

Responses to Discrimination and Psychiatric Disorders Among Black, Hispanic, Female, and Lesbian, Gay, and Bisexual Individuals

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The role of discrimination as a health determinant has increasingly become a focus of scholarly inquiry. Accumulating evidence points to the deleterious consequences of discrimination experiences on health.^{1–6} The damaging effects of discrimination on mental health, in particular, are increasingly evident.^{6–9} Experiences of discrimination, whether based on race/ethnicity, sexual orientation, or gender, have been linked to elevations in psychological distress and symptoms of psychopathology.^{1,8,10–13} Although the relation between discrimination and psychiatric disorders has been studied less frequently, significant associations with major depression,^{9,13} generalized anxiety disorder (GAD),⁹ early initiation of substance abuse,¹⁴ and a composite index of psychiatric morbidity¹⁵ have been reported.

This research provides empirical documentation of the role of discrimination in shaping the distribution of adverse mental health outcomes at a population level, but numerous questions regarding these associations remain. Despite widespread exposure to discrimination, most members of stigmatized groups do not ultimately develop psychiatric disorders, which suggests the presence of factors that buffer some individuals against the negative mental health consequences of discrimination. How an individual responds to and copes with discrimination is one factor that may help to identify those most vulnerable to the development of psychiatric disorders after exposure to discrimination. Although several studies have examined coping strategies that members of stigmatized groups use in response to status-based discrimination,^{16,17} few studies have considered the impact of these strategies on psychiatric disorders. Previous research has reported associations between responses to discrimination and blood pressure,^{3,5} self-esteem, and psychological distress,^{6,16} which suggest that such responses may have implications for psychiatric morbidity.

Objectives. We examined associations between perceived discrimination due to race/ethnicity, sexual orientation, or gender; responses to discrimination experiences; and psychiatric disorders.

Methods. The sample included respondents in the 2004–2005 National Epidemiologic Survey on Alcohol and Related Conditions (n=34 653). We analyzed the associations between self-reported past-year discrimination and past-year psychiatric disorders as assessed with structured diagnostic interviews among Black (n=6587); Hispanic (n=6359); lesbian, gay, and bisexual (LGB; n=577); and female (n=20 089) respondents.

Results. Black respondents reported the highest levels of past-year discrimination, followed by LGB, Hispanic, and female respondents. Across groups, discrimination was associated with 12-month mood (odds ratio [ORs]=2.1–3.1), anxiety (ORs=1.8–3.3), and substance use (ORs=1.6–3.5) disorders. Respondents who reported not accepting discrimination and not discussing it with others had higher odds of psychiatric disorders (ORs=2.9–3.9) than did those who did not accept discrimination but did discuss it with others. Black respondents and women who accepted discrimination and did not talk about it with others had elevated rates of mood and anxiety disorders, respectively.

Conclusions. Psychiatric disorders are more prevalent among individuals reporting past-year discrimination experiences. Certain responses to discrimination, particularly not disclosing it, are associated with psychiatric morbidity. (*Am J Public Health.* 2010;100:1477–1484. doi:10.2105/AJPH.2009.181586)

Two dimensions of discrimination responses relevant to health outcomes are acceptance and disclosure. Previous research has suggested that these responses interact in complex ways. Among individuals who accept discrimination, disclosing the experience is associated with elevated blood pressure among Black men, whereas not disclosing the experience predicts higher blood pressure among Black women.³ Aside from that study, however, the extent to which responses to discrimination and their associations with health outcomes vary across stigmatized groups has rarely been examined empirically. Given the heterogeneity across groups in experiences of discrimination,^{18–20} it is likely that members of stigmatized groups have developed divergent social norms or beliefs regarding appropriate responses to discriminatory actions. Consequently, it remains unclear (1) whether members of different stigmatized groups respond differently to discrimination, and

(2) whether these variations in responses translate into differential vulnerability to psychiatric disorders when discrimination is experienced. Such information may help to more effectively target preventive interventions, an important public health priority given group-based disparities in psychiatric morbidity.²¹

In the present study, we addressed these gaps in the literature by examining whether psychiatric disorders were associated with perceived discrimination due to race/ethnicity, sexual orientation, or gender and with responses to discrimination experiences. We first examined the prevalence of past-year self-reported discrimination experiences based on race/ethnicity, sexual orientation, or gender in a US national sample. Second, we estimated the associations between discrimination experiences and the prevalence of psychiatric disorders as defined in the *Diagnostic and Statistical Manual of Mental*

Disorders, Fourth Edition (DSM-IV),²² including mood, anxiety, and substance use disorders, thus providing the first such estimates across a range of disorders. Third, we examined the distribution of responses to discrimination across 2 domains (acceptance–nonacceptance and disclosure–nondisclosure). Finally, we estimated the associations between responses to discrimination and psychiatric disorders among individuals exposed to past-year discrimination.

METHODS

The data we used for our analyses were drawn from the 2004–2005 National Epidemiologic Survey of Alcohol and Related Conditions (NESARC), a longitudinal, population-based sample of psychiatric disorders among civilian, noninstitutionalized US adults. The sampling frame included households in the Census 2000–2001 Supplementary Survey and group quarters in the Census 2000 Group Quarters Inventory. Interviews were completed for 34 653 (aged 20–90 years) of the original 43 093 NESARC respondents (cumulative response rate of 70%). Further information on the design and implementation of the NESARC is found elsewhere.^{23–25} The research protocol, including written informed consent procedures, received full ethical approval from the US Census Bureau and the US Office of Management and Budget.

Measures

DSM-IV mood, anxiety, and substance use disorders were assessed by use of the Alcohol Use Disorder and Associated Disabilities Interview Schedule–*DSM-IV* Version (AUDADIS-IV).²⁶ The AUDADIS-IV assesses mood disorders, including major depression and mania/hypomania, and anxiety disorders, including generalized anxiety disorder (GAD), panic disorder with or without agoraphobia, social phobia, and posttraumatic stress disorder (PTSD). Substance-induced mood and anxiety disorders, those caused by somatic illnesses, or those caused by bereavement were ruled out per the *DSM-IV* definition. The reliability of AUDADIS-IV mood and anxiety disorder diagnosis and symptom items range from fair (for GAD, $\kappa=0.41$) to good (for PTSD diagnosis, $\kappa=0.77$).^{27–29}

The AUDADIS-IV assessed the criteria for *DSM-IV* alcohol abuse and dependence and for substance abuse and dependence for 10 classes of drugs, including sedatives, tranquilizers, opiates, stimulants, hallucinogens, cannabis, cocaine or crack cocaine, inhalants or solvents, heroin, and other drugs. The substance use disorders have demonstrated good to excellent reliability in clinical and general population studies, and the validity of diagnoses has been established in clinical reappraisal studies.^{27–30} The current analysis focused on 12-month mood (major depression, mania), anxiety (GAD, panic disorder, social phobia, and PTSD), and substance use disorders (alcohol abuse or dependence and substance abuse or dependence).

Discrimination experiences were assessed by using a series of questions from the Experiences of Discrimination (EOD) Scale developed by Krieger.⁵ Respondents were asked how often in the past year they had “experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior.” We examined discrimination experiences among Blacks ($n=6587$), Hispanics ($n=6359$), women ($n=20089$), and lesbian, gay, and bisexual respondents (LGB; $n=577$) in a variety of situations including when obtaining health care and insurance, in public (e.g., on the streets or in stores or restaurants), when obtaining a job or housing, when getting admitted to a school or training program, and when interacting with the courts or police. Respondents were also asked if they had ever been called a derogatory name because of race/ethnicity, gender, or sexual orientation. A dichotomous variable was created in which respondents who reported experiencing any of these types of discrimination “sometimes,” “fairly often,” or “very often” were coded as having experienced past-year discrimination. The EOD Scale has sound psychometric properties³¹ and has been used widely in studies of discrimination and health.^{3,32,33}

Typical responses to discrimination experiences were assessed with the EOD Scale across 2 dimensions: acceptance (“When you are treated unfairly, do you usually accept it as a fact of life or try to do something about it?”) and disclosure (“When you are treated unfairly, do you usually talk to other people about it or do you keep it to yourself?”).

Participants self-identified themselves into racial/ethnic and sexual orientation groups. LGB status was assessed by asking participants, “Which of the categories best describes you?” with 4 potential response categories: heterosexual, gay or lesbian, bisexual, and not sure. White respondents were not asked questions about racial discrimination. Sample sizes of Asian/Pacific Islander and Native American respondents were too small to permit analysis of our research questions. Although racial discrimination and its associations with psychiatric disorders were not estimated directly in these groups, White, Asian/Pacific Islander, and Native American individuals were included in the analysis of gender and sexual orientation discrimination.

Statistical Analysis

We first analyzed the 12-month prevalence of self-reported discrimination due to race/ethnicity (Black, Hispanic), sexual orientation (LGB), and gender and of *DSM-IV* mood, anxiety, and substance use disorders. Associations between self-reported discrimination and *DSM-IV* disorders were examined by using logistic regression. Next, we determined the prevalence of the 4 possible combinations of responses to discrimination (accept and disclose, accept and don’t disclose, don’t accept and disclose, and don’t accept and don’t disclose) among Black, Hispanic, LGB, and female respondents, as well as the prevalence of psychiatric disorders among those reporting past-year discrimination by each of the 4 combinations of discrimination responses. Associations between responses to discrimination and psychiatric disorder prevalence among those reporting past-year discrimination experiences were examined with logistic regression with respondents who reported not accepting and disclosing discrimination experiences serving as the reference group, following previous work.³

Control variables in all models were gender (in analyses not stratified by gender), age, race/ethnicity (in analyses not stratified by race/ethnicity), income, education, marital status, and region of the country. NESARC weights were applied to account for selection and response probabilities. Analyses were completed with SUDAAN software version 9.1 to obtain standard errors adjusted for the

complex sample design of the NESARC.³⁴ Statistical significance was evaluated by using 2-sided .05-level tests.

RESULTS

Black respondents reported the highest levels of past-year discrimination (24.6%), followed by LGB (21.4%) and Hispanic (15.1%) respondents (Table 1). Gender discrimination was least commonly reported (9.4%). Discrimination experiences occurring in public settings (e.g., on the streets or in restaurants or stores) were the most common type of discrimination reported by Black, Hispanic, and LGB respondents. By contrast, women reported experiencing discrimination most frequently when obtaining a job or at work or by being called a sexist name.

Associations Between Perceived Discrimination and Psychiatric Disorders

We next examined the associations between past-year discrimination and 12-month psychiatric disorders among Black, Hispanic, LGB, and female respondents, with adjustment for sociodemographic factors. Of the 36 associations examined, 34 (94.4%) of the odds ratios (ORs) were positive and 26 (72.2%) were statistically significant (Table 2). Nonsignificant associations were found primarily among LGB respondents. Although 7 of 9 (77.8%) associations between discrimination and psychiatric disorders were positive among LGB respondents, none was significant. This is likely

because of the small sample size of LGB respondents in the NESARC (n=577) and the particularly small sample reporting past-year discrimination (n=124).

Past-year discrimination was associated with elevated odds of 12-month mood (ORs=2.1–3.1), anxiety (ORs=1.8–3.3), and substance use (ORs=1.6–3.5) disorders, with little meaningful variation in the magnitude of the associations across psychiatric outcomes. Additionally, the strength of the associations was similar across Black (ORs=1.8–2.9), Hispanic (ORs=1.6–2.8), and female (ORs=2.1–3.5) respondents. Among LGB respondents, 2 of 9 associations were less than 1 (ORs=0.7–0.8), and the remainder (ORs=1.5–2.6) were in the range of those found for other sociodemographic groups.

Distribution of Responses to Perceived Discrimination

The distribution of responses to perceived discrimination was generally consistent across the study groups (Table 3). Of the 4 possible combinations of responses to discrimination, not accepting and disclosing discrimination experiences was the most common (44.2%–59.4%) among respondents of all groups, followed by accepting and disclosing (25.4%–37.8%) and accepting and not disclosing (10.6%–20.9%). Not accepting and not disclosing was least common (4.2%–7.7%).

Responses to Perceived Discrimination and Psychiatric Disorders

Although past-year discrimination was consistently associated with greater odds of psychiatric disorders, particular responses to discrimination varied in association with 12-month disorders after adjustment for sociodemographic factors (note that because of the small number of LGB respondents in each of the groups, we were unable to estimate a model among LGB respondents). Accepting and not disclosing discrimination experiences was associated with elevated odds of mood disorders compared with not accepting and disclosing among Blacks. The prevalences of major depression (21.6%; OR=2.5) and mania or hypomania (17.0%; OR=2.6) were significantly higher among Black respondents who reported engaging in this response to discrimination than among those who reported not accepting and disclosing discrimination experiences (Table 4). Accepting and not disclosing discrimination experiences was also associated with higher odds of anxiety disorders among women, including GAD (14.1%; OR=2.1) and social phobia (13.5%; OR=3.6), than among those who reported not accepting and disclosing discrimination experiences.

Several past-year psychiatric disorders were more common among respondents who reported not accepting and not disclosing than among those who reported not accepting and disclosing discrimination experiences. The

TABLE 1—Prevalence of Exposure to Perceived Discrimination Experiences in the Past 12 Months: National Epidemiologic Survey on Alcohol and Related Conditions, 2004–2005

Situation	Blacks (n=6587), % (95% CI)	Hispanics (n=6359), % (95% CI)	LGB Respondents (n=577), % (95% CI)	Women (n=20089), % (95% CI)
Obtaining health care	2.3 (1.9, 2.8)	3.1 (2.6, 3.8)	3.8 (2.3, 6.1)	0.7 (0.6, 0.8)
Treatment in health care	3.0 (2.5, 3.5)	2.4 (1.9, 3.0)	4.1 (2.5, 6.6)	0.9 (0.8, 1.1)
Obtaining employment or on the job	3.7 (3.4, 4.1)
Public settings	18.3 (16.7, 20.1)	8.9 (7.5, 10.5)	14.4 (11.1, 18.3)	3.0 (2.7, 3.3)
Other situations ^a	10.9 (9.7, 12.2)	6.0 (5.1, 7.1)	6.1 (3.9, 9.4)	1.2 (1.0, 1.4)
Called an offensive name	6.4 (5.6, 7.3)	5.5 (4.5, 6.6)	10.7 (7.9, 14.4)	4.4 (4.1, 4.9)
Pushed, shoved, or threatened	2.0 (1.7, 2.5)	1.8 (1.3, 2.4)	3.7 (2.2, 6.3)	...
Any discrimination in past 12 mo	24.6 (22.0, 26.5)	15.1 (13.3, 17.1)	21.4 (17.5, 25.9)	9.4 (8.8, 9.9)

Note. CI = confidence interval; LGB = lesbian, gay, or bisexual. Percentages are weighted proportions.

^aExamples of other situations for Black and Hispanic respondents included: when obtaining a job or on the job, when getting admitted to a school or training program, when interacting with the courts or the police, and when obtaining housing. Examples of other situations for LGB respondents included when obtaining a job or on the job, when getting admitted to a school or training program, and when interacting with the courts or the police. Examples of other situations for women included when getting admitted to a school or training program, when interacting with the courts or the police, and when obtaining housing.

TABLE 2—Prevalence of Psychiatric Disorders According to Exposure to Perceived Discrimination in the Past 12 Months and Associations Between Perceived Discrimination and Psychiatric Disorders: National Epidemiologic Survey on Alcohol and Related Conditions, 2004–2005

Sample Size, No.	Major Depression		Mania or Hypomania		PTSD		GAD		Social Phobia		Panic Disorder		Nicotine Dependence		Alcohol Disorder		Drug Disorder								
	%	AOR (95%CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)							
Black																									
6587																									
Discrimination	1562	12.6	2.3*	(1.7, 3.1)	9.0	2.4*	(1.6, 3.4)	13.6	2.6*	(2.0, 3.4)	5.8	2.3*	(1.5, 3.4)	4.1	2.5*	(1.5, 4.0)	17.2	1.9*	(1.6, 2.4)	13.9	1.8*	(1.4, 2.3)	5.4	2.9*	(1.7, 4.8)
No discrimination (Ref)	5025	6.3	1.0		4.0	1.0		5.9	1.0		2.8	1.0		1.7	1.0		11.0	1.0		7.2	1.0		1.6	1.0	
Hispanic																									
6359																									
Discrimination	917	13.3	2.1*	(1.5, 3.1)	6.8	2.4*	(1.6, 3.5)	8.6	1.8*	(1.3, 2.6)	6.5	2.8*	(1.5, 5.2)	3.9	2.1*	(1.2, 3.5)	11.6	1.6*	(1.1, 2.3)	13.1	1.5	(1.0, 2.2)	4.4	2.6*	(1.4, 4.9)
No discrimination (Ref)	5442	7.0	1.0		2.7	1.0		5.8	1.0		2.3	1.0		1.8	1.0		7.6	1.0		8.0	1.0		1.6	1.0	
LGB																									
577																									
Discrimination	124	19.2	0.8	(0.3, 2.0)	10.4	2.2	(0.7, 6.5)	14.0	0.7	(0.3, 2.0)	10.6	2.1	(0.7, 6.3)	8.7	2.6	(0.7, 10.2)	25.3	2.1	(1.0, 4.5)	32.8	2.2	(0.8, 5.8)	18.9	2.4	(0.6, 10.0)
No discrimination (Ref)	453	17.7	1.0		5.5	1.0		12.8	1.0		7.9	1.0		6.0	1.0		24.1	1.0		20.9	1.0		9.8	1.0	
Women																									
20089																									
Discrimination	1963	23.1	2.6*	(2.1, 3.1)	9.7	3.1*	(2.3, 4.1)	22.1	3.3*	(2.7, 4.0)	11.8	2.4*	(1.8, 3.1)	7.5	2.6*	(1.8, 3.6)	22.7	2.1*	(1.7, 2.5)	13.9	2.6*	(2.0, 3.4)	5.1	3.5*	(2.3, 5.2)
No discrimination (Ref)	18126	9.6	1.0		3.0	1.0		7.4	1.0		4.4	1.0		2.5	1.0		11.3	1.0		4.4	1.0		1.2	1.0	

Note. AOR = adjusted odds ratio; GAD = generalized anxiety disorder; LGB = lesbian, gay, bisexual; PTSD = posttraumatic stress disorder. Models were adjusted for gender (when appropriate), race/ethnicity (when appropriate), age, income, education, region, urbanicity, and marital status. To evaluate whether the associations between past-year discrimination and psychiatric disorders were modified by social class, we added interactions between occupational prestige and past-year discrimination to the models predicting each of the 9 psychiatric disorder outcomes among Black, Hispanic, LGB, and women respondents. Of 36 potential interactions of this sort, 3 (8.3%) were statistically significant, with no meaningful pattern in the association of discrimination with disorders as a function of prestige. Percentages are weighted proportions. **P* < .05 (2-sided test).

prevalence of nicotine dependence among Black respondents (28.4%; OR=2.9), that of PTSD among Hispanic respondents (14.8%; OR=3.0), and that of GAD (22.5%; OR=3.1), social phobia (18.9%; OR=3.9), alcohol abuse or dependence (20.7%; OR=3.2), and substance abuse or dependence (10.0%; OR=3.1) among women were significantly higher among individuals who reported not accepting and not disclosing discrimination than among those who reported not accepting and disclosing discrimination. Conversely, Black respondents who reported this response to discrimination had a lower prevalence of PTSD (5.5%; OR=0.3) than did those who reported not accepting and disclosing discrimination experiences. Finally, accepting and disclosing perceived discrimination experiences was associated with decreased odds of past-year PTSD among both Black respondents (10.3%, OR=0.5) and women (19.5%, OR=0.6) compared with those who reported not accepting and disclosing discrimination experiences.

DISCUSSION

The prevalence of self-reported discrimination was highest among Black individuals, with approximately 25% reporting a discrimination experience in the past year. These results were consistent with prior research reporting high rates of lifetime discrimination experiences among Black Americans.^{3,5,9} Past-year discrimination was less prevalent but still common among Hispanic, LGB, and female respondents. The prevalence of psychiatric disorders reported here was consistent with previous national studies,^{35,36} with notable elevations in disorder prevalence among LGB respondents.³⁷

We found strong associations between past-year discrimination and psychiatric disorders. These findings were consistent with a growing body of evidence documenting elevated risk for psychological distress and mental health problems among individuals who experience discrimination.^{1,7,8,10–12} Significant relationships between discrimination and psychiatric disorders have also been reported in a small number of previous studies.^{9,13,14} We extended this literature by documenting associations between discrimination and a wide range of psychiatric disorders, including mood,

TABLE 3—Prevalence of Responses to Discrimination Among Respondents Reporting Exposure to Discrimination in the Past 12 Months: National Epidemiologic Survey on Alcohol and Related Conditions, 2004–2005

Response to Discrimination	Black (n = 1562), % (SE)	Hispanic (n = 917), % (SE)	LGB (n = 124), % (SE)	Women (n = 1963), % (SE)
Accepting and not disclosing	13.0 (1.1)	20.9 (1.9)	10.6 (3.7)	11.0 (0.9)
Not accepting and not disclosing	5.5 (0.8)	7.7 (1.1)	5.9 (2.1)	4.2 (0.6)
Accepting and disclosing	28.6 (1.5)	27.2 (2.3)	37.8 (5.4)	25.4 (1.2)
Not accepting and disclosing	52.9 (1.7)	44.2 (2.5)	45.7 (5.7)	59.4 (1.4)

Note. LGB = lesbian, gay, bisexual. The sample size was n = 4473. Percentages are weighted proportions.

anxiety, and substance use disorders, with little variability in the magnitude of these associations across disorders. After we adjusted the analysis for multiple sociodemographic characteristics, we found that individuals who reported past-year discrimination were 2 to 3 times more likely to meet the criteria for a past-year psychiatric disorder regardless of race, ethnicity, sexual orientation, or gender. In other words, discrimination experiences were associated with elevated odds for each of the psychiatric disorders we considered regardless of group membership.

To our knowledge, these findings are novel and suggest that past-year discrimination may act as a global risk factor for psychopathology as opposed to a specific risk factor for certain disorders. This pattern is surprising given that the associations between other types of stressful events and psychiatric disorders are more specific (e.g., loss events are more strongly associated with mood than anxiety disorders).^{38,39} Although the associations between discrimination and psychiatric disorders were similar in magnitude among LGB respondents as in other groups, these associations were not significant, likely resulting from imprecise estimates owing to the small sample size of LGB respondents.

An alternative explanation of these findings is that individuals who meet the criteria for a disorder were more likely to perceive discrimination than were those without a disorder.⁴⁰ The consistency of the results across multiple psychiatric disorders and groups suggests that our findings were not solely an artifact of reporting biases, however. Moreover, recent longitudinal evidence suggests that discrimination experiences predict subsequent poor health

outcomes, but that poor health does not predict later perceptions of discrimination.⁴¹ These findings strengthen somewhat our confidence that the direction of effect in our findings involved discrimination leading to poor mental health, although replication of our findings in prospective studies is warranted.

If discrimination does lead to elevated risk for psychiatric disorders, however, these findings point to the importance of identifying mechanisms that underlie the associations between discrimination and psychiatric disorders. Such mechanisms are likely to operate through both intrapersonal and interpersonal pathways.⁴² For example, recent evidence suggests that stressful experiences increase emotion dysregulation (i.e., poor emotional awareness, understanding, and management) and that these increases, in turn, mediate the longitudinal relationship between stress and psychopathology.^{43,44} Furthermore, emotion dysregulation has been found to underlie the association between daily experiences of discrimination and subsequent psychological distress⁴⁵ and to explain elevations in psychiatric morbidity among LGB adolescents.⁴⁶ These recent studies suggest important avenues for future research into the psychological mechanisms responsible for discrimination-psychopathology associations.

Despite differences in the kinds of discrimination experiences to which members of stigmatized groups are exposed in the United States,^{18–20} the distribution of responses to discrimination appears to be similar across women, Blacks, Hispanics, and LGB individuals. The most common response to discrimination was to not accept it and to disclose the experience

to others, whereas the least common response was to neither accept nor disclose the experience. Although few studies have examined responses to discrimination across stigmatized groups, prior research among Blacks and Whites also found that most individuals report not accepting and disclosing discrimination.^{3,5} Moreover, a recent study found that LGB and African American individuals were equally likely to respond to stigma-related stressors with rumination and suppression,⁴⁵ a pattern of results similar to those of our study.

Certain attempts to cope with discrimination may render members of stigmatized groups more vulnerable to the development of psychiatric disorders. In particular, with one exception, neither accepting nor disclosing discrimination was associated with multiple mental health problems across groups compared with those who did not accept discrimination but discussed the experience with others. Prior research suggests that among Black individuals of low socioeconomic status, those with a tendency to actively cope with psychosocial stressors, a trait termed “John Henryism,” are at elevated risk for high blood pressure.^{47,48} John Henryism is unrelated to blood pressure among Black individuals with high socioeconomic status, however. These findings have been interpreted to reflect the detrimental health consequences of actively attempting to cope with stressors in an environment with inadequate coping resources. Our finding that respondents who did not accept discrimination experiences (i.e., those who attempted to do something about them) but did not disclose the experience to others had higher odds of a range of psychiatric disorders may reflect a similar phenomenon.

One interpretation of these results is that individuals who respond to discrimination by keeping it to themselves engage in some level of suppression to avoid sharing the experience with others. Suppression of emotions increases psychological distress.^{49,50} This may be especially true for members of stigmatized groups, because suppressing their experience deprives them of the benefits of social support⁵¹ and prevents them from accessing group-based coping resources that buffer against the negative effects of stigma,^{17,40,52} including collective action.⁵³ Thus, attempting to actively cope with discrimination without adequate social support

TABLE 4—Prevalence of 12-Month Psychiatric Disorder Among Respondents Endorsing 12-Month Discrimination Experiences According to Responses to Discrimination and Associations of Responses to Discrimination and 12-Month Psychiatric Disorders: National Epidemiologic Survey on Alcohol and Related Conditions, 2004–2005

Response to Discrimination	Sample Size, No.	Major Depression		Mania or Hypomania		PTSD		GAD		Social Phobia		Panic Disorder		Nicotine Dependence		Alcohol Disorder		Drug Disorder																				
		%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)	%	AOR (95% CI)																			
Black																																						
1562																																						
Accepting and not disclosing	21.6	2.5*	(1.3, 4.6)	17.0	2.6*	(1.3, 4.9)	20.1	1.3	(0.7, 2.3)	7.2	1.8	(0.7, 4.5)	5.4	1.7	(0.7, 4.4)	3.8	1.2	(0.5, 3.2)	26.2	1.4	(0.8, 2.5)	19.0	1.6	(0.8, 3.2)	10.3	2.1	(0.8, 5.3)											
Not accepting and not disclosing	12.3	1.5	(0.7, 3.3)	12.3	0.9	(0.2, 5.0)	5.5	0.3*	(0.1, 0.9)	8.9	2.9	(0.9, 9.8)	2.4	0.6	(0.1, 3.1)	3.2	1.6	(0.3, 8.0)	28.4	2.9*	(1.4, 6.1)	10.7	0.7	(0.2, 2.7)	1.8	0.3	(0.1, 1.9)											
Accepting and disclosing	12.3	1.2	(0.6, 2.1)	8.1	1.0	(0.5, 1.9)	10.3	0.5*	(0.3, 0.7)	6.0	1.2	(0.6, 2.7)	4.2	1.3	(0.5, 3.2)	4.0	1.3	(0.6, 3.1)	15.1	0.9	(0.6, 1.5)	13.2	1.1	(0.7, 2.0)	4.9	1.0	(0.4, 2.6)											
Not accepting and disclosing (Ref)	10.5	1.0		7.2	1.0		14.7	1.0		5.0	1.0		4.0	1.0		3.1	1.0		15.0	1.0		13.3	1.0		4.8	1.0												
Hispanic																																						
917																																						
Accepting and not disclosing	14.2	0.8	(0.4, 2.0)	5.7	0.8	(0.3, 2.0)	7.4	0.8	(0.4, 1.8)	5.7	0.8	(0.2, 3.0)	4.0	0.8	(0.3, 2.1)	5.5	1.5	(0.6, 3.7)	11.9	0.8	(0.3, 1.6)	13.6	1.0	(0.4, 2.6)	6.4	2.3	(0.7, 7.3)											
Not accepting and not disclosing	11.2	0.7	(0.2, 2.7)	9.5	1.5	(0.5, 4.9)	14.8	3.0*	(1.3, 7.0)	11.0	1.8	(0.4, 8.9)	0.8	0.2	(0.0, 1.5)	5.1	1.5	(0.4, 5.1)	7.9	0.4	(0.1, 1.4)	17.4	1.0	(0.4, 2.8)	3.8	1.3	(0.2, 7.6)											
Accepting and disclosing	12.3	0.7	(0.3, 1.8)	7.4	1.0	(0.4, 2.6)	7.0	0.9	(0.5, 1.7)	4.1	0.6	(0.1, 2.3)	4.4	0.6	(0.2, 1.6)	3.6	1.0	(0.4, 2.7)	8.4	0.5	(0.2, 1.2)	10.5	0.4	(0.2, 1.0)	3.9	1.1	(0.3, 4.2)											
Not accepting and disclosing (Ref)	13.9	1.0		6.4	1.0		9.0	1.0		7.5	1.0		4.1	1.0		3.6	1.0		14.0	1.0		13.8	1.0		3.9	1.0												
LGB																																						
124																																						
Accepting and not disclosing	0	...		9.8	...		11.5	...		0	...		0	...		0	...		41.7	...		54.8	...		36.7	...												
Not accepting and not disclosing	37.0	...		7.1	...		15.0	...		11.8	...		0	...		15.0	...		15.0	...		15.0	...		0	...												
Accepting and disclosing	20.8	...		19.3	...		7.0	...		11.2	...		10.2	...		6.2	...		23.4	...		34.0	...		23.3	...												
Not accepting and disclosing (Ref)	20.1	...		3.6	...		9.0	...		12.5	...		10.6	...		15.8	...		24.5	...		29.0	...		13.7	...												
Women																																						
1963																																						
Accepting and not disclosing	24.9	1.1	(0.7, 1.0)	9.0	0.9	(0.4, 1.9)	26.8	1.4	(0.8, 2.2)	14.1	2.1*	(1.1, 4.0)	13.5	3.6*	(1.6, 7.8)	8.4	1.3	(0.5, 3.1)	24.8	1.3	(0.8, 2.2)	11.9	0.8	(0.4, 1.7)	4.9	1.2	(0.5, 2.6)											
Not accepting and not disclosing	32.1	1.1	(0.5, 2.5)	9.6	1.0	(0.4, 2.7)	27.5	1.0	(0.5, 2.3)	22.5	3.1*	(1.2, 8.0)	18.9	3.9*	(1.4, 10.7)	7.4	0.8	(0.3, 2.1)	21.9	0.9	(0.4, 2.4)	20.7	3.2*	(1.2, 8.5)	10.0	3.1*	(1.0, 9.3)											
Accepting and disclosing	22.4	0.9	(0.6, 1.3)	10.1	0.8	(0.4, 1.4)	19.5	0.6*	(0.4, 1.0)	10.0	0.9	(0.5, 1.7)	6.4	1.3	(0.6, 2.6)	8.3	0.8	(0.4, 1.8)	23.7	1.0	(0.6, 1.5)	17.9	1.3	(0.8, 2.3)	4.2	1.0	(0.4, 2.2)											
Not accepting and disclosing (Ref)	22.4	1.0		9.6	1.0		22.0	1.0		11.5	1.0		6.0	1.0		7.8	1.0		22.0	1.0		12.1	1.0		5.2	1.0												

Note. AOR = adjusted odds ratio; GAD = generalized anxiety disorder; LGB = lesbian, gay, bisexual; PTSD = posttraumatic stress disorder. Models were adjusted for gender (when appropriate), race/ethnicity (when appropriate), age, income, education, region, urbanicity, and marital status. Percentages are weighted proportions. **P* < .05 (2-sided test).

and group-based coping resources may take a psychological toll that manifests as elevated risk for psychiatric disorders. On the other hand, it is possible that individuals with psychiatric disorders are less likely to disclose discrimination experiences to others as a result of deficits in communication and social skills⁵⁴ or reduced availability of social support networks.^{55,56} The cross-sectional design of the current study does not allow us to directly examine these competing hypotheses, which warrant further exploration in prospective studies.

We also found that accepting discrimination experiences and not disclosing them is associated with mood disorders among Black respondents and anxiety disorders among women compared with those who don't accept and disclose discrimination experiences. Not disclosing discrimination may thus be particularly detrimental for mental health, perhaps because it prevents individuals from benefiting from the stress-buffering effects of social support.^{57,58} One possible explanation of this pattern of results among Black respondents comes from ethnographic research of Black individuals living in inner cities. This research has found that the friendship networks of inner-city Blacks are limited,⁵⁹ which may result in fewer opportunities for disclosing experiences of discrimination to supportive others. However, additional prospective research examining the development of social norms of acceptance and disclosure of discrimination across members of stigmatized groups is warranted to ensure that nondisclosure of discrimination predicts psychiatric disorders as opposed to the reverse causal pathway.

These findings must be interpreted in light of the study limitations. As mentioned previously, the cross-sectional nature of the study precluded us from making strong inferences about the direction of causality in the association between discrimination, responses to discrimination, and psychiatric disorders. Future prospective studies that use different measures of discrimination⁶⁰ and that identify and test mediators along potential causal pathways are needed to clarify the effects of discrimination on mental health.

Second, because of small sample sizes, we were unable to include Asian/Pacific Islander and Native American respondents in the analysis. These groups also confront discrimination

and should be included in future studies of discrimination coping.^{61,62} In addition, the small sample size prevented us from estimating models of discrimination responses among LGB respondents. Social psychological research has identified different dimensions of stigma, including concealability, which may have implications for coping with discrimination.⁶³ Unlike the other groups examined in this study, LGB status can be a concealed stigma. Consequently, future research is necessary to elucidate the relationships among responses to discrimination and psychiatric disorders in LGB populations and to determine whether these associations differ as a result of the concealability of sexual minority stigma.

Third, racial/ethnic sexual minorities face stressors that are multiplicative in nature⁶⁴; future research should therefore consider how the intersection of multiple stigmatized identities may influence responses to discrimination and mental health outcomes. Fourth, we examined only 2 potential dimensions of responses to discrimination. Given the myriad strategies that individuals use to cope with stigma-related stress,¹⁷ more fine-grained analysis of psychological (i.e., cognitive, emotion regulation, and coping), interpersonal (i.e., support-seeking, disclosure), and instrumental responses to discrimination is warranted in future investigations. Such analysis will facilitate the identification of mechanisms linking discrimination to psychopathology. Finally, we examined only the association of presence versus absence of past-year discrimination and psychiatric disorders. Previous research suggests that Black individuals who endorse no discrimination or 3 or more distinct types of discrimination have higher blood pressure than do individuals who report only 1 or 2 types.³ Such specifications remain to be examined for psychiatric disorders and represent an important area for future research.

We have provided the first nationally representative data on self-reported discrimination due to race/ethnicity, sexual orientation, and gender; on responses to discrimination experiences; and on the prevalence of a wide range of psychiatric disorders. We found consistent associations between past-year discrimination and 12-month mood, anxiety, and substance use disorders. Respondents who did not disclose discrimination were most likely to have psychiatric disorders. These findings have

important implications for mental health interventions targeting groups that experience discrimination. In particular, such interventions should highlight the importance of discussing discrimination experiences with supportive others and provide skills that facilitate such disclosures. ■

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This article was accepted December 4, 2009.

Contributors

K. A. McLaughlin originated the study, assisted in the analyses, and wrote the initial draft of the article. M. L. Hatzenbuehler assisted in the analyses and assisted in writing the initial draft of the article. K. M. Keyes completed the analyses. All authors interpreted findings and edited drafts of the article.

Acknowledgments

This work was supported by the Robert Wood Johnson Foundation (K. A. McLaughlin: grant number 053572), a grant from the National Institute on Drug Abuse (K. M. Keyes: grant F31 DA026689-01), and a grant from the National Institute of Mental Health (M. L. Hatzenbuehler: grant F31MH083401).

The authors acknowledge Benjamin Feld for assistance with article preparation.

Note. The content is the sole responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health. K. A. McLaughlin had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Human Participant Protection

The research protocol, including informed consent procedures, received full ethical review and approval from the Harvard School of Public Health.

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