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Racial/Ethnic Discrimination and Suicidal Ideation in Emerging Adults: The Role of Traumatic Stress and Depressive Symptoms Varies by Gender not Race/Ethnicity

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Abstract

Drawing from Race-Based Traumatic Stress theory, the present study examined whether traumatic stress and depressive symptoms differentially help explain the relation between racial/ethnic discrimination and suicidal ideation across gender and racial/ethnic groups. A racially/ethnically diverse group of emerging adults ($N = 1344$; $M_{age} = 19.88$, $SD = 2.25$; 72% female; 46% Hispanic) completed a battery of self-report measures. A cross-sectional design was employed with a series of hierarchical linear regression models and bootstrapping procedures to examine the direct and indirect relation between racial/ethnic discrimination and suicidal ideation through traumatic stress and depressive symptoms across gender and race/ethnicity. The findings suggest an indirect relation through depressive symptoms, but not traumatic stress, and a serial indirect relation through traumatic stress to depressive symptoms in young women and young men, the latter of which was stronger in young women. The indirect relations did not vary by racial/ethnic group. Cumulative experiences of racial/ethnic discrimination may impact suicide-related risk via increases in psychiatric symptomology (i.e., traumatic stress and depressive symptoms), particularly in young women. Racial/ethnic discrimination experiences should be accounted for as a potential source of psychological distress in the assessment, diagnosis, and treatment of suicidal thoughts and behavior, especially among young women endorsing traumatic stress and depressive

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Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the IRB at John Jay College of Criminal Justice of the City University of New York and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

symptoms. Further research is warranted to better understand the gender difference in the relation between racial/ethnic discrimination and suicide-related risk.

Keywords

Racial/ethnic discrimination; Traumatic stress; Depression; Suicidal ideation; Emerging adult

Introduction

Suicide risk in racial/ethnic minority populations is most pronounced among youth, as suicide deaths among Black and Latino/a adolescents have increased in the U.S. over the past two decades (Khan et al. 2018). Further, Black children ages 5–12 are about twice as likely to die by suicide than their White peers (Bridge et al. 2018). In fact, the age of highest risk for suicide deaths among racial/ethnic minority populations is under age 30, whereas middle-aged adults (i.e., ages 40s–50s) account for the highest proportion of suicide deaths among White populations (Centers for Disease Control and Prevention 2019). Furthermore, suicidal thoughts and behavior, the most reliable indicators of suicide-related risk (Nock et al. 2008), peak in adolescence and increase in severity (e.g., intent, recurrence, lethality) during emerging adulthood (Goldston et al. 2015). Thus, emerging adulthood, or the developmental period characterized as late adolescence and adulthood (Arnett 2000), is a vulnerable time for thinking about and attempting suicide, particularly among racial/ethnic minority youth. Unfortunately, racial/ethnic minority individuals remain underrepresented in suicide research (Cha et al. 2018), highlighting the dire need for more information about the cultural context of risk for suicidal thoughts and behavior (Goldston et al. 2008), especially among racial/ethnic minority emerging adults.

Racial/Ethnic Discrimination and Suicidal Thoughts and Behavior

One potential risk factor for suicidal behavior that has recently garnered attention in the suicide literature is racial/ethnic discrimination—unfair treatment due to race or ethnicity—a behavioral manifestation of racism on an interpersonal level that is commonly experienced among racial/ethnic minority individuals and parallels a chronic, social stressor like poverty (Harrell 2000; Clark et al. 1999). According to a report released by the American Psychological Association, almost half of adults in the U.S. perceive major discrimination of any kind at some time in their lives. Nearly 60% perceive day-to-day discrimination, which is more commonly reported among individuals with social disadvantage status, including racial and ethnic minority populations (American Psychological Association 2016). The report also notes that racial/ethnic minority emerging adults are particularly sensitive to the detrimental effects of racial/ethnic discrimination, as they report greater experiences of discrimination and poorer coping responses compared to older adults.

There is compelling evidence showing that racial/ethnic discrimination is linked to poor physical and mental health outcomes, namely depression (Pascoe and Richman 2009), and more recently, suicidal thoughts and behavior (Oh et al. 2019), independent of SES and other sociodemographic factors (Chou et al. 2012). For instance, combining nationally representative samples of Asian, Black, and Latino/a adults in the U.S., one study found that

higher everyday discrimination was associated with higher odds of suicidal thoughts, plans, and attempts, adjusting for sociodemographic factors (Oh et al. 2019). Although psychiatric disorder attenuated the relation, no race/ethnic group difference or differences by psychiatric disorder emerged in the relation. The association between racial/ethnic discrimination and suicidal thoughts and/or behavior has also been found in a nationally representative sample of Black adolescents (Assari et al. 2017a, 2017b), as well as a racially/ethnically diverse group of college students (Gomez et al. 2011) and adolescents (Tobler et al. 2013). One study found no direct relation between racial discrimination and suicidal ideation in a community sample of young African American adults (Castle et al. 2011), suggesting a much more nuanced relation that warrants further examination. Nevertheless, racial/ethnic discrimination may be an important risk factor for suicidal behavior among racial/ethnic minority emerging adults. Potential avenues through which racial/ethnic discrimination may impact risk for suicidal thoughts and behavior, however, remain poorly understood.

Racial/Ethnic Discrimination as a Race-Based Traumatic Stressor

To address the racial/ethnic differences in suicidal behavior, Chu and colleagues (2010) proposed a cultural theory and model of suicide outlining various pathways through which cultural experiences may impact risk for suicide. One pathway is the manner in which cultural experiences influence how individuals manifest and respond to distress. Another pathway is the cultural influences on attitudes toward and the expression of suicidal thoughts and behavior. Lastly, cultural experiences may yield unique culture-specific stressors that individuals confront. Thus, racial/ethnic discrimination, as a race-related stressor, may operate through all three avenues: as a unique and common experience among racial/ethnic minority individuals that elicits specific manifestations of distress and subsequent responses to manage this distress. Scholars have further proposed that racial/ethnic discrimination is more than an innocuous social stressor and better conceptualized as a race-based traumatic stressor (Bryant-Davis and Ocampo 2005; Carter 2007). Specifically, race-based events like experiences of racial/ethnic discrimination—which are often distressing, unexpected, ambiguous, chronic, and out of the individual's control—may yield emotional and psychological injury that negatively impact mental health by eliciting traumatic stress responses. Carter's (2007) race-based traumatic stress theory suggests that racial/ethnic discrimination may be perceived as a threat to the integrity and safety of the individual, resulting in adaptations that include hypervigilance, avoidance or numbing, and emotional distress. Although initially adaptive to mitigate the resulting distress, these responses may be maladaptive outside of this context, and in turn, increase susceptibility to psychopathology, including suicidal behavior.

Individuals with a history of traumatic experiences are at increased risk for thinking about and attempting suicide independent of other psychiatric disorders (Stein et al. 2010). There is growing evidence indicating that racial/ethnic discrimination may disrupt the arousal system to negatively impact stress regulation systems (Berger and Sarnyai 2015), which is implicated in traumatic stress, and may be a pathway for increased risk for psychopathology, including suicidal behavior. Furthermore, recent research suggests the sequelae of racial/ethnic discrimination are akin to traumatic stress reactions (Kirkinis et al. 2019). For instance, research has linked racial/ethnic discrimination to posttraumatic stress symptoms

among Black (Pieterse et al. 2010) and Latino/a college students (Cheng and Mallinckrodt 2015; Flores et al. 2010), as well as Chinese international students (Wei et al. 2012). Recent research also found a significant relation between racial/ethnic discrimination and dissociative symptoms (Polanco-Roman et al. 2016), even after accounting for more traditional trauma exposures. Taken together, these findings indicate that racial/ethnic discrimination may function as a race-based traumatic stressor among racial/ethnic minority emerging adults, compromising mood and stress regulation to potentially impact suicide-related risk. However, research examining the role of posttraumatic stress in the relation between racial/ethnic discrimination and risk for suicidal behavior remains scarce.

There is compelling evidence demonstrating a link between racial/ethnic discrimination and depressive symptoms (Pascoe and Richman 2009), with research demonstrating depressive symptoms may explain the relation between racial/ethnic discrimination and risk for suicidal behavior (O'Keefe et al. 2015; Walker et al. 2014). Specifically, one study found perceived racism (i.e., perceptions of racism across interpersonal and institutional levels) was associated with increases in suicidal ideation among African American adults to the degree that it was associated with increases in depressive symptoms (Walker et al. 2014). Similarly, another study found that racial microaggressions, an interpersonal-level form of racism, was indirectly associated with suicidal ideation through depressive symptoms among African American young adults (O'Keefe et al. 2015). In a nationally representative sample of Latino/a adults, racial/ethnic discrimination was indirectly associated with suicidal ideation through depressive disorders (Kwon and Han 2019). Thus, the sequelae of racial/ethnic discrimination may not be limited to stress dysregulation, but also mood disturbances, as the corresponding stigma and marginalization may compromise a sense of safety, belonging, and agency to yield hopelessness (Polanco-Roman and Miranda 2013) and low self-esteem (Umaña-Taylor and Updegraff 2007). Overall, these findings suggest that racial/ethnic discrimination may influence risk for suicidal behavior through increased vulnerability to depressive symptoms.

Gender Differences in Racial/Ethnic Discrimination, Depressive Symptoms, Traumatic Stress, and Suicidal Behavior

The elevated rates of suicidal thoughts and behavior among women, compared to men, are long-standing and well-supported (Fox et al. 2018). Although men are more likely to die by suicide, the gender difference in rates has narrowed over the years, as suicide rates among women, particularly young women, has increased disproportionately in the past four decades (Ruch et al. 2019). This increased suicide-related risk in young women may be due, in part, to increased vulnerability to depression and traumatic stress, as women have higher prevalence of depression and stress-related disorders like PTSD (Seedat et al. 2009). Thus, the role of depression and traumatic stress as explanatory factors in the relation between racial/ethnic discrimination and risk for suicidal behavior may vary across gender.

Research on gender differences in racial/ethnic discrimination and its impact on mental health remains scarce, though some studies show men are more likely to experience racial/ethnic discrimination than women (Kessler et al. 1999; Pérez et al. 2008). One of the few

studies to examine gender differences in the relation between racial/ethnic discrimination and suicidal behavior found a significant association across both boys and girls in a nationally representative sample of Black adolescents in the U.S. (Assari et al. 2017a, 2017b). Additionally, a longitudinal study of African American pre-adolescents found no mediation effect of depressive symptoms in the relation between racial discrimination and death ideation (i.e., thoughts of death; Walker et al. 2017). Instead, anxiety emerged as a significant mediator, but only in girls. Perhaps the youths in the sample were too young at the time of the study, before the emergence of gender differences in depression, which is typically in adolescence (Hankin et al. 2015). Considering that young women may be more vulnerable to stress than men through biological (Bale and Epperson 2015) and social mechanisms (Dedovic et al. 2009), women may be more sensitive to the effects of racial/ethnic discrimination, which in turn, may increase their vulnerability to suicidal behavior. Therefore, depression and traumatic stress may better explain the relation between racial/ethnic discrimination and suicide-related risk in women emerging adults compared to men.

Racial/Ethnic Differences in Racial/Ethnic Discrimination, Depressive Symptoms, Traumatic Stress, and Suicidal Behavior

The higher prevalence of racial/ethnic discrimination among racial/ethnic minority individuals is well supported (Kessler et al. 1999; APA 2016). Further, racial/ethnic discrimination may differentially impact mental health by race/ethnicity, as findings from a nationally representative sample in the U.S. showed that Black adults reported greater racial/ethnic discrimination than Asian and Hispanic adults, and that its link to psychiatric disorders varied by racial/ethnic group (Chou et al. 2012). Specifically, racial/ethnic discrimination was more strongly related to Major Depressive Disorder among Hispanic adults, whereas it was more strongly related to PTSD among Black adults. This may be due, in part, to group differences in the nature or source of racial/ethnic discrimination (Hwang and Goto 2009; Greene et al. 2006), which may differentially impact outcomes (Benner and Graham 2013). For instance, Greene and colleagues (2006) found that Black and Puerto Rican high school students reported greater experiences of racial/ethnic discrimination from adults (e.g., teachers, police officers), whereas Asian and Dominican students reported greater experiences of racial/ethnic discrimination from peers. They further reported that while racial/ethnic discrimination by adults increased over time across all groups, Black students reported the steepest increase. Another study of Latino/a, African American and Asian American adolescents found that racial/ethnic discrimination from school personnel had the most negative impact on academic performance, whereas discrimination from peers had the most negative impact on psychological adjustment (i.e., self-worth, depressive and anxiety symptoms) (Benner and Graham 2013). These racial/ethnic differences in sources of discrimination may differentially impact mental health outcomes, including suicide-related risk.

Although the prevalence of mood disorders is lower among racial/ethnic minority adults compared to White adults (Alvarez et al. 2019), this is not observed with PTSD. Specifically, recent research shows racial/ethnic differences in types of trauma exposure and vulnerability to PTSD symptoms following trauma exposure (McLaughlin et al. 2019), as

Asian Americans were least likely, and Black American were most likely, to endorse PTSD compared to White Americans. This could be due, in part, to racial/ethnic differences in the types of trauma exposures encountered. Unfortunately, race-based traumatic stressors like racial/ethnic discrimination were not directly examined, which may overlook traumatic exposures most relevant in racial/ethnic minority populations. This is especially relevant as an accumulation of traumatic exposures is associated with greater severity of PTSD and depressive symptoms, independent of early life and daily life stress (Suliman et al. 2009). Thus, racial/ethnic discrimination may function as an added source of traumatic exposure in the lives of racial/ethnic minority emerging adults to increase suicide-related risk, given that racial/ethnic minority individuals are disproportionately burdened by experiences of racial/ethnic discrimination.

Findings have been mixed on whether racial/ethnic discrimination differentially associates with risk for suicidal behavior across racial/ethnic groups. For instance, one study reported racial/ethnic discrimination was associated with higher odds of a suicide attempt history in White and Latino/a college students, but not among their Black and Asian peers, who reported higher levels of racial discrimination, in a minority-serving institution where the student population is predominantly of racial/ethnic minority background (Gomez et al. 2011). Meanwhile, a nationally representative study of racial/ethnic minority adults reported no group difference, though age-related differences were not directly examined, and there was more heterogeneity in the social context of the sample (Oh et al. 2019). Thus, further research is warranted to better understand the contexts under which racial/ethnic discrimination influences suicide-related risk.

Current Study

Using cross-sectional data, the present study sought to identify potential explanatory factors in the relation between racial/ethnic discrimination and suicide-related risk among a racially/ethnically diverse group of emerging adults by examining whether the relation between frequency of experiences of racial/ethnic discrimination and frequency of suicidal ideation is explained, in part, by traumatic stress and/or depressive symptoms. Another aim was to examine whether this indirect relation varied by race/ethnicity and gender. It was hypothesized that racial/ethnic discrimination would be positively associated with suicidal ideation, and that this relation would be explained, in part, by traumatic stress and depressive symptoms to varying degrees across race/ethnicity and gender. Specifically, the relation between racial/ethnic discrimination and suicidal ideation through traumatic stress and/or depressive symptoms would be stronger in young women than young men, as women are generally more sensitive to effects of stress later in life than men. It was also hypothesized that the association between racial/ethnic discrimination and suicidal ideation through traumatic stress and depressive symptoms would be stronger among racial/ethnic minority (versus White) emerging adults, as they are more vulnerable to the harmful effects of racial/ethnic discrimination (APA 2016).

Methods

Sample

Participants ($N = 1344$) were emerging adults, ages 18–29 ($M = 19.88$; $SD = 2.25$) from a public, commuter college in the Northeastern U.S., recruited from a larger study examining risk and protective factors associated with suicidal behavior. The sample was predominantly female (72%), U.S.-born (76%), and racially/ethnically diverse: 46% identified as Hispanic/Latino, 20% non-Hispanic White, 18% non-Hispanic Black, 12% Asian, and 4% identified as other race/ethnicity. For more information on sample characteristics by gender and race/ethnicity, see Table 1.

Measures

Demographic—Information was collected about age, gender, race/ethnicity, and place of birth of self and parents. Participants self-identified gender and a category for women and men was created. Participants also self-identified race/ethnicity and five categories were created: White, Black, Asian, Hispanic, and other race/ethnicity.

Racial/ethnic discrimination—Racial/ethnic discrimination was assessed using the General Ethnic Discrimination Scale (GEDS; Landrine et al. 2006), an 18-item self-report scale that inquires about the frequency, and corresponding subjective distress, of experiences of racial/ethnic discrimination in the past year across various settings. The final item inquires about subjective impact of the discriminatory experiences on the individual's life overall. Responses ranged from 1 “*Never*” or “*Not at all stressful*” to 6 “*Almost all the time*” or “*Extremely stressful*.” The GEDS has demonstrated high internal consistency reliability in frequency and stress appraisal among a racially/ethnically diverse group of college students and adults in the community ($\alpha = 0.91$ – 0.95). A total racial/ethnic discrimination score was computed by summing all frequency items (excluding the final item), with a greater total representing greater frequency of racial/ethnic discriminatory experiences. In the present sample, racial/ethnic discrimination ranged from 17–90, and scale scores demonstrated high internal consistency reliability ($\alpha = 0.94$).

Traumatic Stress—The Impact of Events Scale-Revised (IES-R; Weiss 2007) is a 22-item self-report scale that inquires about the subjective distress resulting from a stressful life event, as experienced within the past week. Items correspond directly to PTSD symptoms as outlined in the DSM-IV-TR (American Psychiatric Association 2000), and fall within 3 symptom clusters: hyperarousal, avoidance, and intrusion. Participants are instructed to indicate the degree to which they were distressed or bothered by a stressful life event during the previous 7 days on a Likert-type scale ranging from 0 (“*Not at all*”) to 4 (“*Extremely*”). The scale has demonstrated high internal consistency reliability among adults with trauma exposure across the three subscales ($\alpha = 0.95$), and strongly correlated with other measures of stress-related disorders such as PTSD (Beck et al. 2008). In the present sample, the overall scores ranged from 0–88, and demonstrated high internal consistency reliability ($\alpha = 0.96$).

Depressive Symptoms—The Beck Depression Inventory (BDI-II; Beck et al. 1996) is a 21-item self-report inventory that measures the presence and severity of depressive symptoms, such as bouts of crying, hopelessness, anhedonia, guilt, and sleep disturbance, in the past two weeks. Items are scored on a Likert-type scale ranging from 0 to 3, with higher totals representing more severe depressive symptoms. The scale has demonstrated high internal consistency reliability in a non-clinical college student sample ($\alpha = 0.93$), high test-retest reliability ($\alpha = 0.93$), and is strongly correlated with other depression measures (Beck et al. 1996). In the present sample, scores ranged from 0–49, and the scale scores demonstrated strong internal consistency reliability ($\alpha = 0.89$).

Suicidal Ideation—The Suicidal Behaviors Questionnaire-Revised (SBQ-R; Linehan and Nielsen 1981) is a widely used 4-item self-report measure that assesses severity of risk for future suicidal behavior by inquiring about lifetime suicidal ideation (SI) and suicide attempts (SA), frequency of SI in the past year, disclosure of SI, and likelihood of a future SA. The scale has been found to be a reliable and valid measure of risk for suicidal behavior with a non-clinical sample of young adults (Osman et al. 2001) demonstrating adequate internal consistency reliability in a group of undergraduate college students ($\alpha = 0.76$). The scale scores demonstrated strong internal consistency reliability in the present sample ($\alpha = 0.82$). Considering that frequency of SI is the most robust predictor of future suicidal behavior (Miranda et al. 2014), SI served as an index of suicide-related risk and was assessed with frequency of SI in the past year (i.e., “*How often have you thought about killing yourself in the past year?*”), with responses on a Likert-type scale ranging from 0 (“*Never*”) to 4 (“*Very often: 5 or more times*”). Previous studies have used this item as an index of severity of risk for future suicidal behavior in a clinical (Glenn et al. 2013), and non-clinical sample (Tucker et al. 2019).

Procedures

Participants completed a battery of self-report questionnaires online. Informed consent was obtained from each participant, who received credit toward partial fulfillment of their introduction to psychology course’s research requirement. Study procedures received Institutional Review Board (IRB) approval from the City University of New York (CUNY).

Data Analysis

Missing data were excluded from analysis using listwise deletion. Gender differences in the variables of interest were examined using independent samples *t*-tests, whereas racial/ethnic differences were examined using a one-way ANOVA with post hoc Bonferroni-corrected *t*-tests. A series of linear regression models were constructed to examine the direct and indirect effects of frequency of racial/ethnic discrimination on SI through traumatic stress and depressive symptoms, adjusting for demographics. Model 1 tested the effect of racial/ethnic discrimination (predictor) on traumatic stress (mediator 1) and the interactive effect with gender (moderator 1). Model 2 tested the effects of racial/ethnic discrimination and traumatic stress on depressive symptoms (mediator 2), and interactive effects between each variable and gender. Model 3 tested the effects of racial/ethnic discrimination, traumatic stress, and depressive symptoms on suicidal ideation (outcome), and interactive effects between each variable and gender. Each model adjusted for age and race/ethnicity, and men

were entered as the reference gender group. To test the moderation effect of race/ethnicity, the same three models were created, adjusting for age and gender, with interactive terms including race/ethnicity (moderator 2). Race/ethnicity was dummy coded, with White entered as the reference race/ethnic group. For interaction terms, continuous variables were centered around their respective means to reduce multicollinearity (Jaccard and Turrissi 2003). Non-parametric bootstrapping procedures with 95% confidence intervals and 5000 resampling distribution were conducted to probe the indirect and conditional indirect effects using PROCESS version 3.0 (model 92), a statistical computational tool for SPSS (Hayes 2018). The index of moderated mediation provides a formal test for the conditional effects of race/ethnicity and gender in the indirect relation between racial/ethnic discrimination and suicidal ideation through traumatic stress and depressive symptoms.

Results

Descriptive Analyses

Approximately 20% of the sample reported any suicidal ideation (SI) in the previous year: 11% reported once, 5% reported two times, 2% reported 3–4 times, and 1% reported 5 or more times. Women reported greater frequency of SI in the last year than men, but this difference was not statistically significant. There was a significant gender difference in racial/ethnic discrimination, traumatic stress and depressive symptoms. Whereas men reported greater racial/ethnic discrimination than women, women reported greater levels of traumatic stress and depressive symptoms than men. There were no significant racial/ethnic group differences in traumatic stress, depressive symptoms, or frequency of SI in the past year. There were, however, significant racial/ethnic group differences in racial/ethnic discrimination, as emerging adults identifying as Black and Asian reported significantly greater racial/ethnic discrimination than White emerging adults. Hispanic emerging adults also reported greater frequency than White emerging adults, but this difference was only a trend ($p = 0.06$). For more details on means and standard deviations by gender and race/ethnicity, see Table 1.

Pearson correlation analyses were conducted to examine bivariate relations. There was a significant, positive correlation between racial/ethnic discrimination and traumatic stress, ($r = 0.25$), depressive symptoms, ($r = 0.17$), and SI, ($r = 0.09$). There was also a significant positive correlation between SI and depressive symptoms, ($r = 0.43$), and traumatic stress, ($r = 0.24$). Lastly, there was a significant positive correlation between traumatic stress and depressive symptoms, ($r = 0.47$).

Moderation effect of gender on the direct and indirect effect of racial/ethnic discrimination on suicidal ideation through traumatic stress and depressive symptoms

Adjusting for age and race/ethnicity, there was a significant effect of racial/ethnic discrimination, gender, and interactive effect between racial/ethnic discrimination and gender on traumatic stress. There was a significant effect of racial/ethnic discrimination, gender, and traumatic stress on depressive symptoms, but no significant interactive effects between gender and racial/ethnic discrimination or traumatic stress. There was a significant effect of depressive symptoms on SI, but no significant effect of gender, racial/ethnic

discrimination or traumatic stress. Whereas there was a significant interactive effect between gender and depressive symptoms, there was no significant interactive effect between gender and racial/ethnic discrimination or traumatic stress. For more details, see Table 2.

There was an indirect effect of racial/ethnic discrimination on SI through depressive symptoms in men, $b = 0.003$, 95%CI = 0.0004–0.006, but not in women, $b = 0.001$, 95%CI = –0.001 to 0.004. However, the effect on women was not significantly different from men, $b = -0.013$, 95%CI = –0.005 to 0.002. There was no indirect effect of racial/ethnic discrimination of racial/ethnic discrimination on SI through traumatic stress in women, $b = 0.001$, 95%CI = –0.0007 to 0.003, or men, $b = 0.001$, 95%CI = –0.0001 to 0.006. There was a significant indirect effect of racial/ethnic discrimination on SI through traumatic stress to depressive symptoms in men, $b = 0.002$, 95%CI = 0.001–0.004, and women, $b = 0.005$, 95%CI = 0.003–0.006. The effect was significantly stronger in women than men, $b = 0.003$, 95%CI = 0.0006–0.005.

Moderation effect of race/ethnicity on the direct and indirect effect of racial/ethnic discrimination on suicidal ideation through traumatic stress and depressive symptoms

Adjusting for age and gender, there was a significant effect of racial/ethnic discrimination, but no interactive effect with race/ethnicity, on traumatic stress. There was also a significant effect of traumatic stress on depressive symptoms, but no significant effect of racial/ethnic discrimination or race/ethnicity. However, there was a significant interactive effect between racial/ethnic discrimination and Asian race/ethnicity, other race/ethnicity, and a trend-level effect with Black race/ethnicity, on depressive symptoms. There was no significant interaction between racial/ethnic discrimination and Hispanic race/ethnicity. There was a significant interactive effect between traumatic stress and Hispanic race/ethnicity on depressive symptoms, but not with Black, Asian, or other race/ethnicity. There was a significant direct effect of depressive symptoms on SI, and a significant interaction with Black race/ethnicity and other race/ethnicity. There was a trend-level effect with Asian race/ethnicity, but no significant interaction with Hispanic race/ethnicity. There was no significant direct effect of traumatic stress on SI or significant interaction effects across race/ethnicity groups. There was no significant direct effect of racial/ethnic discrimination on SI, but there was a significant interaction with other race/ethnicity. No other interaction effects were statistically significant. For more details, see Table 3.

Furthermore, there was a significant indirect effect of racial/ethnic discrimination on SI through traumatic stress among Black individuals, $b = 0.003$, 95%CI = 0.0004–0.007, but not among White, $b = 0.0001$, 95%CI = –0.004 to 0.004, Asian, $b = 0.003$, 95%CI = –0.0005 to 0.007, Hispanic, $b = 0.0005$, 95%CI = –0.001 to 0.002, or individuals of other race/ethnicity, $b = -0.002$, 95%CI = –0.009 to 0.005. Though the difference between Black and White individuals was not statistically significant, $b = 0.003$, 95%CI = –0.002 to 0.008. There was a significant indirect effect of racial/ethnic discrimination on SI through depressive symptoms among Asian individuals, $b = 0.004$, 95%CI = 0.0004–0.01. Similarly, the difference between White and Asian individuals was not statistically significant, $b = 0.006$, 95%CI = –0.0006 to 0.01. Lastly, there was a significant indirect effect of racial/ethnic discrimination on SI through traumatic stress to depressive symptoms among White,

$b = 0.004$, 95%CI = 0.002–0.007, Black, $b = 0.002$, 95%CI = 0.0005–0.004, Asian, $b = 0.002$, 95%CI = 0.0001–0.004, and Hispanic, $b = 0.005$, 95%CI = 0.003–0.007, individuals, but not among individuals identifying as other race/ethnicity, $b = 0.005$, 95%CI = –0.01 to 0.02. There was no significant difference in this indirect effect across race/ethnic groups.

Discussion

There is growing research demonstrating an association between racial/ethnic discrimination and negative physical and mental health outcomes (Pascoe and Richman 2009), including suicidal thoughts and behavior, particularly among racial/ethnic minority emerging adults (Chou et al. 2012; Oh et al. 2019). These findings suggest that experiences of racial/ethnic discrimination may contribute to suicide-related risk; however, little is known about potential mechanisms underlying this relation. The present study sought to identify potential explanatory factors in the relation between racial/ethnic discrimination and suicidal ideation by examining the role of traumatic stress and depressive symptoms among a racially/ethnically diverse group of emerging adults. Specifically, whether increases in the frequency of racial/ethnic discrimination experiences were associated with increases in frequency of suicidal ideation in the past year through traumatic stress and depressive symptoms, and whether these relationships varied across gender and racial/ethnic groups.

Using cross-sectional data, a series of linear regression models and bootstrapping procedures, the present study examined the direct and indirect relation between racial/ethnic discrimination and suicidal ideation through traumatic stress and depressive symptoms. The study also examined whether these relations differed by gender and race/ethnicity. The study hypotheses were partially supported such that whereas there was no indirect relation through traumatic stress, there was an indirect relation through depressive symptoms. Neither of these relations differed between young women or men. Additionally, there was an indirect relation through traumatic stress to depressive symptoms in young women and men; and, the relation was stronger in young women than men. Contrary to what was hypothesized, there was no indirect relation through traumatic stress or depressive symptoms independently. However, there was an indirect relation through traumatic stress to depressive symptoms, and this relation did not differ across race/ethnic groups. Taken together, these findings suggest the co-occurrence of traumatic stress and depressive symptoms may help explain the relation between racial/ethnic discrimination stress and suicidal ideation, particularly among young women. In other words, cumulative experiences of racial/ethnic discrimination may increase risk for suicidal thoughts to the degree that they increase traumatic stress, which in turn, may increase depressive symptoms, particularly in young women from various racial/ethnic backgrounds.

The present findings expand upon previous research demonstrating the potential explanatory role of depressive symptoms in the relation between racial/ethnic discrimination and suicidal ideation among African Americans adults (O’Keefe et al. 2015; Walker et al. 2014) and Hispanic adults (Kwon and Han 2019), and extend the findings to emerging adults of other racial/ethnic groups. It also demonstrates that traumatic stress may also help explain this relation to the degree that it impacts depressive symptoms, and that this combination of symptomology may be more helpful in understanding the discrimination-ideation relation in

young women than men. The present findings also extends previous findings to demonstrate that the mediating effect of depression on the discrimination-ideation relation is more robust in young women. This is in contrast to findings among pre-adolescent African American youth, for whom anxiety and not depressive symptoms, mediated the relation between racial discrimination and death ideation, particularly in girls (Walker et al. 2017), alluding to potential age-related influences in the relation. Nevertheless, this information broadens our understanding of the harmful effects of racial/ethnic discrimination by elucidating potential pathways (i.e., psychiatric symptoms) through which said experiences may increase vulnerability to engaging in suicidal thinking, namely through traumatic stress and depressive symptoms.

The observed gender difference in the indirect relation between racial/ethnic discrimination and suicidal ideation through traumatic stress and depressive symptoms may be due, in part, to gender differences in biological (Bale and Epperson 2015) and social responses to stress (Dedovic et al. 2009). For instance, coping styles elicited specifically in response to racial/ethnic discrimination may vary across gender (Forsyth and Carter 2014), although previous research found that young women employed more active coping styles in response to racial/ethnic discrimination than young men, who employed more passive coping styles (Polanco-Roman et al. 2016). It may also be due to additional forms of oppression experienced by women, particularly women of color, as members of multiple minority groups via their racial/ethnic identity and gender identity (Benner et al. 2018), though gender discrimination was not examined in the present study. An intersectional approach may offer additional insight to better understand the gender and racial/ethnic differences in the relation between racial/ethnic discrimination and suicidal thoughts.

The impact of racial/ethnic discrimination on suicide-related risk may also have developmental consequences that vary across women and men. For instance, in a nationally representative sample of African American youth followed through adulthood, one study found that increases in racial discrimination in emerging adulthood (ages 20–23 years old) predicted increases in depressive and anxiety symptoms later in life (i.e., 32 years old) among African American men, but not among African American women (Assari et al. 2017a, 2017b). The developmental consequences may even extend beyond direct, personal exposure, as one study found that experiences of racial discrimination in African American adolescents and young adults was associated with increased odds of suicidality (i.e., thoughts and/or behaviors), and this relation was explained, in part, by parental experiences of racial/ethnic discrimination. That is, the youths' personal experience with racial/ethnic discrimination was associated with higher odds of suicidality, and this relation was explained by their parents' experiences of racial/ethnic discrimination, particularly in boys, even after adjusting for other well-documented risk factors for suicidal behavior, including a depressive disorder, substance use problems, and abuse history (Arshanapally et al. 2018). Timing of initial exposure to racial/ethnic discrimination may also impact its developmental consequences. One study found that earlier age of initial exposure to racial discrimination was associated with greater cardiovascular problems, though no gender difference was reported in this relation (Cuevas et al. 2019). Thus, multi-generational and longitudinal studies are further warranted to examine the prospective relation between racial/ethnic

discrimination and risk for suicidal thoughts among men and women across the lifespan and across generations.

Contrary to what was hypothesized, there was no racial/ethnic difference in the relation between racial/ethnic discrimination and suicidal ideation through traumatic stress and depressive symptoms, although racial/ethnic minority emerging adults reported greater frequency of racial/ethnic discrimination compared to their White peers, suggesting this finding may not be explained by measurement error. One possible explanation for this finding is due to contextual factors. Specifically, the present sample was drawn from a minority-serving institution with a student population that is predominantly from racial/ethnic minority backgrounds. In this context, White students may be more exposed, and thus, more vulnerable to the effects of racial/ethnic discrimination than White emerging adults in the larger population. Nevertheless, considering the prevalence and pervasiveness of racial/ethnic discrimination in communities of color, racial/ethnic discrimination may be a more robust suicide-related risk factor among racial/ethnic emerging adults compared to their White peers.

There may be other factors influencing the contexts through which experiences of racial/ethnic discrimination may impact suicide-related risk that were not explored, such as anxiety symptoms or other sources of race-related stressors. For instance, previous research identified anxiety symptoms as a potential explanatory factor in the relation between racial/ethnic discrimination and suicidal ideation (Cheref et al. 2019; Kwon and Han 2019; Walker et al. 2017). Specifically, Cheref and colleagues (2019) found that among individuals with anxiety symptoms, racial/ethnic discrimination was more strongly associated with suicidal ideation in Hispanic emerging adults, but not among their Black or Asian peers.

Additionally, in a nationally representative sample of Hispanic adults, one study found an indirect relation between discrete events of racial/ethnic discrimination and suicidal ideation through depressive symptoms, whereas the indirect relation between daily discriminatory experiences and suicidal ideation was more robust through anxiety symptoms (Kwon and Han 2019). Another study reported differences between institutional racial/ethnic discrimination versus interpersonal racial/ethnic discrimination in relation to suicide-related risk in a longitudinal sample of racial/ethnic minority adults reporting depressive symptoms (Wang et al. 2019). Specifically, whereas institutional discrimination predicted the onset of suicidal thoughts, interpersonal discrimination predicted the onset of suicidal thoughts and attempts. Thus, the relation between racial/ethnic discrimination is complex and nuanced, and further research is warranted to better understand the mechanisms underlying this relation. Although the focus of the present study was on individual-level racism, other forms of racism (e.g., structural racism) are also associated with negative mental health outcomes via less access to and poorer quality of care (Williams et al. 2019), and warrant further examination as it relates to suicidal thinking.

In addition to potential differential effects of different forms of racism (interpersonal versus institutional), another consideration is the cumulative effect of these different forms of racism exposure, as novel, discrete exposures may have a differential impact than more chronic, pervasive exposures. For instance, the present study focused on overt, behavioral displays of individual-level racism through concrete discriminatory events; but more subtle,

chronic, and covert behavioral displays of individual-level racism exist in the form of microaggressions (Sue et al. 2007), and may have differential effects on mental health. Indeed, previous research found cognitive performance on an attention task was most compromised among White individuals when exposed to overt, behavioral displays of individual-level racism (akin to racial/ethnic discrimination), whereas performance was most compromised among Black individuals when exposed to ambiguous and covert behavioral displays of individual-level racism (Salvatore and Shelton 2007). Perhaps racial/ethnic minority individuals may be better equipped to cope with racial/ethnic discrimination than their White counterparts due to racial/ethnic socialization, or messages racial/ethnic minority youths receive from caregivers about coping with discrimination, in response to the early and chronic exposure to discrimination in communities of color (Neblett Rivas-Drake and Umaña-Taylor 2012). In fact, previous research identified culture-specific protective factors, such as ethnic identity (Polanco-Roman and Miranda 2013) and religiosity (Walker et al. 2014), that may buffer against the harmful effects of racial/ethnic discrimination to protect against suicidal thinking. Taken together, the findings highlight the importance of cultural context in the relation between racial/ethnic discrimination and suicide-related risk. Future research should examine the unique effects of different forms of racism, and their cumulative effects, in relation to risk for suicidal behavior among racial/ethnic minority emerging adults.

There are several limitations of this research that need to be considered when interpreting the findings. First, the sample consists of predominantly female college students; thus, findings may not generalize to the greater emerging adult population, as research has found higher rates of suicidal thoughts and behavior in non-college-attending emerging adults compared to their college-attending peers (Mortier et al. 2018). However, by focusing on emerging adults, the findings target a population vulnerable to suicidal behavior (Goldston et al. 2015), and to the harmful effects of racial/ethnic discrimination (APA 2016). The large and diverse sample facilitated the examination of gender differences, despite the overrepresentation of female college students. Another limitation is the exclusive reliance on self-report surveys, subjecting data to recall and social desirability bias. Since racial/ethnic minority students are less likely to self-disclose suicidal ideation than their White counterparts, it is possible that suicide-related risk is underestimated among racial/ethnic minority students (Morrison and Downey 2000). Nevertheless, significant indirect associations were found, suggesting the present findings may be more conservative in capturing the nature of this relation in this sample. Future research should incorporate more objective measures of racial/ethnic discrimination to better assess physiological and neurological markers of stress resulting from racial/ethnic discrimination.

The cross-sectional design limits causal inferences or temporal directionality in the relations among the variables, as it is possible that suicidal thoughts, traumatic stress, or depressive symptoms, instead, impact recollection or reporting of racial/ethnic discrimination experiences. As recommended by Kraemer and colleagues (2001), however, parameters for using cross-sectional designs to examine developmental psychiatric processes were factored into the present design, including reliability of measures, clarity of terminology, type of process examined, and selection of time scale. The present study was a preliminary investigation of the potential effect of racial/ethnic discrimination on suicidal ideation

through traumatic stress and depressive symptoms, with race/ethnicity and gender as possible moderators of this relation. Future research with a prospective design is warranted to better examine the temporal relation among these variables. Additionally, to minimize any potential overlap between traumatic stress and racial/ethnic discrimination, as the Impact of Events Scale used to measure traumatic stress inquires about a broadly defined stressful event that may or may not include experiences of racial/ethnic discrimination, a more objective measure of discriminatory experiences was used (frequency of events versus subjective stress appraisal). Nevertheless, the present study conceptualized racial/ethnic discrimination as a chronic and pervasive stressor that may yield stress-related adaptations over time to increase vulnerability to future stressors, regardless of the nature of a recent life stressor, as previous research suggests race-based trauma may impact risk for traumatic stress even after accounting for more traditional forms of traumatic exposures (Pieterse et al. 2010; Flores et al. 2010; Polanco-Roman et al. 2016). Bivariate findings also suggest a significant, positive relation of distinct constructs. Although suicidal ideation was assessed with a single item, which may have oversimplified the assessment of suicidal thoughts, research suggests that frequency of suicidal ideation is a robust predictor of future suicidal behavior (Miranda et al. 2014). Lastly, within-group differences known to impact risk for psychiatric disorders (Alvarez et al. 2019) and suicidal behavior among racial/ethnic minority populations, such as immigration and acculturation (Borges et al. 2012), were not accounted for in the analyses. Despite these limitations, this study provides important information about potential pathways underlying the relation between racial/ethnic discrimination and suicide-related risk among racial/ethnic minority emerging adults. By focusing on emerging adults, the findings target a population vulnerable to suicidal behavior and to the harmful effects of racial/ethnic discrimination. The large and diverse sample facilitated the examination of gender and racial/ethnic group differences.

This information contributes to national efforts to address the gender and racial/ethnic differences in suicidal behavior by broadening our understanding of suicide-related risk within a sociocultural context and the developmental consequences of racial/ethnic discrimination in young women and men. Thus, racial/ethnic discrimination may function as a distal risk factor of suicidal thoughts that impacts vulnerability to more proximal factors such as psychiatric symptoms, as experiences of race-based and more traditional forms of trauma accumulate across the lifespan. This may be a potential pathway through which experiences of racial/ethnic discrimination may increase risk of suicidal thoughts. Indeed, previous research suggests racial/ethnic discrimination may yield hopelessness (Polanco-Roman and Miranda 2013), and rumination (Miranda et al. 2013) to confer risk for depressive symptoms in emerging adults. Information about an individual's racial/ethnic discrimination history, particularly among individuals with traumatic stress and depressive symptom presentation, may provide potential targets for prevention to ward off the onset of suicide ideation, and intervention to attenuate suicide-related risk. Such approaches would improve the cultural sensitivity of services targeted at reducing risk for suicidal thoughts and behavior, particularly among racial/ethnic minority emerging adults. Thus, racial/ethnic discrimination should be approached as a potential source of psychological distress, and accounted for in the assessment, diagnosis, and treatment of racial/ethnic minority emerging adults, particularly young women presenting with mood and stress-related symptoms. The

additive exposure to racial/ethnic discrimination over time could further heighten susceptibility to more severe manifestations of psychological distress in the form of suicidal thoughts and behavior. This is especially relevant to emerging adults, who are more likely to experience racial/ethnic discrimination compared to older adults and are most vulnerable to its harmful effects (APA 2016). As emerging adults undergo significant physical and psychological changes in their transition from childhood into adulthood (Arnett 2000), frequent experiences of racial/ethnic discrimination may compromise their mental health to engender more proximal suicide-related risk factors like traumatic stress and depressive symptoms, particularly in young women.

Conclusion

The evidence for the pernicious and insidious effects of racial/ethnic discrimination on mental health is unequivocal. Recent research suggests racial/ethnic discrimination may increase risk for suicidal thoughts and behavior, particularly among racial/ethnic minority emerging adults, who are most vulnerable to the harmful effects of racial/ethnic discrimination. Information elucidating potential mechanisms underlying the relation between racial/ethnic discrimination and suicide-related risk remain scarce. The present study, thus, provides further insight into potential pathways through which experiences of racial/ethnic discrimination may impact risk for suicidal ideation. Findings indicate that frequent experiences of racial/ethnic discrimination may increase risk of traumatic stress and depressive symptoms, which may, in turn, increase risk of suicidal thoughts, particularly in young women. No racial/ethnic difference was evident in this relation. An approach to reducing suicide-related risk in racial/ethnic minority young women should consider racial/ethnic discrimination as a potential source of psychological distress that warrants clinical attention, particularly in young women presenting with traumatic stress and depressive symptoms. Further research is warranted to better understand the developmental consequences of racial/ethnic discrimination in young women and men as it relates to suicide-related risk, as this information would improve the cultural sensitivity of currently available services in the assessment and treatment of suicide-related risk, particularly among young women.

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Table 1

Sample characteristics, means, and standard deviations by gender and race/ethnicity

	Gender			Race/ethnicity						F
	Total (<i>N</i> = 1541)	Men (<i>n</i> = 441)	Women (<i>n</i> = 1100)	<i>t</i>	White (<i>n</i> = 314)	Black (<i>n</i> = 274)	Hispanic (<i>n</i> = 715)	Asian (<i>n</i> = 180)	Other (<i>n</i> = 58)	
Age	19.88 (2.25)	19.96 (2.35)	19.85 (2.21)	0.81	20.12 (2.54)	19.94 (2.27)	19.74 (20.09)	19.77 (2.07)	20.05 (2.84)	2.60 *
Depressive symptoms	10.44 (8.58)	8.73 (7.74)	11.27 (8.88)	5.26 *	10.85 (8.75)	10.22 (8.12)	10.74 (8.97)	9.78 (7.91)	10.31 (8.70)	0.64
Racial/ethnic discrimination	24.43 (9.87)	25.53 (11.51)	23.90 (9.24)	2.53 *	22.42 (8.33)	26.153 (11.00)	24.38 (10.33)	25.43 (10.48)	24.48 (9.93)	5.01 *
Traumatic stress	27.52 (21.30)	24.78 (21.47)	28.55 (21.15)	3.04 *	27.11 (21.73)	27.62 (22.30)	27.57 (21.25)	28.25 (20.23)	26.56 (19.51)	0.11
Suicidal ideation	0.34 (0.79)	0.28 (0.75)	0.36 (0.80)	8.11 **	0.36 (0.79)	0.31 (0.76)	0.32 (0.77)	0.41 (0.86)	0.42 (0.91)	0.80

* $p < 0.05$;** $p < 0.10$

Direct effect of racial/ethnic discrimination on traumatic stress, depressive symptoms, and suicidal ideation with interactive effects with gender, adjusting for age and race/ethnicity

Table 2

	Traumatic stress				Depressive symptoms				Suicidal ideation			
	<i>b</i> (SE)	95%CI	<i>p</i>		<i>b</i> (SE)	95%CI	<i>p</i>		<i>b</i> (SE)	95%CI	<i>p</i>	
Age	-0.05 (0.25)	-0.54 to 0.44	0.85		-0.19 (0.09)	-0.37 to -0.006	0.04		-0.02 (0.009)	-0.04 to -0.004	0.01	
Black	-2.39 (1.85)	-6.01 to 1.24	0.20		-1.09 (0.68)	-2.42 to 0.24	0.11		-0.03 (0.06)	-0.16 to 0.09	0.61	
Asian	-0.54 (2.08)	-4.62 to 3.55	0.80		-1.01 (0.76)	-2.50 to 0.49	0.19		0.01 (0.07)	-0.13 to 0.15	0.89	
Hispanic	-1.35 (1.51)	-4.31 to 1.62	0.37		-0.25 (0.55)	-1.33 to 0.84	0.66		-0.07 (0.05)	-0.17 to 0.03	0.17	
Other	-1.29 (3.02)	-7.22 to 4.63	0.67		-0.09 (1.11)	-2.25 to 2.08	0.94		0.06 (0.10)	-0.14 to 0.26	0.58	
Gender	5.32 (1.26)	2.84 to 7.79	<0.01		1.99 (0.47)	1.07 to 2.90	<0.01		-0.09 (0.04)	-0.10 to 0.08	0.84	
Discrimination	0.41 (0.09)	0.23 to 0.59	<0.01		0.09 (0.03)	0.02 to 0.16	<0.01		0.0008 (0.003)	-0.006 to 0.007	0.80	
Traumatic stress					0.16 (0.02)	0.13 to 0.20	<0.01		0.003 (0.002)	-0.006 to 0.007	0.10	
Depressive Sxs									0.03 (0.006)	0.02 to 0.04	<0.01	
Discrimination × gender	0.23 (0.18)	0.003 to 0.46	<0.05		-0.06 (0.04)	-0.14 to 0.31	0.22		-0.002 (0.004)	-0.01 to 0.006	0.57	
Traumatic stress × gender					0.03 (0.02)	-0.02 to 0.07	0.23		-0.002 (0.002)	-0.006 to 0.003	0.49	
Depressive Sxs × gender									0.01 (0.006)	-0.002 to 0.02	0.11	
Constant	-1.63 (5.32)	-12.07 to 8.82	0.76		2.64 (1.95)	-1.17 to 6.47	0.17		0.80 (0.18)	0.44 to 1.16	<0.01	
	$R^2 = 0.08$				$R^2 = 0.24$				$R^2 = 0.19$			
	$F(8,1335) = 13.56, p < 0.001$				$F(10,1333) = 41.78, p < 0.001$				$F(12,1331) = 26.27, p < 0.001$			

Men is the gender reference group; White is the reference race/ethnic group; bold = statistically significant

Direct effect of racial/ethnic discrimination on traumatic stress, depressive symptoms, and suicidal ideation with interactive effects with race/ethnicity, adjusting for age and gender

Table 3

	Traumatic stress				Depressive symptoms				Suicidal ideation			
	b (SE)	95%CI	p		b (SE)	95%CI	p		b (SE)	95%CI	p	
Age	-0.05 (0.25)	-0.54 to 0.44	0.86		-0.19 (0.09)	-0.37 to -0.004	0.04		-0.02 (0.01)	-0.04 to -0.007	<0.01	
Gender	5.48 (1.26)	3.00 to 7.96	<0.01		1.87 (0.46)	0.96 to 2.77	<0.01		-0.03 (0.04)	-0.11 to 0.06	0.51	
Black	-2.59 (1.88)	-6.27 to 1.09	0.17		-0.95 (0.68)	-2.29 to 0.39	0.16		-0.06 (0.06)	-0.18 to 0.07	0.37	
Asian	-0.52 (2.10)	-4.65 to 3.60	0.80		-0.92 (0.76)	-2.42 to 0.58	0.23		-0.01 (0.07)	-0.15 to 0.13	0.89	
Hispanic	-1.52 (1.54)	-4.53 to 1.49	0.32		-0.07 (0.56)	-1.16 to 1.02	0.90		-0.08 (0.05)	-0.18 to 0.02	0.14	
Other	-1.38 (3.04)	-7.34 to 4.58	0.65		0.03 (1.10)	-2.13 to 2.20	0.98		0.06 (0.10)	-0.14 to 0.26	0.57	
Discrimination	0.65 (0.15)	0.36 to 0.95	<0.01		-0.04 (0.06)	-0.15 to 0.06	0.42		0.003 (0.005)	-0.008 to 0.01	0.64	
Traumatic stress					0.16 (0.02)	0.12 to 0.20	<0.01		0.0001 (0.0002)	-0.004 to 0.004	0.97	
Depressive Sxs									0.04 (0.006)	0.03 to 0.05	<0.01	
Discrimination × Black	-0.08 (0.19)	-0.46 to 0.29	0.66		0.12 (0.07)	-0.02 to 0.26	0.10*		0.002 (0.007)	-0.01 to 0.01	0.81	
Discrimination × Asian	-0.13 (0.23)	-0.59 to 0.33	0.59		0.22 (0.09)	0.05 to 0.39	0.01		0.004 (0.008)	-0.01 to 0.02	0.62	
Discrimination × Hispanic	-0.12 (0.17)	-0.45 to 0.21	0.48		0.08 (0.06)	-0.05 to 0.20	0.23		-0.006 (0.006)	-0.02 to 0.006	0.32	
Discrimination × other	-0.32 (0.31)	-0.94 to 0.30	0.31		0.33 (0.12)	0.10 to 0.56	<0.01		-0.03 (0.01)	-0.05 to -0.007	0.01	
Traumatic stress × Black					-0.004 (0.03)	-0.07 to 0.06	0.90		0.005 (0.003)	-0.001 to 0.01	0.10	
Traumatic stress × Asian					-0.05 (0.04)	-0.12 to 0.03	0.20		0.005 (0.004)	-0.003 to 0.01	0.19	
Traumatic stress × Hispanic					0.05 (0.03)	0.001 to 0.10	<0.05		0.0008 (0.003)	-0.005 to 0.006	0.78	
Traumatic stress × other					0.05 (0.06)	-0.06 to 0.17	0.34		-0.006 (0.006)	-0.02 to 0.006	0.34	
Depressive Sxs × Black									0.02 (0.008)	-0.04 to -0.003	0.02	
Depressive Sxs × Asian									-0.02 (0.01)	-0.04 to 0.002	0.08*	
Depressive Sxs × Hispanic									-0.002 (0.007)	-0.02 to 0.01	0.11	
Depressive Sxs × other									0.03 (0.01)	0.002 to 0.06	0.04	
Constant	-1.71 (5.35)	-12.21 to 8.79	0.75		2.57 (1.95)	-1.25 to 6.39	0.19		0.88 (0.18)	0.52 to 1.24	<0.01	
	$R^2 = 0.07$				$R^2 = 0.25$				$R^2 = 0.20$			
	$F(11,1332) = 9.57, p < 0.001$				$F(16,1327) = 27.74, p < 0.001$				$F(21,1322) = 16.12, p < 0.001$			

Men is the reference gender group; White is the reference race/ethnic group; bold = statistically significant

* $p < 0.10$