing SGM discrimination in their interactions with the police during their lifetime. Moreover, 66.7 percent reported that they feel uncomfortable or somewhat uncomfortable seeking help from the police. Although a chi squared test of independence showed a relationship between mistrusting the police and any lifetime experience with police discrimination ( $X^2(1, n = 237) = 23.08, p < .001.$ ), among those who did not report lifetime experiences with police discrimination ( $n=131$ ), more than half reported police mistrust ( $n=70$ ). In terms of substance use, 34.0 percent of participants were daily cigarette smokers, 81.0 percent reported any past month alcohol use and 65 percent reported past two-week heavy episodic drinking, and 69.0 percent reported any past-month marijuana use.

### Hypothesis 1

Results of logistic regression models to investigate associations of police discrimination and mistrust with substance use are in Table 2. Controlling for demographics and SGM visibility, we found a significant association between any lifetime police discrimination and past two-week heavy episodic drinking (aOR= 1.88,  $p \leq 0.05$ ). Also, we found that police mistrust was positively associated with past-month marijuana use (aOR=2.18,  $p \leq 0.05$ ). No other main effects were found between the main predictors and substance use. Age was positively associated with daily cigarette smoking and heavy episodic drinking but negatively associated

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with current alcohol use. Being a gender minority was negatively associated with daily cigarette smoking and past-month marijuana use, but being African American was associated with 194% increase in the likelihood of past month marijuana use. Finally, heavy episodic drinking was positively associated with housing insecurity.

## Hypothesis 2

Tests of moderating effects of African American, gender minority, and housing insecurity indicated that the association between any lifetime police discrimination and past two-week heavy episodic drinking differed by African Americans and non-African Americans such that the association was stronger among African American participants (aOR = 4.77; 95% CI = 1.21, 18.84;  $p \leq 0.05$ ). Similarly, results showed that the association between any lifetime police discrimination and past month alcohol use was significantly stronger among participants who reported housing insecurity (aOR = 8.65; 95% CI = 1.41, 52.85;  $p \leq 0.05$ ) compared to those who did not report housing insecurity. Finally, being a gender minority moderated the association between police mistrust and past-month daily cigarette smoking such that daily cigarette smoking was positively associated with police mistrust among gender minorities compared to sexual minorities only (aOR = 5.12; 95% CI = 1.03, 25.53;  $p \leq 0.05$ ). No other moderation effects were observed.

## DISCUSSION

Though the problematic relationship between the police and SGM groups is well known (Lambda Legal 2015, Cain 1993, Mallory, Hasenbush, and Sears 2015), scant research has considered the public health consequences of discriminatory policing for SGM adults. Given the relationship between stigma and substance use (Pachankis, Hatzenbuehler, and Starks 2014, Burgess et al. 2007, Hatzenbuehler et al. 2015, Duncan, Hatzenbuehler, and Johnson 2014,

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Coulter et al. 2018, McCabe et al. 2010, Huebner, Thoma, and Neilands 2015, Lee et al. 2016, Mereish, O'Cleirigh, and Bradford 2014, Pascoe and Smart Richman 2009, Reisner et al. 2015), our study sought to consider to what extent experiences with SGM discrimination at the hands of the police and police mistrust were associated with substance use among SGM adults. Our results suggest that experiences with SGM discrimination from the police and police mistrust are associated with substance use among SGM adults and that multiple, intersecting stigmatized identities may strengthen the associations.

The police are clearly not the only source of SGM stigma that may contribute to inequities in substance use among SGM adults. Other sources of SGM stigma, such as service providers, workplaces, schools, or medical providers, have been associated with substance use and misuse among SGM individuals (Coulter et al. 2018, Coulter et al. 2016, Pachankis and Branstrom 2018). Nevertheless, concentrating attention on the police as a source of SGM stigma may be critically important for protecting SGM communities against other sources of SGM stigma, which would ultimately improve their overall health and well-being including reducing their risk of substance use and related problems. Existing research illustrates that due to discriminatory treatment by the police, SGM adults may fail to report criminal victimization due to fear of the way police might treat them (Briones-Robinson, Powers, and Socia 2016, Herek, Cogan, and Gillis 2002). Therefore, the police may exacerbate SGM discrimination both directly through homophobic and transphobic attitudes that lead to discriminatory treatment of SGM individuals, as well as indirectly through their failure to protect SGM individuals from other sources of SGM discrimination and victimization due to police mistrust. Collectively, these issues may exacerbate the stigmatization of SGM communities and compromise SGM health.

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The police are tasked “to protect and to serve” their communities (Lambda Legal 2015, Los Angeles Police Department), and yet their ability to do so is dependent upon whether communities perceive that the police “ought to be obeyed,” or are legitimate (Tyler 2004). The perceived legitimacy of the police is shaped by the actions of the police, such that supportive and respectful treatment from the police increases perceptions of police legitimacy, and conversely, problematic and disrespectful treatment decreases legitimacy (Dario et al. 2019). Arguably, widespread discriminatory treatment leads to police mistrust, thus eroding police legitimacy (Mallory, Hasenbush, and Sears 2015, Dario et al. 2019). Working to improve the legitimacy of the police among SGM communities by ameliorating SGM discriminatory treatment and improving police trust could have far reaching implications for reducing the stigmatization of SGM identities and subsequently improving the health of SGM individuals, including reducing inequities in substance use and related problems. Importantly, criminological research on policing suggests a number of ways to improve police legitimacy including (1) screening for homophobic and transphobic (as well as racist and sexist) attitudes in law enforcement hiring practices, (2) enacting non-discrimination policies and profiling bans that include protections for sexual and gender minorities and provide clear instructions to officers who respond to incidents involving SGM community members, (3) requiring ongoing SGM training for all law enforcement personnel—an effort that has recently been enacted statewide in CA, and (4) institutionalizing oversight, such as codifying procedures and appointing SGM community liaisons to address discrimination and harassment complaints as well as facilitate contact between the police and SGM community members (Dario et al. 2019, Lambda Legal 2015, Mallory, Hasenbush, and Sears 2015, Nalagan 2018, Rose 2003).

## LIMITATIONS

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This study should be interpreted in light of the following limitations. First, our data were drawn from a non-probability sample of participants in California, so study results are not necessarily representative of SGM adults in California and do not necessarily represent other states. It will be important to replicate this study in a representative sample and in other states. Second, our study did not have the power to consider specific sexual and gender minority groups in the analysis. This is important considering research showing a high prevalence of tobacco, alcohol, and other substance use among specific SGM groups such as transgender people, and bisexual or sexual minority women (Burgard, Cochran, and Mays 2005, Fallin et al. 2015, McCabe et al. 2010, Schuler et al. 2018). Third, in this study we oversampled African Americans and, due to power issues, could only focus on this racial group. Future studies should investigate whether similar patterns occur in other racial or ethnic groups. Fourth, our self-reported measures of experiences with police discrimination may have been limited by recall and social desirability biases and focused only on SGM-related discrimination. Finally, previous research has examined other important risk and resilience factors for explaining inequities in substance use among SGM individuals (Talley et al. 2016, Lee et al. 2020). As such, though our analysis is theory-driven, we cannot make causal claims due to both the cross-sectional design of the study and our inability to rule out such alternative explanations (Aneshensel 2012).

## CONCLUSION

Experiences with SGM discrimination from the police and police mistrust are associated with substance use among SGM adults, and multiple intersecting stigmatized identities may strengthen these associations. These results suggest the importance of policies and interventions designed to eliminate police discriminatory treatment and improve police legitimacy to reduce risk of substance use and related problems among SGM adults.

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Table 1: Sample characteristics and descriptive statistics of study measures ( $n=237$ )

	Percent	Mean (SD)	Range
Substance use			
Daily cigarette smoking	34.2		
Past-month alcohol use	81.0		
Past-two-week heavy episodic drinking	65.0		
Past-month marijuana use	69.0		
Police discrimination, lifetime	45.0		
Police mistrust	66.7		
Sexual and gender identities			
Sexual minority only	60.0		
Gender minority or both sexual and gender minority	40.0		
Perceived SGM visibility		3.0 (1.2)	1-5
Age		37.0 (12.6)	19-65
Being African American	44.3		
Non-Hispanic White	30.0		
Past-month housing insecurity	32.1		

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Table 2: Results of logistic regression models to investigate associations of police discrimination and mistrust and substance use controlling for demographic and individual characteristics ( $N=237$ ), aOR (95% CI).

	Model 1: Daily cigarette smoking <sup>1</sup>	Model 2: Alcohol use <sup>1</sup>	Model 3: Heavy episodic drinking <sup>2</sup>	Model 4: Marijuana use <sup>1</sup>
Any lifetime police discrimination	0.79 (0.42, 1.49)	1.27 (0.58, 2.77)	1.88 (1.00, 3.55)*	1.11 (0.57, 2.16)
Police mistrust	1.87 (0.98, 3.58)	0.76 (0.35, 1.63)	0.83 (0.43, 1.59)	2.18 (1.14, 4.16)*
SGM visibility	0.94 (0.74, 1.19)	0.97 (0.72, 1.31)	0.77 (0.59, 1.00)*	1.13 (0.87, 1.46)
Age	1.02 (1.00, 1.05)*	0.96 (0.93, 0.98)**	1.03 (1.00, 1.05)*	0.98 (0.96, 1.01)
Gender minority	0.46 (0.23, 0.86)*	1.20 (0.56, 2.57)	1.22 (0.65, 2.31)	0.46 (0.24, 0.89)*
African American	1.62 (0.78, 3.34)	0.99 (0.41, 2.42)	1.37 (0.66, 2.83)	2.94 (1.36, 6.34)**
Non-Hispanic White	0.94 (0.43, 2.04)	0.87 (0.34, 2.18)	0.62 (0.29, 1.32)	1.23 (0.58, 2.61)
Housing Insecurity	1.11 (0.11, 1.31)	1.43 (0.63, 3.28)	2.27 (1.13, 4.52)*	1.21 (0.61, 2.42)

<sup>1</sup> Past-month

<sup>2</sup> Past-two-week

\*  $p \leq 0.05$ ; \*\* $p \leq 0.01$

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