

# Discrimination and Psychosocial Engagement During the COVID-19 Pandemic

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Emerging evidence suggests that the effects of the Coronavirus disease (COVID-19) pandemic have disproportionately impacted minoritized populations, including rising rates of hate crimes directed at Asian Americans. Asian and White students ( $N = 1,261$ ) at a large public university completed a survey of their experiences during the first month of the COVID-19 pandemic. Measures included anxiety, depression, academic engagement, and experienced discrimination. Using structural equation modeling, we found that Asian participants reported experiencing higher discrimination during the first month of the pandemic (e.g., being treated as if you have a disease) compared to White participants. Experienced discrimination was associated with significantly higher levels of depression and anxiety and significantly lower levels of academic engagement. In addition to the physical and economic toll of the COVID-19 pandemic, racism and discrimination may pose unique challenges for Asian Americans in particular.

**Keywords:** COVID-19, coronavirus, discrimination, distress, race

In January 2020 the World Health Organization (WHO) noted the appearance of a new, pneumonia-like disease in Wuhan, China. Less than 2 weeks later, the first case of the Coronavirus disease (COVID-19) appeared in the United States and on March 11, 2020 the WHO declared COVID-19 a pandemic. In February 2021, the United States recorded over 500,000 lives lost to the virus, the highest number of any country (World Health Organization, 2020).

In addition to the physical toll of the virus, Asian individuals have experienced increased rates of racist and xenophobic attacks throughout the world and in the United States in particular (Jeung et al., 2021). In a survey of 70 countries, 25% of Chinese respondents reported experiencing discrimination at the start of the pandemic, particularly in high-income countries (He et al., 2020). In the U.S., Lu and Sheng (2020) found that an area's first COVID-19 diagnosis was associated with a spike in Twitter posts and Google searches containing anti-Asian slurs in that area. Between March 2020 and March 2021, the Stop AAPI Hate reporting center recorded 3,800

hate crimes directed at Asian Americans, including verbal harassment, physical assault, civil rights violations, and the murder of six Asian American women in Atlanta, Georgia (Jeung et al., 2021). Victims of these crimes have reported hearing their attackers blame them for the virus, echoing remarks made by former President Trump (Jeung et al., 2021). These data support anecdotal reports of increased racism against Asian Americans during the COVID-19 period.

Experiencing, witnessing, or anticipating racial discrimination has been associated with heightened levels of stress and posttraumatic stress disorder (Carter, 2007), psychological distress (e.g., Quinn et al., 2020), and lower academic engagement (Levy et al., 2016). Racial discrimination may be particularly distressing for young adults, compared to older adults, perhaps due to differences in coping strategies (Greer & Spalding, 2017). Notably, almost half (47%) of the recorded hate crimes from the Stop AAPI Hate report affected young adults ages 18–35. The purpose of this study was to assess the associations of experienced discrimination in the first weeks of the COVID-19 pandemic in the U.S. with indicators of psychological well-being and academic engagement among a large group of Asian young adults, relative to White young adults (i.e., those not subject to racism). We hypothesized that Asian racial identity would be associated with higher levels of past-month discrimination, compared to White-identified students, and that higher levels of discrimination would be associated with higher levels of depression and anxiety and lower levels of academic engagement.

## Method

### Participants and Procedure

This survey was the first wave of a four-wave longitudinal study on psychosocial and professional well-being in an academic community. All university faculty, staff, and students were invited to participate, with students identifying as Asian or White selected for these analyses. Participants were 1,261 undergraduate (74.3%) and

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graduate (25.7%) students. The majority of participants identified as female (69.5%) and heterosexual (77.6%) with an average age of 22.4 ( $SD = 4.78$ ) years old. Racially, participants identified as non-Hispanic White (60.2%) or Asian (39.8%). Participants were not compensated for their participation, but a donation was made to the University Hardship Fund for emergency financial assistance for each complete survey. This study was deemed exempt from the University Institutional Review Board (IRB) review, as we did not collect any personally identifying data. Data collection occurred between March 29 and April 30, 2020 (i.e., 2–6 weeks after the WHO declared COVID-19 a pandemic). Participants were informed that the purpose of the survey was “to understand the social, cognitive, and psychosocial responses to the COVID-19 pandemic.”

## Measures

Participants completed self-report measures assessing depression, anxiety, academic engagement, past-month experienced discrimination, exposure to COVID-19, and demographic characteristics. Depression was measured with the 9-Item Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001). Depression symptoms (e.g., “Feeling down, depressed, or hopeless”) over the past 2 weeks were recorded on a scale of 0 (*Not at all*) to 3 (*Nearly every day*) and summed across the nine items ( $\alpha = .90$ ). Similarly, anxiety was measured with the 7-Item Generalized Anxiety Disorder Scale (GAD-7; Spitzer et al., 2006). Anxiety symptoms (e.g., “Feeling nervous, anxious, or on edge”) over the past 2 weeks were recorded on a scale of 0 (*Not at all*) to 3 (*Nearly every day*) and summed to create an overall score ( $\alpha = .92$ ). Academic engagement was assessed with nine items adapted from the Motivated Strategies for Learning Questionnaire (Pintrich & de Groot, 1990). Participants rated their academic engagement (e.g., “I expect to meet my academic goals this semester”) on a scale of 1 (*Strongly disagree*) to 6 (*Strongly agree*) for an overall sum score ( $\alpha = .94$ ).

To capture experienced discrimination, a latent variable was comprised of six indicator items adapted from the Everyday Discrimination Scale (Williams et al., 1997). These items asked participants about experienced discrimination in the past month (i.e., March 1 to April 1, 2020) and were preceded by seven open-ended recall questions, which primed participants to remember the events that occurred in the days after the WHO classification of COVID-19 as a pandemic. Given the ongoing reports of increased xenophobia and racism directed at Asian Americans during this time, questions were selected to capture the frequency of verbal harassment (“you were called names or insulted,” “you were treated with less respect than others”), avoidance/shunning (“people acted afraid of you,” “people acted like you had a disease or illness”), and refusal of service (“you received poorer service than others in a store or restaurant,” “you received poorer service from others from a health-care provider”) on a scale of 1 (*Not at all*) to 5 (*Very frequently*).

## Data Analysis

Race (Asian vs. White) was entered into the model as a predictor of experienced discrimination, which in turn predicted depression, anxiety, and academic engagement. We used the lavaan package for R (Rosseel, 2012) for our structural equation modeling. Model fit was determined using standard fit indices: a nonsignificant  $\chi^2$  test, a Comparative Fit Index (CFI), and Tucker-Lewis Index

(TLI)  $\geq 0.95$  and a root-mean-square error of approximation (RMSEA)  $\leq 0.06$  (Kline, 2016).

## Results

Participants on average exhibited moderate levels of depression ( $M = 9.37$ ,  $SD = 6.50$ ) and anxiety ( $M = 7.70$ ,  $SD = 5.81$ ) and high academic engagement ( $M = 34.84$ ,  $SD = 10.98$ ). Compared to Asian participants, White participants reported significantly higher levels of depression,  $t(1259) = 2.02$ ,  $p = .044$ ,  $d = 0.12$ , anxiety,  $t(1259) = 4.90$ ,  $p < .001$ ,  $d = 0.28$ , and academic engagement,  $t(1259) = 3.20$ ,  $p = .001$ ,  $d = 0.18$ , but the magnitude of these differences was small and may reflect cultural differences in the way psychological symptoms are experienced and reported between these groups (Kalibatseva & Leong, 2011).

Confirmatory factor analysis supported our latent experienced discrimination variable,  $\chi^2(7) = 14.23$ ,  $p = .047$ ; CFI = 0.99, TLI = 0.99; RMSEA = 0.03, 90% CI [0.003, 0.05]. Factor loadings for the six items ranged from 0.40 to 0.87. Using structural equation modeling, we found that our model fit the data well:  $\chi^2(30) = 100.64$ ,  $p < .001$ ; CFI = 0.98, TLI = 0.97; RMSEA = 0.04, 90% CI [0.03, 0.05]. Although both  $\chi^2$  tests were statistically significant, this test is biased with large sample sizes (Kline, 2016).

As seen in Figure 1, Asian participants reported higher levels of past-month experienced discrimination as compared to White participants,  $\beta = 0.14$ ,  $p < .001$ , 90% CI [0.10, 0.27]. Experienced discrimination was positively associated with depression,  $\beta = 0.33$ ,  $p < .001$ , 90% CI [0.28, 0.38], and anxiety,  $\beta = 0.27$ ,  $p < .001$ , 90% CI [0.22, 0.31], and negatively associated with academic engagement,  $\beta = -0.21$ ,  $p < .001$ , 90% CI [-0.26, -0.16].

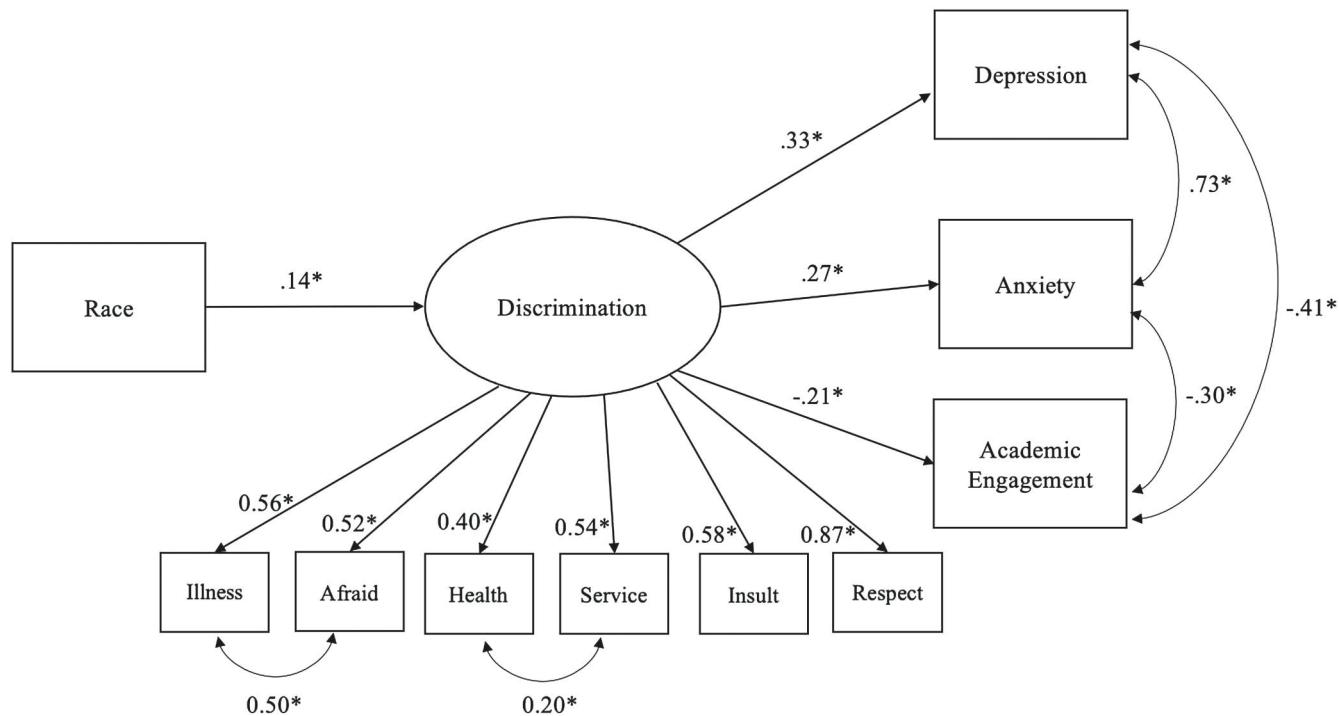
## Discussion

This study explored self-reported experienced discrimination among Asian and White students in the first month of the COVID-19 pandemic in the United States, and the relationship of this experienced discrimination to psychological and academic well-being. We found that Asian participants reported higher levels of experienced discrimination than White participants during the first month of the pandemic. Discrimination experiences were significantly associated with higher levels of depression and anxiety and lower levels of academic engagement. These results indicate that experiencing stigmatizing and discriminatory behavior, which may be worsened or intensified by the pandemic, may disproportionately exacerbate psychological distress and academic disengagement for Asian students.

A strength of this study was the large ( $N = 1,261$ ) and representative (40% Asian) participant sample. These data were also collected among young adults, who are more likely to report post-discrimination psychological distress than older adults (Greer & Spalding, 2017). Additionally, these data were collected at a university located close to the epicenter of the pandemic at the time of data collection; therefore, COVID-19 was particularly salient for these participants. However, the cross-sectional format of the survey limits our ability to conclude causal relationships. This was the first wave of a longitudinal study, and we intend to evaluate this model in subsequent waves to determine the stability or change of these relationships over time. Finally, it is possible that these discrimination experiences would otherwise occur at similar levels even without

**Figure 1**

Structural Equation Model With Standardized Coefficients for the Effect of Race on Experienced Discrimination, and the Effect of This Discrimination on Depression, Anxiety, and Academic Engagement



Note. N = 1,261.

\*  $p < .01$ .

the COVID-19 pandemic, or that these discrimination experiences were not race-related. However, these data are in line with larger national and international findings that Asian individuals are experiencing increased levels of discrimination, including the forms of verbal harassment, social shunning, and refusal of service evaluated in this study (He et al., 2020; Jeung et al., 2021).

In addition to the physical and economic hardships caused by the COVID-19 pandemic, Asian Americans have been additionally burdened by racist and xenophobic actions, from increased use of anti-Asian slurs in online interactions to verbal harassment and physical assault in public (Jeung et al., 2021; Lu & Sheng, 2020). This study suggests that this experienced discrimination is negatively related to psychological well-being and academic engagement among young adults. Future research should evaluate other potential outcomes stemming from experienced discrimination during the COVID-19 pandemic, including physical health and interpersonal behaviors. On college campuses, administrators should consider interventions to acknowledge the rise of hate crimes during the pandemic and provide support for the psychosocial well-being of affected students.

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