

Special Issue: Social Determinants of Health in the Context of Age and Race: Research Article

## COVID-19 and Psychological Distress: Racial Differences Among Middle-Aged and Older Adults

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### Abstract

**Background and Objectives:** COVID-19 has disproportionately impacted older adults and Black individuals. Research has focused on physical outcomes, with less attention to the psychological effects of COVID-19. The objective of this study was to examine the interplay between perceptions of the COVID-19 outbreak as a threat to one's day-to-day life, race, and psychological distress among middle-aged and older men and women.

**Research Design and Methods:** Analyses were conducted on a subsample of self-identified non-Latino Whites and Black individuals aged 50 and older ( $N = 3,834$ ) from the American Trends Panel. Psychological distress was assessed with 5 items adapted from the Center for Epidemiologic Studies Depression Scale and Generalized Anxiety Disorder-7. Perceived COVID-19 day-to-day threat was assessed with a single question. Negative binomial regressions tested the study aim.

**Results:** Perceptions of COVID-19 day-to-day threat were positively associated with psychological distress. Black individuals reported lower distress than Whites. Regardless of gender, greater perceptions of COVID-19 day-to-day threats were associated with greater distress among both White respondents and Black respondents. However, this association was weaker among Black respondents than White respondents. Among men only, the association between COVID-19 day-to-day threat and distress varied by race, patterned similarly to the race differences identified in the total sample. This association did not vary by race among women.

**Discussion and Implications:** This study contributes to the emerging literature focused on older adults and COVID-19 related stressors and psychological distress. An intersectional lens shows how structural oppression may shape perceptions of the pandemic. Future work should consider coexisting intersections in marginalized identities and mental health during COVID-19.

**Keywords:** Health disparities, Mental health, Race, Resilience, Stress

As of May 2021, the United States had a total of 32.9 million cases of COVID-19 infections and 587,342 COVID-19-related deaths ([Centers for Disease Control, 2021](#)).

As COVID-19 has spread, researchers are exploring the multilayered impacts of the pandemic. Thus far, there has been significant attention to the physical symptoms that

accompany a COVID-19 diagnosis, but far fewer inquiries examining the mental health consequences of the COVID-19 pandemic. According to a recent CDC report in June 2021, nearly one third of individuals surveyed ( $N = 5,412$ ) reported symptoms of anxiety or depression (Gordon, 2021). Chong et al. (2020) identified that psychological stress in older adults stems from not only excess mortality risk leading many to self-isolate, but also from restrictions designed to mitigate COVID-19 risk. Brooks et al. (2020) also noted increased posttraumatic stress symptoms, confusion, and anger among older adults.

Mental health is increasingly important during the pandemic with calls for the public health response to include intervention and prevention efforts to address associated mental health conditions (Czeisler et al., 2020). Although the pandemic is stressful for all groups, those with marginalized social identities may experience even more pronounced adverse mental health outcomes. The current inquiry seeks to examine the interplay between perceptions of the COVID-19 outbreak as a threat to one's day-to-day life, race, and psychological distress among middle-aged and older individuals.

### COVID-19 in Middle-Aged and Older Adults

COVID-19 has been especially devastating for middle-aged and older adults. In the United States, the risk for severe illness with COVID-19 increases with age, with older adults at the highest risk. From the start of the pandemic, researchers noted that COVID-19 was dangerous, not only for the older adults but also for middle-aged adults (Levin et al., 2020). Although older adults are disproportionately affected by COVID-19, both middle-aged and older adults are among the largest groups diagnosed with COVID-19 that also experience severe illness (Taberner et al., 2022). In a recent meta-analysis, Levin et al. (2020) found an exponential relationship between age and COVID-19 infection fatality rate. Specifically, their research indicated that the infection fatality rate was very low for children and younger adults. However, starting at age 55, the infection fatality rate increased precipitously. Their findings indicate that COVID-19 is not only dangerous for older adults but also for middle-aged adults. Evidence indicates that isolation and protective measures associated with the COVID-19 pandemic may also amplify issues already present in older adults, such as loneliness, age discrimination, and excessive worrying (Lebrasseur et al., 2021). While adults aged 65 and older represent 16% of the U.S. population (Administration for Community Living, 2020), they comprise 81% of all COVID-19-related deaths (Centers for Disease Control and Prevention [CDC], 2021). This is compared to a COVID-19 mortality rate of 2.5% for individuals under the age of 45 (CDC, 2021). Furthermore, older adults account for close to half of all hospitalizations associated with the virus in the United States (CDC, 2021; n.d.-a; n.d.-b). Among older adults, the racial disparity in the effects of COVID-19 is also pronounced.

### COVID-19 and African Americans

COVID-19 has disproportionately affected many racial and ethnic minority groups, putting them at greater risk of getting sick and dying from COVID-19 (Killerby et al., 2020). Race is an essential consideration in the pandemic because it is a determining factor in where individuals live and work. African Americans disproportionately reside in disadvantaged and underresourced areas characterized by high housing density, high crime rates, and poor access to healthy foods, which combined with other social determinants of health further increase the risk of mortality from COVID-19 (Yancy, 2020). Furthermore, research has established that African Americans experience death and disease much earlier in their life course than whites, suggesting that African Americans age biologically faster due to social, economic, mental, and physical factors encountered throughout the life course (Levine and Crimmins, 2014). This indicates that middle-aged African Americans may experience complications of COVID-19 that are typically found in other racial groups in older adulthood. Recent research notes the need for more research on the mental health threat faced by older adults, racial and ethnic minority groups, and women during the COVID-19 pandemic (Chatters, Taylor, & Taylor, 2020). Although older African Americans comprise only 9% of the older adult population (Administration for Community Living, 2020), they represent 12% of COVID-19 cases and over one in five COVID-19 associated hospitalizations (CDC, 2021). Moreover, older African Americans account for close to one fifth of deaths related to the virus (CDC, 2021).

Although awareness of the physical health consequences of COVID-19 is critically important, we know far less about the mental health consequences of the pandemic, especially among older adults and populations of color. Mental health difficulties are likely to be exacerbated in groups that already face health equity challenges, such as older adults, African Americans, and women. Pandemic preparedness and response occur within a social, cultural, and historical context of preexisting health disparities (Plough et al., 2011).

### COVID-19 Pandemic and Mental Health

Widespread outbreaks of illness, such as COVID-19, are associated with psychological distress and symptoms of mental illness (Bao et al., 2020). According to a recent Kaiser Family Foundation Health Tracking Poll of adults aged 18 and older, approximately four in 10 adults in the United States have reported symptoms of anxiety or depressive disorder during the pandemic (Panchal et al., 2021). Additionally, according to this poll, non-Hispanic Black adults were more likely to report symptoms of anxiety and/or depressive disorder than non-Hispanic Whites (Panchal et al., 2021).

Beginning in the early weeks of the pandemic, older adults endorsed challenges such as constraints on social

interactions and restrictions on the activity as emerging issues in managing the pandemic (Heid et al., 2021). Although older adults have been disproportionately impacted by severe illness complications, increased mortality, and concerns that isolation would exacerbate existing mental health conditions it has been theorized that resilience may protect older adults from some of the adverse mental health effects of the pandemic (Vahia, Jeste, & Reynolds, 2020).

### Gender Differences in the COVID-19 Pandemic

Because of the dearth of research on the psychological and social disparities between middle-aged and older men and women during the pandemic, we will predominately discuss gender health disparities across the entire adult life span in this section. The COVID-19 pandemic has amplified gender health disparities in the United States and throughout the world in multiple forms. During the initial stages of the COVID-19 lockdowns in international contexts, women were noted to have greater stress, anxiety, and psychological distress in comparison to men (Ausín et al., 2021; Fisher & Ryan, 2021; Horesh et al., 2020; Szabo et al., 2020), but were also significantly more likely to take the COVID-19 pandemic seriously, view it as a serious public health problem, and to agree and comply with stay in place orders (Galasso et al., 2020).

There are several reasons why women could potentially experience a greater mental health burden regarding the COVID-19 pandemic. First, there is frequently an unequal domestic division of labor between men and women, especially in households with children (Fisher & Ryan, 2021). Second, the COVID-19 pandemic has led to increased intimate partner violence (Bradbury-Jones & Isham, 2020; Usher et al., 2020). Lastly, women were more likely to experience job loss during the COVID-19 pandemic (Salles, 2021). Collectively, these factors increased the risk of experiencing psychological distress during the COVID-19 pandemic.

### Conceptual Framework

The current inquiry focuses on the interplay of race and gender among middle-aged and older adults regarding the effects of the perceived day-to-day threat of COVID-19. The guiding conceptual framework for this study is the intersectionality framework. Intersectionality is positioned as an innovative way to analyze health inequities, as it shows inequalities are driven by power structures such as systems of discrimination, sexism, and racism that characterize social hierarchical systems (Holman & Walker, 2020). Intersectionality was developed from the tradition of Black Feminist Thought, and the theory initially described how the experiences of Black women in the legal system were shaped by both racism and sexism (Crenshaw, 1989). Previous literature has engaged with the importance of

intersectionality and aging (Dressel et al., 1997; Holman & Walker, 2020). Dressel et al. (1997) suggested that gender, race, class, and age represent interlocking systems of inequality that shape oppression. Although gerontology has treated older adults as a single group, it has been suggested that older adults' racial and ethnic minority status might create unique stressors that could negatively affect their mental health (Calasanti & King, 2015). The concept of intersecting identities has been present in research on older Black adults for many years. Chatters et al. (2020) detail this history, reporting that the concept of "double jeopardy"—being both older and Black is important to contextualize the life experiences of older Black Americans and identify important risk and protective factors for their physical and mental health during the COVID-19 pandemic (p. 855).

Here, we propose that multiple interlacing social identities (i.e., race and gender) influence middle-aged and older adults' experiences and perceptions of the outside world and their mental health status. Race, gender, and age have emerged as key factors that have influenced how the COVID-19 pandemic is experienced. If anything, the pandemic has intensified preexisting sexism, racism, and ageism across the life span. The convergence of these social identities makes individuals more vulnerable to the negative mental health impacts of the pandemic by influencing day-to-day lived experiences. Intersectional analysis is key for navigating the mental health needs of older people who are also members of oppressed groups. Viewing the impact of the pandemic through this lens allows us to consider how gender and race influence psychological distress for individuals who have multiple marginalized identities (i.e., older Black women).

### Race Differences in Mental Health

Past research consistently finds lower rates of psychiatric disorder among Black adults than White adults (Breslau et al., 2005; Williams et al., 2007), an unexpected trend, given Whites' greater levels of privilege in American society. This Black–White mental health paradox has been replicated across multiple psychiatric disorders (Thomas et al., 2019, 2022), for both men and women (Thomas et al., 2019, 2022), and across various age groups (Thomas et al., 2022). Multiple explanations have been proposed to explain the Black–White paradox in mental health—including greater levels of religious involvement (Mouzon, 2017), social support (Mouzon, 2013, 2014), and psychosocial resources among Black people (Thomas, Erving, and Barve, 2021)—with relatively limited success in accounting for this phenomenon.

Despite the failure to document specific explanatory mechanisms to explain the mental health paradox, the sheer persistence of this finding across time, multiple settings, and even in childhood (Kysar-Moon, 2020), strongly suggests that Black Americans exhibit some level of resilience

that enables them to thrive despite typically tougher life circumstances (Keyes, 2009). Although there have been no empirical investigations specifically comparing Black–White differences in resilience, a small but growing body of research finds that exposure to early life stressors—a pattern more common among Black than White Americans (Kysar-Moon, 2020; Mersky et al., 2021; Schilling, Aseltine, & Gore, 2007)—is associated with reduced risk of mental disorders in adulthood. For example, one recent investigation found that Black adults who experienced early life racial discrimination had lower odds of major depression in adulthood than Black adults who did not experience racial discrimination (Thomas & Moody, 2021). Other studies suggest that racial identity (Hughes et al., 2015; Hughes, Kiecolt, & Keith, 2014; Szymanski & Lewis 2016) and certain types of coping may serve as important factors that confer resilience among African Americans (Lewis et al., 2013; Utsey et al., 2000, 2008). Based on this evidence, it would be expected that generally the impact of the perceived COVID-19 day-to-day threat on psychological distress would be attenuated for Black individuals compared to White individuals.

### Focus of the Current Study

There has been limited empirical research on the connection between psychological distress and perceived COVID-19 day-to-day threat, with even less attention on older adults. The current study seeks to uncover the differential impact of perceived of COVID-19 day-to-day threat on psychological distress between Black and White middle-aged and older adults. Given the Black–White mental health racial paradox, we hypothesize that the association between perceived COVID-19 day-to-day threat and psychological distress will be weaker among Black individuals than White individuals. Furthermore, because of the evidence indicating gender differences in the perceptions of the pandemic and pandemic-related mental health burden, we will also test for race differences in the association between perceived COVID-19 day-to-day threat and psychological distress separately for men and women.

## Method

### Sample

To examine these relationships, we drew on data from the American Trends Panel (ATP), a probability-based online survey panel conducted by the Pew Research Center (PRC) of noninstitutionalized adults aged 18 and older in the United States. Respondents participated in the panel via monthly self-administered web surveys. For more information regarding the ATP, see (Pew Research Center, 2022). First, in Wave 63.5 (March 10, 2020–March 16, 2020), the PRC asked panelists to provide detailed answers regarding their stress exposure related to the COVID-19

outbreak. Second, in a follow-up wave fielded between March 19, 2020 and March 24, 2020, the ATP included a battery of questions related to psychological distress. Our analytic sample drew on responses from a subsample of non-Hispanic Black and non-Hispanic white respondents aged 50 and older from Waves 63.5 and 64 of the ATP, who had no missing values on key study variables ( $N = 3,834$ ).

### Dependent Variable

Psychological distress was assessed with a summary score based on five questionnaire items in Wave 64 that the ATP adapted from the Center for Epidemiologic Studies Depression and the Generalized Anxiety Disorder scales. Specifically, the PRC asked ATP panelists how often, in the past seven days, they: (a) felt nervous, anxious, or on edge; (b) felt depressed; (c) felt lonely; (d) had trouble sleeping; and (e) felt hopeful about the future. Original response items were on a scale that ranged from 1 (“rarely or none of the time”) to 5 (“most of the time”). Positive valence items were reverse-coded, and all items were rescaled such that the responses ranged from 0 (“rarely or none of the time”) to 4 (“most of the time”). Following this, we summed the items to produce a psychological distress score with higher scores reflecting increasing levels of psychological distress (possible range: 0–20; Cronbach’s  $\alpha = 0.75$ ).

### Independent Variable

To assess perceived day-to-day COVID-19 threat, respondents were asked (in Wave 63.5) whether they felt that the coronavirus was a threat to their day-to-day life. Response categories included “a major threat,” “a minor threat,” and “not a threat.” This measure taps into a component of the “realistic threats” that the COVID-19 outbreak represents in people’s daily life (Kachanoff et al., 2021).

### Covariates

Our study controls for several factors that may influence the relationship between perceived COVID-19 day-to-day threat and psychological distress. Demographic factors include gender (1 = females, 0 = males [reference group]), age category (50–64 [reference group] and 65 and older), and region of residence (Northeast, Midwest, South [reference group], and West). Socioeconomic measures include educational attainment and household income. Education was coded as a categorical variable and differentiated between respondents with a high school degree or less, some college, and a college degree or higher (reference group). Household income was also coded categorically and differentiated between respondents who reported household incomes less than \$30,000, \$30,000–\$74,999, and \$75,000 or more (reference group). Marital status was coded as married

or cohabiting (reference group); separated, divorced, or widowed; and never married. Political party affiliation was coded as Republican/Republican-leaning (reference group), Democrat/Democrat-leaning, Independent, and Other. Previous diagnosis of a mental disorder was assessed by the question, "Has a doctor or other health care provider ever told you that you have a mental health condition?" Responses were recorded as yes or no.

### Statistical Analysis

Negative binomial regressions were used to estimate the association between perceived COVID-19 day-to-day threat and psychological distress. To examine whether the possible relationship between perceived COVID-19 day-to-day threat and psychological distress varies by race, we constructed an interaction term between perceived COVID-19 day-to-day threat and race. We also tested this interaction term in gender stratified analyses to determine whether the potential moderating effect of race functioned similarly between men and women. Poststratification sampling weights were used to account for the complex multistage probability sampling design of the survey and nonresponse. The sampling weights were calibrated to align with demographic (e.g., age, education, sex, race, ethnicity, geography) and nondemographic (e.g., political party affiliation, religious affiliation, registered voter status, volunteerism) population benchmarks. The use of poststratification sampling weights reduces sampling error and potential nonresponse bias. Poststratification sampling weights also allow for inferences made from the sample to be generalized to the U.S. populations of Black and White adults. All analyses were conducted using STATA 16.

### Results

Table 1 presents the distribution of the study variables. The sample was comprised of 92% non-Hispanic White respondents and 8% non-Hispanic Black respondents. Women made up slightly more than half of the sample (52%). The proportion of respondents in the 50–64 age group and 65 and older age group were evenly split. Close to one in three respondents resided in the South, and one quarter of the sample resided in the Midwest. Nearly another fifth of the sample resided in the West. One in three respondents were either married or cohabiting, and approximately one in five respondents were either separated, divorced, or widowed. Regarding socioeconomic indicators, the majority of respondents reported an educational attainment level of a college degree or higher (57%) and a family income of \$75,000 or more (52%). Most respondents indicated that their political orientation was either Republican/Republican-leaning (30%) or Democrat/Democrat-leaning (35%). Regarding mental health, over four in five respondents reported no previous history of a mental health condition, and the mean psychological

distress score was 4.46 (sample range 0–15). Related to perceptions of COVID-19 day-to-day threat, the majority of respondents reported that COVID-19 was either a minor (57%) or major (30%) threat to their day-to-day lives.

Findings from the multivariate analyses indicated that the perception of COVID-19 as a day-to-day threat was associated with psychological distress (Table 2, Model 1a). Specifically, compared to respondents who reported that COVID-19 was not a day-to-day threat, respondents who reported that COVID-19 was either a minor or major day-to-day threat had higher levels of psychological distress. A race difference in psychological distress was also identified; White respondents reported higher levels of psychological distress.

The interaction between perceived COVID-19 day-to-day threat and race for the total sample in Model 1b was statistically significant, indicating that the association between perceived COVID-19 day-to-day threat and psychological distress varied by race irrespective of gender. Figure 1 provides a clearer picture of this interaction; among respondents who indicated that COVID-19 was not a day-to-day threat to them, Black and White respondents did not differ in their levels of psychological distress. Among respondents who indicated that COVID-19 was a major day-to-day threat, psychological distress levels were relatively elevated for both racial groups. However, the psychological distress scores for Black respondents who indicated that COVID-19 was a major threat to their daily lives increased marginally relative to the scores of Black respondents who reported that COVID-19 was not a threat to their daily lives. In contrast, the psychological distress scores for White respondents who reported that COVID-19 was a major threat to daily life increased substantially relative to the distress scores of their White counterparts who reported that COVID-19 was not a day-to-day threat. Consequently, among respondents who indicated that COVID-19 was a major day-to-day threat, White respondents had higher levels of psychological distress than Black respondents.

The gender stratified analysis indicated that the moderating effects of race were present among men (Model 2) but not among women (Model 3). The negative binomial regression among men indicated that the perception that COVID-19 day-to-day threat was a minor or major threat interacted with race. These significant interactions are plotted in Figure 2. Among White men, respondents who reported that COVID-19 was a minor or major day-to-day threat had higher psychological distress scores than respondents who reported that COVID-19 was not a day-to-day threat. In contrast, among Black men, those who reported that COVID-19 posed a minor day-to-day threat had marginally lower psychological distress scores than Black respondents who reported that COVID-19 was not a day-to-day threat. Furthermore, psychological distress scores among Black men did not differ between those who reported that COVID-19 was a major day-to-day

**Table 1.** Demographic Characteristics of the Sample and Distribution of Study Variables

Participant characteristics	<i>N</i> (%)	Mean ( <i>SD</i> )	Min	Max
Race				
Non-Latino White	4,050 (92.15)			
Non-Latino Black	345 (7.85)			
Gender				
Men	2,100 (47.80)			
Women	2,293 (52.20)			
Age				
50–64	2,190 (50.00)			
65+	2,190 (50.00)			
Region				
Northeast	750 (17.18)			
Midwest	1,108 (25.38)			
South	1,553 (35.58)			
West	954 (21.86)			
Marital status				
Married/cohabiting	2,867 (65.77)			
Separated/divorced/widowed	1,123 (25.76)			
Never married	369 (8.47)			
Education				
High school or less	602 (13.81)			
Some college	1,293 (29.66)			
College degree or higher	2,465 (56.54)			
Family income				
Less than \$30,000	613 (14.85)			
\$30,000–\$74,999	1,381 (33.45)			
\$75,000 or more	2,134 (51.70)			
Political party				
Republican/Republican-leaning	1,308 (30.17)			
Democrat/Democrat-leaning	1,526 (35.19)			
Independent	1,242 (28.64)			
Something else	260 (6.00)			
Previous mental disorder				
No	3,653 (88.32)			
Yes	483 (11.68)			
Perception of COVID-19 threat				
Not a threat	557 (12.70)			
A minor threat	2,510 (57.23)			
A major threat	1,319 (30.07)			
Psychological distress		4.46 (3.28)	0	15

Notes: *SD* = standard deviations. Percentages and *N* are presented for categorical variables, and means and standard deviations are presented for continuous variables. Percentages are weighted, and frequencies are un-weighted.

threat and those who reported that COVID-19 was not a day-to-day threat.

## Discussion

The purpose of this study was to examine the associations between race and psychological distress, and the perception of COVID-19 as a day-to-day threat among middle-aged and older men and women. Overall, the perception of COVID-19 as a day-to-day threat was associated with greater psychological distress. The results of this study mirror prior findings on COVID-19 and anxiety

and depressive symptoms among adults (Panchal et al., 2021). COVID-19 has been an unexpected and traumatic event that has altered nearly every aspect of daily life. During the pandemic, individuals have been exposed to multiple stressors at a time and have dealt with ongoing and persistent changes in employment, interpersonal interactions with family, friends, and acquaintances. Additionally, day-to-day life as we knew it before was completely disrupted due to the spread of the virus and the health precautions (i.e., social distancing) taken to slow down the spread of COVID-19. Collectively these unwanted changes may lead to an increased vulnerability

**Table 2.** Negative Binomial Regression Analyses of Psychological Distress

	Total sample		Men	Women
	Model 1a	Model 1b	Model 2	Model 3
Participant characteristics	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )
Perception of COVID-19 threat				
Not a threat <sup>a</sup>	—	—	—	—
A minor threat	0.28 (0.04)***	0.06 (0.16)	-0.14 (0.24)	0.25 (0.20)
A major threat	0.46 (0.05)***	0.13 (0.16)	-0.05 (0.24)	0.31 (0.21)
Race				
Non-Latino Black <sup>a</sup>	—	—	—	—
Non-Latino White	0.29 (0.05)***	0.01 (0.16)	-0.35 (0.23)	0.33 (0.20)
Perception of COVID-19 threat × race				
A minor threat × non-Latino White	—	0.25 (0.17)	0.52 (0.25)*	-0.01 (0.21)
A major threat × non-Latino White	—	0.36 (0.17)*	0.64 (0.25)*	0.10 (0.22)
Gender				
Men <sup>a</sup>	—	—	—	—
Women	0.13 (0.03)***	0.13 (0.03)***	—	—
Age				
50–64 <sup>a</sup>	—	—	—	—
65+	-0.16 (0.03)***	-0.16 (0.03)***	-0.19 (0.04)***	-0.14 (0.04)***
Region				
Northeast	0.03 (0.04)	0.03 (0.04)	0.01 (0.06)	0.04 (0.05)
Midwest	-0.00 (0.04)	-0.00 (0.04)	0.02 (0.06)	-0.02 (0.04)
South <sup>a</sup>	—	—	—	—
West	-0.02 (0.04)	-0.02 (0.04)	-0.08 (0.05)	0.03 (0.05)
Marital status				
Married/cohabiting <sup>a</sup>	—	—	—	—
Separated/divorced/widowed	0.09 (0.03)***	0.09 (0.03)***	0.13 (0.04)**	0.07 (0.04)
Never married	0.04 (0.04)	0.04 (0.04)	0.04 (0.06)	0.04 (0.05)
Education				
High school or less	0.04 (0.05)	0.05 (0.05)	-0.01 (0.07)	0.08 (0.06)
Some college	-0.01 (0.03)	-0.01 (0.03)	-0.02 (0.05)	0.01 (0.04)
College degree or higher <sup>a</sup>	—	—	—	—
Family income				
Less than \$30,000	0.09 (0.04)*	0.09 (0.04)*	0.11 (0.07)	0.07 (0.05)
\$30,000–\$74,999	0.01 (.03)	0.01 (.03)	0.02 (0.04)	0.00 (0.04)
\$75,000 or more <sup>a</sup>	—	—	—	—
Political party				
Republican/Republican-leaning <sup>a</sup>	—	—	—	—
Democrat/Democrat-leaning	0.41 (0.04)***	0.41 (0.04)***	0.42 (0.05)***	0.40 (0.05)***
Independent	0.24 (0.04)***	0.23 (0.04)***	0.22 (0.06)***	0.25 (0.05)***
Something else	0.19 (0.06)***	0.18 (0.06)**	0.13 (0.09)	0.25 (0.07)***
Previous mental disorder				
No <sup>a</sup>	—	—	—	—
Yes	0.37 (0.03)***	0.37 (0.03)***	0.48 (0.05)***	0.29 (0.04)***
Intercept	0.94 (0.12)	1.20 (0.19)	1.71 (0.27)	1.13 (0.24)
<i>N</i>	3,832	3,832	1,881	1,951

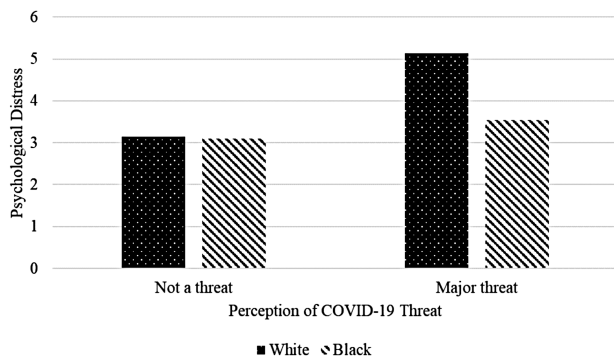
Notes: *B* = unstandardized regression coefficient; *SE* = standard error. Sampling weights and design factors were used to account for the complex survey design.

<sup>a</sup>Reference category.

\**p* < .05; \*\**p* < .01; \*\*\**p* < .001.

to psychological distress (Pearlin et al., 2005). These findings contribute to the scant empirical literature on the perception of COVID-19 day-to-day threat and mental health.

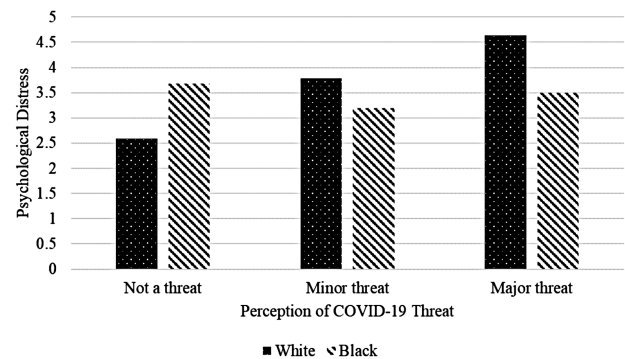
Specific to COVID-19, Vahia, Jeste, and Reynolds (2020) argued that factors such as resilience and an increased ability to regulate emotions may protect older adults from some of the adverse mental health effects of



**Figure 1.** Perception of COVID-19 day-to-day threat and psychological distress—Total sample.

the pandemic. For Black Americans, resilience may not be a choice, but a necessity in order to weather the storms of racism and discrimination that are enduring to the Black American experience. Our study did not directly measure resilience, so we are unable to determine whether resilience played a role in the racial differences identified in the current analysis. We suggest that future research examine whether resilience and other psychological resources may explain racial differences in the relationship between COVID-19 day-to-day threat and mental health. Pandemic-related stress can exacerbate preexisting life stressors and amplify the perception of stress. [Pearlin et al. \(2005\)](#) also reported that in times of great stress, stress proliferation can exacerbate the existing stress process. [Brown et al. \(2020\)](#) have found that while older Black individuals are exposed to more chronic stressors than older Whites, comparatively Black individuals report lower average stress appraisals. In this analysis, Black individuals may have appraised the threat of COVID-19 to be less stressful than their White counterparts. This lower stress appraisal combined with their potential experiences with the emotion regulation and resilience accumulated over the life course could have resulted in Black respondents reporting lower levels of psychological distress than White respondents in the face of heightened perceptions of COVID-19 day-to-day threat.

As hypothesized, we found that White respondents reported higher levels of psychological distress compared to Black respondents, which is consistent with the literature on the race paradox in mental health. Past research suggests higher distress among Black individuals in the general adult population ([Barnes & Bates, 2017](#)). It is therefore, all the more striking our findings for distress among older adults are consistent with the broader literature on the Black–White advantage in mental disorders. It is notable that these findings remain robust even during a pandemic in which older Black Americans are disproportionately at risk and dying. We do recommend that future studies test these relationships using measures of psychiatric disorder, where available. Prior research has pointed to several factors that may protect Black individuals, such as increased resilience



**Figure 2.** Perception of COVID-19 day-to-day threat and psychological distress—Men only.

and ability to thrive in difficult circumstances ([Keyes, 2009](#)), greater levels of social support ([Mouzon, 2013, 2014](#)), and psychosocial resources ([Thomas, Erving, & Barve, 2021](#)). The current investigation found racial differences in the association between the perception of COVID-19 day-to-day threat and psychological distress in the total sample as well as among men only. In the total sample, compared to respondents who indicated that COVID-19 was not a day-to-day threat, psychological distress levels were elevated among respondents who indicated that COVID-19 was a major day-to-day threat for both Black and White individuals. However, this increase in psychological distress was greater for White respondents than Black respondents. This is concordant with research on the Black–White paradox in mental health and the SPM.

Turning to the analysis specifically among men, while psychological distress levels increased with the perception of COVID-19 day-to-day threat severity among White men, Black men reported slightly lower or similar levels of psychological distress as perceptions of day-to-day COVID-19 threat increased in severity. One potential explanation for this result is that Black men who perceived COVID-19 day-to-day threat as a minor threat to daily life may be more conscious and aware of the persistent threat of COVID-19 and have spent time thinking about the day-to-day threat of COVID-19 and planning ways to ameliorate that threat, while those who perceive no daily threat may not have given the pandemic the same level of consideration and planning. These men may experience more uncertainty regarding the pandemic. This could lead to greater stress among those who reported no threat and consequently more psychological distress. Another explanation is that Black men compared to White men have faced increased psychological distress during the pandemic from other sources, such as witnessing several public racial injustices (i.e., the police-involved murders of George Floyd, Daunte Wright, and Breonna Taylor), all of which occurred during the same timeframe as the COVID-19 pandemic. For these men, the COVID-19 threat may not be as palpable as the day-to-day threat of having one's life taken just because of the color of their skin.



The gender stratified analysis indicated that race did not moderate the relationship between perceived COVID-19 day-to-day threat and psychological distress among women. Perhaps women, regardless of race, have a more similar way of appraising stressors than men. Gender may have a stronger influence than race in this matter among women. It could be argued that women are subject to unique stressors (i.e., unequal distribution of household labor, increased caregiving responsibilities) that may influence the appraisal of stress, and thus the reporting of psychological distress. Specific to the stress process model, changes experienced during the pandemic would generally lead to more stress and elevated psychological distress. However, if women already disproportionately dealt with more pre-existing stressors (e.g., unequal distribution of household and childcare responsibilities within the family) prior to the pandemic, women may simply be better equipped to handle the changes brought on by the pandemic and may appraise the events more similarly across racial groups. These findings suggest that women have already been dealing with levels of stressors that many men are now just being exposed to because of a shift in the responsibilities during the pandemic.

This study was informed by intersectionality theory, both methodologically and theoretically. Using this perspective, the experiences of the respondents surveyed are not viewed in isolation of their individual characteristics and identities. Applying this theory to older adults contributes to the emerging application and analysis of intersectional identity among this group. As cited in [Bauer et al. \(2021\)](#), [Hancock \(2007\)](#) notes “intersectionality posits that experiences at an intersection are coconstituted and must be considered jointly” (p. 2). Also, our intention in utilizing this theory is to begin moving beyond the simple description of differences in groups and as previous scholars have noted, “point towards actionable solutions instead of reinforcing inherent differences between groups.” ([Bauer et al., 2021](#)). Future research should begin to carefully consider how to incorporate intersectional perspectives in theory and analysis and consider how mental health difficulties may be exacerbated by the coexistence of multiple disadvantaged and marginalized identities. This is important for older adults who often embody multiple marginalized identities.

Viewing the current inquiry’s findings through an intersectional lens is important, particularly for older Black adults. Older adults are often treated as a homogenous group, but the differences in experiences of stress and distress across older Black adults compared to older White adults are best understood through the application of the intersectional framework. Approaching the association between perceptions of COVID-19 and distress from an intersectional perspective allowed us to disaggregate this relationship not only between older Black and White adults, but also between these two racial groups specifically among older men and women. Consequently, our findings revealed that race does not function in the same manner

in the relationship between perceptions of COVID-19 and distress among women as it does among men. Moreover, this intersectionality framework allows us to contextualize our results within the existing systems of oppression that disproportionately impact older Black adults. It stands to reason that older Black men, who possess intersecting marginalized identities, may be more likely to be exposed to the long-term and persistent stressors of racism and discrimination that influence how other stressors are perceived.

### Limitations and Strengths

The cross-sectional analysis limits our understanding of how rapidly changing developments (e.g., COVID-19 vaccine) during the pandemic influence the relationship between COVID-19 threat and distress. Longitudinal data could provide added context to the results. This study utilized self-report data, which are subject to recall and social desirability biases. Also, this analysis was based on a noninstitutionalized, community-dwelling sample. Those who were institutionalized or physically compromised and unable to participate in the interview were excluded. As such, the current findings cannot be generalized to these populations. Another limitation of this analysis was the lack of explicit focus on how age may interact with race and gender in its influence on the relationship between perceptions of COVID-19 threat and psychological distress. Future work should consider examining age in this relationship and explore the synergistic impact of age, race, and gender. Additionally, due to the lack of available data, this analysis did not account for some pandemic-related contextual factors, such as whether the respondent knew someone who was diagnosed with or died from COVID-19 or whether the respondent had been diagnosed with COVID-19. These contextual factors can influence respondents’ perceptions of COVID-19 threat and mental health. Finally, COVID-19 represents different threats to different people, and perceptions of COVID-19 threat changes over time. The current COVID-19 threat measure did not capture this variability. Moreover, the psychometric testing of this measure was conducted within the general, noninstitutionalized adult population and not specifically within the middle-aged and older adult populations. Future research should focus on the development of more precise measures of COVID-19 threat that are derived from the threats and concerns that middle-aged and older adults face.

Despite the limitations noted, this study makes several unique contributions to the existing literature on COVID-19 and mental health outcomes. To the best of our knowledge this is among the first few studies concerning the perception of COVID-19 day-to-day threat and psychological distress among older adults and adds to the limited literature ([Cobb, Erving, & Carson Byrd, 2021](#)) on racial differences in how perception of COVID-19 day-to-day threat influences mental health. Our findings extend the literature on the race paradox in mental health

by demonstrating that the same stressors may not have the same influence across Black and White adults due to a range of possible moderating factors. Another strength of this analysis is the use of a nationally representative, probability-based sample, which permits generalization of the study findings to the U.S. population. Finally, the results of this study contribute to the limited empirical knowledge about the mental health effects of the COVID-19 pandemic on middle-aged and older adults.

### Implications for Practice or Policy

Generally, clinicians should be aware of the association of the perception of COVID-19 day-to-day threat and psychological distress and the potential of its widespread impacts on mental health. For many people, the ongoing pandemic has multiplied the effects of past traumas, and this may be especially important for historically marginalized and excluded groups such as Black Americans. Clinicians should be aware of heightened psychological distress and should utilize interventions that take into consideration the multiplicative effects of trauma that older individuals may be experiencing. Mental health should be prioritized in upcoming national relief legislation that is being developed during the pandemic. For example, in upcoming “stimulus packages,” the United States government should consider investing in a mental health services stimulus package that can bolster mental health support.

Lastly, future research should examine the mental health consequences of COVID-19 and its impact on Black Americans, as the current inquiry demonstrates that there are unique differences in the reporting of psychological distress in response to the pandemic between racial groups. Additionally, examining factors related to COVID-19 that uniquely impact older adults, such as physical comorbidities and exploring differences between middle-aged, the young-old, and the oldest-old could provide new critical information regarding COVID-19.

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### Conflict of Interest

None declared.

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