

Anti-Asian Discrimination and Antiracist Bystander Behaviors amid the COVID-19 Outbreak

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Preregistrations for the study protocol <https://osf.io/hb8jc> and the present study <https://osf.io/buade> are available in the Open Science Framework online repository. A preprint of this manuscript is available in PsyArXiv at <https://psyarxiv.com/eaz3k/>.

CrediT statement: Lui was responsible for the idea conception, research design, funding acquisition, project administration, data curation, formal data analyses, supervision of research assistants, writing and revising the manuscript. Parikh and Katedia were responsible for data cleaning, and conducting and summarizing preliminary and descriptive statistics, and contributed to manuscript writing and revision. Jouriles contributed to conceptualization of the research aims and analytic strategies, and manuscript writing and revision. The authors acknowledge Savannah Pham for her assistance with data collection and management and Akihito Kamata for his statistical consultation.

Positionality statement: Lui is an East Asian American psychologist with research expertise on racism, discrimination, acculturation, and minority mental health. Parikh and Katedia are South Asian American undergraduate students in psychology/creative computing and biology, respectively. Jouriles is a White psychologist with research expertise on bystander interventions and intimate partner violence.

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Abstract

Anti-Asian racism is a public health concern, and it has escalated during the coronavirus disease 2019 (COVID-19) outbreak. Bystanders—individuals who directly witness or become aware of acts of racism—can help by discouraging perpetrations of discrimination (and other forms of violence), offering help and support to victims, and reinforcing antiracist prosocial norms. Yet, little is known about who engages in antiracist bystander interventions in response to discriminatory events, and who engages in proactive bystander behaviors to discourage future acts of racism. In the current study, 456 US community adults of diverse ethnoracial backgrounds (18-85 years, $M_{age} = 48.8$, 52.0% women, 212 Asian Americans) reported on their experiences with discrimination, attitudes about the acceptability of discrimination, and engagement in proactive and reactive bystander behaviors. About 40% of the Asian American participants experienced discrimination during a one-week period in early months of the COVID-19 pandemic. Among individuals who witnessed anti-Asian discrimination during the study period, 45% of them engaged in antiracist reactive bystander interventions. Controlling for ethnicity, gender, and attitudes about the acceptability of discrimination, individuals who reported more frequent experiences with everyday discrimination prior to the pandemic were more likely to engage in reactive bystander behaviors in response to anti-Asian discrimination. Lifetime experiences with discrimination may contribute to individuals' active engagement in antiracist bystander behaviors. Future research directions on antiracist bystander actions and allyship are discussed.

Keywords: attitudes; racism; SARS-CoV-2; victimization; violence

Public Significance Statement: Using data collected during the COVID-19 pandemic, we found that bystander behaviors responding to anti-Asian discrimination could manifest in reactive bystander interventions and proactive antiracism. People with greater lifetime experiences with discrimination were more likely to intervene when witnessing anti-Asian racism incidents.

Anti-Asian Discrimination and Antiracist Bystander Behaviors amid the COVID-19 Outbreak

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first detected in China in late 2019. Human transmissions of this novel coronavirus have resulted in the coronavirus disease 2019 (COVID-19) global pandemic (Cucinotta & Vanelli, 2020).

Accompanying this pandemic is a surge of racial slurs, verbal assaults, physical attacks, and other hate crimes directed at individuals of Asian descents (Campbell, 2020; Hong, 2020; Margolin, 2020). Because systemic racism and interpersonal discrimination are harmful to the victims' mental and physical health (Fung et al., 2016; Lui & Quezada, 2019; Pascoe & Richman, 2009; Schmitt et al., 2014), anti-Asian discrimination makes another critical public health concern amid the COVID-19 pandemic. A potentially effective way to address systemic racism and interpersonal discrimination involves the engagement of individuals—namely bystanders—who directly witness or become aware of acts of racism. Bystanders can discourage perpetrations of discrimination, help and support victims, and reinforce (antiracist) prosocial norms. Using data collected from a United States (US) community-based adult sample during the early phase of the COVID-19 outbreak, we examined anti-Asian discrimination and antiracist bystander behaviors that respond to this discrimination. As an initial study on this topic, we explored a set of personal characteristics that correlated with engagement of antiracist bystander behaviors.

Anti-Asian Discrimination Amid COVID-19 Outbreak

There has been a long history of anti-Asian racism and discrimination in the US. At the cultural level, Asian Americans of diverse ethnic heritages persistently are perceived to be foreigners to the US, essentialized to one culture (e.g., Chinese), considered to be carriers and spreaders of diseases such as the plague, and subjected to marginalizing stereotypes (Tessler et

al., 2020). At the institutional level, policies such as the Chinese Exclusion Act and internment of Japanese Americans have been implemented to marginalize Asian Americans (Mio et al., 2007). At the interpersonal level, Asian Americans experience major and everyday racial discrimination not only directly but vicariously through friends, family, and the media (Miller et al., 2012; Museus & Park, 2015). Within this context of persistent anti-Asian racism, the COVID-19 pandemic has amplified the prejudice and discrimination facing many Asian Americans. Nearly 2,000 anti-Asian hate crimes were reported over an eight-week period in March through June 2020 (Jeung & Nham, 2020). One-third of American adults have witnessed Asian individuals being blamed for the COVID-19 outbreak (Jackson et al., 2020). Further, 30% of Asian Americans reported having experienced more frequent or intense racial discrimination during the pandemic than before the pandemic (e.g., Lee & Waters, 2020).

Common examples of anti-Asian discrimination during the COVID-19 pandemic have included verbal harassment and assaults (e.g., racial slurs), shunning, physical attacks, violations of civic rights (e.g., discrimination at the workplace and denial of services from establishments), coughing at or spitting on Asian individuals, referring to SARS-COV-2 as the “Chinese virus,” and unfairly blaming Asian Americans for the spread of COVID-19. Asian Americans as a collective group—including Chinese, Korean, Vietnamese, Filipino, and other ethnic groups—have reported experiencing incidents of anti-Asian racism during the pandemic (Jeung & Nham, 2020). The pandemic heightened the harmful anti-Asian stereotypes associated with perpetual foreigners, uncleanliness, and cultural inferiority (Tessler et al., 2020). Consistent with the existing racism literature, experiencing acts of anti-Asian discrimination during the COVID-19 pandemic has been linked to depression and anxiety symptoms, sleep problems, and physical complaints in adults and youth (Cheah et al., 2020; Lee & Waters, 2020). Given the exacerbation

of xenophobic and racist rhetoric, there is an urgent and critical need to identify ways to combat anti-Asian discrimination to reduce its negative impact on individuals' health outcomes.

Bystander Behaviors in Response to Discrimination amid the COVID-19 Outbreak

A holistic approach to combatting (anti-Asian) racism includes bystanders acting in ways that disarm perpetrators and assist victims when witnessing discriminatory events (Nelson et al., 2011). Active bystanders can be particularly valuable in challenging everyday discriminatory behaviors (Neto & Pedersen, 2013; Sue et al., 2019). Antiracist bystanders also can challenge prejudicial beliefs and strengthen prosocial norms to help reduce future victimizations (Aboud & Joong, 2008; Nelson et al., 2011). Yet, many witnesses to violent and discriminatory acts appear to be only passive observers (Banyard, 2008; Hyers, 2007). Leveraging the knowledgebase regarding emergency situations and various forms of interpersonal violence, barriers to bystanders' actions include failure to identify the situations as risky or harmful, diffused responsibility to help, and low levels of disapproval of transgression (Campbell et al., 2020; Yule & Grych, 2017). To enhance the impact in reducing—and ultimately eliminating—discriminatory acts and to mitigate their negative health consequences, it is important to understand factors that facilitate individuals' engagement in bystander behaviors in response to racism and discrimination.

Types of Bystander Actions

In contrast to inaction, bystanders can react to anti-Asian discrimination in several ways. Bystanders can interrupt or challenge the perpetrators before or during a discriminatory act, physically defend the victims of attacks, seek help from authority and other people, comfort and support the victims, and speak out against the incidents or perpetrators afterwards. These examples are both reactive and “high-risk” because they often require the bystanders to respond

to ongoing discrimination and involve themselves directly with the perpetrators, victims, or both (McMahon & Banyard, 2012). By doing so, bystanders may place themselves at an increased risk for retaliation.

In addition to reactive bystander behaviors, there are a number of proactive, antiracist bystander actions. These include joining or volunteering for advocacy groups, enhancing one's own or others' knowledge concerning discrimination, and speaking to others about injustices; these behaviors can reinforce anti-prejudice social norms to prevent future violence and discrimination (McMahon & Banyard, 2012; Nelson et al., 2011; Sue et al., 2019). Unlike reactive bystander behaviors, proactive behaviors are 'low-risk' because they do not require the direct witnessing and interruption of anti-Asian discriminatory acts.

Individuals who Engage in Bystander Behaviors

According to social identity theories, individuals define their place in society by perceiving themselves to be members of at least one social category (e.g., Asian American, US ethnic minority). Social categorizations often are facilitated by shared experiences. Social identities then are reinforced by individuals developing emotional involvement with the ingroup, assessing their statuses in reference to outgroup members, and striving to enhance group prestige (Tajfel & Turner, 1979; Trepte & Loy, 2017). Because of ingroup favoritism, bystanders may feel emotionally connected and show increased empathic concerns when there is a salient sense of shared group membership (Johnson et al., 2019; Levine et al., 2005).

There has been little empirical research on antiracist bystander behaviors that respond to anti-Asian discrimination. Still, findings from several studies help justify predictions derived from social identity theories. For example, research showed that when the victims shared bystanders' ethnic or social categorizations, bystanders reported a greater likelihood to

intervene—or demonstrated faster helping behaviors—in response to emergencies or interpersonal violence situations (Gaertner et al., 1982; Levine et al., 2002). Additionally, as shown in a study in the United Kingdom, ethnic minority youth indicated greater intentions to help in an imagined discrimination-related situation than their majority counterparts (Palmer et al., 2017). Thus, in response to anti-Asian discrimination amid the COVID-19 outbreak, social identity theories suggest that Asian Americans may be more likely to engage in reactive and proactive bystander behaviors than Whites. In solidarity with Asian American victims, non-Asian ethnic minority individuals (e.g., African Americans, Hispanics) also may be more likely to engage in bystander actions, compared to Whites.

Social identity theories also suggest that people who have experienced racism and other forms of unfair treatment may identify more strongly with and feel more empathic toward victims of anti-Asian discrimination. Prior experiences with racial discrimination can heighten individuals' emotional involvement with their ethnoracial group and enhance their understanding of how their group membership is evaluated (Cheon & Yip, 2019; Seaton et al., 2009). Consistent with this idea, prior victimization has been found to correlate with secondary school and college students' active bystander responses to high-risk situations of interpersonal violence (Campbell et al., 2020; Cascardi et al., 2018).

Other Correlates of Bystander Behaviors

Research on active bystander responses to emergencies and interpersonal violence suggests other personal characteristics that may influence individuals' helping behaviors in the context of racism and discrimination. For example, gender is likely to be important. Women in most societies are socialized to emphasize communion and empathy (Eagly, 2009). Thus, it is not surprising that women would report more favorable attitudes toward—and greater intentions

to engage in—reactive bystander interventions in racism-related situations than men (Redmond et al., 2014). Additionally, individuals' own prejudice or beliefs may influence their intentions and decisions to engage in bystander behaviors. For example, intentions to confront discriminatory acts were associated with perceived injustice positively (e.g., unacceptability of major discrimination) and racial prejudice negatively (Neto & Pedersen, 2013; Pedersen et al., 2011; Saab et al., 2015). It would be reasonable to expect that individuals' attitudes about the acceptability of anti-Asian discrimination amid COVID-19 outbreak to be linked to their engagement in antiracist reactive and proactive bystander behaviors.

The Present Study

The objectives of the present study were to describe Asian Americans' experiences with discrimination during early months of the COVID-19 pandemic, and examine correlates of antiracist bystander behaviors in response to anti-Asian discriminatory acts. Consistent with social identity theories, in response to anti-Asian discriminatory acts, we expected to observe greater odds of reactive bystander behaviors among Asian Americans and other ethnic minority participants than among Whites. We also expected to observe greater odds of reactive bystander behaviors among individuals who reported frequent lifetime experiences with discrimination than individuals who did not. Compared to their counterparts, women and people who believed anti-Asian discrimination to be unacceptable were hypothesized to be more likely to engage in bystander behaviors. Nonspecific to antiracism, existing research has differentiated reactive and proactive bystander behaviors; however, few studies have focused specifically on proactive bystander actions (McMahon et al., 2014). Hence, we considered the same set of personal characteristics but did not specify directional hypotheses in how these predictors would be related to individuals' likelihood of engaging in proactive bystander behaviors.

Method

Study Design and Recruitment

Data came from a short-term survey study on US adult's experiences amid the COVID-19 pandemic. The overall study took place in April-May 2020. Study protocol received approval from the authors' university institutional review board. All participants in the overall study protocol were recruited via Qualtrics Panels, a commonly-used crowdsourced platform to recruit participants for market research and social science investigations (Boas et al., 2018; Ibarra et al., 2018). "Panels" of community individuals are curated in diverse ways. For example, individuals may opt into Qualtrics Panels to earn airline miles or reward points from a retailer. Crowdsourcing recruitment strategies can yield samples that are demographically representative of the target populations and data that are theoretically generalizable to data collected by traditional methods (Behrend et al., 2011).

In this study, Qualtrics Panels provided panelists in the US aged 18 years or older with brief information about the study opportunity (i.e., topic on psychology research, length of time of the participation, full incentive in the type of compensation they had chosen with their panel vendors). Individuals who opted in were then informed that this was a survey study examining people's experiences amid the COVID-19 pandemic. Upon providing electronic informed consent, participants completed the baseline survey. Individuals ($N = 831$) who provided adequate responses (i.e., passed attention checks, provided consistent responses to similar item pairs, did not speed through the questionnaire) to the baseline survey questionnaires were re-contacted one week later to complete the subsequent survey. This investigation primarily used data from the wave 2 survey administered at the beginning of May 2020—when participants were asked about COVID-related experiences. We also used data from the baseline survey

administered at the end of April 2020—when participants reported basic demographic information and experiences prior to the COVID-19 pandemic.¹ Responses were identified and matched using an arbitrary Panel ID number. Participation was voluntary and anonymous. Consistent with other studies on Qualtrics Panels, participants received compensations that were agreed with their respective vendors. Quotas for basic demographic backgrounds including gender and age were implemented to ensure that our sample characteristics were similar to those of the general public in the US. Because our research questions pertained to anti-Asian discrimination, we oversampled Asian Americans to make up half of our participants. In the other half of the sample, procedure was specified to recruit 30% African Americans, 30% Hispanics, 30% Whites, and 10% individuals of mixed-heritage or other ethnoracial backgrounds.

Participant Characteristics

The current sample comprised 456 individuals aged 18 to 85 years old ($M_{age} = 48.83$, $SD_{age} = 15.37$, 52.0% women², 91.2% completely heterosexual). There were 212 Asian Americans, 59 African Americans, 55 Hispanics, 80 Whites, 6 Native Americans or Arabic, Middle Eastern, and North African individuals, and 44 individuals who reported multiple or other ethnoracial backgrounds. Most participants reported a legal documentation status (99.1%) and were born in the US (73.4%). The present sample represented 39 states and the District of Columbia. Most participants resided in California (25.7%), New York (9.9%), and Texas (8.3%). Participants reported a wide range of annual household income (< \$20,000 to > \$200,000,

¹ The retention rate in our study was consistent with other multi-wave research studies or commercial polls administered on Qualtrics Panel. There were no statistically significant differences in the demographic information between participants who returned for the wave 2 survey and participants who only completed the baseline survey.

² The US consisted of approximately 51% women and 49% men, and < 1% transgender and gender-nonconforming individuals. The gender quota was specified to be 51% women and 49% men, and individuals who did not identify as women or men were inadvertently not included in the present sample. Transgender individuals may identify as women or men.

median range = \$80,001-\$100,000; median household size = 2). Most participants attained some college education (83.0%); 37.9% and 33.9% of the sample received a bachelor's degree and advanced degree, respectively. At the time of the survey, 87.5% of the sample were sheltering at home. Most participants who did not shelter at home reported that they held essential jobs.

Measures

Asian Americans' Experiences with Discrimination During COVID-19 Outbreak

In the overall study description, participants read that the investigation was aimed to “learn about American people’s current experiences because of the novel coronavirus disease 2019 (COVID-19)” and that the survey would include questions about their “experiences with daily stress and discrimination-related stress, and behaviors [they] engage to cope with the current COVID-19 pandemic.” Asian American participants’ direct experiences with discrimination amid the COVID-19 pandemic were assessed at wave 2 using a 10-item measure developed for this study. Items were constructed based on the most commonly reported anti-Asian hate incidents in the US since the COVID-19 outbreak (Jeung & Nham, 2020). Example items included, “*being coughed at or spat on*” and “*being blamed for the COVID-19 pandemic.*” Participants indicated the frequency by which they encountered assaults and other differential treatment over the past week on a scale from 1 (*never*) to 4 (*often/frequently*). Item-level analyses showed that 5.2% (“*being physically assaulted or attacked*”) to 21.1% (“*being treated with less respect or courtesy*”) of the Asian American participants experienced specific discriminatory events over a one-week period (see Table 1).

To evaluate the structural validity of the present discrimination frequency scores, we performed an exploratory factor analysis (EFA) in Mplus v8.4. Treating scale scores as ordered-categorical variables, a single-factor EFA with mean- and variance-adjusted weighted least

square (WLSMV) estimator and geomin rotation showed a close fit with the data from Asian Americans ($\chi^2(35) = 43.816, p = .146, CFI = .999, TLI = .999, RMSEA = .042$ [90% CI = .000-.078], SRMR = .036). Our data demonstrated excellent internal consistency reliability (Cronbach's $\alpha = .95$). Given the floor effect, responses to the 10 items were recoded to 0 (*no experience*) and 1 (*experienced*). A composite binary variable was used to categorize participants who experienced no discrimination at all and who experienced at least one anti-Asian discrimination incident over the past week.

Antiracist Bystander Behaviors

A seven-item scale was used to measure antiracist bystander behaviors that respond to anti-Asian discrimination. There were also three filler items that addressed general prosocial bystander behavior that was unrelated to anti-Asian racism.³ This scale was constructed for the present study, and it was based on the 10-item Bystander Behavior Scale-Revised, a self-report questionnaire that captures a range of bystander behaviors that could be used in response to sexual violence (McMahon et al., 2014; McMahon et al., 2011). The present items were developed to capture reactive bystander interventions before, during, or after a discriminatory event, and antiracist proactive bystander actions. Responses to each item were scored as 0 (*no*) and 1 (*yes*), and 99 (*no opportunity*) for engagement in antiracist bystander behaviors in the past week (see Table 1).⁴

An EFA with WLSMV estimator showed that a single-factor structure was not a close fit for the data with the full sample ($\chi^2(14) = 39.72, p = .003, CFI = .990, TLI = .986, RMSEA =$

³ Twelve items were developed initially. Two items were dropped from survey administration because of a researcher error.

⁴ In making instructions consistent across all items in the scale, participants were asked to choose an option from "no opportunity," "no," and "yes;" however, some bystander behaviors were possible regardless of whether participants witnessed a perpetration of anti-Asian discrimination. Thus, responses of "no opportunity" on these prosocial bystander action items were recoded to "no" engagement.

.064 [90% CI = .041-.088], SRMR = .093). Rather, a two-factor structure demonstrated superior fit to the single-factor structure ($\chi^2(8) = 11.10, p = .196$, CFI = .999, TLI = .997, RMSEA = .029 [90% CI = .000-.067], SRMR = .034). Factor analytic results demonstrated evidence for the structural validity of the present scores.⁵ The two-factor solution was consistent with our conceptual differentiation of reactive bystander interventions and proactive bystander actions. Specifically, three of the seven items focused on reactive bystander opportunities to intervene during or after an anti-Asian discriminatory event (e.g., “*confront a friend if I heard that they had treated Asian Americans unfairly*”). For these items, participants first rated whether they had the opportunity to engage in these behaviors. In the event that they had the opportunity, participants indicated whether they intervened as a bystander. Four of the seven items focused on behaviors that did not require respondents to have witnessed an anti-Asian discriminant event; rather, these proactive actions were possible at any time (e.g., “*encourage others to learn more and get involved in preventing anti-Asian discrimination*”). As shown in the exploratory factor analysis, there was a floor effect in the data assessing antiracist bystander behaviors. Similar to our treatment of data on anti-Asian discrimination, we computed a binary variable categorizing participants who engaged in no reactive bystander intervention and who have intervened once or more times over the past week, and another binary variable categorizing participants who did or did not engage in proactive bystander actions. The present data showed adequate internal consistency reliability for both subscales (KR-20 = .83 and .87, respectively).

Prior Everyday Discrimination

⁵ One of the items, “Report to authority about information I might have about anti-Asian hate crime or discriminatory behavior,” loaded onto both factors. EFA results with all 10 bystander behavior items (including those that respond to discrimination that was not directed at Asian Americans) showed that this item loaded primarily onto the reactive bystander behaviors factor. Confirmatory factor analysis with the 7 items assessing bystander behaviors responding to anti-Asian discrimination showed that the 2-factor structure was superior to the 1-factor structure regardless of whether items were treated as binary variables or unordered 3-categorical variables.

Lifetime experiences with discrimination were measured by the 10-item Everyday Discrimination Scale (Williams et al., 1997). Participants reported prior exposure to day-to-day unfair treatment in the baseline measurement occasion. Items included, “*you were treated with less courtesy than other people are.*” Participants responded to each item on a scale from 1 (*never*) to 4 (*often/frequency*). The Everyday Discrimination Scale data had shown adequate construct validity in various adult samples and measurement invariance across ethnoracial and age groups (Harnois et al., 2019; Kim et al., 2014; Krieger et al., 2005; Lewis et al., 2012). Experiences with everyday unfair treatment also were shown to be associated with stress, mental health problems and self-rated health (e.g., Earnshaw et al., 2016). Our observed scores demonstrated adequate internal consistency reliability (Cronbach’s $\alpha = .93$).

Perceived Acceptability of Anti-Asian Discrimination

Using the same 10-items that were used to measure anti-Asian discrimination, participants rated whether they thought it was acceptable for anti-Asian assaults and other differential treatment to occur during the COVID-19 pandemic. The response scale ranged from 1 (*not at all acceptable*) to 4 (*highly acceptable*). Results from an EFA showed that a single-factor structure adequately fit the data from the full sample, and thereby provided evidence for the structural validity of scores assessing beliefs about the acceptability of anti-Asian discrimination. Our data also showed excellent internal consistency reliability (Cronbach’s $\alpha = .97$). Furthermore, these attitude data were skewed (prevalence of “not at all acceptable” ranged from 83.3% to 95.2% across the 10 items). Thus, consistent with the creation of composite binary variables tapping anti-Asian discrimination experiences and engagement in bystander behaviors, we computed a binary variable to categorize whether or not participants considered anti-Asian discrimination to be acceptable.

Data Analytic Plan

The overall study protocol and an analytic plan for this investigation were registered on the Open Science Framework before we accessed the present data.⁶ All cases passed our screening for data adequacy that was mentioned above, thus no data were removed prior to analyses. The amount of missing data was trivial on the present study variables (1.8% of participants); thus, missingness was handled by pairwise and listwise deletions in zero-order and multivariate analyses, respectively. To achieve our research objectives, we planned to perform a series of logistic regression analyses to predict the probability of proactive and reactive bystander behaviors. Based on social identity theories and findings from the broader bystander literature, predictors were Asian and ethnic minority backgrounds, gender, self-reported acceptability of anti-Asian discrimination, and baseline everyday discrimination. In a set of exploratory analyses, we included Asian Americans' current experiences with discrimination as an additional predictor for this subsample's antiracist bystander behaviors.

Results

Preliminary and Descriptive Statistics, and Construct Validation

We found only one demographic difference between Asian American and other participants: more Asian American participants (45.5%) were born outside of the US than non-Asian participants (10.2%; Mann-Whitney $U = 16667.50$, $z = -8.48$, $p < .001$; see Table S1). Table 2 summarizes the descriptive statistics of the study variables for predicting the odds of bystander behaviors, and their intercorrelations. We performed regression analyses concerning reactive bystander behaviors using data from individuals who reported at least one opportunity to intervene during or after an anti-Asian discrimination event ($n = 166$). In contrast, proactive

⁶ View-only links for peer-review: https://osf.io/hb8jc/?view_only=8f5230b1cc15439dae62b20979f878fb and https://osf.io/buade/?view_only=4b40b352674c4811acf40f96c8c93c71, respectively.

bystander actions were possible for all individuals, regardless of whether they witnessed an anti-Asian discriminatory event in the past week. Thus, data from the overall sample were used in regression analyses concerning proactive bystander actions ($n = 448$). We observed no demographic differences between those who had the opportunity to engage in reactive bystander interventions ($n = 166$) and the overall sample ($n = 448$; see Supplemental Text).

In response to any anti-Asian discriminatory acts, 45.2% of participants who reported an opportunity to engage in reactive bystander behavior did so. By contrast, 18.8% of all participants engaged in proactive bystander actions. To further examine the construct validity of the anti-Asian discrimination and bystander behavior data, we examined their point biserial correlation with lifetime everyday discrimination. Reactive and proactive antiracist bystander behaviors were positively correlated, $r = .58, p < .001$, whereas smaller correlations were observed between lifetime everyday discrimination and reactive bystander interventions ($r = .18, p = .019$), and proactive bystander actions ($r = .07, p = .129$). Among Asian American participants, current experiences with anti-Asian discrimination during COVID-19 pandemic correlated with lifetime everyday discrimination, $r = .32, p < .001$.

Predictors of Antiracist Bystander Behaviors⁷

Confirmatory Analyses. Table 3 summarizes the parameter estimates from logistic regressions accounting for the odds of bystander behavior engagement in the overall sample. Patterns of results differed for reactive and proactive bystander behaviors. Lifetime everyday discrimination was statistically significantly associated with reactive bystander behaviors ($B =$

⁷ In our preregistration, we planned to include the diversity of the states in which participants resided to approximate the social environments that might facilitate prejudice and bystander behavior engagement. The variable, however, was a gross proxy and likely would not address the construct; thus, we removed it from the present analyses. Results from the preregistered analyses were reported in the supplemental materials; conclusions did not differ without (Table 3) and with (Table S2) the diversity of state variable in the regression models.

.58, $SE = .23$, $p = .010$). Each one unit increase in lifetime everyday discrimination corresponded to 1.78 times more odds of stepping in to help when participants witnessed anti-Asian discrimination. In contrast, none of our hypothesized predictor variables were related to proactive bystander actions.

Exploratory Analyses. We examined whether current experiences with anti-Asian discrimination uniquely predicted Asian American participants' reactive and proactive bystander behaviors. Once discrimination experiences amid COVID-19 outbreak were included in the logistic regressions, lifetime everyday discrimination no longer statistically significantly predicted bystander behaviors. After accounting for gender, beliefs about the acceptability of discrimination, and lifetime everyday discrimination, we found that having experienced anti-Asian discrimination during the pandemic corresponded to lower odds of engagement in reactive bystander interventions ($B = -1.90$, $SE = .62$, $p = .002$) and proactive bystander actions ($B = -.94$, $SE = .38$, $p = .013$) among Asian Americans.

Discussion

One of the objectives of our present study was to describe anti-Asian discrimination experiences in a sample of US community adults. Corroborating anecdotal evidence in the US and globally, many Asian American (39%) reported personal experiences with discrimination during a one-week period during the early phase of the COVID-19 pandemic. Our findings are consistent with existing daily diary research results showing that Asian Americans experienced everyday racism about once per week (Ong et al., 2013). Another objective of the present study was to examine correlates of antiracist bystander behaviors in response to anti-Asian discrimination during the COVID-19 outbreak. We found that lifetime discrimination uniquely correlated with antiracist reactive bystander behaviors, over and above other variables including

Asian and ethnic minority background, gender, and beliefs about the acceptability of discrimination. Compared to individuals who did not experience everyday unfair treatment, individuals exposed to more frequent discrimination were more likely to report engaging in antiracist reactive bystander behaviors. This finding is consistent with previous findings in the interpersonal violence literature, indicating that prior victimization correlates with active bystander responses to high-risk situations of interpersonal violence (Campbell et al., 2020; Cascardi et al., 2018). Our finding also is consistent with predictions derived from social identity theories; individuals who have greater lifetime experiences with discrimination likely identify with victims of anti-Asian discrimination, and they may be more empathic toward others who are assaulted or treated unfairly (Neto & Pedersen, 2013).

An alternative explanation for the association between lifetime discrimination and antiracist reactive bystander behaviors is that past exposure to discrimination—regardless of ethnicity or race, age, or other prejudice—may prompt individuals to prepare for future discrimination. As part of this preparation, individuals equip themselves with skills to confront the perpetrators of discriminatory behaviors and/or provide support to the victims. For example, compared to other groups in the US, African Americans and Hispanics are more likely to be treated unfairly by the police and law enforcement (English et al., 2017; Landers et al., 2011; Nadal et al., 2017). As a result, racial socialization in these populations often include learning how to engage in self-defense, obtain help, confront the perpetrators of unfair treatment, and de-escalate the situations (Harris & Amutah-Onukagha, 2019; Thomas & Blackmon, 2014).

Our exploratory analyses, however, suggest a possible caveat to the finding that lifetime discrimination experiences relate positively to antiracist reactive bystander behaviors. Specifically, Asian Americans who recently (within the past week) experienced discrimination

were *less* inclined to intervene when witnessing racism directed at other Asian individuals. They were also *less* inclined to engage in proactive antiracism. These results suggest that the timing or recency of discrimination experiences may impact subsequent bystander behaviors. Individuals can become distressed, demoralized, and traumatized immediately after experiencing discrimination (Ong et al., 2013; Torres & Ong, 2010). In the short term, the negative psychological consequences may inhibit victims of racism from helping others who also experience discrimination. Over time, however, these immediate responses to discrimination may dissipate, and perhaps past discrimination experiences can facilitate the development of empathy and willingness to intervene as a bystander. It is also possible that Asian Americans are concerned about retaliations for engaging in antiracist bystander behaviors (e.g., additional assaults) or do not feel efficacious in advocating for their same-ethnic peers who experience discrimination. Nonetheless, our exploratory findings underscore a potentially important direction for future research: a need to better understand how experiences of discrimination influence motivations and decisions for engaging in behaviors that help combat discrimination.

In developing and evaluating questionnaires assessing anti-Asian discrimination and antiracist bystander behaviors, this research advances the scientific understanding of both constructs. For example, everyday discrimination—namely microaggression—has been characterized as distinct from major discrimination (Donovan et al., 2013; Wong et al., 2014). Yet, consistent with qualitative data (Lui et al., 2020), results from our factor analyses showed that current participants considered major discrimination experiences (e.g., being verbally assaulted and physically attacked) and minor, everyday discrimination experiences (e.g., being treated with less respect) to reflect a unidimensional concept. Regarding antiracist bystander actions, results of factor analysis and regression analyses supported the utility in differentiating

reactive and proactive bystander behaviors. Such differentiation corroborates existing empirical data regarding the dimensions of bystander behaviors in response to interpersonal violence (Banyard et al., 2014; Cascardi et al., 2018), and emerging conceptual typologies of antiracist actions (Sue et al., 2019). Both antiracist reactive and proactive bystander behaviors should be considered in future research. With cross-validation, our antiracist bystander behavior measure may be useful in other basic and applied research.

Limitations and Future Directions

The following limitations should be considered when interpreting our findings. First, the extent to which these findings can be generalized to other samples and other time periods is unclear. For example, the present sample was overrepresented by community adults who attained college and advanced education levels, made higher than average household income, and live in the most populous states (i.e., California, New York, and Texas). Communities with lower levels of educational attainment and household income may be more likely to be essential workers who were unable to work from home amid the COVID-19 outbreak. Thus, the present rates of anti-Asian discrimination experiences and engagement in antiracist bystander behaviors may not represent the experiences of individuals in underprivileged segments of the population. Additionally, the present study was conducted during a unique time period within the US. There were active stay-at-home orders around the country. There also were widespread Black Lives Matter protests shortly after our data collection. It is unknown how exposure to vicarious racism-related experiences and social justice actions may influence people's self-reported discrimination experiences and engagement in bystander behaviors.

Another limitation pertains to the novelty of our measures. This was among the first investigations of antiracist bystander behaviors using a new self-report scale created for our

current objectives. Although we provided some evidence for the validity of the measure in the context of this study, additional research on the measurement of antiracial bystander behaviors is needed. For example, our scale was arguably short and did not capture an exhaustive list of possible reactive and proactive bystander behaviors. Additionally, our measure focused on assessing bystander behaviors directed toward friends. There is a need to assess a wider range of bystander actions, and to consider more carefully toward whom these actions were directed (e.g., a friend vs. a stranger). There is also a need to evaluate the extent to which self-reports of bystander behavior correspond with observations of actual behavior, and to understand individual and situational factors that contribute to individuals' behaviors. A third limitation is that we do not know how research participants may have perceived the opportunities to intervene as bystanders. Failures to notice and recognize transgressions as violence, and to take personal responsibilities to intervene are common reasons for inaction among bystanders of sexual violence (Kistler et al., 2021). Thus, our current estimates of individuals who reported having no opportunity of reactive bystander interventions may contain individual differences in their ability to identify racism and discrimination incidents.

Looking ahead, it will be important to evaluate how victims of discrimination perceive the effectiveness of various types of bystander actions. Furthermore, the power dynamics in bystander interventions likely vary by ethnic minority and majority status; thus, it would be valuable to understand the psychological processes that drive antiracist actions by same-ethnic bystanders and White allies. Finally, whether bystanders intervene likely vary across situations (e.g., the severity of discrimination incidents, perceived risk for retaliation, efficacy in interventions) (Haynes-Baratz et al., 2021). These research questions warrant systematic examinations in the future.

In conclusion, amid the COVID-19 outbreak, about 45% of adults intervened during an anti-Asian discriminatory act when presented with the opportunity. Close to 20% of the sample supported an Asian American who had been victimized by discrimination. Across ethnic groups, having had more frequent experiences with everyday unfair treatment likely promoted an awareness of the possible negative effects of discrimination, empathy, and willingness and confidence to intervene as a bystander in response to anti-Asian discrimination. Our exploratory analyses also suggested that the timing or recency of anti-Asian discrimination experiences might influence Asian Americans' own bystander behavior. The present results can be helpful in future basic and intervention research that examines the potential of antiracist bystander actions in preventing and confronting discrimination.

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Table 1

Frequency of Responses to Items Assessing Exposure to Anti-Asian Discrimination, Acceptability of Discrimination, and Engagement in Reactive and Proactive Bystander Behaviors

Item	Sample (N = 452)	Asian American (n = 211)	Non-Asian American (n = 243)
Anti-Asian Discrimination			
<i>How often has the following happened to you in the past week...</i>		% Never	
Being coughed at or spat on	--	93.3%	--
Being verbally assaulted or harassed	--	87.6%	--
Being accused of spreading the coronavirus	--	92.4%	--
Being blamed for the COVID-19 pandemic	--	91.9%	--
Being physically assaulted or attacked	--	94.8%	--
Being called names or racial slurs	--	80.0%	--
Being told that you do not belong in the US	--	84.8%	--
Referring to the COVID-19 as the "Chinese virus"	--	80.5%	--
People act as if they are afraid of you	--	84.3%	--
Being treated with less respect or courtesy	--	78.9%	--
Reactive Bystander Interventions			
	(N = 127-147)	(n = 52-68)	(n = 75-79)
<i>(If there was an opportunity) Have you engaged in the following behaviors in the past week...</i>		% No	
If I suspect a friend had been targeted in an anti-Asian discrimination, I let them know that I am there to help	59.9%	55.9%	63.3%
Confront a friend if I heard that they had treated Asian Americans unfairly	70.6%	73.7%	68.4%
Report to authority about information I might have about anti-Asian hate crime or discriminatory behavior	76.4%	76.9%	76.0%
Proactive Bystander Actions			
<i>Have you engaged in the following behaviors in the past week...</i>		% No	
Encourage others to learn more and get involved in preventing anti-Asian discrimination	91.0%	91.3%	90.8%
Talk with a friend about anti-Asian discrimination as an issue for our community	88.8%	87.5%	89.9%
Talk with a friend what makes a behavior discriminatory or unfair to Asian Americans	89.0%	88.0%	90.9%
Visit a website to learn more about (anti-Asian) discrimination	90.6%	89.0%	92.1%

Table 2*Summary of Descriptive Statistics on and Intercorrelations among Key Study Variables*

Variable	Sample		Asian American		Non-Asian American	
	% Yes	<i>M</i> (<i>SD</i>)	% Yes	<i>M</i> (<i>SD</i>)	% Yes	<i>M</i> (<i>SD</i>)
Anti-Asian Discrimination	--	--	39.2%	--	--	--
Reactive Bystander Interventions	45.2%	--	50.7%	--	41.4%	--
Proactive Bystander Actions	18.8%	--	19.6%	--	19.0%	--
Acceptability of Anti-Asian Discrimination	20.0%	--	20.9%	--	19.3%	--
Prior Everyday Discrimination	--	1.74 (0.67)	--	1.72 (0.61)	--	1.76 (0.72)
<u>Point Biserial Correlations</u>						
1. Anti-Asian Discrimination	2. .44*	3. .21*	4. .07	5. .32*	6. .01	
2. Reactive Bystander Interventions	--	.56*	.09	.19	.10	
3. Proactive Bystander Actions	.58*	--	.02	.14*	.08	
4. Acceptability of Anti-Asian Discrimination	-.00	-.01	--	.17*	-.15*	
5. Prior Everyday Discrimination	.18*	.07	.16*	--	-.01	
6. Gender (0 = man)	.02	-.01	-.18*	-.05	--	

Note. Sample size ranged from 448 to 456 (209 to 212 from Asian Americans) for engagement in proactive bystander actions, acceptability ratings for anti-Asian discrimination, and prior experiences with everyday discrimination. Sample size was 166 (71 from Asian Americans) for engagement in reactive bystander interventions, using data from individuals who reported the opportunity to do so. Correlations for the overall sample are shown below the diagonal, and correlations for the Asian American subsample are shown above the diagonal.

* $p < .05$

Table 3*Summary of Logistic Regression Predicting the Engagement in Reactive and Proactive Antiracist Bystander Behaviors*

Predictor	Reactive Bystander Interventions				Proactive Bystander Actions			
	<i>B (SE)</i>	Wald	Exp(<i>B</i>)	<i>p</i>	<i>B (SE)</i>	Wald	Exp(<i>B</i>)	<i>p</i>
<u>Confirmatory Analyses</u>								
	(N = 166)				(N = 448)			
Asian American Dummy (0 = White)	-.37 (0.40)	.85	0.69	.356	-.25 (0.30)	0.70	0.78	.402
African American Dummy (0 = White)	.30 (0.53)	0.32	1.35	.568	-.20 (0.42)	0.23	0.82	.635
Latinx American Dummy (0 = White)	.36 (0.56)	0.40	1.43	.525	-.30 (0.43)	0.48	0.74	.490
Other Ethnicity Dummy (0 = White) ¹	--	--	--	--	-.15 (1.15)	0.02	0.86	.898
Gender (0 = man)	-.07 (0.33)	0.04	0.93	.835	.08 (0.25)	0.11	1.09	.745
Acceptability of Anti-Asian Discrimination (0 = unacceptable)	.25 (0.40)	0.38	1.28	.536	.16 (0.32)	0.25	1.18	.617
Prior Everyday Discrimination	.58 (0.23)	6.56	1.78	.010	.35 (0.19)	3.49	1.41	.062
<u>Exploratory Analyses with Asian Americans Only</u>								
	(N = 71)				(N = 209)			
Gender (0 = man)	-.50 (0.54)	0.85	0.61	.357	-.12 (0.37)	1.27	0.66	.260
Experiences with COVID Discrimination (0 = no experience)	-1.90 (0.62)	9.45	0.15	.002	-.94 (0.38)	6.12	0.39	.013
Acceptability of Anti-Asian Discrimination (0 = unacceptable)	-.09 (0.65)	0.02	0.92	.895	-.02 (0.45)	0.00	0.98	.962
Prior Everyday Discrimination	.04 (0.46)	0.01	1.05	.925	.28 (0.31)	0.86	1.33	.353

Note. Omnibus test of model for reactive bystander interventions: $-2 \log \text{likelihood} = 215.42$, $\chi^2 = 13.16$, $p = .068$. Omnibus test of model for proactive bystander actions: $-2 \log \text{likelihood} = 427.98$, $\chi^2 = 4.41$, $p = .732$. The model fit indices for the model predicting reactive bystander interventions in Asian Americans: $-2 \log \text{likelihood} = 83.20$, $\chi^2 = 15.21$, $p = .004$. The model fit indices for the model predicting proactive bystander actions in Asian Americans: $-2 \log \text{likelihood} = 195.98$, $\chi^2 = 10.95$, $p = .027$.

¹ The parameter estimates for the variable in the analysis predicting reactive bystander interventions with the overall sample appeared to be out of bounds, and they should not be interpreted.

Supplement to the Method

Diversity of the State

Using the latest population data from the US Census, we created a variable to indicate whether participants resided in a predominantly White state. Makeup of the social environments may influence individuals' prejudice and bystander behaviors. Consistent with contact hypothesis, greater neighborhood ethno-racial diversity may enhance intergroup contact and facilitate positive relationships (Laurence, 2014; Schmid et al., 2014). Thus, individuals who live in states that are more ethnically diverse may have more intergroup ties and contact that would reduce racial prejudice and promote bystander behaviors. The diversity of state variable was intended to serve as a gross proxy in reflecting the social environments that may shape individuals' probability of intergroup contact. States that comprised < 50% Whites were coded as relatively more ethnically diverse than predominantly White states.

Supplement to the Results

There were no substantial differences in demographic backgrounds between participants who did and did not have an opportunity to witness anti-Asian COVID-related discrimination. This subset of participants ($n = 166$, 53.0% men, 91.6% completely heterosexual) reported a mean age of 48.5 years ($SD_{age} = 15.48$, age range = 18-85). Most of these participants reported a legal documentation status (97.6%) and were born in the US (73.5%). Participants represented 39 states and the District of Columbia, most of whom resided in California (28.3%), New York (13.3%) and Texas (7.2%). There were 71 Asian American individuals, and 26 African Americans, 23 Latinx Americans, 29 Euro Americans, 15 individuals who reported other ethnic backgrounds. This subset of participants who had an opportunity to intervene during or after a discriminatory event reported a median range of \$80,001-\$100,000 for annual household income

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(range covered below \$20,000 to over \$200,000). Most of these individuals had experiences with at least some college education (90.4%); specifically, there were 38.6% who received a bachelor's degree and 27.8% who received an advanced degree. Similar to the overall sample, 85.5% of the subset of participants reported that they were sheltering at home during the baseline survey time point, and 84.9% of the sample were sheltering at home at the time of the follow-up survey.

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COVID19-RELATED DISCRIMINATION AND BYSTANDER BEHAVIORS

Table S1

Summary of Demographic Information for Asian American and non-Asian Participants

Demographic	Asian American	Non-Asian American
Age <i>M</i> (<i>SD</i>)	48.34 (14.93)	49.25 (15.75)
Gender (% women)	53.8%	50.4%
Sexual Orientation (% completely heterosexual)	94.3%	88.5%
Documentation Status (% legal US residence)	99.5%	98.8%
Nativity Status (% US born)	54.5%	89.8%
Household Income (mode range)	\$100,001-200,000	\$100,001-200,000
Education Attainment (% bachelor's or higher)	85.8%	60.2%

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Table S2

Summary of Logistic Regression Predicting the Engagement in Reactive and Proactive Antiracist Bystander Behaviors (Including Diversity of State Residence)

Predictor	Reactive Bystander Interventions ¹ (N = 166)				Proactive Bystander Actions (N = 448)			
	B (SE)	Wald	Exp(B)	p	B (SE)	Wald	Exp(B)	p
Asian American Dummy (0 = White)	-.42 (0.40)	1.07	0.66	.300	-.23 (0.31)	0.54	0.80	.461
African American Dummy (0 = White)	.32 (0.53)	0.35	1.37	.552	-.20 (0.42)	0.22	0.82	.639
Latinx American Dummy (0 = White)	-.25 (0.58)	0.19	1.29	.660	-.25 (0.44)	0.31	0.78	.576
Other Ethnicity Dummy (0 = White)	--	--	--	--	-.17 (1.15)	0.02	0.84	.882
Gender (0 = man)	-.10 (0.34)	0.09	0.90	.761	.09 (0.25)	0.14	1.10	.713
Acceptability of Anti-Asian Discrimination (0 = unacceptable)	.28 (0.40)	0.48	1.32	.489	.17 (0.33)	0.26	1.18	.609
Prior Everyday Discrimination	.58 (0.23)	6.58	1.78	.010	.35 (0.19)	3.52	1.42	.061
Diversity of State Residence (0 = not predominantly White)	-.32 (0.37)	0.74	0.73	.391	.15 (0.27)	0.30	1.16	.584

Note. Omnibus test of model for reactive bystander interventions: -2 log likelihood = 214.68, $\chi^2 = 7.60$, $p = .022$. Omnibus test of model for proactive bystander actions: -2 log likelihood = 427.68, $\chi^2 = 3.70$, $p = .157$.

¹ The parameter estimates for the other ethnicity dummy variable appeared to be out of bounds, and they should not be interpreted.