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Discrimination and Suicidality amongst racial and ethnic minorities in the United States

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Abstract

Background: Over the past decade, suicide rates have increased among certain racial/ethnic minority groups in the United States. To better understand suicide vulnerability among people of color, studies have examined the relations between social risk factors –such as discrimination –and suicidal thoughts and behaviors. However, the literature has been inconsistent, calling for more population studies.

Methods: This study analyzed data from two surveys: (1) The National Survey of American Life; and (2) The National Latino and Asian American Survey, which taken together are representative of Black, Latino, and Asians in the United States. Multivariable logistic regression models were used to examine the association between levels of discrimination on the Everyday Discrimination

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AUTHOR STATEMENT

All authors have contributed to this manuscript and have approved of this submission.

Scale and suicidal thoughts and behaviors. Additional models tested for effect modification by race and by psychiatric diagnosis.

Results: We found that individuals who reported the highest levels of discrimination had greater odds of reporting lifetime suicidal thoughts, plans, and attempts, when compared with people who did not report discrimination, after adjusting for socio-demographic characteristics. Notably, discrimination increased odds of reporting an unplanned suicide attempt and a suicide attempt without the intent to die. Adjusting for psychiatric diagnoses attenuated these effects. We found no evidence of effect modification by race or by psychiatric diagnosis.

Limitations: Data were cross-sectional, which did not allow for causal inferences.

Conclusions: Future translational research can explore how screening for discrimination may help identify individuals and groups of racial/ethnic minorities at risk for suicidal thoughts and behaviors.

Keywords

Suicide; discrimination; Black; Asian; Latino; Hispanic

INTRODUCTION

Suicide death is a major public health concern in the United States, particularly as the overall suicide rate has increased to the highest it has been in recent decades (Control and Prevention, 2002). While Whites (specifically males) have the highest rate of suicide death out of all racial groups (Control and Prevention, 2002), this gap is beginning to narrow (Day-Vines, 2007), and suicide mortality continues to disproportionately impact certain racial and ethnic minority groups (Al-Mateen and Rogers, 2018) who are often understudied and face substantial barriers to mental health resources (Ojeda and McGuire, 2006; Sentell et al., 2007; Wang et al., 2005). Thus, it is becoming increasingly important to understand the social risk factors that contribute to suicidal thoughts and behaviors among people of color. One major social risk factor is discrimination, which is defined as the unjust or prejudicial treatment of individuals on the basis of race, age, sex, or another socially defined characteristic (Dovidio and Gaertner, 1986). The discrimination that racial and ethnic minorities in the United States experience is not purely based on race, but also based on sexual identity, religion, and the intersection of various identity markers. Social conditions are fundamental causes of diseases (Link and Phelan, 1995), and people of color often inhabit social environments where they are subject to various forms of discrimination. A significant body of literature has shown that these discriminatory experiences can be stressful and can increase risk for several mental and physical health problems (Pascoe and Smart Richman, 2009), including suicidality (Castle et al., 2011; Cheng et al., 2010; Gomez et al., 2011).

The literature has not been entirely consistent when examining discrimination and suicidality across racial groups. Gomez and colleagues (Gomez et al., 2011) studied emerging adults and found that perceived discrimination was associated with a nearly six-fold increase in the odds of making a suicide attempt; however, upon stratifying by race, discrimination was only significantly associated with suicide attempts among Latino

Americans (more than a three and a half-fold increase in odds) and US-born Whites (more than ten times higher odds), but not among Asian or Black Americans. Other studies with Latino Americans appear to confirm the association between perceived discrimination and suicidality in the general Hispanic population (Perez-Rodriguez et al., 2014), along with subpopulations such as patients in primary care (Fortuna et al., 2016), college students (Hwang and Goto, 2008), and non-heterosexual men (Diaz et al., 2001). Contrary to Gomez and colleagues' findings, other studies have suggested that discrimination is also associated with suicidality among Asian Americans, including those in the general population (Cheng et al., 2010), and also within specific subgroups, such as college students (Hwang and Goto, 2008), and older Chinese American adults (Li et al., 2018).

Findings on the association between discrimination and suicidality among Black Americans, however, have been mixed. One study reported that among Black young adults (aged 18–24), perceived discrimination was not associated with suicide ideation or attempts (Castle et al., 2011). In another study of a sample of Black youth (aged 16–26, mostly homeless, nearly half of the sample non-heterosexual), racial discrimination was associated with higher levels of depressive symptoms, but not suicidality (Gattis and Larson, 2016). Arshanapally and colleagues (Arshanapally et al., 2018) found that among African American adolescents and young adults, discrimination increased the odds for suicidality after adjusting for psychiatric disorders, but was no longer statistically significant after adjusting for maternal experiences of racial discrimination, depression, and problem drinking. In contrast, Assari and colleagues (Assari et al., 2017) found that among African American and Caribbean Black youth, perceived discrimination was associated with higher odds of suicidal ideation, after controlling for age, ethnicity, gender, and socioeconomic status. Given the conflicting results across studies (possibly due to inconsistent adjustments for covariates), more research is needed to formally test for effect moderation by race using large representative samples of the general population.

In this study, we examined two surveys –the National Latino and Asian American Survey and the National Survey of American Life –which taken together serve as a representative sample of Latinos, Asians, and Blacks in the general population of the United States. We used a discrimination scale that captures the range and frequency of everyday discrimination to test whether increasing levels of discrimination are associated with increasing odds of suicidality, while adjusting for sociodemographic characteristics and psychiatric disorders. In this paper, we used suicidality as an umbrella term to encompass suicidal ideation, suicide plan, and suicide attempt, which we examined separately. We undertook a set of exploratory aims, where we tested for effect modification by race to determine whether the association between discrimination and suicidality varies across Black, Asian, and Latino racial groups. Moreover, we also explored effect modification by psychiatric diagnosis (mood or anxiety disorders). Finally, we examined whether discrimination predicts specific types of suicide attempts (planned, unplanned, intent to die, no intent to die, attempt without foolproof plan).

METHODS

Sample and procedures

Data were analyzed from the National Latino and Asian American Survey (NLAAS) (Alegria et al., 2004) and the National Survey of American Life (NSAL) (Jackson et al., 2004), which were conducted between the years 2001 and 2003 using the World Health Organization's Composite International Diagnostic Interview (WHO CIDI; (Kessler and Ustun, 2004). These two datasets were amalgamated for the purposes of this analysis. The study population included non-institutionalized adults aged 18 years or older who were selected through a multistage probability sampling strategy to achieve nationally representative samples of Asian (N=2095), Latino (N=2554), and Black Americans (N=5191) living in the United States (Heeringa et al., 2004). Special supplements were used to oversample from census block groups with a high-density of individuals of Puerto Rican, Cuban, Chinese, Filipino, Vietnamese, and Caribbean national origin. Non-Hispanic whites in the NSAL (N=891) were omitted from this analysis. Details on the sampling strategy and interview procedures have been described elsewhere (Heeringa et al., 2004; Pennell et al., 2004). Individuals missing any of the data of interest were dropped from the study. The final analytic sample consisted of 9409 participants (2018 Asians, 2690 Latinos, 4701 Blacks). The survey investigators provided survey weighting (NSNLWT) and stratification (SESTRAT) variables to allow for the analysis of the combined datasets (Heeringa et al., 2004).

Measures

Suicidality (Dependent variable).—In 81.4% of the sample, suicidality was assessed through a written self-report module for respondents literate in English, which helps mitigate the influence of social desirability bias. Another 17.4% of the sample were asked the suicidality questions in face-to-face interviews in the respondents' primary language. These responses were collapsed into the suicidality variables. In this paper, suicidality refers to three separate variables: suicidal ideation, suicide plans, and suicide attempts. Respondents reported (yes/no) to whether they had ever seriously thought about suicide; if yes, respondents were then asked (yes/no) if they had ever made a plan, and if they had ever made an attempt. Individuals who made any attempts were then asked if the most recent attempt was made with (a) the intent to die (a serious attempt to kill myself and it was only luck that I did not succeed), (b) a foolproof plan (I tried to kill myself, but I knew the method was not foolproof), or (c) no intent to die (my attempt was a cry for help, I did not want to die).

The Everyday Discrimination Scale (Independent variable).—Perceived discrimination was measured using the Everyday Discrimination Scale (EDS) of the Detroit Area Study Discrimination Questionnaire, which aggregated perceptions of routine discrimination over the course of an individual's lifetime (Williams et al., 1997). This has been validated as a reliable measure of perceived discrimination (Krieger et al., 2005) and has been used to study African Americans (Taylor et al., 2004), Hispanic–Americans (Sribney and Rodríguez, 2009), and Asian–Americans (Gee et al., 2007). Participants were asked, "In your day-to-day life, how often have any of the following things happened to

you?" Then participants were asked to rate the frequency of nine discriminatory events (see Table 2) using the following responses: almost every day, at least once a week, a few times a month, a few times a year, less than once a year, or never. Cronbach's alpha for the overall sample was 0.90 (NLAAS: 0.91; NSAL: 0.88).

The EDS items were summed into a continuous scale ranging from 0 to 45, which was used in some analyses to test for effect modification. However, given the skewed distribution of the sample and the possibility of a non-linear relationship between discrimination and suicidality, the scale was divided into five categories that each comprised approximately 20% of the sample, similar to the approach used in the development of the scale (Kessler et al., 1999). A score of zero signified no experience of discrimination and served as the reference category. The categories were none (0), low (1–6), moderate (7–10), high (11–15), and very high (16–45).

Psychiatric Disorders (Covariates).—Lifetime psychiatric disorders were based on the Word Mental Health Composite International Diagnostic Interview (Kessler and Ustun, 2004), a fully structured lay interview to screen for diagnoses according to DSM-IV criteria. Lifetime psychiatric disorders were based on DSMIV criteria, and included: (1) mood disorders (dysthymia, depressive episode, major depressive disorder), (2) anxiety disorders (agoraphobia with and without panic disorder, generalized anxiety disorder, panic attacks, panic disorder, post-traumatic stress, social phobia), (3) substance use disorders (drug abuse and dependence), and (4) alcohol use disorders (alcohol abuse and dependence). These four dummy variables were included separately in the models.

Sociodemographic characteristics (Covariates).—Models were adjusted for age (18–34, 35–49, 50–64, 65+), sex (male, female), race (Black, Asian, Latino), income-poverty ratio (whereby a ratio of 1 equals the federal poverty line; a ratio of 0–1 was considered 'poor'; a ratio greater than 1 but less than 2 was considered 'near poor'; and a ratio greater than 2 was considered 'non-poor'), education (less than high school, high school graduate, some college, college graduate and beyond).

Main Analyses

Standard errors were estimated through design-based analyses that used the Taylor series linearization method to account for the complex multistage clustered design, with US metropolitan statistical areas or counties as the primary sampling units. Sampling weights were used for all statistical analyses to account for individual-level sampling factors (i.e. non-response and unequal probabilities of selection). Complete case analyses were used, and models were allowed to vary according to available data. Effect sizes for all multivariable logistic regression models were presented as odds ratios (OR) with 95% confidence intervals (CI). For all analyses, the significance level was set at a=0.05, two-tailed. All analyses were performed using STATA SE version 13. The following analyses were performed:

a. Descriptive statistics were calculated for the overall sample and also race-wise samples. Chi-squared tests were used to test whether the prevalence of suicidality was different across racial groups, and t-tests were used to test whether the mean of EDS was different across racial groups. Additionally, t-tests were used to test

for differences in means between individuals with and without lifetime suicidal ideation for each EDS item.

b. Multivariable logistic regression models were used to examine the relation between each discrimination category (none, low, moderate, high, very high) and lifetime suicidal ideation, suicide plans, and suicide attempts, adjusting for socio-demographic confounders in the first block, and then further adjusting for lifetime occurrence of psychiatric disorders in the second block. Linear trend tests were conducted by including the 5-category discrimination variable in the models as a continuous variable to determine whether higher levels of discrimination were associated with higher levels of suicidality in a dose-response fashion.

c. To test for effect modification by race, the discrimination scale was treated as a continuous variable (0–45), and a 'race × discrimination' interaction variable was created and included in a fully adjusted model.

d. To test for effect modification by psychiatric diagnosis, the discrimination scale was treated as a continuous variable (0–45), and a 'mood disorder × discrimination' interaction variable was created and included in a fully adjusted model. An 'anxiety disorder × discrimination' interaction variable was also created and included in a separate model.

e. Additional fully adjusted models explored the associations between discrimination (discretized into five categories) and specific types of suicide attempts (planned, unplanned, intent to die, no intent to die, intent without a foolproof plan).

RESULTS

Descriptive statistics for the discrimination (independent) and suicidality (dependent) variables are presented in Table 1. Results are presented for the overall analytic sample, and also stratified by race. The average score in the EDS (on a scale from 0–45) was 8.62. Blacks had a significantly higher score on the scale when compared with Asians and Latinos. Between 10–11% of the weighted sample reported lifetime suicidal ideation; the lifetime prevalence of suicide plan and suicide attempts were 3.40% and 3.93% respectively. Among those who made a suicide attempt, Latinos appeared to be more likely than Asians or Black to make attempts without a plan and without the intent to die. Descriptive statistics for the covariates are available in online supplemental materials (Table S1).

Approximately 80% of the weighted sample reported any amount of discrimination (i.e. a score above zero). Table 2 compares the mean of each item of the EDS among people with and without lifetime suicidal ideation. The mean for each EDS item was significantly higher for those with lifetime suicidal ideation than for those without suicidal ideation.

Compared to no discrimination, a moderate level of discrimination was associated with double the odds of reporting suicidal ideation, while the highest level of discrimination was associated with a five to six-fold increase in odds after adjusting for sociodemographic

characteristics, revealing a dose-response relationship. However, these odds attenuated after adjusting for psychiatric disorders; a high level of discrimination were associated with more than a two-fold increased likelihood of reporting lifetime suicidal ideation, while the highest level of discrimination was associated with over a three-fold increase. A similar pattern was found for suicide plans and suicide attempts, where the inclusion of psychiatric disorders significantly attenuated the odds (Table 3).

Interaction analyses showed that the relations between discrimination and suicidality (ideation, plan, attempt) were not significantly different among Asians or Latinos when compared with Blacks in adjusted models. Further, there was no effect modification by psychiatric diagnosis.

Table 4 shows the associations between discrimination and suicide attempts, differentiating between whether the attempts were planned or unplanned. High and moderate-high levels of discrimination appeared to be associated with lifetime unplanned attempts in a linear fashion. A similar dose-dependent relation was detected among planned attempts as well; however, the associations were not statistically significant at the conventional level, possibly due to limitations in power given the small numbers involved. Increasing levels of discrimination were also significantly associated with greater odds of suicide attempts without the intent to die in a linear fashion, but were not associated with attempts without intent to die or attempts that were made without a foolproof plan.

DISCUSSION

Main Findings

The main finding from our study was that among people of color in the United States, everyday discrimination increased the odds of reporting lifetime suicidal thoughts and behaviors in a linear fashion, adjusting for socio-demographics and major lifetime psychiatric disorders. Moreover, when examining specific types of suicide attempts, discrimination was associated with unplanned attempts as well as attempts without the intent to die. We found no evidence of effect modification by race or by psychiatric disorder For the most severe forms of discrimination, the odds ratios ranged between 2.5 to 3.0 for lifetime suicidal behavior, while for some forms suicide attempts, even experiencing moderate levels of discrimination significantly increased odds ratios, suggesting that discrimination may be an important factor in suicidal behavior across the whole population irrespective of mental health.

Our study was motivated in part by major theoretical and empirical shortcomings in the area of suicide research, particularly with respect to racial and ethnic minority populations in the United States. The Interpersonal Psychological Theory of Suicide (IPTS; (Van Orden et al., 2010) posits that feeling ostracized (i.e. thwarted belongingness) and feeling as though one is a burden on others can give rise to suicidal thoughts. Moreover, repeated exposures to painful and fear-inducing experiences make one susceptible to suicidal behaviors. However, this theory was not specifically formulated to capture the experiences of marginalized racial and ethnic minority groups, and it is unclear whether thwarted belongingness and perceived burdensomeness play out differently within these communities to modify suicide

vulnerability. There have been some application of the IPTS to racial and ethnic minorities, verifying that low belonging and perceived burdensomeness predict suicide attempts among White, African-American, Hispanic, and Hispanic Blacks, though differences across racial groups were not observed. Our findings contribute to the IPTS literature by underscoring the role of discrimination as a factor that may influence one's sense of belonging in workplaces, neighborhoods, public spaces, and the larger society. Additionally, discrimination in its more severe forms (e.g. being threatened or attacked) may involve painful and fear-inducing experiences, increasing the risk for suicidal behaviors.

Putative Mechanisms

Our findings showed that the relation between discrimination and suicidal thoughts and behaviors attenuated after adjusting for psychiatric disorders, suggesting that mental illness may function as a possible mediator. Discrimination can trigger the body's stress-response system, activating the hypothalamic-pituitary-adrenal axis to release stress hormones that cause neuroinflammation, resulting in mental and physical health problems, including depression and anxiety (Berk et al., 2013; Brundin et al., 2015; Raison et al., 2006) as well as alcohol and drug use, which in turn contribute to risk for suicidality (Borges et al., 2010, 2008). It is important to note that while being the victim of discrimination may theoretically lead to mental illness, being identified as a person with mental illness can be stigmatizing, and can make one the target of discrimination (Thornicroft, 2006).

Putative Moderators

We did not find evidence of effect modification by race; however, the differences observed across racial groups in the extant literature may speak to the different variables used across the different studies. For example, there is some evidence to suggest that certain factors (such as anxiety symptoms or rumination) moderate the association between discrimination and suicidal ideation for Latino emerging adults, but not for emerging adults in other racial minority groups (Cheref et al., 2016, 2015). Other moderators such as cultural identity (Cheng et al., 2010; Fortuna et al., 2007), acculturation (e.g. years in the US, citizenship; (Fortuna et al., 2007), and social relationships (Cheng et al., 2010; Fortuna et al., 2007) can buffer the psychological effects of discrimination, protecting against suicidality (Lai et al., 2017). These factors have been identified as important for Latinos and Asians, but have not been uniformly examined. Scholars have proposed other frameworks to understand suicide risk specifically for African Americans (Klibert et al., 2015), highlighting the importance interpersonal discord, feeling as though one's culture is not acceptable, and low self-concept, all of which can be exacerbated after repeated exposures to discrimination.

It is important to also consider protective factors in cultural frameworks. For African Americans, churches are often places where one can find social support, acceptance, and strength to protect against mental health problems (Ellison et al., 2008), though few studies have examined the moderating effects of religiosity on discrimination and suicidal thoughts and behaviors. In the face of adversity (i.e. discrimination), people who choose to seek support from churches may reinforce their ethnic identities and find a sense of belonging within the community (Lincoln and Mamiya, 1990; Moore, 1991). Moreover, religious proscriptions may also protect against suicidality (Stack and Lester, 1991); indeed religion

has also been shown to buffer the effect of psychiatric disorders on suicidal ideation (Assari et al., 2012).

Limitations

Our findings should be interpreted bearing in mind a number of limitations. The data were cross-sectional, which does not allow us to make any causal inferences. Moreover, the data was from the years 2001–2003, and may not necessarily reflect the ways in which discrimination and suicidality have evolved in the United States over the past two decades. While the large representative datasets were a strength of our study, we did not have enough power to examine nuanced within-group differences, as racial groups are heterogeneous. While our study examined discrimination more broadly, we were unable to meaningfully examine the differential effects of specific attributions (e.g. discrimination on the basis of sex/gender, sexuality, religion, race). We were also unable to examine the moderating effects of identity, which as stated earlier, has been known to modify the effects of discrimination (Mossakowski, 2003; Sellers and Shelton, 2003; Yoo and Lee, 2005). Future studies should pay particular attention to multiple intersecting identities, which has been understudied even though it is important in understanding risk for suicide (Wong et al., 2014). Finally, the EDS captures the range and frequency of discrimination perpetrated at the interpersonal level. However, it is also important to examine ecological factors as well, since discrimination can operate at the structural and cultural levels to impact health, especially systemic barriers that obstruct access to timely and high-quality treatment (Wong et al., 2014).

Conclusions and Clinical Relevance

Our study highlights the need to identify individuals at risk for discrimination as a measure to curb suicidal thoughts and behaviors among people of color. More research is needed to identify how discrimination operates through the mechanisms that underlie suicidal thoughts and behaviors, which can help formulate culturally informed assessments and interventions to identify at-risk individuals and reduce suicide attempts among people of color. Efforts toward this end will need to draw from existing cultural frameworks of suicide, such as the Cultural Theory and Model of Suicide (Chu et al., 2010) and the Racial-Cultural Framework (Wong et al., 2014). Community-driven efforts to build resilience among victims of discrimination are needed. But more importantly, coordinated efforts across disciplines are needed to eliminate discrimination at multiple levels of society to reduce suicide risk for people of color in the United States.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

CONFLICTS OF INTEREST

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HIGHLIGHTS

- Everyday discrimination increases the odds of reporting suicidal thoughts, plans, and attempts.
- Race does not moderate the association between discrimination and suicidal thoughts or behaviors.
- The association between discrimination and suicidal thoughts and behaviors is not any stronger for people with mood or anxiety disorders.
- Discrimination increased odds of reporting a suicide attempt without the intent to die, based on the most recent suicide attempt.

Table 1.

Descriptive statistics of the sample (N=9646)

	Total	Asian N=2020	Latino N=2696	Black N=4853	F-statistic (p-value)
	Mean (95% CI)				
Discrimination (0–45)	8.62 (8.09–9.16)	7.29 (6.84–7.74)	7.38 (6.797.98)	11.41 (10.8911.92)	229.56 (p<0.00)
	Weighted % (SE)				
Suicidality					
Ideation	10.52 (0.49)	8.48 (0.78)	10.2 (0.80)	11.68 (0.77)	3.21 (p=0.05)
Plan	3.40 (0.27)	3.15 (0.48)	2.94 (0.33)	4.0 (0.52)	2.16 (p=0.12)
Attempt	3.93 (0.28)	4.3 (0.37)	2.48 (0.37)	4.09 (0.52)	3.48 (p=0.04)
Attempt without plan	1.72 (0.18)	0.65 (0.18)	2.22 (0.34)	1.59 (0.25)	6.39 (p=0.003)
Attempt with plan	2.19 (0.22)	1.83 (0.34)	2.04 (0.29)	2.50 (0.41)	0.95 (p=0.37)
Intent to die	1.42 (0.22)	1.01 (0.20)	1.47 (0.40)	1.54 (0.33)	0.48 (p=0.56)
No intent to die	1.78 (0.17)	0.94 (0.21)	2.28 (0.31)	1.56 (0.26)	5.30 (p=0.01)
Intent without a foolproof plan	1.31 (0.17)	0.98 (0.19)	1.2 (0.29)	1.57 (0.30)	1.03 (p=0.34)

The mean and 95% confidence intervals are reported for the discrimination scale. All suicidality outcomes represent weighted percentages and standard errors, adjusted for the complex survey design.

Table 2.

Descriptive statistics for discriminatory experiences between respondents with and without suicidal ideation

Discriminatory Experience	Total Mean (SE)	No Suicidal Ideation Mean (SE)	Suicidal Ideation Mean (SE)	F-Statistic (Prob > F)
You are treated with less courtesy than other people (0–5)	1.34 (0.02)	1.29 (0.02)	1.82 (0.06)	75.37 (p=0.00)
You are treated with less respect than other people (0–5)	1.20 (0.03)	1.14 (0.02)	1.75 (0.07)	91.52 (p=0.00)
You receive poorer service than other people at restaurants or stores (0–5)	1.07 (0.03)	1.02 (0.02)	1.45 (0.07)	46.69 (p=0.00)
People act as if they think you are not smart (0–5)	1.22 (0.04)	1.14 (0.03)	1.83 (0.08)	101.99 (p=0.00)
People act as if they are afraid of you (0–5)	0.87 (0.03)	0.81 (0.03)	1.35 (0.07)	72.82 (p=0.00)
People act as if you are not as good as they are (0–5)	1.34 (0.04)	1.25 (0.04)	2.00 (0.09)	94.47 (p=0.00)
People act as if they think you are dishonest (0–5)	0.79 (0.02)	0.73 (0.02)	1.25 (0.06)	74.73 (p=0.00)
You are called names or insulted (0–5)	0.71 (0.02)	0.65 (0.02)	1.19 (0.08)	48.70 (p=0.00)
You are threatened or harassed (0–5)	0.47 (0.02)	0.43 (0.02)	0.76 (0.05)	46.30 (p=0.00)
Total (0–45)	9.01 (0.22)	8.48 (0.20)	13.26 (0.46)	152.86 (p=0.00)

Weighted percentages and standard errors are adjusted for the complex survey design.

Table 3.

Associations between levels of discrimination and lifetime suicidality (N=9409)

	Suicidal Ideation		Suicide Plan		Suicide Attempt	
	I	I+II	I	I+II	I	I+II
	OR (95%CI)	OR (95%CI)	OR (95%CI)	OR (95%CI)	OR (95%CI)	OR (95%CI)
Discrimination						
Very high	**5.63 (3.638.74)** ***	**3.01 (1.904.77)** ***	**4.84 (1.9911.75)** **	2.38 (0.93–6.12)	**5.37 (2.6710.82)** ***	**2.49 (1.22–5.09** *
High	**3.25 (2.045.18)** ***	**2.13 (1.283.54)** **	2.36 (0.96–5.79)	1.37 (0.51–3.66)	**2.86 (1.45–5.64)** **	1.66 (0.83–3.30)
Moderate	**2.00 (1.113.60)** *	1.42 (0.81–2.48)	1.38 (0.59–3.25)	0.90 (0.37–2.15)	1.63 (0.66–3.98)	1.07 (0.47–2.43)
Low	1.51 (0.94–2.45)	1.28 (0.80–2.05)	1.11 (0.502.45)	0.85 (0.38–1.94)	0.97 (0.44–2.14)	0.80 (0.37–1.73)
None (Ref)	1.0	1.0	1.0	1.0	1.0	1.0
Linear Trend Test	**P<0.001**	**P<0.001**	**P<0.001**	**P<0.01**	**P<0.001**	**P<0.001**

* p<0.05,

** p<0.01,

*** p<0.001

The Everyday Discrimination Scale scores that ranged from 0 −45 were discretized into five categories containing approximately 20% of the sample in each category.

I. Adjusted for sociodemographic variables: sex, age, education, income, race

II. Adjusted for lifetime DSM-IV psychiatric disorders (mood disorders, anxiety disorders, substance use disorders, and alcohol use disorders)

Table 4.

Associations between discrimination and suicide attempts (N=9409)

	Planned attempts	Unplanned attempts	Attempts with intent to die	Attempts without intent to die	Attempts without foolproof plan
	OR (95%CI)	**OR (95%CI)**	**OR (95%CI)**	**OR (95%CI)**	**OR (95%CI)**
Discrimination					
High	2.17 (0.696.82)	**2.44 (1.36–4.39)** ***	0.98 (0.43–2.22)	**4.41 (2.348.33)** ****	1.11 (0.52–2.37)
Moderate - High	1.20 (0.42–3.44)	**2.15 (1.15–4.02)** *	1.04 (0.47–2.34)	**2.44 (1.09–5.47)** *	1.42 (0.67–3.02)
Moderate - Low	0.88 (0.34–2.30)	1.35 (0.59–3.13)	0.99 (0.40–2.43)	1.30 (0.51–3.29)	1.39 (0.61–3.17)
Low	0.96 (0.38–2.42)	0.60 (0.25–1.41)	0.87 (0.35–2.15)	0.75 (0.34–1.66)	1.19 (0.49–2.88)
None	1.0	1.0	1.0	1.0	1.0
Linear Trend Test	**P<0.05**	**P<0.001**	N.S.	**P<0.001**	N.S.

* p<0.05,

** p<0.01,

*** p<0.001

Adjusted for sociodemographic variables (sex, age, education, income, race), and lifetime DSM psychiatric disorders (mood disorders, anxiety disorders, substance use disorders, and alcohol use disorders)