Stigmatizing Microaggressions, Depression Symptoms, and Suicide Ideation among a
Geographically-diverse Sample of Sexual Minority Persons

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Abstract

This study examined the relation of sexual identity-related victimization in the form of stigmatizing microaggressions with past-year depression symptoms and suicide ideation among a sample of sexual minority (SM) persons ($n = 167$). Multiple logistic regression models found that for each event increase in average weekly frequency of stigmatizing microaggression events, odds of past-year suicide ideation increased by 68% (adjusted odds ratio [AOR] = 1.68, 95% confidence interval [CI] [1.14, 2.43]), past-year hopelessness or sadness for two weeks or more increased by 56% (AOR = 1.56, 95% CI [1.04, 2.30]), and past-year withdrawal from regular activities increased by 186% (AOR = 2.86, 95% CI [1.52, 4.94]). An additional socioecological factor, living in the U.S. South, was associated with substantially increased odds of suicide ideation (AOR = 3.89, 95% CI [1.15, 13.84]) and hopelessness/sadness (AOR = 4.32, 95% CI [1.28, 15.91]). Findings of this study indicate that frequent and more subtle sexual identity-related victimization in the form of microaggressions, in addition to overt victimization such as physical or sexual violence, may negatively impact the mental health of SM persons.

Keywords: sexual minorities, microaggressions, stigma, suicide, depression

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Suicide and its determinants are increasingly recognized as a public health crisis, a syndemic of interlinking social and psychological risk factors that have contributed to reduced life expectancy in the United States (Hong, Espelage, & Kral, 2011; Murphy, Xu, Kochanek, & Arias, 2018). Suicide disproportionately impacts sexual minority (SM) individuals, including those identifying as lesbian, gay, bisexual, queer, or questioning (Hong et al., 2011; McManama O'Brien, Salas-Wright, Vaughn, & LeCloux, 2015; Mustanski, Andrews, Herrick, Stall, & Schnarrs, 2014). In meta-analytic samples, 11–20% of SM adults have attempted suicide in their lifetime, two to five times greater than rates among heterosexual persons (Hottes, Bogaert, Rhodes, Brennan, & Gesink, 2016). Primary studies and epidemiological data report rates of lifetime suicide attempt of up to 31% in SM adults and 37% in SM youth, while approximately 40% of SM adolescents and adults report recent suicide ideation (Eisenberg & Resnick, 2006; Hottes et al., 2016; Kann et al., 2016; McBee-Strayer & Rogers, 2002; McManama O'Brien et al., 2015). An array of socioecological and intraindividual factors have been linked with depression and suicidality among SM persons (see Hong et al., 2011, for a comprehensive review), with one important domain of environmental risk factors being sexual identity-related victimization experiences. For instance, bullying or threats or enactments of violence related to sexual or gender-minority identity are associated with a nearly three-fold increase in odds of depression symptoms and a 3.5-fold increase in odds of suicide attempt, and among sexual minorities specifically, victimization experiences mediate the relation between sexual minority identity and depression and suicidality longitudinally (Burton, Marshal, Chisolm, Sucato, & Friedman, 2013; Shields, Whitaker, Glassman, Franks, & Howard, 2012). The types of sexual

identity-related victimization examined in much of the existing literature may be described as *overt*: involving pronounced acts of discrimination or victimization such as physical and sexual threats and violence, bullying, denial of services, employment or housing loss, and social and family rejection. Importantly, experiences of overt victimization do not fully account for disparities in suicide risk between SM and heterosexual-identifying individuals, and other potential etiological factors for suicidality among SM must be considered (Paceley, Goffnett, & Gandy-Guedes, 2017).

Sexual identity-related victimization in the form of microaggressions – brief, frequent, and sometimes subtle experiences which convey stigmatization, objectification, or rejection of sexual minority identities – has been proposed as an additional socioecological risk factor for poor mental health outcomes among SM populations (Nadal, Rivera, & Corpus, 2010; Sue et al., 2007). Several typologies of stigmatizing microaggressions have been developed, and broadly, these microaggressions take the form of a) use of heterosexist terminology (e.g., referring to an undesirable situation or behavior as “gay”), b) endorsement of heteronormative cultural norms (e.g., an expectation that sexual minority identity will not be openly discussed), c) assumption of a universal sexual minority experience (e.g., suggesting that someone does not meet stereotypes of their sexual identity), d) objectification or exoticization (e.g., being stared at in public), e) discomfort or disapproval of sexual minority identity (e.g., being told one’s sexual identity is a “phase” or is sinful), f) denial of societal heterosexism (e.g., disputing that sexual minorities are systematically marginalized), g) assumption of pathology (e.g., insinuating that a sexual minority person is a predator, or is deviant or mentally ill), or h) denial of individual heterosexism (e.g., becoming defensive when one is confronted about heterosexist behavior) (Nadal et al., 2010; Parr & Howe, 2019; Platt & Lenzen, 2013; Sue, 2010). The majority of studies focusing on

stigmatizing microaggressions among SM have used qualitative methods to more fully characterize variation in types of microaggressions and in the settings in which they occur. Limited quantitative research has been carried out to estimate the frequency with which stigmatizing microaggressions are experienced by SM populations, or the association of those experiences with outcomes such as depression and suicidality. A small number of recent studies have found that nonphysical victimization (not characterized explicitly as microaggressions), including overhearing stigmatizing conversation, shunning, or teasing, is associated with depression, anxiety, and additive stress among SM persons (Almeida, Johnson, Corliss, Molnar, & Azrael, 2009; Robinson & Espelage, 2012). Another study recently examined the relation of stigmatizing microaggressions and cigarette smoking behaviors among SM university students, and found that past-year experience of microaggressions is associated with a nearly two-fold increase in odds of smoking (Ylloja, Cochran, Woodford, & Renn, 2018).

Understanding the role of stigmatizing microaggressions in relation to depression and suicide risk is critical. Indeed, because stigmatizing microaggressions likely occur with greater frequency than overt victimization (e.g., acts of physical or sexual violence), it is possible that the commonplace experience of microaggressions may lead to a chronic perception of stigmatization and social rejection among SM youth and adults (Hatzenbuehler, 2009; Meyer, 2003; Parr & Howe, 2019). Further, it is conceivable that this ongoing stigmatization may lead SM individuals to concealment of their identity, a behavior that itself is associated with depression, relationship strain, poorer HIV-related outcomes, and lower overall psychological and physiological quality of life (Quinn, Weisz, & Lawner, 2017; Ullrich, Lutgendorf, & Stapleton, 2003). Given a dearth of quantitative studies investigating the associations of depression and suicidality among SM with experiences of stigmatizing microaggressions, we

aimed to examine these relations in the present study. Specifically, we used an online survey to assess the weekly frequency with which SM individuals experience eight different stigmatizing microaggressions as well as past-year depression symptoms and suicide ideation. We then tested hypotheses that increased weekly frequency of stigmatizing microaggressions would be independently associated with greater odds of past-year suicide ideation, past-year sadness or hopelessness for two weeks or more, and past-year withdrawal from regular activities while adjusting for sociodemographic variables that may be associated with increased mental health risk. Because respondents represented major geographic regions of the United States, we had a secondary interest in whether region of residence had an explanatory role in depression and suicidality among SM respondents, in light of prior findings that (overt) victimization does not fully explain these outcomes among SM individuals and that they may in part result from unsupportive community climate (Paceley et al., 2017). All phases of research were approved by the University of Oregon Institutional Review Board.

Method

Data for the present study were drawn from a two-phase study which aimed to identify specific identity-related microaggressions experienced by both sexual and gender minority individuals, and to quantitatively assess the frequency and self-rated intensity with which they occur. Full details of that study can be found in Parr and Howe (2019). In brief, the first phase of study consisted of three focus groups held across the U.S., in which non-transgender sexual minority and transgender participants were prompted to describe experiences of identity-related microaggressions. Thirty-six adolescents and adults, ranging in age from 15–55 years, participated in focus groups; of those endorsing a sexual minority identity, six identified as lesbian, nine as gay, five as bisexual, and two as *other*. From the focus group analysis, 14

specific stigmatizing microaggressions were identified as commonly experienced by sexual and gender minority participants. These microaggressions were adapted into situational prompts to be included in an online survey questionnaire, which was disseminated via email lists of organizations serving sexual and gender minority persons, and social media platforms and online forums with user bases of sexual and gender minority individuals. An informed consent procedure was integrated into the survey platform. Inclusion criteria were being at least 14 years of age and a U.S. resident, and there were no specific exclusion criteria. Parental notification or consent was not required for minor participants' involvement in the study to minimize risk of unwanted or unintentional disclosure of their sexual and/or gender identity. Data were collected over an approximately one-month period, during which 841 responses were initiated. Following implementation of an 80% completion threshold, 402 responses remained. Of these, 167 respondents identified as a non-transgender sexual minority, and these participants comprise the present sample. For the purposes of this study, non-transgender sexual minority is defined as self-identifying as lesbian, gay, bisexual, or *other*, as well as cisgender female or male, genderqueer/gender non-conforming, or *other*. Because a number of the microaggressions included in the survey questionnaire were relevant primarily to transgender individuals (e.g., related to gender confirmation procedures; see Measures section), the subsample of participants who self-identified as transgender were analyzed separately (see Parr and Howe, 2019). Demographic information for participants included in the present study is provided in Table 1.

Measures

Accompanying each situational prompt adapted from stigmatizing microaggressions reported in focus groups was an item assessing the weekly frequency with which participants experienced each microaggression event. In the current study, this item was used to calculate

each participant's average weekly number of microaggressions experienced. Of the 14 microaggressions included in the survey, eight were pertinent to both sexual and gender minority persons (Table 2) and were used to calculate the average frequency variable used in the analyses described below. Frequency item internal consistency was assessed prior to calculating means and was high ($\alpha = .89$). Additional measures included participant age category, annual income, education level, U.S. region of residence, and demographic area of residence (urban, suburban, or rural). Participant race/ethnicity was collected but was not used in analyses due to substantial imbalance (see Table 1). Outcomes of interest were measured using an item from the Suicide Behaviors Questionnaire–Revised (Osman et al., 2001) assessing past-year suicide ideation (“How often have you thought about killing yourself in the past year?”), and two additional items assessing past-year depression symptomatology including sadness or hopelessness (“During the past year, did you ever feel sad or hopeless almost every day for 2 weeks or more?”) and withdrawal from regular activities (“During the past year, did you ever feel so sad or hopeless that you stopped doing some usual activities?”). Depression items were dichotomous, and for analyses the suicide item was also dichotomized with zero representing no past-year suicide ideation and one indicating endorsement of any past-year ideation.¹ Because of the inclusion of items related to suicide, contact information for suicide prevention lifelines including the U.S. National Suicide Prevention Lifeline and two lifelines serving sexual and gender minority persons was provided to participants at the conclusion of the survey.

Analytic Approach

Multiple logistic regression analyses were used to examine a priori hypotheses. As commonly occurs in logistic regression settings with multiple predictor variables, partial

¹ Collapsing of self-rated, categorical health-related outcome variables yields similar logistic regression parameter estimates to analyses with category levels preserved (Manor, Matthews, & Power, 2000).

separation was observed on some control variables during initial model fitting (here, on age and education variables). Separation occurs when a linear combination of independent or control variables (or category levels of those variables) perfectly predicts a binary outcome, resulting in extreme inferences for those variables or levels and in the model being unidentified (Albert & Anderson, 1984; Lesaffre & Albert, 1989). While a routine challenge in logistic regression models, separation is also routinely mishandled by, for instance, removing predictors on which separation is found (Gelman, Jakulin, Pittau, & Su, 2008). Despite the instability in model estimation introduced by those variables, however, their precise prediction of the outcome is valuable and their exclusion from the model removes explanatory information (Zorn, 2005). Here, we address separation by implementing an approach developed by Gelman et al. (2008) that uses a partially Bayesian method of model estimation. This procedure maintains the estimation algorithm typical for logistic regression (iteratively-weighted least squares) and implements a conservative Student-*t* distribution to estimate model parameters, while incorporating a flexible and minimally-informative prior distribution to stabilize estimation of parameters exhibiting separation. The behavior of this prior distribution, known as a Cauchy prior, is to yield appropriate estimates of coefficients which would otherwise be unidentified due to separation, while leaving other coefficients (e.g., microaggression frequency) substantively unchanged (Gelman et al., 2008). We implemented this modelling technique for the present analyses, and conducted sensitivity analyses comparing the standard logistic regression estimates of non-separated variables we obtained during initial model fitting to those of the same variables in the fully-identified models that incorporated the Cauchy prior.

Three diagnostic measures were used to evaluate overall model specification and fit. First, residual quantile-quantile and residual vs. fitted values plots were inspected. Residuals of

logistic regression models are often not directly interpretable because the outcome variable is discrete, creating the condition in which multiple values of a (continuous) predictor variable are associated with the same outcome level. To produce interpretable diagnostic plots, a simulation approach similar to bootstrapping was used to generate an empirical cumulative density distribution of expected residuals. From this distribution, scaled standardized residuals corresponding to the observed data were drawn and plotted, with diagnostic plot interpretation then analogous to that of linear regression models (Dunn & Smyth, 1996; Hartig, 2019). Visual inspection and Kolmogorov–Smirnov tests were then used to assess model misspecification and departures of residuals from normality. Additionally, model explained deviance (D^2) was calculated and deviance tests conducted to assess the significance of reduction in residual deviance of full models in comparison to null models with no predictors. Finally, the area under a receiver operating characteristic curve (AUC) was calculated for each full model. This statistic quantifies the predictive ability of a model to discriminate between the two values of the dichotomous outcome variable. An AUC of .5 indicates that the model performs no better than chance at selecting the outcome level based on levels of the predictors, while a value of 1.0 indicates the model perfectly discriminates between the outcome values based on the included predictors. Following evaluation of model fit, model coefficients were exponentiated to adjusted odds ratios (AORs) to provide interpretable effect sizes and 95% confidence intervals (CIs) for AORs were generated from exponentiated bootstrapped sample percentiles. For all analyses, statistical significance was assessed using the bootstrapped CIs (i.e., when an AOR of one was excluded from the interval). All analyses were conducted using R Version 3.6.0 (R Core Team, 2018; RStudio Team, 2018). Multiple logistic regression models implementing the method described above were fitted using the “bayesglm” function in the *arm* package (Gelman & Su,

2018) and standardized residual calculation and plotting were carried out using the *DHARMa* package (Hartig, 2019).

Results

Descriptive Findings

Sociodemographic characteristics of study participants are provided in Table 1. Gay or lesbian participants made up 28.7% of the sample and individuals identifying as bisexual comprised a similar proportion (27.5%); 43.7% endorsed a sexual orientation of *other*. Descriptive details for stigmatizing microaggression items are shown in Table 2. The most frequently-occurring microaggression event was observing one's identity depicted in the media as an abnormality or curiosity, experienced on average 2.32 times per week ($SD = 1.94$) and reported as occurring at least once per week by 82.4% of SM participants. The next most frequent stigmatizing microaggression was being stared at in public because of one's identity (on average 2.16 events each week, $SD = 2.02$), and 71.7% of participants experienced this microaggression at least once per week. The least frequent microaggression was being labeled a predator or seen as a danger to others because of one's identity (0.39 events per week, $SD = 0.89$); nevertheless, nearly one-quarter (22.4%) of participants indicated they experienced this microaggression at least once per week. Microaggressions taking place in media or public contexts occurred more frequently (range = 0.88–2.32 events per week) than interpersonal microaggressions (range = 0.39–1.22). Past-year suicide ideation was reported by 62.8% of participants, 67.1% reported past-year sadness or hopelessness for two weeks or more, and 75.4% endorsed past-year withdrawal from regular activities.

Inferential Findings

Fewer than 1% of participant responses were missing; remaining missing data were primarily on sociodemographic control variables and appeared nonrandom (e.g., non-response on most demographic variables). Consequently, these observations ($n = 6$) were excluded from analyses, leaving an analytic sample of $n = 161$. Correlation among independent and control variables was also evaluated before model fitting and was minimal (median $r = .02$, range = $-.17$ – $.53$). Following model fitting and scaling and standardization of model residuals, all final models exhibited residual normality in visual inspection of quantile-quantile plots and nonsignificant Kolmogorov–Smirnov tests. Further, no distinct patterning of model residuals was found in residual vs. fitted values plots, suggesting that residuals were uniform across predictor levels. Remaining model fit indicators are presented in Table 3. In deviance tests, all final models significantly reduced deviance in comparison to null models for each outcome, and AUCs calculated for each model ranged from $.78$ – $.79$ (indicating fairly good discrimination among outcome levels). Lastly, as noted above, a sensitivity analysis (not shown) was carried out to compare standard logistic regression estimates on non-separated variables with coefficients of the same variables estimated using models incorporating a minimally informative stabilizing prior to address separation. In all cases, parameter estimates of the models using the Cauchy prior were either directly comparable to those of the standard logistic regression, or somewhat more conservative. The latter condition is likely reflective of the Student- t distribution applied to coefficient estimation. Further, extreme parameter estimates found in the standard regressions with evident separation were resolved in the final models that included the stabilizing prior, and reasonable and interpretable estimates were achieved (described next).

Experiencing higher average weekly frequency of stigmatizing microaggressions was found to be associated with significantly greater odds of experiencing all outcome variables

among SM participants (Table 3). For each event increase in average weekly frequency of microaggression events, odds of past-year suicide ideation increased by 68% (AOR = 1.68, 95% CI [1.14, 2.43]) when adjusting for participant age, annual income, education level, and U.S. region and demographic area of residence. For depression symptom variables, each event increase in average weekly microaggression frequency was associated with a 56% increase in odds of past-year hopelessness or sadness for two weeks or more (AOR = 1.56, 95% CI [1.04, 2.30]) and a 186% increase in odds of past-year withdrawal from regular activities (AOR = 2.86, 95% CI [1.52, 4.94]), when adjusting for sociodemographic factors. With regard to the region of residence variable, living in the U.S. South² is associated with a 3.9-fold increase in past-year suicide ideation (AOR = 3.89, 95% CI [1.15, 13.84]) and a 4.3-fold increase in past-year hopelessness or sadness for two weeks or more (AOR = 4.32, 95% CI [1.28, 15.91]) for SM participants, compared to living in the Pacific West³ and when adjusting for participant age, income, education, demographic area, and for stigmatizing microaggression frequency. Finally, while the annual income variable was primarily included to adjust for other potential influences of suicidality and depression, increasing annual income above US\$35,000 was found to be associated with substantially reduced odds of past-year suicide ideation in comparison to the lowest income category (earning less than US\$20,000 annually) when adjusting for other sociodemographic factors and for microaggression frequency. Decreases ranged from 74% lower odds of past-year suicide ideation for those earning US\$35,000–49,999 each year (AOR = 0.26, 95% CI [0.08, 0.78]), to 84% lower odds for those earning over US\$100,000 each year (AOR = 0.16, 95% CI [0.04, 0.71]). For those with an annual income of US\$50,000–74,999, odds of past-

² U.S. states Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

³ U.S. states Alaska, California, Hawaii, Oregon, and Washington.

year hopelessness or sadness for two weeks or more were reduced by 73% (AOR = 0.27, 95% CI [0.08, 0.91]) in comparison to those with the lowest income and when adjusting for other sociodemographic factors and for microaggression frequency.

Discussion and Implications

To more fully understand and intervene to reduce disproportionate rates of suicide among sexual minorities, it is important to utilize a socioecological view of the risk environment occupied by this population (Hong et al., 2011). Indeed, while individual-level determinants such as comorbid mental health concerns (e.g., depression) may partially account for suicide ideation or attempt among sexual minorities, increased risk of suicidality is likely the result of interactions among individual and socioecological risk factors (Mustanski et al., 2014; Stall, Friedman, & Catania, 2008). Among these risk factors, evidence has accumulated that experiences of overt sexual identity-related victimization are harmful to the mental health and wellbeing of SM populations (Burton et al., 2013; Hong et al., 2011; Shields et al., 2012). Findings of this study extend this body of research by further characterizing the risk environment experienced by SM individuals. We found that more subtle forms of sexual identity-related victimization – stigmatizing microaggressions – are associated with increased odds of past-year sadness or hopelessness, withdrawal from regular activities, and suicide ideation. Moreover, we identified a substantial independent relation that among SM participants, living in the U.S. South is associated with elevated risk of suicide ideation and withdrawal from regular activities. This finding aligns with prior research that has linked less supportive or tolerant community climates with increased occurrence of sexual identity-related victimization and risk of depression (Paceley et al., 2017). Finally, microaggressions occurring in media and public contexts were generally more frequent than interpersonal microaggressions, an important finding for characterizing how

microaggressions may produce chronic states of perceived societal, in addition to interpersonal, stigmatization (Hatzenbuehler, 2009; Meyer, 2003; Parr & Howe, 2019).

A limitation of this study is that, as a cross-sectional survey design, causal relations among microaggression frequency, region of residence, and mental health outcomes could not be ascertained. Further, representation of racial or ethnic minority SM individuals was limited in our sample, preventing inference on additive or multiplicative relations that race/ethnicity may have with SM identity and microaggressions (i.e., multiple minority identity; Balsam, Molina, Beadnell, Simoni, & Walters, 2011; Meyer, 2003). Future studies of sexual minority-related victimization should implement sampling strategies that ensure greater representation of racial or ethnic minority SM persons, particularly as this population experiences elevated risk of victimization in comparison to white (non-Hispanic) SM individuals (see Balsam et al., 2011). Finally, while there were significant findings for the U.S. South region of residence variable level, the wide CIs suggest that the magnitude of the relation between living in the southern U.S. and suicide ideation and depression symptomatology could not be precisely estimated using this sample of SM persons.

Findings of this study along with others noted suggest that the socioecological risk environment experienced by SM individuals is characterized by several pathways to elevated risk of depression and suicidality: experiences of overt victimization and discrimination, such as physical or sexual violence, job or housing loss, or rejection; chronic exposure to more subtle victimization in the form of stigmatizing microaggressions; and ongoing experiences of community or family nonsupport or nonacceptance. Realistically, the lived experience of many SM individuals may include several or all of these pathways interacting syndemically, such that acts of overt victimization, happening more rarely, are punctuated by frequent or everyday

experiences of stigmatizing microaggressions or other expressions of nonsupport based on an individual's sexual identity. Consequently, many SM persons may be faced with expressing their identity, which may elevate their risk of overt and microaggressive victimization, or concealing their identity, which itself impacts psychosocial health (Quinn et al., 2017; Ullrich et al., 2003). Taken together, currently-available evidence underlines the need for broad implementation of interventions to enhance the inclusivity of environments SM persons regularly experience (e.g., school or university climates; Burk, Park, & Saewyc, 2018), and highlights the need for systematic efforts to bring greater awareness to the numerous ways sexual identity-related stigma can be subtly or unintentionally communicated in everyday life.

Declaration of Interest

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6

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Table 1

Study Participant Demographics (N = 167)

	<i>n</i> (%)
Age	
14–17	7 (4.2)
18–24	56 (33.5)
25–34	32 (19.2)
35–49	39 (23.4)
50–64	26 (15.6)
65 +	7 (4.2)
Race/ethnicity	
African-American or Black	2 (1.2)
American Indian	3 (1.8)
Asian or Pacific Islander	2 (1.2)
Hispanic or Latino	7 (4.2)
White (non-Hispanic)	132 (79.0)
Mixed race or ethnicity	17 (10.2)
Other	4 (2.4)
Current gender identity ^a	
Cisgender female / woman	61 (36.5)
Cisgender male / man	15 (9.0)
Genderqueer / Gender non-conforming	39 (23.4)
Other	52 (31.1)
Sexual orientation	
Gay or lesbian	48 (28.7)
Bisexual	46 (27.5)
Other	73 (43.7)
Highest education level	
Still attending high school	6 (3.6)
High school graduate	18 (10.9)
Some college	55 (33.3)
Bachelor's degree	41 (24.8)
Master's or doctoral degree	45 (27.3)

Annual income (US\$)	
Less than \$20,000	75 (46.0)
\$20,000–\$34,999	22 (13.5)
\$35,000–\$49,999	21 (12.9)
\$50,000–\$74,999	18 (11.0)
\$75,000–\$99,999	15 (9.2)
Over \$100,000	12 (7.4)
U.S. region of residence ^b	
Pacific West	63 (38.2)
Rocky Mountain West	31 (18.8)
Midwest	28 (17.0)
South	28 (17.0)
Mid-Atlantic	10 (6.1)
New England	5 (3.0)
Demographic area of residence ^c	
Urban	72 (43.6)
Suburban	64 (38.8)
Rural	29 (17.6)

Note. Percentages reflect missingness of up to four participants on some demographic variables. Sexual orientation and gender identity variables were complete. ^a See Parr and Howe (2019) for analyses related to transgender respondents. ^b U.S. states included in each region were provided on questionnaire. ^c Self-described.

Table 2

Stigmatizing Microaggressions Reported by Sexual Minority Participants (N = 167)

Microaggression	Weekly frequency of microaggression events	Participants reporting ≥ 1 microaggression event per week
	<i>Mean (SD)</i>	<i>n (%)</i>
Observed their sexual identity depicted in the media as an abnormality or curiosity	2.32 (1.94)	136 (82.4)
Stared at in public because of identity	2.16 (2.02)	119 (71.7)
Heard their identity presented in the media as a process and not a key part of who they are	1.28 (1.76)	79 (47.9)
Told that if they wanted to be an authentic person of their identity, they should present their identity more stereotypically	1.22 (1.83)	79 (47.9)
Treated as though their identity is a process and not a key part of who they are	1.10 (1.77)	62 (37.8)
Heard their identity referred to in the media in an objectifying way	0.88 (1.48)	65 (38.9)
Asked if they have tried “curing” their identity, as if it is a medical condition or mental illness	0.63 (1.24)	56 (33.7)
Labeled a predator, or seen as a danger to others, because of their identity	0.39 (0.89)	37 (22.4)

Note. Microaggressions presented as scenario-based prompts (e.g., “I have been stared at in public because of my identity.”) on study questionnaire.

Table 3

Results of Multiple Logistic Regression Analyses of the Association Between Frequency of Stigmatizing Microaggressions and Past-year Suicide Ideation, Hopelessness or Sadness, and Withdrawal from Regular Activities among Sexual Minority Respondents (n = 161^a)

Variable	Past-year Suicide Ideation		Past-year Hopelessness		Past-year Withdrawal	
	AOR	95% CI	AOR	95% CI	AOR	95% CI
Intercept	0.72	[0.09, 5.28]	1.51	[0.20, 12.77]	2.00	[0.22, 22.04]
Frequency	1.68	[1.14, 2.43]	1.56	[1.04, 2.30]	2.86	[1.52, 4.94]
Age						
18–24	1.78	[0.41, 7.69]	0.53	[0.10, 2.95]	1.06	[0.17, 5.24]
25–34	1.64	[0.40, 7.58]	0.40	[0.07, 2.36]	0.65	[0.10, 3.89]
35–49	1.49	[0.35, 7.63]	0.60	[0.11, 3.28]	0.83	[0.14, 4.99]
50–64	3.02	[0.59, 16.60]	1.19	[0.21, 7.85]	0.84	[0.14, 5.96]
65+	1.07	[0.14, 7.79]	0.48	[0.06, 3.18]	0.44	[0.05, 3.52]
Region						
Rocky Mtn. West	1.26	[0.47, 3.59]	1.48	[0.56, 3.96]	1.95	[0.63, 6.75]
Midwest	1.42	[0.48, 3.99]	2.41	[0.86, 7.53]	1.27	[0.42, 4.10]
South ^b	3.89	[1.15, 13.84]	4.32	[1.28, 15.91]	2.31	[0.61, 10.23]
Mid-Atlantic	0.92	[0.21, 3.90]	0.33	[0.08, 1.31]	0.52	[0.12, 2.39]
New England	1.43	[0.16, 12.84]	1.48	[0.21, 10.85]	0.34	[0.05, 2.19]
Demographic Area						
Suburban	1.15	[0.54, 2.73]	0.85	[0.39, 1.82]	0.94	[0.36, 2.25]
Rural	1.82	[0.61, 5.76]	2.74	[0.87, 10.12]	1.76	[0.55, 6.31]
Annual income						
20,000–34,999	0.76	[0.23, 2.23]	1.53	[0.49, 4.85]	0.96	[0.27, 3.17]
35,000–49,999	0.26	[0.08, 0.78]	0.40	[0.13, 1.23]	0.35	[0.10, 1.23]
50,000–74,999	0.15	[0.04, 0.55]	0.27	[0.08, 0.91]	1.46	[0.34, 6.36]
75,000–99,999	0.22	[0.06, 0.84]	0.90	[0.22, 3.60]	0.35	[0.08, 1.27]
Over 100,000	0.16	[0.04, 0.71]	0.51	[0.11, 2.17]	0.51	[0.12, 2.12]
Education						
High school	0.49	[0.09, 2.84]	0.63	[0.10, 3.37]	0.50	[0.06, 3.67]
Some college	1.20	[0.22, 6.30]	2.12	[0.43, 10.92]	0.70	[0.12, 4.55]
Bachelor's	1.02	[0.19, 5.45]	1.21	[0.21, 6.26]	0.90	[0.15, 5.67]
Master's or doc.	1.39	[0.24, 7.02]	1.07	[0.17, 5.54]	0.66	[0.12, 4.58]
D^2	.20		.18		.21	
Deviance test (χ^2)	41.53 (22), $p = .01$		36.86 (22), $p = .03$		36.24 (22), $p = .03$	

AUC	.79	.78	.79
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Note. For all categorical variables, reference level is the first level listed in Table 1. Boldface indicates statistical significance (95% confidence interval for adjusted odds ratios excluding one). AOR = adjusted odds ratio. CI = confidence interval. D^2 = explained deviance (calculated as $1 - \text{ratio of full and null model deviances}$). AUC = area under receiver operating characteristic curve. ^a Six observations deleted due to nonrandom missingness. ^b U.S. states Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.