



# Racial and gender differences in discrimination and psychological distress among young adults

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## ABSTRACT

Racial and gender differences in the effects of discrimination on health are well-established. The evidence has derived largely from studies of older adults, with less attention paid to younger adults. The current study takes an intersectional approach to address this gap. Using nationally representative, longitudinal data from the 2017 and 2019 Panel Study of Income Dynamics Transitioning to Adulthood Supplement (PSID-TAS), we assess the effects of everyday discrimination on psychological distress among Black and White young adults aged 18–28 ( $n = 3894$ ). We examine cumulative discrimination and individual items of the cumulative measure based on the Everyday Discrimination Scale. The analysis reveals that perceived discrimination is positively associated with psychological distress for each race-gender group. However, the magnitude of the association varied by group and dimension of discrimination. Black men and women reported more frequent experiences of each type of discrimination than their White counterparts. The positive association between discrimination and distress, however, was lower for Black men and women relative to White men— suggesting that White men may be more sensitive to and/or less resilient against the effects of perceived discrimination. In contrast, associations for White women did not differ significantly from those of White men. Our findings demonstrate that the health-harming effects of discrimination on psychological distress begin early in the life course and suggest that resilience-based coping mechanisms found in older samples of Black adults may also exist for younger adults.

## 1. Introduction

Health disparities and exposures to discrimination vary by race and gender (Gee et al., 2019; Ifatunji and Harnois, 2016; Williams et al., 2019). Due to systems of oppression built on racism, sexism, and other biases, those occupying socially disadvantaged positions often bear the brunt of these negative social interactions. Discrimination in everyday life is one of the major pathways through which these systems manifest themselves (Lawrence et al., 2022). Experiencing discrimination violates expectations of fairness, morality, and human rights and increases stress, which, in turn, harms mental and physical well-being (Williams et al., 2019).

To date, evidence on the negative impact of discrimination on health has been based primarily on cross-generational or older adult sample populations, with less attention to younger adults (Lawrence et al., 2022; Smith et al., 2022; Sylvers et al., 2022). Even fewer studies have

taken an intersectional approach to assess how race and gender interact to shape these relationships (Grollman, 2017; Ridgeway and Denney, 2023). This is an important line of research for several reasons. First, the cumulative effects of discrimination on health are well-established, and there is growing evidence that the harmful impact can emerge as early as childhood (Bailey et al., 2017; Williams, 2018). Young adulthood marks a pivotal period in the life course wherein financial independence is established and opportunities for social mobility (or lack thereof) are salient. Second, discriminatory experiences and psychological distress are known to vary by race and gender. Understanding how race and gender interact to influence these associations among young adults could improve efforts to reduce disparities during a critical period in the life course.

The current study examines the relationships between discrimination and psychological distress among young adults at the intersection of race (non-Hispanic Black and non-Hispanic White, hereafter Black and

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White), gender (male and female, hereafter assumed as proxies for cis-gender men and women and referred to as men and women), and race-gender (Black men, Black women, White men, and White women). Our analysis contributes to prior research in several ways. First, we focus on young adults to capture unique associations that may be present at earlier stages of the life course. Studies that use older samples are informative but may yield conservative estimates of racial disparities, as elderly Black adults, more than elderly White adults, are selected on resiliency and other protective characteristics. Second, we extend studies that focus on racial or gender differences in the associations between everyday discrimination and health to explore their associations by race and gender (Guerrero et al., 2023; Ridgeway and Denney, 2023). Of the studies using the data we employ, only one adopted an intersectional approach, and the analysis focused on discrimination over time rather than the association between discrimination and health (Palmer et al., 2023). Third, we use multiple operational definitions of discrimination to capture both the effects of cumulative discrimination (i.e., everyday discrimination scale) and those of individual dimensions of discrimination (e.g., treatment with less respect or as inferior) on psychological distress.

## 2. Background

### 2.1. Differential exposure to discrimination by race and gender

It is well-established that Black Americans experience greater exposure to discrimination over the life course than do White Americans (Gee et al., 2019; Reskin, 2012). Discrimination occurs at the structural, institutional, and individual levels and can be assessed with objective measures, such as access to housing and employment, and subjective measures, such as individuals' perceptions of discrimination (i.e., everyday discrimination). The literature consistently finds that Black individuals experience more forms of structural discrimination than White individuals, including increased cost of goods, greater exposure to environmental hazards, and higher unemployment rates (Coleman et al., 2008; Williams et al., 2019). However, evidence on perceptions of discrimination among Black and White individuals is more mixed.

Everyday discrimination captures chronic perceived experiences of mistreatment, such as receiving poorer service or being treated as inferior (Williams et al., 1997). Most studies find that Black adults are more exposed to everyday discrimination and more likely to report these experiences of discrimination than are White adults (Lee et al., 2019; Rodriguez et al., 2022). Others find that White adults, especially conservative Whites, perceive anti-White bias as more pronounced than anti-Black bias (Wilkins and Kaiser, 2014), while others still find that perceptions of discrimination among Black and White adults depend on the type of discrimination experienced (Sylvers et al., 2022). For example, Sylvers et al. (2022) found that Black and White older adults reported similar frequencies of being threatened or harassed, but for all other aspects of everyday discrimination, Black respondents reported significantly higher frequencies than Whites.

Perceptions of discrimination also vary by social context (Assari and Lankarani, 2018; Coleman et al., 2008; Craig and Richeson, 2018). Black adults tend to report higher levels of perceived discrimination as their socioeconomic status (SES) increases due to racial isolation in predominantly White neighborhoods and workplaces (Assari and Lankarani, 2018; Sylvers et al., 2022). White adults tend to report the highest levels of discrimination in situations they perceive a status threat (Cabrera, 2014; Craig and Richeson, 2018; Malat et al., 2018; Wilkins et al., 2017). For example, Craig and Richeson (2018) studied the effects of neighborhood composition on perceived discrimination and found that White respondents' perceptions increased when they believed that the local racial minority population was larger.

Gender further complicates racial differences in perceived discrimination. Although the everyday discrimination scale (EDS) was originally derived from the experiences of Black women (Essed, 1991), some

contend that items on the scale may be biased in favor of capturing Black men's experiences (discussed in Ifatunji and Harnois, 2016). As such, higher levels of cumulative discrimination for Black men may be artificially inflated compared to other groups. In a direct test of this argument, Ifatunji and Harnois (2016) found little evidence of gender bias in the EDS. Like others, they point to the *subordinate male target hypothesis* in explaining why Black men's cumulative everyday discrimination scores may be higher than others: the reality that Black men pose a relatively greater threat to Whites' dominant social position than Black women and are the primary targets of discriminatory practices aimed at maintaining the racial hierarchy (Mouzon et al., 2020).

### 2.2. Racial and gender differences in the effects of discrimination on health

Discrimination is an aspect of social life that is known to negatively impact mental and physical health (Liu and Yang, 2022; Reskin, 2012). Perceived discrimination is associated with negative coping mechanisms, substance abuse, and anticipatory coping behaviors that can elevate stress (Hicken et al., 2018; Lewis et al., 2015). However, evidence on the effects of discrimination on health across race or gender groups is mixed (Jung et al., 2022). Although White adults report less perceived discrimination than Black adults (Lee et al., 2019), some research shows that when they do perceive discrimination, they experience more negative mental health outcomes (Ayalon and Gum, 2011; Liu and Yang, 2022). Ayalon and Gum (2011) found stronger associations between perceived discrimination and depressive symptoms for White than Black adults. They argue that Black adults may have developed more discrimination-related coping skills due to greater exposure to discrimination over the life course. Research on gender differences finds a similar pattern, in which men's mental health is more negatively impacted by discrimination than women's (e.g., Foyne et al., 2012). The key argument is that men are less likely to experience gender-based discrimination, and when they do, they are less likely to have the coping mechanisms needed to buffer its effects on distress. A 2012 study on U.S. marines, for example, found that men's anxiety levels were more negatively impacted by gender-based discrimination than women's, in part due to women having more experience with and stronger coping strategies for dealing with discrimination (Foyne et al., 2012).

Explanations for the associations between discrimination and health vary across race-gender groups (Matthews et al., 2013; Perez et al., 2023; Versey and Curtin, 2016). Scholars of whiteness suggest that racial identity is an important factor in perceptions of discrimination among White adults (Bey, 2022; Cabrera, 2014; Malat et al., 2018; Wilkins and Kaiser, 2014), particularly White men (Bey, 2022; Cabrera, 2014). Hegemonic ideals of (White) masculinity place them in a dominant social position, and perceived threats to that position can prompt feelings of "reverse discrimination" (Cabrera, 2014). In turn, these perceived status threats can increase White men's susceptibility to psychological distress (Bey, 2022). White women also attach value and self-worth to their racial identity, and may downplay the role of gender-based discrimination in order to maintain their secondary position (behind White men) in the social hierarchy (Frasure-Yokley, 2018; Wilkins et al., 2017). Indeed, Versey and Curtin (2016) found that self-esteem was an important mediator in the impact of discrimination on mental health for White, but not Black women. They posited that White women interpret discrimination as a devaluation of self, which triggers lower self-esteem and greater psychological distress relative to Black women.

For Black adults, the relationship between discrimination and health often stems from the unintended consequences of internalized coping mechanisms, such as rumination, hypervigilance, and over-compensation, which heighten stress and negatively impact health over time (Hicken et al., 2018; Matthews et al., 2013; Perez et al., 2023; Williams, 2018). Black men, in particular, disproportionately

overcompensate for discrimination via high-effort coping strategies like John Henryism (James, 1994; Matthews et al., 2013). Though harmful to health in the long term, some research suggests that John Henryism can also be associated with lower depressive symptomology because individuals who ascribe to this coping process typically have a greater sense of mastery (Matthews et al., 2013). Similarly, Black women's unique stress coping mechanisms are articulated best by Woods-Giscombe's Superwoman Schema, wherein Black women suppress negative emotions and overextend themselves in the care of others (Woods-Giscombé, 2010). Evidence on the consequences for health are mixed (Allen et al., 2019; Perez et al., 2023; Woods-Giscombé, 2010). A 2023 study by Perez and colleagues found that higher emotional suppression and a tendency to prioritize caring for others were associated with lower psychological distress among Black women. In contrast, Allen et al. (2019) found that higher emotional suppression buffered against allostatic load, while prioritizing the care of others exacerbated said outcomes.

### 2.3. Explanations for variations: stress exposure and stress vulnerability hypotheses

Research on whether discrimination more negatively affects those occupying relatively disadvantaged social statuses (i.e., women and/or non-Whites) or advantaged social statuses (i.e., men and/or Whites) has produced mixed results (Kwon et al., 2023; Rodriguez et al., 2022). The mixed findings are best understood via the differential stress exposure and stress vulnerability hypotheses (George and Lynch, 2003; Pearlin et al., 2005). The *stress exposure hypothesis* posits that the effects of stress on health depend on the degree of exposure to stress. Those occupying more disadvantaged social statuses might experience more negative health effects due to greater exposure to discrimination-related stress. Findings in support of this hypothesis suggest that Black adults are more negatively affected by discrimination (Lo and Cheng, 2018). For example, one 2020 study examined the effect of discrimination on cortisol levels and found that experiencing discrimination was a significant predictor of higher cortisol levels (i.e., poorer health) among older Black but not White adults (Lehrer et al., 2020). Other studies find similar differences in areas such as sleep quality, with stronger, negative effects between discrimination and sleep for Black but not White respondents (Gaston et al., 2020).

The *stress vulnerability hypothesis* suggests that associations between stress and health depend on a group's access to resources that mitigate, or buffer, the negative consequences of stress (George and Lynch, 2003; Pearlin et al., 2005). Groups lacking financial and psychosocial resources to cope with social stressors may be more vulnerable to the negative effects of those stressors on health. Findings in support of this hypothesis demonstrate that the effects of discrimination on mental health are worse for Black adults due to less access to socioeconomic and other stress-buffering resources (Assari and Caldwell, 2018). Moreover, since resources like education and income level are less protective for health among Black Americans, discrimination can be especially harmful for this demographic (Bell et al., 2020; Lo and Cheng, 2018).

The *stress vulnerability hypothesis* has also been employed to explain poorer outcomes among those in more socially advantaged positions (Kwon et al., 2023; Rodriguez et al., 2022). This approach posits that those in higher social positions may have fewer coping mechanisms and less resilience to discrimination-related stressors due to a lack of exposure to such stressors over the life course (Rodriguez et al., 2022). Susceptibility to stress may be greater for those who have been more sheltered from experiences of discrimination, making them more sensitive to the negative health consequences when it occurs.

### 2.4. Exposure to discrimination across the life course

To date, our understanding of the relationship between discrimination and health is based primarily on studies utilizing elderly or mixed-

age samples. Stage of the life course matters because discrimination is an *exposure occurrence*—wherein the likelihood of experiencing discrimination is higher during stages of the life course when public engagement is high (Sylvers et al., 2022). Due to structural racism and interpersonal discrimination, Black Americans must overcome more structural obstacles to reach older ages and thus represent a more robust group than similar-aged White Americans (Ayalon and Gum, 2011). Young adults, regardless of race, have had less exposure to adverse life events and are less affected by selection due to death and institutionalization relative to older adults. Indeed, research shows that older Black adults are less likely to report everyday discrimination compared to their younger counterparts simply because they are less engaged in social situations where they can be exposed to such discrimination (e.g., workforce, restaurants, schools) (Taylor et al., 2018). Alternatively, younger Black cohorts have higher exposures to discrimination than their White counterparts (Sylvers et al., 2022; Taylor et al., 2018).

A handful of studies have examined the relationship between discrimination and health during young adulthood, a time when public engagement and potential exposure to discrimination are high. For example, in their examination of trends in racism, sexism, and ageism in the workplace for Black and White women over the life course, Gee et al. (2019) found that perceived racism and ageism in the workplace peak in young adulthood for both Black and White women and vary as they age. Similarly, O'Brien et al. (2017) examined the relationships between discrimination and health among younger cohorts and found significant negative associations between the two, suggesting that these relationships can be observed at earlier stages in the life course. Although the study did not find significant differences by race, the authors argue this is likely due to their analytic focus on major forms of discrimination (e.g., housing) that generally occur in later stages of adulthood (O'Brien et al., 2017). A recent nationwide report on stress found that nearly two-thirds (61%) of women and one-half (51%) of men ages 18 to 34 felt "completely overwhelmed by stress" on most days (American Psychological Association, 2022). Although not race-specific, the results further underscore the importance of studying psychological distress among young adults.

### 2.5. Current study

The current study examines the relationships between discrimination and psychological distress among young adults and assesses the extent to which the relationships vary by 1) race; 2) gender; and 3) race-gender. We use an intersectional lens and employ race and gender as proxies for lived experiences and intragroup similarities in levels of exposure to systemic biases (Lett et al., 2022). Our analyses contribute to prior research in several distinct ways. We extend prior studies that focus on racial or gender differences in discrimination and health to explore their associations at the intersection of race and gender. We focus on the associations during young adulthood, an understudied stage of the life course when exposure to stressors during the transition to adulthood may be particularly acute. Finally, we examine cumulative experiences of discrimination, as well as individual forms of discrimination, to assess their relationships with psychological distress across race, gender, and race-gender groups. By including individual items, we are also able to address concerns regarding the comparability of cumulative scores across groups that may result from similarities between individual items (e.g., perceptions of receiving less courtesy or respect) (Bastos and Harnois, 2020; Harnois et al., 2019). More formally stated, our analysis seeks to answer the following research questions.

RQ1. To what extent do experiences of discrimination and psychological distress vary among young adults by race, gender, and race-gender?

RQ2. To what extent does the relationship *between* discrimination and psychological distress vary across these groups? Put differently, does discrimination have a greater impact on psychological distress

for some groups over others, or is the relationship similar across race-gender groups?

RQ3. To what extent do observed associations across race-gender groups vary by type and frequency of individual discrimination measures?

### 3. Methods

#### 3.1. Data

This study uses nationally representative, longitudinal data from two waves of the Panel Study of Income Dynamics Transitioning to Adulthood Supplement (PSID-TAS). The PSID-TAS is administered every two years to respondents ages 18 to 28, and the analytic sample for this study derives from the 2017 ( $n = 2526$ ) and 2019 ( $n = 2595$ ) waves (total  $n = 5121$ ). We limit the sample to Black and White respondents ( $n = 3894$ ), who represent the primary groups of interest for the current study and comprise the majority of respondents in the 2017 and 2019 samples (83% and 87%, respectively). Since panel data have the potential to include respondents in multiple waves, we account for this possibility by pooling the data from the two waves and adjusting for non-independence with robust cluster standard errors at the individual level.

#### 3.2. Measures

Our primary dependent variable is *psychological distress*. The measure is based on a cumulative score across items from the 6-item Kessler Non-Specific Psychological Distress Scale (K-6). Items in this scale assess how often in the past month respondents have felt nervous, hopeless, restless, everything was an effort, too sad, or worthless. Responses range from 1 (“all of the time”) to 5 (“none of the time”) and are reverse-coded so that higher frequencies represent greater distress. The responses are recoded from 0 (“none of the time”) to 4 (“all of the time”) and summed for a scale ranging from 0 to 24 ( $\alpha = 0.784$ ). We operationalize this scale as a continuous variable in alignment with previous studies (Perez et al., 2023; Topazian et al., 2022).

Our key independent variables are *individual* and *cumulative* experiences of discrimination. *Discrimination* is assessed with the everyday discrimination scale that asks: “In your day-to-day life how often do any of the following things happen to you?” The *individual discrimination* experiences include being treated with less courtesy, treated with less respect, treated as stupid, treated as inferior, treated as dishonest, having others act afraid of respondents, and receiving poorer service. The response categories for each of the seven items range from “never” (0) to “almost every day” (5). *Cumulative discrimination* is the summed index of responses from four of the seven measures of discrimination that were psychometrically invariant across race, gender, and race-gender as determined by results from multi-group confirmatory factor analyses (CFA) (Bastos and Harnois, 2020; see Appendix A). The four items are being treated with less courtesy, less respect, as stupid, and as inferior, and the scale ranges from 0 to 20 ( $\alpha = 0.865$ ), with 0 representing respondents who have never experienced discrimination of any form and 20 representing respondents who have experienced each form almost every day.

We use self-identified *race* and *gender* to examine differences between race, gender, and race-gender groups. We also include several control variables that may contribute to differences across race and gender groups. These include age, educational attainment, marital status, employment status, and two measures of independence gauging whether respondents have a car in their own name or received any parental assistance to pay for housing (i.e., rent, mortgage, or dormitory costs). Given the age of respondents, we also control for whether a respondent is currently enrolled in school to account for differences among the “some college” classification.

#### 3.3. Analytic strategy

The analysis begins with descriptive comparisons of our dependent and independent variables, separately by race, gender, and race-gender to provide initial evidence for our first research question (Table 1). We use Pearson chi-square ( $\chi^2$ ) and t-tests to identify significant race, gender, and within-race gender differences. Next, we run a series of multivariable regression models examining the independent and interactive effects of cumulative discrimination, race, and gender on psychological distress (Table 2). Model 1 includes race and gender separately (reference = Whites and men, respectively), and Model 2 includes combined race-gender groups (reference = White men) to assess their relationships with psychological distress. Models 3 through 5 address our second research question (RQ2) by including interaction terms for cumulative discrimination and race, and cumulative discrimination and gender, and cumulative discrimination for each race-gender group (reference = White men). Fig. 1 graphs the regression coefficients from Model 5 as predicted probabilities to ease interpretation of the findings. As a robustness check, we used alternative cut points for psychological distress and cumulative discrimination to remove potential outliers from the analyses (see Appendix B). Substantive results were similar, and sample sizes smaller; thus, we retained the full range of responses.

For our third research question (RQ3), we disaggregate the seven types of discrimination and examine their relationships to psychological distress for each race-gender group (Table 3). We graph predicted probabilities for three of the seven types of discrimination in Fig. 2; each type represents the interaction patterns found in Table 3. Appendix C includes graphs for the remaining types of discrimination. All analyses are completed using R version 3.6.1, and conducted using survey weights and adjustments for non-independence via individual-level robust cluster standard errors by means of the ‘survey’ package.

### 4. Results

#### 4.1. Descriptive statistics

Table 1 presents descriptive statistics on our independent and dependent variables by race, gender, and race-gender groupings. As seen in Table 1, Black and White young adults, on average, do not differ significantly from each other in terms of psychological distress, with mean scores of 5.32 and 5.33, respectively (K-6 scale, 0–24). However, these averages mask significant gender differences within each racial group. Both White (5.60) and Black (5.75) women have higher levels of psychological distress than their White (5.07) and Black (4.84) male counterparts. The gap between Black men and women is particularly stark, with Black men reporting much lower levels of distress than Black women.

For the 4-item discrimination scale, there is both a race and gender story. White young adults, on average, have significantly higher mean scores than their Black counterparts (6.51 and 5.94, respectively), while young men and women do not differ significantly from each other (6.52 and 6.29), and this is true for both racial groups. The cumulative discrimination measure masks considerable differences in the *types of discrimination* experienced by respondents. At the high end of the frequency scale—once a week or more—Black men report twice the rate of being treated as dishonest (9.3% vs. 4.3% of White men) and nearly three times the rate of receiving poorer service (7.1% vs. 2.3%) and people acting afraid of them (12.4% vs. 4.4%). Similarly, at the high end of the frequency scale, Black women report roughly three times the rate of being treated as dishonest (5.9% vs. 1.7% of White women), receiving poorer service (5.1% vs. 1.6%), and people acting afraid of them (7.0% vs. 2.6%). The findings by discrimination type also indicate that race is more salient than gender in shaping experiences of discrimination—Black young adults, regardless of gender, experience each form of discrimination more frequently (i.e., once a week or more) than their

**Table 1**  
Descriptive Statistics by Race, Gender, and Race-Gender groups, Ages 18–28, PSID 2017, 2019 (n = 3894).

	Race			Gender			White x Gender			Black x Gender		
	White	Black	p	Men	Women	p	WM	WW	p	BM	BW	p
Psychological Distress, mean (sd)	5.33 (4.60)	5.32 (4.71)		5.03 (4.65)	5.63 (4.58)<	*	5.07 (4.68)	5.60 (4.50)<	+	4.84 (4.48)	5.75 (4.87)<	*
Cumulative discrimination <sup>a</sup> (4 items), mean (sd)<	6.51 (4.71)	5.94 (5.19)	*	6.52 (5.00)	6.29 (4.60)		6.58 (4.94)	6.44 (4.46)		6.24 (5.29)	5.68 (5.10)	
<b>Type of Discrimination:</b>												
Treated as inferior <sup>a</sup>			***			+			+			
Never	23.3	38.2		27.2	24.8		24.7	21.8		39.4	37.1	
Few times/year or less	44.4	31.4		39.3	44.7		41.6	47.3		28.8	33.8	
Few times/month	19.1	12.0		17.4	18.1		18.6	19.5		11.5	12.4	
Once a week or more	13.3	18.4		16.0	12.4		15.1	11.4		20.3	16.6	
Treated as stupid <sup>a</sup>			***			*			*			
Never	35.5	46.5		38.0	36.9		36.8	34.1		43.9	48.8	
Few times/year or less	43.9	29.5		38.1	44.4		40.2	47.6		28.1	30.7	
Few times/month	11.4	11.8		12.0	10.9		11.7	11.1		13.8	10.1	
Once a week or more	9.3	12.2		11.8	7.8		11.3	7.2		14.3	10.4	
Treated with less respect <sup>a</sup>			***			*			*			
Never	32.1	44.0		36.5	32.1		34.9	29.3		44.2	43.9	
Few times/year or less	45.5	36.7		40.4	47.3		41.1	49.9		36.9	36.5	
Few times/month	14.0	8.4		13.3	12.6		14.5	13.4		7.6	9.1	
Once a week or more	8.4	10.8		9.9	7.9		9.6	7.3		11.2	10.5	
Treated with less courtesy <sup>a</sup>			**									
Never	28.8	38.2		32.1	29.0		31.1	26.6		37.0	39.3	
Few times/year or less	46.7	37.2		43.3	46.6		44.4	49.1		38.2	36.2	
Few times/month	12.8	11.5		11.8	13.3		12.1	13.5		10.6	12.3	
Once a week or more	11.7	13.1		12.7	11.1		12.4	10.8		14.2	12.2	
Treated as dishonest			***			***			**			*
Never	59.9	62.1		54.9	65.6		54.8	65.0		55.4	68.2	
Few times/year or less	32.6	24.6		34.2	28.0		35.5	29.5		28.1	21.5	
Few times/month	4.6	5.7		5.7	3.9		5.4	3.8		7.2	4.4	
Once a week or more	3.0	7.5		5.2	2.5		4.3	1.7		9.3	5.9	
Received poorer service			***			*			+			
Never	48.1	41.8		46.7	47.1		47.8	48.3		41.5	42.0	
Few times/year or less	44.9	41.1		42.5	45.9		43.3	46.5		38.6	43.3	
Few times/month	5.1	11.1		7.7	4.7		6.6	3.6		12.8	9.6	
Once a week or more	1.9	6.1		3.1	2.3		2.3	1.6		7.1	5.1	
Others act afraid			***			***			***			**
Never	62.2	58.0		54.5	68.4		55.6	69.1		49.7	65.5	
Few times/year or less	28.4	23.4		31.5	23.5		32.4	24.4		27.0	20.1	
Few times/month	5.8	9.0		8.2	4.6		7.6	4.0		10.9	7.3	
Once a week or more	3.5	9.6		5.8	3.5		4.4	2.6		12.4	7.0	
<b>Sociodemographics:</b>												
Educational attainment			***			**			*			**
Less than HS/GED	29.5	39.8		34.7	28.1		32	26.9		47.5	32.8	
Some College	39.5	48.4		41.4	40.9		40.7	38.3		44.7	51.8	
Associates	5.8	3.1		4.0	6.7		4.2	7.4		2.7	3.5	
Bachelor's+	25.2	8.7		20.0	24.3		23.1	27.3		5.1	11.9	
% Currently in school	36.4	31.2	+	34.0	37.0		35.4	37.5		28.1	34.1	
% Owns Car	51.4	30.4	***	48.0	47.0		52.8	50.0		24.8	35.5	**
% Has Job	68.6	58.6	***	65.0	68.0		66.4	70.8		58.9	58.4	
% Married	14.3	5.4	***	10.0	15.0	**	11.8	16.9	*	2.7	7.9	*
% Pays Housing	82.8	88.8	**	83.0	85.0		81.7	83.9		87.6	89.9	
% Women	49.5	52.2		0.0	100.0	***	0.0	100.0	***	0.0	100.0	***
Age	22.46 (3.38)	22.18 (3.41)		22.23 (3.34)	22.58 (3.43)	+	22.24 (3.33)	22.68 (3.42)	*	22.20 (3.39)	22.16 (3.42)	
Sample size =	1908	1986		1812	2082		927	981		885	1101	

Notes: <sup>a</sup> denotes items included on the cumulative discrimination scale.

<sup>+</sup>p < .10; \*p < .05; \*\*p < .01; \*\*\*p < .001.

**White counterparts.**

There is a notable racial gap in sociodemographic characteristics. Nearly three times as many White than Black respondents have a Bachelor's degree or more (25.2% compared to 8.7%), and both White men and women (23.1% and 27.3%) have a sizable educational advantage over Black men and women (5.1% and 11.9%). Relative to Black young adults, a greater share of White respondents owns a car (51.4% vs. 30.4%), and have a job (68.6% vs. 58.6%). Alternatively, less White than Black respondents are responsible for housing expenses in their entirety (82.8% vs. 88.8%).

**4.2. Multivariable regression**

We next examine the relationships between race, gender, cumulative discrimination and psychological distress in the multivariable context (Table 2). Model 1 shows that cumulative discrimination is associated with higher levels of psychological distress; for each unit increase of cumulative discrimination, psychological distress scores increased by 0.434 (p < 0.001). Being a woman is also associated with higher levels of psychological distress, while there are no significant racial differences. Model 2 shows that psychological distress is higher for White women (0.729, p < 0.001) and Black women (0.774, p < 0.05) relative to White men. In contrast, the effects for Black men do not significantly differ

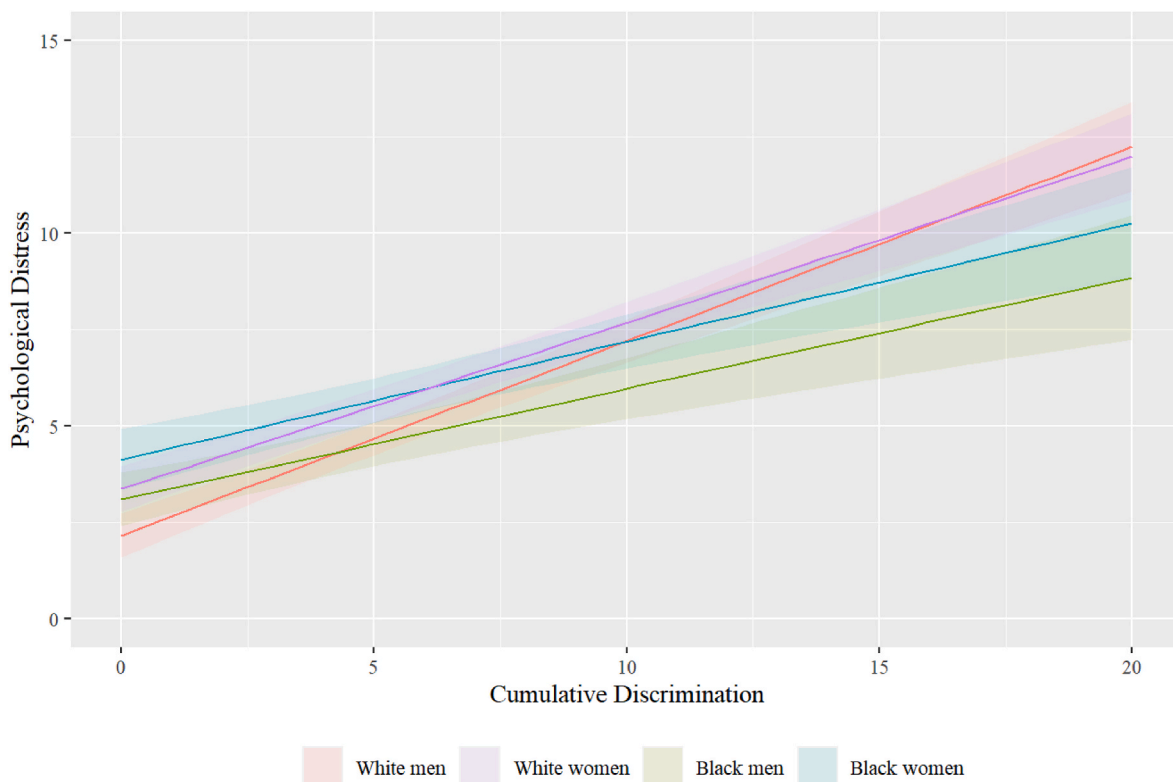
**Table 2**

Regression coefficients from linear regression models predicting psychological distress by race, gender and cumulative discrimination, adults ages 18–28, PSID 2017–2019.

	Model 1	Model 2	Model 3	Model 4	Model 5
Cumulative Discrimination	0.434*** (0.022)	0.434*** (0.022)	0.472*** (0.026)	0.463*** (0.032)	0.505*** (0.037)
Race (ref = White)					
Black	-0.193 (0.244)		0.885** (0.326)	-0.195 (0.244)	
Gender (ref = men)					
Women	0.822*** (0.197)		0.810*** (0.195)	1.222*** (0.290)	
Race & Gender (ref = White men)					
Black men		-0.460 (0.342)			0.937* (0.413)
Black women		0.774* (0.332)			1.975*** (0.467)
White women		0.729** (0.224)			1.213*** (0.338)
Cumulative Discrimination x Black			-0.176*** (0.043)		
Cumulative Discrimination x Women				-0.063 (0.044)	
Cumulative Discrimination x Black men					-0.217*** (0.061)
Cumulative Discrimination x Black women					-0.198*** (0.060)
Cumulative Discrimination x White women					-0.074 (0.052)
Constant	1.640 <sup>+</sup> (0.878)	1.657 <sup>+</sup> (0.878)	1.381 (0.871)	1.455 <sup>+</sup> (0.868)	1.191 (0.863)
Observations	3825	3825	3825	3825	3825
Log Likelihood	-12,126.690	-12,125.590	-12,112.470	-12,124.070	-12,108.790
Akaike Inf. Crit.	24,279.390	24,279.180	24,252.930	24,276.140	24,251.570

Note: All models control for education, age, and financial independence measures.

+p < 0.1 \*p < 0.05 \*\*p < 0.01 \*\*\*p < .001.



**Fig. 1.** Predicted probabilities for psychological distress by cumulative discrimination across race-gender groups, 95% confidence intervals.

from White men, which suggests that the independent effect of gender (Model 1) may be driven by the differences between Black women, White women, and the White male reference group.

Models 3 and 4 include interaction terms to determine whether the effects of cumulative discrimination on psychological distress vary by race and gender. Model 3 examines the interaction between Black racial identity and discrimination and finds significant, negative associations with psychological distress. For each unit increase in cumulative discrimination, the rate at which psychological distress increases for Black young adults is 0.176 ( $p < 0.001$ ) points lower than for White young adults. Model 4 finds no significant interaction between

cumulative discrimination and gender. Finally, Model 5 tests for significant interactions between discrimination and distress for each race-gender group. Relative to White men, the interaction effects were statistically significant for Black men and women, but not White women. Compared to White men, the rate of increase in psychological distress with cumulative discrimination is reduced by 0.217 ( $p < 0.001$ ) points for Black men and 0.198 ( $p < 0.001$ ) points for Black women.

Table 3 examines our third research question by assessing the relationships between each of the seven types of discrimination and psychological distress for each race-gender group. Fig. 2 eases interpretation of the findings by illustrating predicted probabilities for

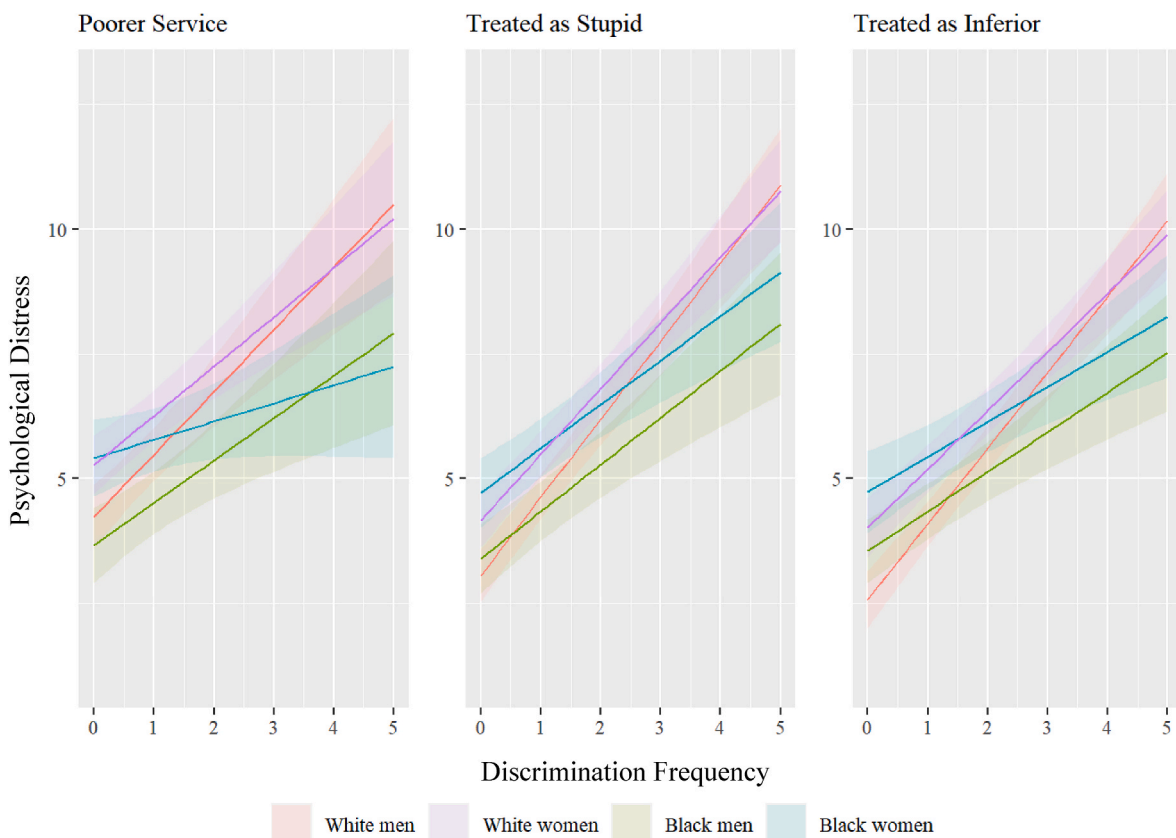
**Table 3**

Regression coefficients from linear regression models predicting psychological distress by race-gender group and type of discrimination, adults ages 18–28, PSID 2017–2019.

	Type of Discrimination						
	Stupid	Courtesy	Respect	Inferior	Dishonest	Service	Afraid
Discrimination	1.566*** (0.133)	1.385*** (0.143)	1.468*** (0.137)	1.519*** (0.125)	1.575*** (0.165)	1.252*** (0.205)	0.937*** (0.151)
<i>Race &amp; Gender (ref = White men)</i>							
Black men	0.961 <sup>+</sup> (0.543)	1.896** (0.611)	1.023 <sup>+</sup> (0.537)	1.695** (0.536)	0.224 (0.594)	-0.169 (0.652)	-0.744 (0.532)
Black women	2.344*** (0.549)	1.840** (0.597)	1.903** (0.586)	2.969*** (0.650)	1.747** (0.549)	2.066** (0.685)	0.921 (0.599)
White women	1.353** (0.427)	1.175* (0.488)	1.090* (0.469)	1.787*** (0.496)	1.182** (0.458)	1.304* (0.531)	0.626 (0.485)
Discrimination x Black men	-0.624** (0.216)	-0.958*** (0.243)	-0.616* (0.239)	-0.723*** (0.186)	-0.536* (0.264)	-0.402 (0.299)	-0.151 (0.226)
Discrimination x Black women	-0.683** (0.213)	-0.504* (0.219)	-0.532* (0.221)	-0.814*** (0.207)	-0.654* (0.259)	-0.887** (0.301)	-0.293 (0.251)
Discrimination x White women	-0.247 (0.183)	-0.198 (0.192)	-0.156 (0.191)	-0.345* (0.173)	-0.051 (0.245)	-0.265 (0.271)	0.209 (0.263)
Constant	0.648 (0.897)	1.569 (0.987)	0.795 (0.942)	-0.388 (0.919)	1.239 (1.026)	2.393* (1.101)	2.707* (1.090)
Observations	3832	3835	3834	3832	3830	3830	3832
Log Likelihood	-12,222.510	-12,324.600	-12,280.160	-12,266.880	-12,327.090	-12,466.040	-12,472.470
Akaike Inf. Crit.	24,479.020	24,683.200	24,594.310	24,567.770	24,688.190	24,966.090	24,978.950

Note: All models control for education, age, and financial independence measures.

+p < 0.1 \*p < 0.05 \*\*p < 0.01 \*\*\*p < .001.



**Fig. 2.** Predicted probabilities for psychological distress by type of discrimination across race-gender groups, 95% confidence intervals. Note: Discrimination frequency ranges from “never” (0) to “almost every day” (5). See the online [supplement Appendix C](#) for the full list of numerical values.

three types of discrimination that represent the range of interaction patterns found in [Table 3](#): *treated as stupid*, *treated as inferior*, and *receiving poorer service*. *Being treated as stupid* represents the most common pattern that was observed for four of the seven types of discrimination (*stupid*, *dishonest*, *less respect*, *less courtesy*). For these types, the rate of increase in psychological distress for both Black men and women, but not White women, was significantly lower relative to White men. Put differently, the effects of experiencing these forms of discrimination on

psychological distress were more pronounced for White men than for Black men or Black women.

*Being treated as inferior* is the only form of discrimination wherein the effect of discrimination on psychological distress was significantly less pronounced for Black men, Black women, and White women. For all other measures of discrimination, associations with psychological distress were not statistically different for White women relative to White men. *Receiving poorer service* was the only item wherein Black

women, alone, differed significantly from White men. Finally, there was no significant difference in the effects of *others acting afraid* on psychological distress across the race-gender groups. Overall, the effects of discrimination on psychological distress operated in a similar, harmful direction for all race-gender groups and were slightly more pronounced for White men than for other groups. This is not to say that discrimination is more harmful for White men, as our results show that discrimination is harmful for all race-gender groups; rather the findings indicate that the magnitude of the relationship was stronger for White men, which we discuss in more detail below.

## 5. Discussion

This study examined racial and gender differences in the relationships between cumulative and individual-item everyday discrimination and psychological distress among young adults—a group generally underrepresented or overlooked in studies of health disparities. We found remarkable similarities in perceptions of cumulative discrimination across race and gender groups. Studies that find larger racial gaps in perceived discrimination have typically focused on adults in mid-to later life, when exposures to discrimination are lower, but differences in perceptions of discrimination may be greater between groups (Lawrence et al., 2022; Palmer et al., 2023). Similarities in cumulative scores, however, masked heterogeneity across individual types of discrimination. Black men experienced each type of discrimination more frequently (i.e., once a week or more) than any other group. Similarly, Black women reported more frequent experiences for each type of discrimination than White women and, for all but two items, more than White men.

Our study centered on the associations between discrimination and psychological distress across race and gender groups. Though perceived discrimination was associated with worse psychological distress across groups, the magnitude of the relationship varied by race, gender, and specific dimension of discrimination. Black women experienced higher levels of psychological distress at lower levels of perceived cumulative discrimination (Fig. 1), and White men experienced greater psychological distress at higher levels. To state clearly, high levels of discrimination can also be harmful for Black men, Black women, and White women; this finding merely indicates that White men's psychological distress is more sensitive to higher levels of perceived discrimination than other groups. These substantive patterns remained the similar even when we changed the threshold for psychological distress to remove outliers and adjusted the cumulative discrimination measure to remove items that were not equivalent across race-gender groups (available on request).

Though previous research suggests that the items excluded from the invariant cumulative measure may be interpreted differently across groups, nonequivalence may also occur due to misspecification of the EDS's underlying latent variable structure. Ifatunji and Harnois (2016) theorize that the EDS captures *implicit* and *explicit* dimensions of discrimination, yet studies demonstrating group nonequivalence often employ singular latent variable structures (e.g., Bastos and Harnois, 2020). Accordingly, two of the three of our nonequivalent EDS items are *explicit*, while each invariant EDS item is *implicit*. Future research should determine whether measurement nonequivalence persists in CFA models that operationalize the EDS via multiple latent variables.

There are several implications of these findings beyond this study. First, our results support the *stress vulnerability hypothesis*, wherein White men are more negatively affected by discrimination because they are less able to cope with discrimination-related stress. Previous studies suggest that White men may have the lowest levels of exposure to discrimination over the life course, and thus may not have developed resilience-based coping strategies to mitigate the negative effects of these perceived experiences on their health (Liu and Yang, 2022; Yang and Sun, 2019). Second, these findings lend support to a resilience framework for understanding patterns in discrimination and health

among young adults. Specifically, Black men and Black women appeared more resilient than White men to the effects of discrimination on psychological distress. Studies of older adults have pointed to greater resiliency among Black relative to White respondents in explaining these patterns, and our findings likewise suggest the presence, if not emergence, of similar coping strategies among young Black adults.

Third, this study suggests that discrimination-related coping mechanisms may develop at different times in the life course for specific race-gender groups. For White women, we only observed a significant difference in the associations between discrimination and psychological distress relative to White men for one item: *being treated as inferior*. The lack of significant race-gender interactions for the cumulative and item-specific discrimination measures suggests that discrimination-related coping mechanisms observed in older study populations may have not yet manifested among young White women. In contrast, we found significantly lower associations between cumulative discrimination and psychological distress for Black men and women relative to White men. Similarly, we found significantly lower associations with psychological distress for six of the seven individual measures of discrimination for Black women and five of the seven measures for Black men (relative to White men). One plausible, and well-founded explanation among older adults is that Black Americans acquire greater resiliency to discrimination as a result of more frequent and consistent exposures than White Americans. Our findings lend support to this claim and suggest that such coping mechanisms are present in young adulthood as well.

In addition to resilience-based explanations, there are other plausible mechanisms contributing to racial differences in perceived discrimination and psychological distress. One such possibility lies in the Thomas Theorem, or the idea that subjective perceptions of reality can be real in their consequences (Merton, 1995). White men may believe themselves to be victims of discrimination, even when they are not being discriminated against, and these subjective interpretations may trigger concrete stress responses (Bey, 2022; Craig and Richeson, 2018; Wilkins and Kaiser, 2014). In this study, more pronounced associations between perceived discrimination and psychological distress for White men may be related to perceptions of *status threat*, or the subjective belief that their dominant social position is in jeopardy, that stem from more generalized efforts to achieve racial equity and equitable access to resources (Bey, 2022; Wilkins et al., 2017). We should note that the two aforementioned explanations—Black resiliency and subjective threats to White hegemony—are not mutually exclusive and can work in tandem to contribute to our findings.

### 5.1. Limitations

This study is not without limitations. First, everyday discrimination is a retrospective measure of perceived discrimination that relies entirely on respondent perceptions and recall as opposed to real-time experiences. Second, the data are based on self-reported psychological distress rather than clinical diagnoses, which require access to and interaction with the healthcare system; the advantage of using self-reported health is that it removes potential biases related to unequal access to healthcare across race and gender groups. Third, because our data focus on young adults, we were unable to test whether perceptions of discrimination among young adults differed from those found for older cohorts. Trends in perceived discrimination for younger adults may vary from older adults due to cohort differences in *what counts as discrimination* (Bonilla-Silva, 2006; Gee et al., 2019). Relatedly, we could not examine directly whether the *associations* between psychological distress and everyday discrimination among young adults vary from trends derived from studies of older or cross-sectional age groups. Finally, we could not capture the full spectrum of gender identities in our analyses due to data limitations and relied on sex as a proxy for the respondent's gender. Future research should better assess gender identity and examine whether these associations persist for transgender, non-binary, and gender non-conforming individuals.



## 6. Conclusion

This study aimed to contribute to a nascent line of inquiry in the literature on discrimination and health by focusing on young adults, a population that is disproportionately underrepresented in health disparities research. We built on prior studies that focused on gender or racial differences in discrimination and health to focus on associations at their intersection in young adulthood. Our results both aligned with and diverged from the existing evidence. Discrimination increased psychological distress for all young adults, aligning with studies of older Black and White adult samples. However, the magnitude of the association varied across race-gender groups. Compared to White men, young Black men and women reported higher frequencies of perceived discrimination across each of the individual types, but the effects of those perceptions on psychological distress were less pronounced. This finding is unique from previous studies on older adults that often find stronger associations for Black relative to White respondents; the finding further underscores the importance of examining age cohort-specific trends, particularly for young adults. Future research must continue to monitor the health of young adults to provide a fuller understanding of the social conditions that affect well-being over the life course.

## Ethics approval statement

Ethical approval was not sought for the present study because this study used secondary anonymized data available to the public.

## CRediT authorship contribution statement

**Imari Z. Smith:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Formal analysis, Data curation, Conceptualization. **Jen'nan G. Read:** Writing – review & editing, Writing – original draft, Methodology.

## Data availability

Data will be made available on request.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.socscimed.2024.117070>.

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