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Factors Associated with Disclosure of Sexual Orientation Among Black Sexual Minority Men

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Abstract

Purpose: This study evaluated the characteristics associated with sexual orientation disclosure among HIVnegative Black sexual minority men (BSMM) in the greater Atlanta, Georgia area. Survey data were collected from 475 HIV-negative BSMM from 2017 to 2019 as part of a larger behavioral intervention study focused on stigma, prejudice, and HIV-testing uptake.

Methods: Participants reported their levels of sexual orientation disclosure globally, to their community, and to their family. Data were analyzed using one-way analysis of variance and multinomial logistic regression to determine whether demographic, minority stress, substance use, and mental health were associated with sexual orientation disclosure globally, to community members, and to family members.

Results: Findings revealed that participants with older age, bisexual identity, and higher levels of internalized homophobia had higher odds of global, community, and family sexual orientation nondisclosure. Furthermore, participants with higher levels of resilience had lower odds of partial sexual orientation disclosure compared with their fully disclosed counterparts.

Conclusions: These findings reveal variations associated with sexual orientation disclosure across varying contexts among HIV-negative BSMM, particularly among family member disclosure.

Keywords: Black/African American, disclosure, HIV-negative, sexual orientation

Introduction

ISCLOSURE OF SEXUAL ORIENTATION among sexual Disclosure of season control of the process. Individuals may choose to disclose (e.g., discuss) or not disclose (e.g., avoid discussing) their sexual orientation in different contexts; for example, some sexual minority individuals may strategically choose to disclose their sexual orientation to their friends but not disclose their sexual orientation to their families and colleagues. Determining who to disclose to is shaped by several factors such as feelings of safety, support, and trust. 1-4 In addition, nondisclosure of sexual orientation may be necessary, particularly in areas

where sexual minority individuals are provided minimal legal protections and may face loss of employment, housing insecurity, and denial of medical services as a result of sexual minority status.^{5–9} There is a need to further explore disclosure among sexual minority individuals across varying contexts, including factors associated with disclosure among community and family members.

Prior literature has documented both negative and positive aspects to disclosure. Some of the documented negative outcomes related to disclosure include experiences of physical and sexual violence, depression, and increased sexual risk behaviors. ¹⁰⁻¹² Beneficial aspects of disclosure have also been identified, such as reduced psychological distress

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and improved self-image. ^{13,14} Despite evidence of both the negative and positive aspects of disclosure, not all sexual minority men disclose in the same patterns across different contexts (e.g., family, friend groups, and at work).

Black sexual minority men (BSMM) are less likely than their White counterparts to disclose their sexual orientation. ^{15,16} Much of the literature on sexual minority disclosure has focused on sexual minority men as a whole; however, factors associated with disclosure of sexual orientation among sexual minority men, including BSMM, may differ depending on personal factors and experiences. Demographic variables that are indicative of financial independence (e.g., employment and income) may increase willingness to disclose sexual orientation. ^{17,18}

Experiences of minority stressors (e.g., internalized, anticipated, and enacted stigmas from health care workers) and distrust of organizations in which they experience stigmatizing attitudes and discrimination (e.g., health care systems) may also impact disclosure of sexual orientation of BSMM. ^{19–23} Literature indicates BSMM are less likely to disclose their sexual orientation compared with their White counterparts due to experiences of intersectional stigma related to Black/African American racial identities and also identifying as a sexual minority. ^{15,24} In addition, mental health-related challenges and substance use may be resultant of negative health consequences related to nondisclosure of sexual orientation. ^{25,26}

Choosing to disclose sexual orientation may be compounded by fear of losing valued support networks, such as community and family members, which may serve as buffers to existing race-based inequities and stressors chronically experienced by Black/African American individuals.^{27–30} Another factor—resiliency, or the ability to experience adversity and to adapt and overcome its negative effectsmay serve as a protective factor among BSMM and encourage disclosure. ^{23,31–33} As BSMM are more likely to experience repetitive stressful life events due to intersecting racial and sexual orientation identities, ^{23,34,35} research indicates that BSMM with higher resilience levels engage in fewer HIV-risk behaviors, increased substance use recovery, higher self-efficacy, and better coping strategies when compared with those with lower resilience scores. 36–38 However, resilience has yet to be studied in relation to disclosure of sexual orientation beyond global disclosure among BSMM adults.

Although previous studies have examined disclosure as an independent variable among predominantly White or racially diverse participants, research regarding variables associated with disclosure as a dependent variable have yet to be conducted exclusively among BSMM in varied contexts, including among community and family members. This study is exploratory and sought to examine what factors among HIV-negative BSMM were associated with three contexts of sexual orientation disclosure: global disclosure ("out" in general), community disclosure ("out" to community members), and family disclosure ("out" to family members).

As previous studies have indicated that demographics (e.g., socioeconomic status), minority stress indicators (e.g., internalized homophobia), and health-related markers (e.g., substance use and depression) are associated with disclosure of sexual orientation, we consider these in this study. 10,16,39–42 In addition, we sought to explore the impact

of resilience on disclosure of sexual orientation across these three contexts, which can serve as a protective factor for BSMM when faced with adversity and promote positive mental and physical health outcomes.^{43,44}

This exploratory study seeks to identify which characteristics are associated with sexual orientation disclosure in different contexts. As factors associated with BSMM's disclosure of sexual orientation are understudied, 16,40 understanding disclosure of sexual orientation across different contexts, particularly for BSMM, is important, as disclosure among BSMM may be associated with positive and negative well-being.

Methods

Participants and procedures

Participants included 493 HIV-negative BSMM living in Atlanta, Georgia, and surrounding areas. Participants were recruited using Lesbian, Gay, Bisexual, Transgender, Queer, and others (LGBTQ+) dating apps, websites, and participant referrals. Data were collected from February 2017 to October 2019 at baseline of a larger behavioral intervention study for HIV-negative BSMM and their experiences with stigma, discrimination, prejudice, and HIV testing. Data from this study come solely from the baseline assessment. This research involved human subjects and was conducted with the approval of the University of Connecticut Institutional Review Board and research was conducted in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards.

Informed consent was obtained from all individual participants included in the study. To enroll, participants self-identified as at least 18 years old, Black/African American, reported having sex with a man in the past year, and HIV-negative/unknown HIV status at the time of screening. Eighteen participants were removed from analysis because they either did not identify as male, identified as heterosexual, or reported living with HIV at the time of data collection. All participants received \$45 for their participation.

Survey measures

Demographics. Participants were asked to report their age, sexual orientation (i.e., same gender loving/gay = 0, bisexual = 1), education level (less than high school = 0, high school = 1, some college = 2, college degree = 3, graduate school = 4, graduate degree = 5), and income (0-10,000=1, 10,000-20,000=2, 21,000-30,000=3, 31,000-40,000=4, 41,000-50,000=5, 51,000-60,000=6, 61,000 or higher = 7).

Disclosure of sexual orientation. Three separate items asked participants: "How 'out' are you about your sexual orientation" (global disclosure), "Thinking about your community, how 'out' are you about your sexuality" (community disclosure), and "Thinking about your family, how 'out' are you about your sexuality" (family disclosure). Response options included three levels (definitely "closeted" =0; "closeted" some of the time and "out" some of the time=1; and definitely "out" =2). We refer to

these outness contexts as "not at all disclosed," "partially disclosed," and "fully disclosed."

Minority stress-related measures

Internalized homophobia. Participants answered an adapted version of the Internalized Homophobia Scale, which included four questions on a 6-point Likert scale regarding how they feel about being attracted to men. ^{39,45} Items included "I try not to be attracted to men in general," "I would accept the chance to be completely heterosexual," "I wish I did not want to have sex with men," and "I feel alienated for being attracted to men." Responses ranged from *Strongly disagree* (1) to *Strongly agree* (6), with higher scores indicating greater internalized homophobia. Responses were created into a mean score (Cronbach's α =0.72).

Enacted homophobia. Participants answered three questions on a 6-point Likert scale regarding how they were treated by health care workers in the past year. ^{46,47} Questions included "In the past year, I have been mistreated by health-care providers because of my sexual orientation," "In the past year, I have been ignored by healthcare providers due to my sexual orientation," and "In the past year, my healthcare has not been as good as others because of my sexual orientation." Responses ranged from *Strongly disagree* (1) to *Strongly agree* (6), with higher scores indicating greater enacted homophobia. Responses were averaged to create a mean score (Cronbach's $\alpha = 0.88$).

Anticipated homophobia. Participants responded to three questions on a 6-point Likert scale regarding how they anticipated they would be treated by health care workers in the next year. Questions included "In the year ahead, I will be mistreated by healthcare providers because of my sexual orientation," "In the year ahead, I will be ignored by healthcare providers because of my sexual orientation," and "In the year ahead, my healthcare won't be as good as others because of my sexual orientation." Responses ranged from *Very unlikely* (1) to *Very likely* (6), with higher scores indicating greater anticipated homophobia. Responses were averaged to create a mean score (Cronbach's $\alpha = 0.93$).

Resilience. Participants completed the 10-item Connor-Davidson Resilience Scale.⁵⁰ The scale included questions such as "I try to see the humorous side of problems" and "I can stay focused under pressure," with responses on a 6-point Likert scale ranging from *Strongly disagree* (1) to *Strongly agree* (6), with higher scores indicating higher resilience. Responses were averaged to create a mean score (Cronbach's $\alpha = 0.76$).

Substance use and mental health measures

Alcohol Use Disorders Identification Test-Concise (AUDIT-C). Participants completed the 3-item AUDIT-C questionnaire to screen for risky alcohol use, adapted to focus on the past 3 months of alcohol use.⁵¹ Questions included "How often do you have a drink containing alcohol," "In the past 3 months, how many drinks containing alcohol did you have on a typical day when you were drinking," and "In the past 3 months, how often did you have

six or more drinks on one occasion." Response option anchors varied for each item but always ranged from 0 to 4 with higher values indicating greater risk of problematic alcohol use. Composite scores range from 0 to 12, with higher scores indicating increased risk of problematic alcohol use.

Substance use. Participants were asked their frequency of use of eight substances in the past 3 months (i.e., marijuana, crack, cocaine, poppers, speed, Viagra, injection drug use, and other drugs) with responses ranging from Never (1) to $About\ every\ day$ (5). Responses for each substance were dichotomized to indicate whether the participant reported any substance use (No=0; Yes=1). Dichotomized responses were then aggregated into a sum score, with possible ranges from 0 to 8; higher scores indicating a greater number of substances used in the past 3 months.

Depressive symptoms. Participants answered the 10-item Center for Epidemiologic Studies Depression Scale (CES-D 10) to screen for depressive symptomology over the past week. The CES-D 10 contains 10 items, including "I could not 'get going'" and "my sleep was restless," with responses on a 4-point scale ranging from *Rarely or none of the time* (0) to *All of the time* (3). Two items, "I was happy" and "I felt hopeful about the future" were reverse coded. Items were summed to achieve a total symptomology score with possible scores ranging from 0 to 30, with higher scores indicating greater depressive symptomology (Cronbach's α = 0.83).

Data analyses

One-way analysis of variance (ANOVA) and chi-square analyses were performed to determine differences among participants who reported fully disclosing their sexual orientation globally, to their community, and to their family, compared with those who had partially disclosed or not disclosed. Multinomial logistic regression analyses were conducted to determine variables associated with disclosure of sexual orientation, including demographic, minority stress, substance use, and mental health variables. To retain significant covariates and eliminate nonrelevant variables, we utilized a purposeful selection process in which variables with p < 0.10 among one-way ANOVA and chi-square results were included in multinomial logistic regressions. For outcome analyses, p < 0.05 was used to denote statistical significance.

Results

Participant characteristics

Participant ages ranged from 18 to 71 [mean (M) = 31.49, standard deviation (SD) = 10.1]. Most participants identified as same gender loving or gay (73.7%), had completed at least some college or higher (73.9%), and made >\$20,000 annually (53.4%) (see Table 1 for demographics).

Disclosure of sexual orientation

Most participants reported that they had fully disclosed their sexual orientation globally (60.0%), to their community (66.5%), and to their family (59.2%). Almost half of all participants (46.1%) reported full disclosure of sexual

Table 1. Demographic Characteristics of 475 HIV-Negative Black Sexual Minority Men Living in the Atlanta, Georgia Metro Area

Variable	n	%
Sexual orientation		
Same gender loving/gay	350	73.7
Bisexual	125	26.3
Education		
<high school<="" td=""><td>23</td><td>4.8</td></high>	23	4.8
High school	101	21.3
Some college	196	41.3
College degree	102	21.5
Graduate school	20	4.2
Graduate degree	33	6.9
Income		
\$0-\$10,000	128	26.9
\$11,000-\$20,000	92	19.4
\$21,000–\$30,000	90	18.9
\$31,000–\$40,000	69	14.5
\$41,000–\$50,000	39	8.2
\$51,000–\$60,000	21	4.4
\$61,000 or higher	35	7.4
	M	SD
Age	31.49	10.1
AUDIT-C	3.55	2.6
Substance use	0.91	0.9
CES-D 10	9.61	6.8
Internalized homophobia	2.44	1.4
Enacted homophobia	1.37	0.9
Anticipated homophobia	2.02	1.4
Resilience	5.53	0.5

n and % are used to represent number and percentage of participants who endorsed each question.

M and SD are used to represent mean and standard deviation. AUDIT-C, Alcohol Use Disorders Identification Test-Concise; CES-D 10, 10-item Center for Epidemiologic Studies Depression Scale.

orientation across all three contexts, and 21.7% reported that they had not at all disclosed their sexual orientation across all three contexts (Table 2). Sexual orientation disclosure across all three contexts were significantly correlated (Table 3). Prevalence of full disclosure globally, to their community, and to their family differed by age, sexual orientation, and education level. No significant differences were found among AUDIT-C, substance use, enacted homophobia, or anticipated homophobia between groups (Table 4).

Global sexual orientation disclosure. One-way ANOVA revealed significant age differences among disclosure of sexual orientation globally [F(2, 469) = 3.787, p < 0.05]. Tukey honest significant difference (HSD) tests for multiple com-

parisons revealed that participants who fully disclosed their sexual orientation globally were marginally younger than those who partially disclosed (p<0.10, 95% confidence interval [CI]=-4.38 to 0.25) and those who had not disclosed (p<0.10, 95% CI=-9.5 to 0.52). Same gender loving/gay participants reported significantly higher rates of full disclosure globally when compared with their bisexual counterparts [χ^2 (2)=53.402, p<0.001].

Moderate differences were found between group educational attainment levels [F(2, 471) = 2.364, p < 0.10], with Tukey HSD tests revealing no moderate or significant differences between group education attainment. In addition, Welch tests revealed significant differences in internalized homophobia [F(2, 62.902) = 32.091, p < 0.001]. As homogeneity of variance was violated, *post hoc* Scheffe tests were performed, and indicated that those who had fully disclosed their sexual orientation globally had significantly lower internalized homophobia when compared with those who had partially disclosed (p < 0.001, CI = -1.21 to -0.60) and not at all disclosed (p < 0.001, CI = -2.11 to -0.82), respectively (Table 4).

Community sexual orientation disclosure. One-way ANOVA revealed significant age differences among participants who disclosed their sexual orientation to their community [F(2, 470)=5.561, p<0.01]. Tukey HSD tests for multiple comparisons revealed that participants who fully disclosed to their communities were significantly younger than those who had not disclosed their sexual orientation (p<0.01, 95% CI=-8.85 to -1.51). Same gender loving/gay participants were significantly more likely to fully disclose their sexual orientation to their community when compared with their bisexual counterparts $[\chi^2(2)=33.013, p<0.001]$.

Welch tests revealed significant differences among participant reports of internalized homophobia [F(2, 106.924)= 30.371, p<0.001]. Post hoc Scheffe tests revealed that participants who had fully disclosed to their community reported significantly lower internalized homophobia when compared with those who had partially disclosed (p<0.001, CI=-1.21 to -0.53) and those who had not at all disclosed (p<0.001, CI=-1.84 to -0.88). In addition, those who had not disclosed their sexual orientation reported moderately higher internalized homophobia than those who had partially disclosed (p<0.10, CI=-0.4 to 1.03) (Table 4).

Family sexual orientation disclosure. One-way ANOVA revealed moderate differences in age among participants who disclosed their sexual orientation to their families [F(2, 470) = 2.526, p < 0.10]. Tukey HSD test revealed that participants who fully disclosed their sexual orientation to their families were moderately older than those who had partially disclosed (p < 0.01, 95% CI = -0.27 to 5.04). Participants who identified as same gender loving/gay were

Table 2. Participants' Disclosure Levels Across Global (n=474), Community (n=475), and Family (n=475) Sexual Orientation Disclosure

Variable	Fully disclosed	Partially disclosed	Not at all disclosed
Global disclosure	285 (60.1%)	164 (34.6%)	25 (5.3%)
Community disclosure	316 (66.5%)	111 (23.4%)	48 (10.1%)
Family disclosure	281 (59.2%)	111 (23.4%)	83 (17.5%)

Table 3. Means, Standard Deviations, and Correlations with Confidence Intervals for Global Disclosure (n=474), Community Disclosure (n=475), and Family Disclosure (n=475)

Variable	M	SD	1	2	3
 Global disclosure Community disclosure Family disclosure 	1.55 1.56 1.42	0.595 0.670 0.771	0.679*** (0.628–0.725) 0.623*** (0.565–0.676)	 0.528*** (0.460–0.590)	

Values in parentheses indicate 95% confidence interval per correlation. ***p < 0.001.

significantly more likely to fully disclose their sexual orientation to their families when compared with bisexual participants [χ^2 (2)=55.372, p<0.001].

Significant differences were found among participant educational attainment [F(2, 472)=7.837, p<0.001], with Tukey HSD tests revealing that participants who fully disclosed had significantly lower educational attainment than those who somewhat disclosed (p<0.001, CI=-0.79 to-0.18). Participants who had not disclosed their sexual orientation also reported significantly lower educational attainment than those who had partially disclosed to their families (p<0.01, CI=0.15-0.94). In addition, significant differences were found among reported levels of internalized homophobia [F(2, 173.6)=16.636, p<0.001]—with participants who had fully disclosed to their families reporting significantly lower internalized homophobia than those who had partially disclosed (p<0.001, CI=-1 to -0.28) and those who had not disclosed (p<0.001, CI=-1.24 to -0.44).

One-way ANOVA and Welch analyses found moderate to significant differences in income [F(2, 471) = 3.031,p < 0.05], depressive symptomology [F(2, 472) = 3.024, p < 0.10], and resilience [F(2, 175.285) = 6.276, p < 0.01]. Tukey HSD tests found participants who had partially disclosed reported moderately higher income than those who had not disclosed their sexual orientation (p < 0.10, CI=0.00-1.25). Participants who had fully disclosed their sexual orientation reported moderately lower depressive symptomology than those who were partially disclosed (p < 0.10, CI = -3.5 to 0.058). As homogeneity of variance was violated for resilience, post hoc Scheffe tests were performed and revealed that those who had fully disclosed reported significantly higher resilience levels than those who had partially disclosed (p < 0.001, CI=0.081–0.376) (Table 4).

Variables associated with sexual orientation disclosure

Multinomial logistic regression analyses were conducted to determine which variables were associated with disclosure of sexual orientation (full disclosure, partial disclosure, and no disclosure) globally, to community members, and to family among BSMM.

Global sexual orientation disclosure findings. Older age participants [adjusted odds ratio (AOR)=1.06, 95% CI=1.018–1.104] and those with higher levels of internalized homophobia (AOR=1.882, 95% CI=1.356–2.613) had lower odds of global disclosure disclosed. Conversely, participants who identified as same gender loving/gay (AOR=0.106, 95% CI=0.04–0.285) had higher odds of global disclosure.

Older age participants (AOR = 1.026, 95% CI = 1.004–1.049) and those with higher levels of internalized homophobia (AOR = 1.68, 95% CI = 1.421–1.985) had higher odds of partial disclosure globally compared with participants who had fully disclosed. Conversely, participants who identified as same gender loving/gay (AOR = 0.419, 95% CI = 0.258–0.679) had lower odds of partial disclosure (Table 5).

Community sexual orientation disclosure findings. Older age participants (AOR=1.06, 95% CI=1.028–1.092) and those with higher levels of internalized homophobia (AOR=1.969, 95% CI=1.533–2.529) had lower odds of community disclosure compared with participants who had not at all disclosed. Conversely, participants who identified as same gender loving/gay (AOR=0.285, 95% CI=0.142–0.572) had higher odds of disclosure.

Participants with higher levels of internalized homophobia (AOR = 1.64, 95% CI = 1.375–1.956) had higher odds of partial disclosure compared with those who had fully disclosed (Table 5).

Family sexual orientation disclosure findings. Participants with higher levels of internalized homophobia (AOR = 1.354, 95% CI=1.1-1.667) had lower odds of family disclosure compared with their counterparts who had not at all disclosed. Conversely, participants who identified as same gender loving/gay (AOR=0.187, 95% CI=0.106-0.33) had higher odds of family disclosure.

Participants with greater educational attainment (AOR = 1.466, 95% CI=1.162–1.85) and higher levels of internalized homophobia (AOR=1.359, 95% CI=1.123–1.645) had higher odds of partial family disclosure compared with their counterparts with full disclosure. Conversely, participants with older age (AOR=0.962, 95% CI=0.933–0.991), who identified as gay/same gender loving sexual orientation (AOR=0.506, 95% CI=0.289–0.885), and with higher resilience levels (AOR=0.492, 95% CI=0.31–0.78) had lower odds of partial disclosure (Table 5).

Discussion

This study is one of the few to investigate disclosure of sexual orientation among BSMM adults globally, to their communities, and to their families as a dependent variable. Although previous studies indicate that disclosure of sexual orientation may result in both positive and negative outcomes, ^{10,16} factors associated with disclosure varied depending on the context of disclosure. Identifying as same gender loving/gay was the only consistent demographic variable associated with sexual orientation disclosure across all three contexts. This finding highlights previous research

TABLE 4. COMPARISON OF FULLY DISCLOSED, PARTIALLY DISCLOSED, AND NOT AT ALL DISCLOSED ACROSS GLOBAL, COMMUNITY, AND FAMILY CONTEXTS AMONG 475 HIV-NEGATIVE BLACK SEXUAL MINORITY MEN LIVING IN THE ATLANTA, GEORGIA METRO AREA

t Fully Partially (9.8) Not disclosed				Global				Community					Family		
30.74 31.77 35.91 5.561*** 0.023 32.00 29.62 32.28 2.526* 9.8) (10.1) (10.9) 33.013*** 0.264 (10.3) (8.9) (10.5) 55.372**** 255 74 21 236 78 36 78 36 (10.3) (66.7) (43.8) (43.4) 45 33 47 47 (10.3) (33.3) (56.2) (1.50) (29.7) (56.6) 73.7** (11.2) (1.1) (1.4) (1.60) (29.7) (56.6) 73.3** 47 (12.8) (2.1) (1.8) (1.2) (1.1) (1.2) (1.2) (1.1) (1.2) (1.2) (1.1) (1.2) (1.2) (1.1) (1.2) (1.2) (1.1) (1.2) (1.2) (1.1) (1.2) (1.2) (1.2) (2.1) (2.6) (2.6) (2.6) (2.6) (2.6) (2.8) (2.8) (2.8) (2.8) (2.8) (2.8	Not Not Fully Partially at all Effect disclosed disclosed F/χ^2 size	Not Not at all disclosed disclosed F/χ^2	Not at all disclosed F/χ^2		Effect size	Fully disclosed	Partially disclosed	Not at all disclosed	F/χ^2	Effect size	Fully disclosed	Partially disclosed	Not at all disclosed	$\mathrm{F}\chi^2$	Effect size
74 21 236 78 36 (66.7) (43.8) (84.0) (70.3) (43.4) 37 27 45 33 47 (33.3) (56.2) (16.0) (29.7) (56.6) 2.32 2.0 1.351 0.006 2.1 2.58 2.04 7.837**** (1.1) (1.4) (1.4) 1.604 0.007 2.95 3.34 2.72 3.031* (2.4) (3.1) 1.852 0.008 3.55 3.34 3.84 0.866 (2.4) (3.1) 1.852 0.008 3.55 3.34 3.84 0.866 (2.4) (3.1) 1.852 0.008 3.55 3.34 3.84 0.866 (2.4) (3.1) 1.852 0.006 0.90 0.97 0.84 0.481 (0.8) (1.2) 1.412 0.006 0.90 0.97 0.84 0.481 (0.8) (1.2) 1.369 0.006 8.99 10.71 10.24 3.024* (1.4) (1.5) 1.207 0.006 8.99 10.71 10.24 3.024* (1.4) (1.5) 1.207 0.008 1.35 1.41	30.55 32.62 35.04 3.787* 0.016 (9.7) (10.4) (11.1) 53.402*** 0.336	35.04 3.787* (11.1) 53.402***	3.787*		0.016	30.74 (9.8)	31.77 (10.1)	35.91 (10.9)	5.561**	0.023	32.00 (10.3)	29.62 (8.9)	32.28 (10.5)	2.526 ⁺	0.011
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$(0.5) \qquad (0.6) \qquad (0.5) \qquad (0.5) \qquad (0.5)$	(1.3) (1.5) (5.5) 5.46 0.816	(1.5) (1.5) (1.5) (1.5)	0.816		0.003	(1.5) 5.54	(1.4)	(1.4) 5.45	0.545	0.002	(C.1.) 5.6	(1.4)	(1.4) 5.49	7.476***	0.031
	(0.5) (0.7)	(0.7)				(0.5)	(0.5)	(0.6)			(0.5)	(0.6)	(0.5)		

 $^*p\!<\!0.05; \; ^**p\!<\!0.01; \; ^{***}p\!<\!0.001; \; ^*p\!<\!0.001; \; ^*p\!<\!0.10.$

Table 5. Multinomial Logistic Regression among HIV-Negative Black Sexual Minority Men Comparing Full Sexual Orientation Disclosure Globally (n=470), to Community (n=472), and to Family (n=471)

		disclosed vs. all disclosed	Fully disclosed vs. partially disclosed	
Predictor variable	Adjusted odds ratio	95% CI	Adjusted odds ratio	95% CI
Global				
Age	1.060	1.018-1.104**	1.026	1.004-1.049*
Sexual orientation gay/same gender loving (ref. group: bisexual)	0.106	0.040-0.285***	0.419	0.258-0.679***
Education	1.074	0.683-1.690	1.137	0.929 - 1.393
Income	0.831	0.605 - 1.142	1.038	0.911 - 1.183
Internalized homophobia	1.882	1.356-2.613***	1.680	1.421-1.985***
Community				
Age	1.060	1.028-1.092***	1.019	0.996 - 1.042
Sexual orientation gay/same gender loving (ref. group: bisexual)	0.285	0.142-0.572***	0.652	0.390-1.089
Internalized homophobia	1.969	1.533-2.529***	1.64	1.375-1.956***
Family				
Age	1.009	0.983-1.036	0.962	0.933-0.991*
Sexual orientation gay/same gender loving (ref. group: bisexual)	0.187	0.106-0.330***	0.506	0.289-0.885*
Education	1.075	0.821 - 1.407	1.466	1.162-1.850**
Income	0.929	0.775-1.113	1.085	0.932 - 1.263
CESD-10	0.988	0.946-1.032	0.994	0.956 - 1.033
Internalized homophobia	1.354	1.100-1.667**	1.359	1.123-1.645**
Resilience	0.640	$0.377 - 1.088^+$	0.492	0.310-0.780**

Final multinomial logistic regressions include variables with p < 0.10 for global (n = 470), community (n = 472), and family (n = 471) disclosure.

results, which indicate that BSMM, who openly identified as bisexual are more likely to not disclose their sexual orientation, experience greater minority stressors (e.g., internalized homophobia), and increased negative health outcomes (e.g., depressive symptomology) compared with their same gender loving/gay counterparts. ^{39,41,54–56}

Interestingly, income was not significantly associated with disclosure of sexual orientation among all three groups. Previous research has found mixed results regarding disclosure of sexual orientation and income status, in which income is not related to disclosure of sexual orientation as it relates specifically to sexual minority men. 42,57 However, findings indicate that younger BSMM were significantly more likely to fully disclose their sexual orientation globally and to their communities, whereas older BSMM were more likely to partially disclose their sexual orientation to their families. Research has indicated that younger sexual minority individuals are more likely to disclose their sexual orientation than older sexual minority individuals. 58

In the age of virtual support groups and friends, it is possible that younger BSMM may have increased access to developing a more diverse set of social support networks with other sexual minority populations.⁵⁹ In addition, disclosure of sexual orientation is also dependent on experiences of stigma and discrimination, which may accumulate with age.⁶⁰ Although some research has indicated that online communities may serve as buffers to the potential negative consequences of sexual minority identification, there is a need to better understand

younger BSMM's community members and networks when compared with older BSMM, and the relationships between full and partial disclosure among family members.^{59,61}

Similar to other research findings, higher internalized homophobia was negatively associated with disclosure of sexual orientation across all three groups. ^{10,16,39,42,55} The processes of internalized homophobia include the internalization of negative societal concepts of sexual minority identities, and must be addressed to develop a healthy self-concept. ^{62,63} Further, the structural processes that drive homophobia must be addressed through public health policy. A need to address internalized homophobia through culturally tailored interventions is evident, and may help prevent the internalization of societal negativity among BSMM.

Our exploration of resilience levels and their association with disclosure of sexual orientation was only supported in the context of family disclosure; higher levels of resilience were associated with full disclosure of sexual orientation to family, but not globally or to community members. Resilience may serve as an important resource for BSMM—but perhaps only in certain contexts (family, in this study)—as disclosure of sexual orientation to family may come with mixed results. BSMM with higher resilience may possess the resolve to disclose to their families at the risk of incurring negative reactions. ^{10,39,40} Future research should further assess the process of resilience development among BSMM, as resilience development may be resultant of family supports.

p < 0.05; p < 0.01, p < 0.01; p < 0.00; p < 0.10.

CI, confidence interval.

Contrary to previous studies, alcohol use, illicit substance use, and depressive symptomology were not significantly associated with disclosure of sexual orientation across all three contexts, as BSMM have previously reported higher rates of all three. Whereas average reported alcohol use was not within problematic ranges, participants did report high levels of alcohol consumption. Perhaps among BSMM, alcohol and illicit substance use may not be associated with minority stressors to the same extent as White sexual minority individuals.

Lower educational attainment was associated with disclosure to family, but not globally or community, contradictory to previous research. Previous research indicates that BSMM with higher educational attainment are less likely to disclose their sexual orientation compared with BSMM with lower educational attainment. Furthermore, depressive symptomology was not associated with disclosure of sexual orientation. As this was an exploratory study, there is a need to further evaluate and understand the associative value of disclosure of sexual orientation more fully as it relates to health markers; particularly, with the coexisting factors of resilience and depression.

Limitations

Although this was a cross-sectional analysis to determine factors associated with disclosure of sexual orientation among HIV-negative BSMM, these findings provide key correlational insights into variables associated with disclosure among BSMM across three contexts. All three contexts were measured using single-item variables, which may not have completely captured the complexities of disclosure.⁶⁶ However, there have been several studies that have successfully utilized single-item variables validly.^{67–69} Interestingly, global disclosure of sexual orientation did not translate to disclosure to both community and family—underscoring how this variable may have been interpreted by participants.

In addition, community disclosure could include many different groups, including virtually and in person, and may have been too broad. Data on participant religiosity were not collected and may have provided additional insights into sexual orientation disclosure among BSMM. Inclusion of HIV-positive BSMM may also offer further insight into factors associated with disclosure. A longitudinal study may have provided more key insights into findings, as cross-sectional data are correlational, not causal. Furthermore, enacted and anticipated homophobia were asked in the context of health care utilization, which may not have adequately captured enacted and anticipated homophobia among participants. In addition, some analyses may have been underpowered.

Conclusions

Limitations not withstanding these findings provide key insights into factors associated with sexual orientation disclosure among BSMM across three contexts. Our findings highlight the impacts of age, bisexual identity, and internalized homophobia across all three disclosure contexts. In addition, results indicate that disclosure to family involves more unique characteristics when compared with global and community disclosure among BSMMs; including both education and resilience. As LGBTQ+ identities become increasingly visible in mainstream society, understanding what

variables promote mental and physical well-being during disclosure processes are important to understand and study, particularly for individuals experiencing intersecting systems of oppression.

Authors' Contributions

M.B. visualized the published study, wrote the original draft, and reviewed and edited the article. L.A.E. and R.J.W conceptualized the original study, curated the data, conducted original formal analyses, provided funding acquisition for this study, conducted original study investigations, developed the methodology, conducted project administration, and supervised article development. V.A.E., J.M.W, and E.L. contributed to reviewing and editing the article. All coauthors reviewed and approved the article before submission.

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The authors declare that they have no relevant or material financial interests that relate to the research described in this article. The authors have no conflicts of interest to report.

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Disclaimer

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