

Sex Res Social Policy. Author manuscript; available in PMC 2015 March 01.

Published in final edited form as:

Sex Res Social Policy. 2014 March 1; 11(1): 1–10. doi:10.1007/s13178-013-0139-0.

# Sexuality-related work discrimination and its association with the health of sexual minority emerging and young adult men in the Detroit Metro Area

José A. Bauermeister, MPH, PhD<sup>1</sup>, Steven Meanley, MPH<sup>1</sup>, Andrew Hickok, MPH<sup>1</sup>, Emily Pingel, MPH<sup>1</sup>, William VanHemert, MSW<sup>2</sup>, and Jimena Loveluck, MSW<sup>3</sup>

<sup>1</sup>The Center for Sexuality & Health Disparities, 300 North Ingalls – 9<sup>th</sup> Floor, Wing D. University of Michigan School of Public Health, Ann Arbor, MI 48109. United States

<sup>2</sup>AIDS Partnership Michigan, 2751 E. Jefferson Ave, Suite 301, Detroit, MI 48207. United States

<sup>3</sup>HIV/AIDS Resource Center, 3075 Clark Road, Suite 203, Ypsilanti, MI 48197. United States

# **Abstract**

Discrimination has been linked to negative health outcomes among minority populations. The increasing evidence regarding health disparities among sexual minorities has underscored the importance of addressing sexuality discrimination as a public health issue. We conducted a webbased survey between May and September of 2012 in order to obtain a diverse sample of young men who have sex with men (ages 18–29; N = 397; 83% gay; 49% Black, 27% White, 15% Latino) living in the Detroit Metro Area (Michigan, USA). Using multivariate regression models, we examined the association between overall health (self-rated health, days in prior month when their physical or mental health was not good, limited functionality) and experiences of sexuality-based work discrimination. Fifteen percent reported at least one experience of sexuality-based work discrimination in the prior year. Recent workplace discrimination was associated with poorer self-rated health, a greater number of days when health was not good, and more functional limitation. We discuss the importance of addressing sexuality-related discrimination as a public health problem and propose multilevel intervention strategies to address these discriminatory practices.

## Keywords

Employment; Job; homophobia; LGBT

For some populations, workforce participation may be hindered by discrimination and accompanied by stressful experiences of harassment, victimization, and prejudice, which may in turn negatively affect their social and physical health (Chae, Krieger, Bennett, Lindsey, Stoddard & Barbeau, 2010; Pascoe & Richman, 2009). In the context of racial/ethnic discrimination, for example, researchers have noted that perceived or enacted experiences of racial/ethnic workplace discrimination are associated with a greater number of physical health conditions (de Castro, Gee, & Takeuchi, 2008; Okechukwu, Souza, Davis, & de Castro, 2013), higher blood pressure and hypertension (Din-Dzietham, Nembhdard, Collins, & Davis, 2004; Krieger & Sidney, 1996), and decreased psychological well-being

Corresponding Author: José A. Bauermeister, MPH, PhD, 300 N. Ingalls, Suite 971, Ann Arbor, MI 48109, jbauerme@umich.edu, Phone: (734) 615-8414, Fax: (734) 763-7259.

(Hammond, Gillen & Yen, 2010). Furthermore, the association between work discrimination and health may persist even after controlling for job characteristics and prior emotional and physical health, respectively (Pavalko, Mossakowski & Hamilton, 2003). Less is known, however, about the experiences of work discrimination in the lives of lesbian, gay, bisexual and transgender (LGBT) individuals (Bowleg, Brooks, & Ritz, 2008). Sexual minority individuals may experience discrimination when seeking a job (Embrick, Walther, & Wickens, 2007), may have concerns over their job security were colleagues to discover their sexual identity (Bernstein & Swartwout, 2012; Bouzianis, Malcolm, & Hallab, 2008; Connell, 2012), and may earn reduced wages as compared to heterosexually-identified counterparts (Badgett, 1995; Laurent, & Mihoubi, 2012). For example, using population-level data, Badgett and colleagues (2007) noted that gay men earned 10–32% less than heterosexual counterparts with the same job. These experiences have been documented across a range of occupations, both in the United States (Badgett, Sears, Lau, & Ho, 2009) and in other countries (Ozturk, 2011), suggesting a need to have policy-driven initiatives to address these structural experiences of discrimination.

By definition, policies that create inequalities for sexual minority populations (e.g., absence of sexual orientation and gender expression in non-discrimination laws) create social obstacles and hinder their socioeconomic advancement through unequal access to social resources, exposure to minority stressors, and increased psychological vulnerability (Hatzenbuehler, 2010; Riggle, Rostosky, Prather & Hamrin, 2005; Russell & Richards, 2003). Absent of federal protections against employment discrimination due to sexual orientation and gender identity, sexual minority populations must defer to state-level work discrimination policies. Unfortunately, only 21 states and the District of Columbia have employment protections based on sexual orientation, with only 16 states and the District of Colombia also offering protections based on gender identity/expression (National Gay and Lesbian Task Force Foundation, 2012). As a result, sexual minority populations are particularly vulnerable to work-related discrimination if they live in states where they do not have employment protections based on sexual orientation and gender identity and expression (Badgett et al., 2009; Bradford, Reisner, Honnold, & Xavier, 2013). Experiences of discrimination may place sexual minority individuals at a social disadvantage and increase their psychological distress (Chae et al., 2010) and use of alcohol and other substances as a coping mechanism (McCabe, Bostwick, Hughes, West, & Boyd, 2010). Using data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), for example, Hatzenbuehler and colleagues (2009) documented how sexual minority individuals living in states that do not extend legal protections against hate crimes and employment discrimination to sexual minority populations were more likely to report psychiatric comorbidity than those who lived in states with fewer restrictions. These data underscore the importance of examining the prevalence of work-related discrimination and its association to health outcomes among sexual minority populations living in states without employment protection policies.

At present, the state of Michigan does not extend employment protections to sexual minorities; however, several cities in the state, including the City of Detroit, include sexual orientation as a protected class against workforce discrimination. A report by the state of Michigan's Department of Civil Rights (2009) noted that the absence of sexuality-related protections may result in a negative impact to the state's economic growth and wellbeing by creating unequal hiring opportunities for sexual minority workers seeking employment in the state, decreasing the psychosocial wellbeing and productivity of sexual minority workers living in the state, and increasing the migration of sexual minority workers out of the state. However, scarce data documenting the prevalence of work-related discrimination among sexual minority populations in Michigan currently exist. Availability of these data would be particularly meaningful to promote the implementation of non-discrimination policies at the

state level. Consequently, in this study, we sought to examine the prevalence of sexuality-specific work discrimination and its association to health outcomes in a sample of emerging and young adult men who have sex with men (YMSM; ages 18–29). Examining the experiences of work discrimination and its association to health are particularly meaningful for this age group for several reasons. First, the workplace is a critical environment where emerging and young adults learn what society expects from them as adults, helping them nurture the formation of their adult identity and establish their path to financial independence (Arnett, 2007; Bauermeister, Zimmerman, Barnett, & Caldwell, 2007). Second, younger cohorts are more likely to be healthier than older counterparts, reducing the likelihood that any observed associations between work-related discrimination and physical health markers are confounded by chronic health conditions. Finally, young workers bring innovation to the workplace and are vital to the long-term sustainability of the economy. As a result, it is vital that young workers remain productive and healthy.

Recognizing the need to understand the role of sexuality-related work discrimination on the health of young sexual minorities, we sought to examine the relationship between experiences of work discrimination and health-related outcomes (e.g., self-reported health status, health-related quality of life, and limited functionality) in a racially diverse sample of YMSM living in the Detroit Metro Area (DMA), the largest urban area in the state of Michigan. Given the saliency of work experiences as part of the healthy development of individuals during emerging and young adulthood, we proposed two objectives for the current study. We first examined the prevalence of recent work-related discrimination (e.g., denied/fired from a job, denied promotion or salary, received unfair work evaluation) in our sample. Second, we tested the relationship between self-reported sexuality-ascribed work discrimination experiences in the past year and the physical health status of YMSM from the Detroit Metro Area. Consistent with the existing psychological literature (Hatzenbuehler et al., 2009), we hypothesized that YMSM reporting sexuality-related discrimination would be more likely to report poorer health status and worse health-related quality of life. Based on our findings, we discuss the importance of addressing sexuality-related work discrimination as a public health matter requiring federal and state legislation.

## **METHOD**

# Sample

The data for this paper are derived from a cross-sectional observational study examining YMSM's structural and psychosocial vulnerabilities to HIV/AIDS in the Detroit Metro Area. To be eligible for participation, recruits had to be between the ages of 18 and 29; identify as male; report currently residing in the Detroit Metropolitan Area (as verified by zipcode and IP address); and report having ever had sex with men.

Participants were recruited online and in-person between May and October 2012. On the Internet, advertisements were posted on Black Gay Chat Live (BGC Live) and Facebook. Inperson recruitment occurred across gay bars, clubs, and community events frequented by the target population. Staff from community partner agencies, clinics, and other agencies in the DMA working with YMSM (i.e., LGBT organizations, AIDS Service Organizations, and community and university health clinics) also conducted recruitment outreach in their respective venues. Advertisements displayed brief information about the survey, a mention of a \$30 Visa e-gift card incentive upon completion, and the survey's website.

We recorded a total of 1,183 entries between May and September 2012. We used established guidelines (Bauermeister et al., 2012) to identify duplicates and falsified entries (N = 341; 28.8% of all recorded entries) for online data collection by manually examining participants' online presence, email and IP addresses, operating system and browser information,

irregular answer patterns, and time taken to complete survey. Of the remaining 842 recorded screeners, we found 381 entries were ineligible to participate in our survey based on study criteria. We concluded with an analytic sample of N=461 sexual minority emerging and young adult men, of which 32 (6.94%) was eligible and consented but did not commence the survey (e.g., a study completion rate of 93.05%). For those questionnaires that were incomplete, participants were sent two reminder emails that encouraged them to complete the questionnaire; one email was sent a week after they had started the questionnaire and another was sent a week before the questionnaire was scheduled to close. Even though we did collect gender-specific work discrimination measures for trans participants, the sample size was too small (n=32) to make inferences about gender-based discrimination. Consequently, for the current analysis, we included only those participants who identified as cisgender because the discrimination measure is based on sexuality-related (and not gender-specific) experiences of discrimination.

#### **Procedures**

We developed our web survey using established guidelines (Couper, 2008), including various iterations of pilot testing prior to data collection. Study data were protected with a 128-bit SSL encryption and kept within a University of Michigan firewalled server. Upon entering the study site, participants were asked to enter a valid and private email address, which served as their username. This allowed participants to save their answers and, if unable to complete the questionnaire in one sitting, continue the questionnaire at a later time. Upon completing an eligibility screener, eligible young adults were presented with a detailed consent form that explained the purpose of the study and their rights as participants, and were asked to acknowledge that they read and understood each section of the consent form.

Consented participants then answered a 45–60 minute questionnaire that covered assessments regarding their socio-demographic characteristics, health status, individual-level characteristics (i.e. sexual and substance use behaviors), perceptions and experiences with community (e.g. social networks, neighborhood, stigma, participation in minority communities), general mood over the last few months, and their hopes and dreams. Participants were compensated with a \$30 Visa e-gift card via e-mail upon completion of the questionnaire. We acquired a Certificate of Confidentiality to protect study data. The University of Michigan Institutional Review Board approved all study procedures.

#### **Measures**

Health Indicators—We used three of the standard health-related quality of life (HRQOL) indicators (Moriarty, Zack, Kobau, 2003) from the Behavioral Risk Factors Surveillance System (BRFSS) as our outcomes. The first indicator, *Self-rated health status*, has been found to be highly predictive of actual health (Jylhä, 1982), and is measured using a 5-point ordinal scale (0=Poor; 4=Excellent). The other two HRQOL measures ask participants to note the number of days in the prior 30 days when their physical or mental health, respectively had not been good. The physical health item read as follows: "Now thinking about your physical health, which includes physical illness and injury, how many days during the past 30 days was your physical health not good?" Similarly, the mental health item asked, "Now thinking about your mental health, which includes stress, depression, and problems with emotions, how many days during the past 30 days was your mental health not good?" We also assessed participants' *limited functionality* from the BRFSS. Limited functionality was ascertained by asking participants whether they felt limited in their everyday activities due to any physical, mental, or emotional problem (0=No; 1=Yes).

**Sexuality-related work discrimination**—We used employment-related items from Herek's discrimination scale (Herek & Berril, 1992) to measure sexuality-related work discrimination. Participants were asked to report if they had experienced three work discrimination events (being denied employment or fired from a job, being denied a promotion or salary increase, and receiving an unfair work evaluation) as a result of their sexuality in the past year. We then summed these events into a 4-point scale (0= No report of work-related discrimination in past year; 3=experienced all three events in past year).

Demographics—Participants were asked standard demographic characteristics regarding their age, sexual identity, gender identity, race/ethnicity, employment status, whether or not they had health insurance, and residential stability. We asked participants to indicate which of the following terms corresponded with their primary sexual identity: gay or homosexual, bisexual, straight/heterosexual, and same gender loving, MSM, or other. For the purposes of these analyses, we collapsed participants' answers into three groups: gay/homosexual, bisexual, or other sexual identity. Gay respondents served as the referent group in our analyses because they represented the largest sample size of all reported sexual identities. Participants indicated their race (Black/African American, White, American Indian/Alaskan Native, Asian, Native Hawaiian/Pacific Islander, and Other) and Spanish/Hispanic/Latino ethnicity. We combined American Indian/Alaskan Native, Asian, Native Hawaiian/Pacific Islander, and Other race categories given the limited number of observations, and then created dummy variables for each race/ethnicity group. White respondents served as the referent group in our analyses, as we predicted that they would report better health than other racial/ethnic minority groups (e.g., Black and Latino).

Participants were also asked to identify as working full time (30 hours or more), part-time (less than 30 hours), unemployed, or not looking for a job due to disability. Participants were asked if they had any type of health insurance coverage (0=No; 1=Yes). Residential instability was ascertained by whether or not (0=No; 1=Yes) participants had spent at least one night in the past 30 days in a shelter, public place not intended for sleeping (e.g., bus station, car, abandoned building), on the street or outside, in a temporary housing program, or in a welfare or voucher motel.

#### **Data Analytic Strategy**

We first examined the distribution of our variables (see Table 1). In order to examine the relationship between work discrimination and health outcomes, we then employed a multivariate regression technique consonant with each outcome's distribution. We used a multivariate linear model to examine the relationship between work discrimination and selfrated health. For the outcomes examining number of days when health was poor, we employed a multivariate Poisson regression to accommodate the count distribution in the data. Finally, to examine the relationship between work discrimination and the binary outcome for limited functionality, we used a multivariate logistic regression. We accounted for sexual identity, HIV status, race/ethnicity, employment status, insurance, and residential instability in each of these models. Because age was not significant in our bivariate analyses, we did not include it as a control in the regression models. Furthermore, we included nonworkers (e.g., unemployed and those under disability) in our analyses, as it is possible that these individuals worked in the prior year and experienced work discrimination due to their sexuality. In sensitivity analyses, we re-ran models only including participants who reported currently working and found no differences in our findings. For brevity, only statistically significant findings (p < .05) are reported.

# **RESULTS**

Our sample (N = 397) had a mean age of 23.09 (SD = 2.83). The racial/ethnic distribution of our sample was predominantly Black/African American (N = 195; 49%), followed by White/Caucasian (N = 107; 27%), Latino (N = 60; 15%), or Other race (N = 35; 9%). Most participants self-identified as gay or homosexual (N = 331; 83%), followed by other identities including bisexual (N = 33; 8%), and other (N = 33; 8%). The majority of our sample received a high school diploma or GED (N = 387; 90.2%). In terms of socioeconomic status, participants reported a median income of \$12,000 (M = \$17,123; SD = \$20,197). Forty five percent of the sample would qualify as living under the federal poverty line; nearly 7% reported being residentially unstable in the prior 30 days. At the time of the survey, close to two thirds of the sample reported being employed either full-time (N = 153, 38.5%) or part-time (N = 121; 30.5%). Another quarter of the sample reported being unemployed (N = 108; 27.2%), with the remainder (N = 15; 3.8%) reporting disability (see Table 1).

Over half of the sample reported having at least some form of health insurance coverage. On average, participants reported their health being very good (M = 2.93, SD = .92). We found comparable prevalence estimates to those in the Michigan 2010 BRFSS report regarding the proportion of the population that reported poor or fair health. Participants between the ages 18–29 whose health was poor or fair was 7.5%; approximating the state's prevalence of 8.1% (95% CI: 6.4–10.1) for 18–24 year olds and 9.2% (95% CI: 7.7–10.9) for 25–34 year olds. Participants noted having multiple days when their physical (M = 1.24; SD = 3.54) or mental (M = 3.57; SD = 6.68) health were not good. On average, participants noted having had just over 1.5 days when their physical or mental health kept them from their usual activities (M = 1.55; SD = 4.15). Nine percent reported limited functionality due to impairment or a health problem (see Table 1).

Nearly 15% of participants reported at least one experience of sexuality-based work discrimination in the past year, including being denied or fired from a job (10.6%), receiving an unfair evaluation at work (6.0%), or being denied a promotion or salary increase (3.5%). When accumulated, 85.6% did not report a work discrimination experience in the past year, 10.1% reported at least one experience, 2.8% reported two experiences, and 1.5% reported all three experiences. We found no differences across age groups (i.e., 18–20, 21–24, 25–29) or occupational status (i.e., full-time, part-time, unemployed) in likelihood of experiencing work-related discrimination.

#### **Multivariate Analyses**

**Self-Rated Health—**In our multivariate regression model ( $F_{(13, 381)} = 4.21$ ; p=.001; see Table 2), work discrimination (b=-.15; se =.08;  $\beta=-.09$ ; p=.05) and being HIV positive (b=-.40, se =.15,  $\beta=.04$ , p<.01) were negatively associated with self-rated health. Self-rated health was also lower among those who reported residential instability (b=-.47; se =.18;  $\beta=-.12$ ; p=.01). Participants who identified as Black (b=.24, se =.11,  $\beta=.13$ , p<0.05) reported greater self-rated health than White participants. We found no other mean differences in self-rated health by race/ethnicity. Participants who had health insurance (b=.43; se =.10;  $\beta=.23$ ; p=.001) reported greater self-rated health than those without insurance. We found no association between self-rated health and sexual identity or employment status.

**Physical and Mental Health**—In our Poisson regression analysis for days when physical health was not good ( $X^2_{(df=13)} = 277.42$ ; p .001), we found workplace discrimination was associated with a greater number of days when their physical health was not good (IRR =

1.44 [95% CI: 1.27, 1.65]; p .001). Bisexual participants reported lower incidence rates of having days of poor physical health compared to gay participants (IRR = .51 [95% CI: .32, .81]; p .05) Black participants were also noted to have decreased incidence rates of poor physical health compared to their White counterparts (IRR = .32 [95% CI: .26, .41]; p .001). Part-time working participants (IRR = .78 [95% CI: .62, .99]; p <0.05), as compared to full-time participants, had lower incidence rates of poor physical health. Those who reported being on disability reported higher incidence rates of poor physical health (IRR = 2.95 [95% CI: 2.10, 4.14], p 0.001. Residentially unstable participants reported fewer days when their physical health was poor (IRR = .53 [95% CI: .33, .83]; p .01). Those who were covered by health insurance reported higher incidence rates of poor physical health (IRR = 1.42 [95% CI: 1.15, 1.75]; p .001).

In our Poisson regression analysis for days when individuals' mental health was not good  $(X^2_{(df=13)}=614.05; p<.001)$ , we found that participants reporting workplace discrimination were more likely to report a greater number of days when their mental health was not good (IRR=1.58 [95% CI: 1.48, 1.69]; p .001), after adjusting for all covariates in the model. Participants who identified as bisexual (IRR = 1.54 [95% CI: 1.27, 1.86]; p .001) or Other sexual identity (IRR = 2.14 [95% CI: 1.81, 2.52]; p .001) had increased incidence rates for poor mental health days compared to gay-identified participants. Black (IRR = .37 [95% CI: 32,.42]; p < .001) and Latino (IRR=.68 [95% CI:.58, .81]; p .001) emerging and young adults reported fewer days when their mental health was poor than White counterparts. Parttime (IRR=.70 [95% CI: .61,.80]; p .001), not working (IRR = .80 [95% CI: .69, .92]; p < .01), and participants on disability (IRR = .64 [95% CI: .46, .89]; p < .01) were less likely than emerging adults working full-time to report having had days when their mental health was poor. Lastly, participants with health insurance showed higher incidence rates (IRR = 1.37 [95% CI: 1.21, 1.54]; p .001) of number of days when they experienced poor mental health (see Table 2).

**Limited Functionality**—In our logistic regression ( $X^2_{(df=13)} = 33.18$ ; p .01; see Table 3), we found that with a greater number of work discrimination experiences in the prior year, the odds of reporting limited functionality increased, approximating statistical significance (OR = 1.64 [95% CI: .98, 2.65]; p = .058). Black participants were less likely to report limited functionality (OR = .29 [95% CI: .11, .81]; p .05) than White counterparts. Participants on work disability were more likely to report functional limitations (OR = 14.00 [95% CI: 3.18, 61.63]; p .001). We found no other relationships between limited functionality and covariates in our model.

## **DISCUSSION**

Employment offers emerging and young adults an opportunity to pursue financial independence alongside a series of social advantages, including the development and refinement of professional and interpersonal skills as well as better employment opportunities later in life, which affect their health and well-being (Bauermeister et al., 2007). The absence of non-discriminatory policies, however, may reduce the likelihood that individuals belonging to socially marginalized groups could benefit from these social advantages. Recognizing the longstanding history of sexuality-related discrimination across a range of occupations (Badgett et al., 2009; Bradford et al., 2013), we sought to examine whether the prevalence of work-related discrimination over the past year was associated with several indicators of health in a racially diverse sample of YMSM.

Approximately fifteen percent of our sample reported at least one work-related discriminatory event in the prior year – even though they lived in areas where cities and townships have adopted sexual orientation as a protected class in their work discrimination

statutes. YMSM who reported these experiences were more likely to report poorer health outcomes, including self-rated health, number of days that their physical or mental health was not good, respectively, and limited functionality. Furthermore, the likelihood of reporting poorer health outcomes increased if participants had experienced more workrelated discrimination (e.g., being denied or fired from a job, receiving an unfair evaluation, and/or being denied a promotion) as a result of one's sexual identity. Taken together, these findings underscore the importance of addressing sexuality-related discrimination, both in terms of equity in job availability and job performance (as reflected in the sexuality-related work discrimination measure). Specifically, it is vital that sexual minorities be recognized as a protected group in federal and state non-discrimination employment regulations. Our findings, for example, support the implementation of the Employment Non-Discrimination Act (ENDA) as a policy-level strategy to prohibit discrimination in the hiring or employment of sexual minorities among businesses with at least 15 employees. Nevertheless, given current tensions between federal and state regulations regarding the protections of sexual minorities, state and local-level policies should also be implemented to protect the well-being of sexual minority workers. Our findings also support the recent findings from the state of Michigan's Department of Civil Rights report (2013) and underscore the importance of including sexual orientation in the state's employment protections. Taken together, these findings contribute to the mounting evidence that sexuality-related discrimination is a public health concern warranting multisectoral intervention.

Although we only assessed overt and salient experiences of sexuality-related work discrimination in the prior year, an increasing body of discrimination literature has recognized that micro-aggressions (e.g., side comments, stereotypes, lack of cultural sensitivity in interactions) can also have a toll on the well-being of minority populations (Sue et al., 2007; Balsam, Molina, Beadnell, Simoni, & Walters, 2011). Consequently, it is possible that our work discrimination findings are conservative as we only ascertained explicit and overt discrimination events in the workplace. Experiences of micro-aggressions, not captured in our current analyses, may help explain some of the sociodemographic trends seen in our multivariate analyses. For instance, we found that full-time workers reported poorer health outcomes than their part-time and unemployed counterparts, respectively. Due to working a greater number of hours, it is possible that full-time workers have a greater likelihood of being exposed to, or experiencing, micro-aggressions in the workplace. Although this finding is consistent with prior developmental literature suggesting an association between the number of hours worked and well-being among emerging and young adults (Finch, Mortimer, & Ryu, 1997; Bauermeister et al., 2007), it is possible that the observed relationship between hours worked and health serves as a proxy for participants' job type and/or characteristics. Unfortunately, we did not ascertain job type in our study. Thus, future research examining sexuality-related micro-aggressions and workrelated characteristics is warranted.

It is important to highlight that the relationship between discrimination and health may be experienced differentially among racial/ethnic minorities and sexual identities. In our analyses, racial ethnic minorities (e.g., Black and, to some extent, Latino men) reported fewer days when their physical or mental health was not good than did their counterparts. These findings may suggest the presence of high-effort coping (Brenner, Zimmerman, Bauermeister, Caldwell, 2012; James, 1994; Geronimus, 2000) among YMSM of color. James (1993), for example, proposed the concept of John Henryism as a process by which African Americans may activate sustained high effort coping strategies to counter social discrimination across the lifecourse, with the accumulation of this sustained coping response taking its toll on their health later in life. Alternatively, it is also possible that these groups have differential access to, and enactment of, socioeconomic resources and support systems

in their communities. For instance, prior research examining the role of racial/ethnic discrimination on health has noted that socioeconomic position may help mitigate some of the negative consequences of racial/ethnic discrimination (D'Anna, Ponce, & Siegel, 2010; Geronimus, 2000; Geronimus, Bound, Waidmann, Colen & Steffick, 2001).

Adding to this complex picture of how socioeconomic resources and support systems influence health, we found two seemingly counterintuitive results that we interpret to be related to one another and upon which we wish to elaborate. First, participants who had experienced residential instability reported worse self-rated health, yet had fewer days of reported poor physical health. Individuals who are residentially unstable may not have regular or reliable access to important sources of social support, such as immediate family, nor safety net support for health in the form of access to health care provision. Researchers have noted that individuals with less social capital may rate their health as poorer, above and beyond potential differences across individual-level factors (e.g., health risk behaviors) that might indicate poor health, because they also consider their social context and (e.g., homelessness) and subjective social status (Wolff, Subramanian, Acevedo-Garcia, Weber & Kawachi, 2010) when rating their overall well-being (Flick and Rohnsch, 2007). It is therefore not surprising that in a measure of subjective wellbeing (i.e., self-rated health), residentially unstable young men would rate their health lower. When asked to note the number of days when they had poor physical health, however, residentially unstable men reported fewer days of poor physical health. One plausible interpretation for this finding may be that residentially unstable youth feel that they cannot "afford" to be sick. In a qualitative study with homeless adolescents, for example, Flick and Rohnsch (2007) noted that health was highly valued because the admission of illness would make life on the streets more complicated or be perceived as a marker of individual failure. Another interpretation for our finding may be that we had differential sampling (i.e., potential selection bias) among residentially unstable participants, being more likely to recruit youth in better health into the study. Future research examining how residentially unstable sexual minority young men conceptualize health may be warranted.

Participants who reported having health insurance also tended to rate their health as better than their non-insured counterparts, yet they reported a greater number of days in which their physical and mental health was poor in the past month. Similar to our interpretation of the trend with residentially unstable youth, these findings initially seem illogical until one considers the potential role of social capital and support systems (Vingilis, Wade & Adlaf, 1998). Participants who reported having health insurance presumably have more social capital and greater access to both social support and medical care. In this age group in particular, having health insurance may be a marker of socioeconomic status (e.g., part of an employment package, or access to parents' insurance), particularly in light of the extension of parental insurance to young adults up to age 26 as part of the implementation of the Affordable Care Act in 2010. Given that having health insurance enables access to health care providers, it is possible that insured participants may feel more comfortable acknowledging that they have days of poor health. Such access may allow them to recognize and disclose days of poor health in a way that is inadmissible for those with diminished social capital and availability of resources (e.g., uninsured and residentially unstable youth). At present, however, these interpretations are speculative and require further exploration. Future research examining how structural conditions and access to social capital influence perceived health-related quality of life is warranted.

Gay-identified participants were also less likely to report poorer mental health outcomes than non-gay counterparts. In the context of non-gay identified emerging and young adults, it is possible that their poorer mental health may be attributable to a dual marginalization from both gay and heterosexual communities (Frost & Meyer, 2012; Johns, Zimmerman, &

Bauermeister, 2012). Although these experiences align well with the sexual minority stress hypothesis (Meyer, 1995), we also acknowledge that the experiences of work discrimination may be compounded by race/ethnicity *and* sexual identity (Dubé EM & Savin-Williams, 1999; Bowleg, 2012). Unfortunately, we were unable to examine whether sexuality-based discrimination manifests differentially across racial/ethnic *and* sexual minority identities due to small cell sizes. In addition, we did not assess men's experiences of racial/ethnic work discrimination in our study. Nevertheless, our findings provide preliminary evidence regarding the importance of addressing sexuality-related work discrimination and underscore the need to understand in greater depth how the intersections between race/ethnicity and sexuality. Future research, both qualitative and quantitative, examining the racial/ethnic and sexuality-specific disparities *within* the sexual minority community may be warranted in order to inform interventions for all subgroups of the population.

Our study has several additional limitations deserving mention. First, our findings focus on the lived experiences of YMSM in the Detroit Metro Area and may not be generalizable. Although it is impossible to obtain a random sample of YMSM in the Detroit Metro Area, we noted that we obtained demographic estimates approximating those noted for the city of Detroit. For example, while 77% of the population over age 25 possesses a high school degree or equivalent (United States Census Bureau, 2013), the unemployment rate (23.1%) is the highest of any urban center in the nation (Bureau of Labor Statistics, 2013), with a third of Detroit residents living under the poverty line (U.S. Census, 2013). Furthermore, the cross-sectional nature of the study allows for only a snap-shot of discrimination-based experiences and health outcomes in this specific sample of YMSM. Thus, future research should explore these relationships longitudinally with YMSM in other metropolitan areas. Second, we used a convenience sample for this study and some participants were recruited by community-based organizations to participate. As we did not ascertain how participants found out about our study (e.g., agency recruitment vs. online vs. bars), we were unable to determine if those who were involved in community-based organizations differed in health from those who were not, possibly limiting the generalizability of findings. Third, our sample was highly educated with the majority of participants reported having obtained a high school diploma or GED. It is possible that the experiences of work discrimination may vary depending on emerging and young adults' educational attainment. Fourth, although our indicators are used in national health surveys and are highly predictive of health outcomes, future research examining the relationship between work discrimination and biomarkers may be warranted, particularly given the proposed assumptions regarding high-effort coping. Finally, our sample was comprised of sexual minorities between the ages of 18-29. Future research should explore the observed relationships with other populations of interest (e.g., sexual minority women, older MSM).

These limitations notwithstanding, our data highlight the importance of addressing sexuality-related work discrimination as a public health issue and the need to advocate for structural protections at the federal and state level. While these policy-level interventions are implemented, workplace-specific policies that promote non-discrimination with regard to sexual identity are warranted. In addition, promoting work environments where sexual minority emerging and young adults are visible and supported may create opportunities to mitigate their exposure to and internalization of discrimination. Future research examining the long-term effects of work discrimination, as well as the coping strategies employed by sexual minorities, is warranted in order to develop effective work-based interventions to address sexuality-related discrimination.

# **Acknowledgments**

This research was supported by a grant by the Ford Foundation and the MAC AIDS Fund to the primary author. The primary author is also supported by a Career Development Award (K01-MH087242) from the National Institutes of Mental Health.

## References

- Arnett J. Emerging adulthood: What is it, and what is it good for? Child Development Perspectives. 2007; 1(2):68–73.
- Badgett M. The wage effects of sexual orientation discrimination. Industrial and Labor Relations Review. 1995; 48(4):726–39.
- Badgett, M.; Lau, H.; Sears, B.; Ho, D. Bias in the workplace: Consistent evidence of sexual orientation and gender identity discrimination. The Williams Institute, UCLA School of Law; Los Angeles: 2007.
- Badgett, M.; Sears, B.; Lau, H.; Ho, D. Bias in the workplace: Consistent evidence of sexual orientation and gender identity discrimination 1998–2008. Chicago: Kent Law Review; 2009.
- Balsam KF, Molina Y, Beadnell B, Simon J, Walters K. Measuring multiple minority stress: The LGBT People of Color Microaggressions Scale. Cultural Diversity & Ethnic Minority Psychology. 2011; 17(2):163–74. [PubMed: 21604840]
- Bauermeister JA, Pingel E, Zimmerman M, Couper M, Carballo-Dieguez A, Strecher VJ. Data quality in HIV/AIDS web-based surveys: Handling invalid and suspicious data. Field Methods. 2012; 24(3):272–91. [PubMed: 23180978]
- Bauermeister JA, Zimmerman MA, Barnett TE, Caldwell CH. Working in high school and adaptation in the transition to young adulthood among African American youth. Journal of Youth and Adolescence. 2007; 36(7):877–90.
- Bernstein M, Swartwout P. Gay officers in their midst: Heterosexual police employees' anticipation of the consequences for coworkers who come out. Journal of Homosexuality. 2012; 59(8):1145–66. [PubMed: 22966996]
- Bouzianis B, Malcolm JP, Hallab L. Factors associated with sexual identity disclosure in the workplace by gay men and lesbians: A couples study. Gay & Lesbian Issues and Psychology Review. 2008; 4(3):166–75.
- Bowleg L. The problem with the phrase women and minorities: Intersectionality-an important theoretical framework for public health. American Journal of Public Health. 2012; 102(7):1267–73. [PubMed: 22594719]
- Bowleg L, Brooks K, Ritz SF. Bringing home more than a paycheck: An exploratory analysis of Black lesbians' experiences of stress and coping in the workplace. Journal of Lesbian Studies. 2008; 12(1):69–84. [PubMed: 19042294]
- Bradford J, Reisner SL, Honnold J, Xavier J. Experiences of transgender-related discrimination and implications for health: Results from the Virginia transgender health initiative study. American Journal of Public Health. 2013:e1–e10.
- Brenner AB, Zimmerman MA, Bauermeister JA, Caldwell CH. The physiological expression of living in disadvantaged neighborhoods for youth. Journal of Youth and Adolescence. 2012; 42(6):792–806. [PubMed: 23086016]
- Chae DH, Krieger N, Bennett GG, Lindsey JC, Stoddard AM, Barbeau EM. Implications of discrimination based on sexuality, gender, and race/ethnicity for psychological distress among working-class sexual minorities: The United for Health Study, 2003–2004. International Journal of Health Services. 2010; 40(4):589–608. [PubMed: 21058533]
- Connell C. Dangerous disclosures. Sexuality Research and Social Policy. 2012; 9(2):168-77.
- Couper, MP. Designing effective web surveys. New York, NY: Cambridge University Press; 2008.
- D'Anna LH, Ponce NA, Siegel JM. Racial and ethnic health disparities: Evidence of discrimination's effects across the SEP spectrum. Ethnicity & Health. 2010; 15(2):121–43. [PubMed: 20131130]
- de Castro A, Gee G, Takeuchi D. Workplace discrimination and health among Filipinos in the United States. American Journal Of Public Health. 2008; 98(3):520–526. [PubMed: 18235069]

Din-Dzietham RR, Nembhard WN, Collins RR, Davis SK. Perceived stress following race-based discrimination at work is associated with hypertension in African-Americans. The metro Atlanta heart disease study, 1999–2001. Social Science & Medicine. 2004; 58(3):449–461. [PubMed: 14652043]

- Department of Civil Rights State of Michigan. Report on LGBT Inclusion Under Michigan Law with Recommendations for Action. Lansing, Michigan: 2013. p. 132Retrieved from: http://www.michigan.gov/mdcr/0,4613,7-138--293875--,00.html
- Department of Labor Statistics. Local area unemployment statistics: Unemployment rates for the 50 largest cities. 2013. Retrieved from: http://www.bls.gov/lau/lacilg10.htm
- Dubé EM, Savin-Williams RC. Sexual identity development among ethnic sexual-minority male youths. Developmental Psychology. 1999; 35(6):1389–98. [PubMed: 10563729]
- Embrick DG, Walther CS, Wickens CM. Working class masculinity: Keeping gay men and lesbians out of the workplace. Sex Roles. 2007; 56(11–12):757–66.
- Finch, MD.; Mortimer, JT.; Ryu, S. Transition into part-time work: Health risks and opportunities. In: Schulenberg, J.; Maggs, JL.; Hurrelmann, K., editors. Health risks and developmental transitions during adolescence. New York: Oxford University Press; 1997. p. 321-324.
- Flick U, Rohnsch G. Idealization and neglect: Health concepts of homeless adolescents. Journal of Health Psychology. 2007; 12(5):737–749. [PubMed: 17855459]
- Frost DM, Meyer IH. Measuring community connectedness among diverse sexual minority populations. Journal of Sex Research. 2012; 49(1):36–49. [PubMed: 21512945]
- Geronimus AT. To mitigate, resist, or undo: Addressing structural influences on the health of urban populations. American Journal of Public Health. 2000; 90(6):867–72. [PubMed: 10846503]
- Geronimus AT, Bound J, Waidmann TA, Colen CG, Steffick D. Inequality in life expectancy, functional status, and active life expectancy across selected black and white populations in the United States. Demography. 2001; 38(2):227–251. [PubMed: 11392910]
- Hammond WP, Gillen M, Yen IH. Workplace discrimination and depressive symptoms: A Study of multi-ethnic hospital employees. Race and Social Problems. 2010; 2(1):19–30. [PubMed: 20463846]
- Hatzenbuehler ML, Keyes KM, Hasin DS. State-level policies and psychiatric morbidity in lesbian, gay, and bisexual populations. American Journal of Public Health. 2009; 99(12):2275–81. [PubMed: 19833997]
- Hatzenbuehler ML. The impact of institutional discrimination on psychiatric disorders in lesbian, gay, and bisexual populations: A prospective study. American Journal of Public Health. 2010; 100(3): 452–459. [PubMed: 20075314]
- Herek, GM.; Berril, KT., editors. Hate Crimes: Confronting violence against lesbians and gay men. Sage Publications; Newbury Park: 1992.
- James SA. Racial and ethnic differences in infant mortality and low birth weight: A psychosocial critique. Annals of Epidemiology. 1993; 3(2):130–6. [PubMed: 8269064]
- James SA. John Henryism and the health of African-Americans. Culture, Medicine and Psychiatry. 1994; 18(2):163–182.
- Johns MM, Zimmerman M, Bauermeister JA. Sexual attraction, sexual identity, and psychosocial wellbeing in a national sample of young women during emerging adulthood. Journal of Youth and Adolescence. 2012; 42(1):82–95. [PubMed: 22847750]
- Jylhä M. What is self-rated health and why does it predict mortality? Towards a unified conceptual model. Social Science & Medicine. 1982; 69(3):307–16. [PubMed: 19520474]
- Krieger N, Sidney S. Racial discrimination and blood pressure: The CARDIA study of young black and white adults. American Journal Of Public Health. 1996; 86(10):1370–1378. [PubMed: 8876504]
- Laurent T, Mihoubi F. Sexual orientation and wage discrimination in France: The hidden side of the rainbow. Journal of Labor Research. 2012; 33(4):487–527.
- McCabe SE, Bostwick WB, Hughes TL, West BT, Boyd CJ. The relationship between discrimination and substance use disorders among lesbian, gay, and bisexual adults in the United States. American Journal of Public Health. 2010; 100(10):1946–52. [PubMed: 20075317]

Meyer I. Minority stress and mental health in gay men. Journal of Health and Social Behavior. 1995; 36:38–56. [PubMed: 7738327]

- Moriarty DG, Zack MM, Kobau R. The Centers for Disease Control and Prevention's Healthy Days Measures -- Population tracking of perceived physical and mental health over time. Health & Quality Of Life Outcomes. 2003; 1:37–8. [PubMed: 14498988]
- National Gay and Lesbian Task Force Foundation. State Nondiscrimination laws in the United States. 2012. Retrieved from: http://www.thetaskforce.org/downloads/reports/issue\_maps/non\_discrimination\_1\_12\_color.pdf
- Okechukwu CA, Souza K, Davis KD, de Castro AB. Discrimination, harassment, abuse, and bullying in the workplace: Contribution of workplace injustice to occupational health disparities. American Journal Industrial Medicine. 2013:1–14.
- Ozturk M. Sexual orientation discrimination: Exploring the experiences of lesbian, gay and bisexual employees in Turkey. Human Relations. 2011; 64(8):1099–118.
- Pascoe EA, Smart Richman L. Perceived discrimination and health: a meta-analytic review. Psychological Bulletin. 2009; 135(4):531–54. [PubMed: 19586161]
- Pavalko EK, Mossakowski KN, Hamilton VJ. Does perceived discrimination affect health? Longitudinal relationships between work discrimination and women's physical and emotional health. Journal Of Health & Social Behavior. 2003; 44(1):18–33. [PubMed: 12751308]
- Riggle EDB, Rostosky SS, Prather Ra, Hamrin R. The execution of legal documents by sexual minority individuals. Psychology, Public Policy, and Law. 2005; 11(1):138–163.
- Russell GM, Richards J. Stressor and resilience factors for lesbians, gay men, and bisexuals confronting antigay politics. American Journal of Community Psychology. 2003; 31(3–4):313–28. [PubMed: 12866688]
- Sue DW, Capodilupo CM, Torino GC, Bucceri JM, Holder AMB, Nadal KL, et al. Racial microaggressions in everyday life: Implications for clinical practice. The American Psychologist. 2007; 62(4):271–86. [PubMed: 17516773]
- United States Census Bureau. State and county quick facts. Detroit, Michigan: 2013. Retrieved from: http://quickfacts.census.gov/qfd/states/26/2622000.html
- Vingilis E, Wade T, Adlaf E. What factors predict student self-rated physical health? Journal of Adolescence. 1998; 21(1):83–97. [PubMed: 9503077]
- Wolff LS, Subramanian SV, Acevedo-Garcia D, Weber D, Kawachi I. Compared to whom? Subjective social status, self-rated health, and referent group sensitivity in a diverse US sample. Social Science & Medicine. 2010; 70(12):2019–2028. [PubMed: 20381225]

 $\label{eq:Table 1} \textbf{Table 1}$  Demographic characteristics of study sample (N = 397)

Variable	M (SD)/N(%)
Age	23.09 (2.83)
Race/Ethnicity	
Black	195 (49.1%)
White	107 (27.0%)
Latino	60 (15.1%)
Other	35 (8.8%)
Sexual Identity	
Gay/Homosexual	331 (83.4%)
Bisexual	33 (8.3%)
Other	33 (8.3%)
In Relationship(s)	168 (42.3%)
Education Level	
Less than HS/GED	33 (8.3%)
Has HS/GED	364 (91.7%)
Spent 1 Nights in Residential Instability (past 30 days)	27 (6.8%)
Annual Income	\$17,123 (20,197)
Living below Poverty Line	180 (45.3%)
Occupation Status	
Full Time (30+ hrs/wk)	153 (38.5%)
Part Time (<30 hrs/wk)	121 (30.5%)
Unemployed	108 (27.2%)
Disability	15 (3.8%)
HIV Status	
HIV Positive	41 (10.3%)
HIV Unknown	55 (13.9%)
Has Health Insurance	230 (57.9%)
Self-Reported Health	2.93 (.92)
Poor	4 (1.0%)
Fair	26 (6.5%)
Good	80 (20.2%)
Very Good	168 (42.3)
Excellent	119 (30.0%)
Number of days (past 30 days) when physical health was not good	1.24 (3.53)
Number of days (past 30) when mental health was not good	3.57 (6.68)
Number of days (past 30) when physical or mental health kept you from usual activities	1.55 (4.15)
Limited functionality due to impairment or health problem	36 (9.1%)
Work Discrimination in Past Year due to Sexuality (any)	57 (14.4%)
Denied employment or fired from a job	42 (10.6%)
Denied a promotion or salary increase	14 (3.5%)

Variable	M (SD)/N(%)
Received an unfair work evaluation	24 (6.0%)

Table 2

Multivariate Regression examining the association between work-related discrimination and health outcomes among young sexual minority men

	Seli	-Rate	Self-Rated Health <sup>a</sup>		lumber of Day	Number of Days when Physical Health was Poor $^{\it D}$	th was Poor <sup>D</sup>	Number of Da	Number of Days when Mental Health was Poor $^{m{b}}$	lth was Poor <sup>o</sup>
	q	SE	В		IRR	95% CI	Sig.	IRR	95% CI	Sig.
Intercept	2.61	.13	*	* * *	1.43	1.10, 1.86	*	3.73	3.20, 4.35	* *
Sexual Identity $^{I}$										
Bisexual	12	.16	03		.51	.32, .81	*	1.54	1.27, 1.86	* *
Other Sexuality	26	.16	07		1.21	.87, 1.68		2.14	1.81, 2.52	* * *
Race/Ethnicity <sup>2</sup>										
Black	.24	11.	.13	*	.32	.26, .41	* * *	.37	.32, .42	* * *
Latino	.15	1.	90.		76.	.75, 1.25		89.	.58, .81	* * *
Other Race	.13	.13	90.		.74	.54, 1.02		1.18	1.00, 1.38	*
Employment Status <sup>3</sup>										
Part-Time	80.	11.	.00		.78	.69, .99	*	.70	.61, .80	* * *
Not Working	.04	.12	.02		68:	.69, 1.13		.80	.69, .92	* *
Disability	14	.24	03		2.95	2.10, 4.14	* * *	<b>2</b> 6.	.46, .89	*
Has Health Insurance	.43	60:	.23	* * *	1.42	1.15, 1.75	* * *	1.37	1.21, 1.54	* * *
HIV Status										
HIV Unknown	11.	.13	.00		.47	.33, .66	* * *	.93	.79, 1.09	
HIV Positive	40	.15	13	*	2.76	2.19, 3.47	* * *	2.09	1.81, 2.42	* * *
Residentially Unstable	41	.18	12	* *	.58	.33, .83	*	1.21	.97, 1.51	
Work Discrimination	16	80.	09	*	1.45	1.27, 1.65	* *	1.58	1.48, 1.69	* *

<sup>\*\*</sup>p .01;

\*
p .05
p .05

 $I_{\hbox{Gay-identified serves as referent group;}}$ 

 $<sup>^2</sup>$ White-identified serves as referent group;

 $^3\mathrm{Full}\text{-Time}$  participants serves as referent group.

 $^{\it a}$  Outcome is modeled as ordinal, ordinary least square regression was employed.

 $\ensuremath{b}$  Outcome is count data, Poisson regression was employed.

IRR = Incidence Risk Ratio

Table 3

Multivariate Logistic Regression examining the association between work-related discrimination and limited functionality among gay, bisexual and transgender emerging adults

	Limi	ted Functiona	lity
	OR	95% CI	Sig.
Intercept	.027		***
Sexual Identity <sup>3</sup>			
Bisexual	2.72	.80, 9.20	
Other Sexuality	2.27	.65, 7.88	
Race/Ethnicity <sup>4</sup>			
Black	.29	.11, .81	
Latino	.953	.31, 2.90	
Other Race	1.29	.39, 4.23	
Employment Status <sup>5</sup>			
Part-Time	2.51	.90, 6.93	
Not Working	2.85	.99, 8.26	*
Disability	14.00	3.18, 61.63	***
Has Health Insurance	1.87	.82, 4.30	
HIV Status			
HIV Unknown	1.47	.55, 3.91	
HIV Positive	2.82	.99, 8.04	*
Residentially Unstable	1.89	.57, 6.16	
Work Discrimination	1.64	.98, 2.73	*

p .001;

<sup>\*\*</sup> p .01;

<sup>\*</sup> p .05

Notes. <sup>1</sup>Gay-identified serves as referent group; <sup>2</sup>White-identified serves as referent group; <sup>3</sup>Full-Time serves as referent group.