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Neither Asian nor American: How COVID-19 Impacted Asian Americans' Identity and Well-Being

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Supplementary Materials: Code, Data, Materials, Preregistration [see [Index of Supplementary Materials](#)]



Abstract

Asians and Asian Americans have experienced increased discrimination due to COVID-19. Building on the rejection-identification model (RIM; Branscombe et al., 1999) and the rejection-disidentification model (RDIM; Jasinskaja-Lahti et al., 2009), we sought to examine how COVID-19 discrimination has impacted Asian Americans' identities and well-being. Asian and Asian American individuals currently residing in the United States were recruited to participate in our study. The relations between perceived COVID-19 discrimination, identification, and well-being were examined correlationally (Study 1) and experimentally (Studies 2 and 3). Across 3 studies, COVID-19 discrimination is associated with increased levels of anxiety and stress but decreased identification with being American. At the same time, perceived discrimination was unrelated to participants' Asian (Study 1, 2, and 3) and specific ethnic (Study 3) identities. In Study 2, we experimentally demonstrated that reading about the negative impact of COVID-19 on Asian Americans interacted with perceived discrimination to decrease the extent to which participants identified as American, which has implications for anxiety and stress. Results from Study 2 supported the RDIM predictions and was replicated in a US-born sample in Study 3. Our studies suggest that Asian and Asian Americans' well-being is harmed through the decrease of a positive identity (i.e., being an American) without the compensation of another positive identity (i.e., being Asian or being a specific ethnicity) to protect them from the negative impact of COVID-19 discrimination. Thus, Asian Americans need support now more than ever.



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Keywords

COVID-19, Asian Americans, perceived discrimination, well-being, group identity

Highlights

- Traditionally, racial minorities tend to identify more with their group when experiencing pervasive discrimination.
- We find Asian Americans are not identifying more as “Asian” nor their ethnic group in response to COVID-19 discrimination.
- At the same time, Asian Americans are identifying less as “Americans” in response to COVID-19-related discrimination.
- Asian Americans lose a protective identity (i.e., American) without increasing their racial identity to compensate in the face of discrimination.

On January 30, 2020, the World Health Organization (WHO) declared the novel coronavirus a public health emergency of international concern. Unfortunately, infectious diseases, especially deadly pandemics (Gover et al., 2020), tend to bring out xenophobia (Tessler et al., 2020) and the singling out of racial/ethnic groups in the U.S. (Misra et al., 2020). Media outlets, public figures, and private citizens began using derogatory and inflammatory nicknames for the virus that stigmatized Asian individuals and implied that they were responsible for the outbreak. Despite the WHO’s (World Health Organization, 2020a, 2020b) warning to refrain from attaching locations or ethnicity in reference to the novel disease, many elected officials and media continued to refer to the virus using stigmatizing language (Rizzuto, 2020). Subsequently, there was a surge in the usage of “Chinese virus”, “Kung Flu”, and related terms in social media outlets (Rizzuto, 2020). Such widespread use of stigmatizing language may have had significant consequences. For instance, a recent study found that racial bias towards Asian Americans as foreigners increased following the stigmatizing coverage of COVID-19, especially among conservative individuals (Darling-Hammond et al., 2020). The visible shift in attitudes towards Asians and Asian Americans warranted an examination into COVID-19-related discrimination and the negative effects it may have on Asians and Asian Americans’ sense of identity and well-being.

While Asian Americans have been heralded as the model minority (Chou & Feagin, 2015), this elevated status did not prevent individuals from blaming Asians and Asian Americans for the pandemic. Discrimination directed toward Asians and Asian Americans is by no means a new phenomenon (see Young & Takeuchi, 1998, for a review). Throughout history, Asian immigrants and their descendants have been othered (e.g., the perpetual foreigner stereotype; Gover et al., 2020) and viewed as dangerous health hazards (e.g., the “Yellow Peril” narrative; Lo et al., 2022), among other threats. According to the advocacy group Asian Pacific Planning and Policy Council (A3PCON), their Stop

Asian American and Pacific Islander (AAPI) Hate campaign received over 2,000 incidents reports of racial discrimination related to COVID-19 from Asian Americans across the country in 2020. These reports varied from vicarious experiences of discrimination, verbal assaults (e.g., “go back to China”, being called racial slurs), and physical threats (e.g., spat on, physically assaulted) from various sources (e.g., friends, co-workers) and across contexts (Wang & Santos, 2022).

The Impact of COVID-19 Discrimination on Asian Americans’ Health

Experiencing racial discrimination is thought to function as both a physiological and psychological stressor for individuals (Major et al., 2002) and can harm Asian Americans’ health-related outcomes. Indeed, using data from the US National Latino and Asian American Study (NLAAS, 2003-2007), researchers have found that racial discrimination is associated with chronic mental health disorders (Gee, Spencer, Chen, Yip, & Takeuchi, 2007) and an increased risk of heart disease and respiratory illnesses (Gee, Spencer, Chen, & Takeuchi, 2007) beyond other factors such as socioeconomic status, education, and employment. Other researchers have found similar links between racial discrimination and greater levels of anxiety (Q. L. Huynh et al., 2014), depression (C. M. Liu & Suyemoto, 2016), and lower psychological well-being (Tran & Sangalang, 2016).

Recent studies on the consequences of the COVID-19 pandemic suggest that Asian Americans’ mental health and well-being are at risk partly due to the increase in discrimination experiences. Consistently, Asian Americans who reported more COVID-related discrimination also reported more anxiety and depressive symptoms (Oh & Litam, 2022), as well as somatic symptoms (T. Liu et al., 2022). In addition, experiences of COVID-19 discrimination (T. Liu et al., 2022) and the perception that others view Asian Americans as a health hazard (Lo et al., 2022) are negatively associated with life satisfaction. Importantly, these adverse effects from discrimination are predictive of negative psychological and physical health above and beyond the impact of general COVID-19-related stressors (e.g., loss of income; T. Liu et al., 2022). Given the document relation between COVID-19 discrimination and psychological well-being, the current study is interested in how one’s group identity may be impacted by experiences of discrimination and how this relates to well-being.

The Role of Group Identification

Generally, group identification is positively associated with positive psychological outcomes. Researchers have examined the role of identification in the relationship between perceived discrimination and mental health as a moderator and as a mediator. From some perspectives, group identification moderates individuals’ responses to discrimination (e.g., V. W. Huynh et al., 2022; McCoy & Major, 2003; Oh & Litam, 2022). Others

have suggested that one's level of group identification is a mediator (e.g., Branscombe et al., 1999; Jasinskaja-Lahti et al., 2009) such that the experience of discrimination is associated with increases or decreases in identification with one's targeted identity. The current study seeks to examine group identification as a mediator through two theories to focus on two aspects of identity for Asian Americans: being Asian and being American. The rejection-identification model (RIM; Branscombe et al., 1999) suggests that when stigmatized individuals experience discrimination they will identify more with their stigmatized identity, which serves as a protective mechanism against the negative impact of discrimination on well-being. Conversely, the rejection-disidentification model (RDIM; Jasinskaja-Lahti et al., 2009) has proposed that when immigrants experience discrimination from their new host country, they disidentify with their national identity, which harms their overall well-being. Longitudinal data (Ramos et al., 2012) and experimental data (Jetten et al., 2013) support these models' predictions that experiences of discrimination influence one's identification with their group.

A Tale of Two Identities: Being Asian and American

According to the biculturalism literature, possessing a strong ethnic-racial identity and a strong national identity may be psychologically and socially beneficial (see Nguyen & Benet-Martínez, 2013, for a review). In the case of Asian Americans, Asian identification would be considered an ethnic-racial identity while American identification would be considered a national identity. Prior research among Asian Americans has found that those who strongly identify as both American and Asian reported fewer symptoms of anxiety and depression when they experienced perceived discrimination (Q. L. Huynh et al., 2014), suggesting that both identities may provide a buffer against the negative impact of discrimination. Yet, Asian Americans are stereotyped as perpetual foreigners and are often denied their American identity (Q.-L. Huynh et al., 2011), suggesting that being Asian is pitted against being American. Thus, it is important to separate "Asian" from "American" in examining Asian Americans' identification in response to perceived COVID-19 discrimination.

Rejection-Identification

Social Identity Theory (Tajfel & Turner, 1986) suggests that an individual's group is an extension of their self-concept or who they are as a person. Group identification is a multifaceted construct that refers to the extent to which individuals are cognitively and affectively connected to their group (Leach et al., 2008; Luhtanen & Crocker, 1992). Discrimination and stigmatization are often thought of as threats to one's group/identity and, accordingly, individuals may engage in a variety of strategies in response (Tajfel & Turner, 1986). The rejection-identification model (RIM; Branscombe et al., 1999) suggests that, in response to perceiving discrimination, low-status individuals (i.e., individuals traditionally devalued by society) may turn towards the group by identifying more

with their devalued group. By turning toward the group, they gain support and a more positive sense of identity/self-worth, which, in turn, can buffer against the negative consequences of discrimination. Thus, increasing one's identification with one's devalued identity in the face of discrimination may be beneficial. Several empirical studies have found support for the rejection identification model among a variety of groups including African Americans (Branscombe et al., 1999), women (Schmitt et al., 2002), and retirees (Haslam et al., 2018). However, to our knowledge, the rejection-identification model has yet to be applied to Asian Americans.

Rejection-Disidentification

While the RIM focuses on the role of individuals' minority and/or ethnic identities, it does not explain how national identity is influenced by experiences of discrimination. National identity (i.e., American) is important to examine in addition to Asian Americans' ethnic/racial heritage (i.e., Asians). The rejection-disidentification model (RDIM) posits that individuals may also cope with pervasive discrimination experiences by dis-identifying with their national identity (Jasinskaja-Lahti et al., 2009). In a longitudinal study, immigrants' national identification decreased following experiences of discrimination (Jasinskaja-Lahti et al., 2009). Past literature has replicated this pattern of response among Latino immigrants in the US (Wiley et al., 2013) and refugees in the Netherlands (Bobowik et al., 2017). However, research on the RDIM model has focused on the national identification of immigrants and refugees in a new host country. The RDIM model to our knowledge has not been applied to a group that is not exclusively made up of immigrants.

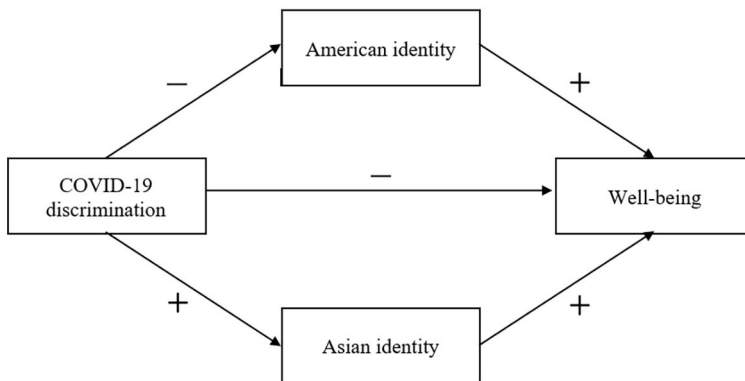
The Current Study

Given that individuals of Asian descent were uniquely discriminated against during the pandemic, the current research is interested in examining how perceived COVID-19 discrimination impacts Asian Americans' group identification and well-being. Based on the rejection-identification model (Branscombe et al., 1999), we hypothesized that individuals will increase their identification with their Asian identity in response to experiences of discrimination, and subsequently, increased identification will be positively associated with physical (Study 1) and psychological well-being (Study 1, 2, and 3). Based on the rejection-disidentification model (Jasinskaja-Lahti et al., 2009), we hypothesize that individuals' American identification would decrease in response to experiences of discrimination (Studies 1, 2, and 3). However, consistent with research on biculturalism, we hypothesized that individuals' American identification should still be positively associated with physical and psychological well-being. Thus, the reduction would be detrimental to well-being. Finally, in Study 3, we sought to examine Asian Americans' ethnic identification (e.g., Chinese, Koreans, etc.) to rule out the explanation that Asian Americans are more likely to identify with their ethnicity than racial identity. Further,

we sought to replicate our results in a second-generation sample of Asian Americans to establish that our results are not driven solely by first-generation Asian Americans (i.e., immigrants). See [Figure 1](#) for a hypothetical model.

Figure 1

Theoretical Model of the Relationship Between COVID-Related Discrimination, American and Asian Identities, and Wellbeing



All measures, data, and syntax for each study are all available on the Open Science Framework (OSF; see [Nguyen et al., 2020](#)). Preregistrations are linked in their respective studies (Study 2 and 3).

Study 1

The primary goal of Study 1 was to explore the relationship between perceived COVID-19 discrimination, American and Asian identification, and well-being among Asian Americans in a correlational study. Based on RIM, perceived discrimination (COVID-19-related) is positively related to minority identification (Asian), which, in turn, is positively related to well-being (e.g., physical and psychological). This indirect pathway should be positive and should serve as a protective mechanism between perceived discrimination and well-being. In addition, we examined Asian Americans' national identity as another possible mediator of the relationship between discrimination and well-being. Based on the RDIM, we would expect a negative association between discrimination and American group identification. Since American group identification should be positively related to well-being, this lower identification would be detrimental to Asian Americans' well-being.

Method

Participants

No a priori power analysis was conducted for this exploratory study. A total of 118 self-identified Asian Americans were recruited through CloudResearch (Hauser et al., 2022), an online survey platform. After removing individuals who failed more than two attention checks ($n = 5$), 113 participants remained (Age: $M = 43.96$, $SD = 15.71$, range = 18–81; Gender: 58.90% women; Generational status: 56.30% first generation, 43.80% second generation and above). A sensitivity analysis revealed that our sample could minimally detect a Pearson's r of 0.28 at 85% power and $\alpha = .05$.

Procedure

Participants filled out a series of questionnaires to measure their COVID-related perceived discrimination, COVID-related concerns, physical and mental health, and their identification (counterbalanced) as American and Asian. After filling out the questionnaires, participants completed demographics information and were compensated for their participation. Data was collected in May 2020.

Measures

Descriptive information and correlations among each variable are presented in Table 1. Unless otherwise indicated, participants responded to each measure using a Likert-type scale (1-Strongly disagree to 7-Strongly agree) and a mean composite was computed.

Table 1
Correlation, Mean, Standard Deviations, and Reliability for All Variables

Variable	1	2	3	4	5	6	7	8	9	10
1 Perceived COVID-19 Discrimination	—									
2 COVID-19 concerns	.15	—								
3 Health	-.35**	.02	—							
4 Depression	.24**	-.02	-.69**	—						
5 Anxiety	.34**	-.08	-.69**	.80**	—					
6 Stress	.30**	-.03	-.66**	.67**	.69**	—				
7 Perceived control	-.30**	.04	.54**	-.54**	-.51**	-.67**	—			
8 Stigma consciousness	.43**	-.05	-.22*	.24*	.24*	.41**	-.38**	—		
9 American ID	-.24*	.23**	.33**	-.31**	-.27**	-.32**	.44**	-.22*	—	
10 Asian ID	-.01	.15	.24*	-.18	-.10	-.19*	.29**	.07	.40**	—
Mean	3.49	5.57	40.89	5.30	4.69	16.26	4.44	3.93	4.75	4.64
(SD)	(1.29)	(1.55)	(6.57)	(5.67)	(5.26)	(6.73)	(1.08)	(0.82)	(0.87)	(0.86)
α	.91	.98	.76	.93	.95	.83	.85	.77	.80	.80

Note: Bolded values are significant.
* $p < .05$. ** $p < .01$.

Perceived COVID-19 Discrimination — Eight items were created to assess the extent to which participants perceive they have been stigmatized by others since the start of the COVID-19 pandemic. Example: “Since COVID-19, I have felt that people avoid me more than others when I am in public”.

COVID-Related Concerns — Two items were created to assess participants’ concerns related to well-being during the pandemic. Example: “How worried are you about your well-being due to COVID-19?” (1-*Not at all* to 7- *Very much*).

Health — The 12-item Short Form Health Survey (SF-12; [Ware et al., 1996](#)) was used to assess participants’ overall health. The SF-12 has the advantage of being able to assess both physical and emotional well-being. Example: “During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?” (*Reverse-coded*) (1-*Not at all* to 5-*Extremely*). All items were summed into one composite score with higher scores indicating better overall health.

Depression — The 8-item Personal Health Questionnaire (PHQ-8; [Kroenke et al., 2009](#)) was used to assess participants’ depressive symptoms over the last two weeks. Example: “How often during the past 2 weeks were you bothered by feeling down, depressed, or hopeless?” (0-*Not at all* to 3-*Nearly every day*). Items were summed together with higher scores indicating higher depression.

Anxiety — The Generalized Anxiety Disorder scale (GAD-7; [Spitzer et al., 2006](#)) was used to measure participants’ levels of anxiety. Example: “Over the last 2 weeks, how often have you been bothered by feeling nervous, anxious, or on edge?” (0-*Never* to 3-*Nearly every day*). Items were summed together with higher scores indicating more anxiety.

Stress — The 10-item Perceived Stress Scale ([Cohen et al., 1983](#)) was used to assess participants’ stress levels. Example: “In the last month, how often have you felt nervous and “stressed”?” (0-*Never* to 4-*Very often*). Items were summed together with higher scores indicating more stress.

Perceived Control — Participants’ perception of control they have over their lives was assessed using the 7-item scale adapted from [Pearlin and Schooler \(1978\)](#). Perceived control was examined in addition to other measures of well-being as it relates to psychological need satisfaction. Greater autonomy, or perceived control individuals have over their own actions, has been linked to greater psychological need satisfaction and well-being ([Deci & Ryan, 2000](#)). Example: “There is really no way I can solve some of the problems I have”.

Stigma Consciousness — A 10-item scale was adapted from Pinel (1999) to assess the extent to which participants were aware of the racial stigma associated with being Asian. Example: “Most non-Asians have a problem viewing Asians as equals”.

American and Asian Identification — Ten items each were used to assess the extent to which being American or Asian is important to participants’ self-concept and how positive they feel about their group (adapted; Luhtanen & Crocker, 1992; McCoy & Major, 2003). Example: “Americans’ [Asians’] successes are my successes” and “In general, I am glad to be an American [Asian]”.

Results

Correlations

Of special interest was the correlation between COVID-related discrimination with each outcome variable. COVID-related discrimination was not associated with participants’ concerns about COVID-19 impacting their well-being. Additionally, perceived discrimination was positively correlated with participants’ depression, anxiety, stress, and the extent to which they are conscious of the stigma associated with being Asian. On the other hand, perceived discrimination was negatively correlated with participants’ overall health and perceived control over their lives. Interestingly, perceived discrimination related to COVID-19 was negatively correlated with participants’ American identity but was *not* related to their Asian identity.

Mediational Analysis

To assess the parallel mediational pathways, we used PROCESS (Model 4; Hayes, 2018) with COVID-related perceived discrimination as the predictor and both American and Asian identification as mediators for each outcome variable using 5000 bootstrap samples. Significant effects were indicated by the confidence interval not encompassing zero. Perceived discrimination significantly predicts outcomes such as reduced health, higher depression, anxiety, and stress (see Table 2). Upon examining the mediation paths through Asian and American identification, we found that discrimination was significantly related to poorer general health, depression, anxiety, stress, and personal control through American identification but not through Asian identification.

Table 2

Study 1: The Relations Between COVID-Related Discrimination and Outcome Variables Through Group Identification

	Anxiety		Stress		Perceived Control	
	<i>b</i> (SE)	95% CI	<i>b</i> (SE)	95% CI	<i>b</i> (SE)	95% CI
Model Summary						
Discrimination	1.20 (.37)**	[.47, 1.93]	1.30 (.47)**	[.37, 2.23]	-.18 (.07)*	[-.33, -.04]
American ID	-1.17 (.60)	[-2.36, .03]	-1.69 (.77)*	[-3.21, -.17]	.40 (.12)**	[.17, .63]
Asian ID	-.11 (.59)	[-1.28, 1.05]	-.77 (.75)	[-2.26, .71]	.20 (.11)	[-.03, .42]
<i>Model R</i> ²	.15**		.16**		.25**	
<i>F</i> (<i>df</i>)	(3, 109) = 6.65		(3, 109) = 7.09		(3, 109) = 12.35	
Direct Effects						
Discrimination	1.20 (.37)	[.47, 1.93]	1.30 (.47)	[.37, 2.23]	-.18 (.07)	[-.33, -.04]
Indirect Effects						
American ID	.19 (.11)	[.0001, .42]	.27 (.16)	[.004, .65]	-.06 (.03)	[-.13, -.01]
Asian ID	.001 (.05)	[-.08, .12]	.01 (.08)	[-.14, .22]	-.002 (.02)	[-.05, .02]
	Health		Depression			
	<i>b</i> (SE)	95% CI	<i>b</i> (SE)	95% CI		
Model Summary						
Discrimination	-1.50 (.45)**	[-2.39, -.61]	.82 (.40)*	[.02, 1.62]		
American ID	1.53 (.73)*	[.08, 2.98]	-1.53 (.66)*	[-2.83, -.22]		
Asian ID	1.14 (.71)	[-.27, 2.56]	-.52 (.64)	[-1.79, .75]		
<i>Model R</i> ²	.20**		.13**			
<i>F</i> (<i>df</i>)	(3, 109) = 9.35		(3, 109) = 5.56			
Direct Effects						
Discrimination	-1.50 (.45)	[-2.39, -.61]	.82 (.40)	[.02, 1.62]		
Indirect Effects						
American ID	-.24 (.15)	[-.58, -.01]	.24 (.12)	[.04, .52]		
Asian ID	-.01 (.09)	[-.25, .15]	.004 (.06)	[-.09, .15]		

Note. Results from PROCESS Model 4; unstandardized coefficients are reported, bias-corrected 95% confidence interval (CI) from 5,000 bootstrap samples. Bolded values indicate a significant pathway.

p* < .05. *p* < .01.

Discussion

Consistent with prior literature, we found that perceived discrimination is associated with lower well-being (Gee, Spencer, Chen, & Takeuchi, 2007). The threat of the virus as a health and economic issue was not related to Asian Americans’ well-being. It is specifically the perception that Asian Americans are targets of discrimination due to

COVID-19 that is related to poorer health and higher levels of depression, anxiety, and stress, as well as lower perceived control over their lives.

We found support for the rejection-disidentification model. Perceived COVID-19 discrimination was associated with lower identification with being American. However, Asian Americans' identification with being American was still positively associated with their mental and physical health, which is consistent with biculturalism predictions. Possessing a strong national identity (American) should be beneficial to Asian Americans' well-being (Nguyen & Benet-Martínez, 2013). Yet, we found that Asian Americans are not benefiting from their American identity because they are distancing themselves from it. Additionally, we did not find support for the rejection-identification model; the positive indirect Asian identification pathway predicted by the rejection-identification model was not found. In response to COVID-19 discrimination, Asian Americans may be disidentifying with being an American while not identifying more with their devalued Asian identity. While it appears that COVID-19 discrimination negatively impacts identification and well-being, our cross-sectional design limits our ability to draw causal conclusions.

Study 2

Our aim in Study 2 was to experimentally manipulate the saliency of COVID-19 group-based discrimination to see if it influenced group identification and psychological well-being relative to reading about COVID-19's impact on another ethnic outgroup or climate change. We created two control conditions to parse out the specificity of discrimination experiences in influencing one's identification. Reading about the impact of COVID-19 on another ethnic group, the *Black discrimination* condition, serves as a "tighter" control. We hypothesized that when COVID-19 Asian discrimination was salient, American identification would be reduced (RDIM) and Asian identification would be increased (RIM) relative to the control. We expected participants would report lower well-being in the COVID-19 Asian discrimination condition relative to the control. We also predicted that identification would mediate the relationship between discrimination salience and well-being. We had no hypothesis about what would happen when COVID-19 discrimination towards a minority outgroup (e.g., Black Americans) is salient, this could have no effect as it is not about participants' specific group, or it could lead to similar effects to the COVID-19 Asian Discrimination condition if it elicits minority solidarity (e.g., what is happening to them could happen to us). Hypotheses were pre-registered on OSF (see Nguyen & Wellman, 2020).

We failed to include our a priori moderation hypotheses that individuals' experiences of COVID-related discrimination would moderate their response to the condition manipulation. Although discrimination typically impacts individuals' health, not everyone perceives the same events as discrimination, and thus, not everyone may be impacted by more general discrimination (e.g., Araiza & Wellman, 2017). Previous experiences

with discrimination are likely to make individuals more sensitive to cues of discrimination relative to individuals who have not experienced discrimination; thus, one's past experiences should moderate one's responses to the manipulation. We hypothesized that individuals who experienced more COVID-related discrimination would report lower American identification, higher Asian identification, and lower well-being when COVID-19 Asian Discrimination was salient but not in any other condition. Further, we expected that within the COVID-19 Asian Discrimination condition, both American and Asian identification would mediate the relationship between experiences of COVID-related Discrimination and well-being. We did not predict mediation in the other conditions. This is consistent with previous findings that manipulations of discrimination are moderated by individuals' prior experiences of stigmatization/discrimination (see [Araiza & Wellman, 2017](#); [Major et al., 2002](#)).

Method

Participants

Using G^* power, an a priori power analysis for an analysis of covariance for three groups, effect size Cohen's $f = .20$ at 85% power and $\alpha = .05$, which revealed that 277 participants were needed. To account for the potential loss of participants, 323 self-identified Asian Americans were recruited via CloudResearch ([Hauser et al., 2022](#)). Sixty-eight participants were excluded from the sample due to missing multiple attention and manipulation checks, resulting in a final sample size of 255 participants (Age: $M = 36.04$, $SD = 16.53$, range = 18–80; Gender: 60.30% women; Generational status: 35.90% first generation, 64.10% second generation and beyond). Since our final sample was smaller than anticipated, a sensitivity analysis was conducted and revealed that a Cohen's $f = .21$ can be detected at 85% power and $\alpha = .05$.

Procedure

Eligible participants were randomly assigned to 1 of 3 conditions where they read a fictitious news article depicting: 1) the impact COVID-19 has had regarding racial discrimination against Asians (*Asian discrimination* condition), 2) the impact COVID-19 has had on health discrimination against Black individuals (*Black discrimination* condition), or 3) the impact COVID-19 has had in regard to climate change (*Control* condition). After reading their assigned news article, participants then respond to a variety of measures examining their perceived discrimination related to COVID-19, anxiety, stress, control, stigma consciousness, identification with being Asian, and identification with being American. Participants then provided demographic information, were debriefed, and compensated for their time and participation. Data was collected in July of 2020.

Measures

All measures were identical to those used in Study 1. Response options ranged from 1-*Strongly Disagree* to 7-*Strongly Agree* for all measures, and items for each were averaged to form each composite measure. Experiences of COVID-Related Discrimination ($M = 3.40$, $SD = 1.37$, $\alpha = .92$), Stigma Consciousness ($M = 3.97$, $SD = 0.88$, $\alpha = .82$), American Identification ($M = 4.53$, $SD = 1.21$, $\alpha = .91$), and Asian Identification ($M = 5.04$, $SD = 0.99$, $\alpha = .86$), Perceived Control ($M = 4.43$, $SD = 1.15$, $\alpha = .85$), Anxiety ($M = 3.87$, $SD = 1.49$, $\alpha = .94$), and Stress ($M = 3.98$, $SD = 1.11$, $\alpha = .88$) were measured using the same items as Study 1. However, participants were instructed to respond with their feelings in-the-moment, rather than chronic feelings.

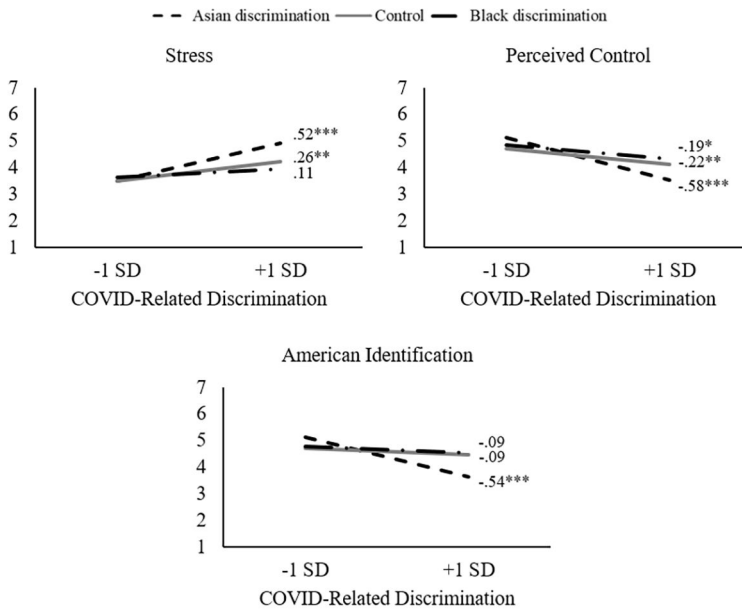
Results

Utilizing hierarchical linear regression, we examined the interaction between COVID-19-related discrimination (continuous) and condition (Asian discrimination vs. Black discrimination vs. Control). In Step 1, perceived discrimination (mean-centered) and Asian discrimination condition (represented with two dummy coded variables) were entered. In step 2, the two-way interactions between discrimination*Dummy 1 and discrimination*Dummy2 were entered. Interactions were followed up with an analysis of simple slopes within condition.¹ See [Figure 2](#) for a visualization of significant interactions.

1) Stigma consciousness was found to be a significant covariate. However, results remained the same whether stigma consciousness was included or removed, thus stigma consciousness was not included in analyses.

Figure 2

Study 2: Interactions Between COVID-Related Discrimination and Condition



* $p < .05$. ** $p < .01$. *** $p < .001$.

Since our measure of COVID-19 discrimination was collected after our manipulation, we examined condition differences to ensure it was unaffected by the manipulation and could be used as a moderator in our analyses. There was no significant effect of condition on our measure of experiences of COVID-19 discrimination, $F(2, 252) = .42, p = .66, \eta^2 = .003$.

Anxiety

There was no significant interaction between discrimination and condition in predicting current levels of anxiety for participants, Step 2: $\Delta F(2, 249) = 2.62, p = .075, \Delta R^2 = .02$; Model: $F(5, 249) = 12.54, p < .001, R^2 = .20$. There was, however, a significant main effect of perceived discrimination and condition, Step 1: $F(3, 251) = 18.91, p < .001, \Delta R^2 = .18$. Perceived discrimination was positively associated with current levels of anxiety, $b = .43, SE = .06, p < .001, 95\% \text{ CI } [.31, .55]$. To examine the possible main effects of conditions, we conducted an ANOVA to examine the simple main effects between conditions. The effect of condition was significant, $F(2, 252) = 3.65, p = .027, \eta^2 = .03$, such that participants in the *Asian discrimination* condition were more anxious ($M = 4.21, SE = .16$) than participants in the *Black discrimination* ($M = 3.63, SE = .17, p = .04$) but not significantly

different from the *control* condition ($M = 3.75$, $SE = .16$, $p = .116$). Anxiety level was not different between the Black discrimination and the control condition ($p = 1.00$).

Stress

There were significant main effects of condition and discrimination, Step 1: $F(3, 251) = 20.66$, $p < .001$, $\Delta R^2 = .20$; which was qualified by a significant interaction between discrimination and condition in predicting participants' current level of stress, Step 2: $\Delta F(2, 249) = 6.87$, $p = .001$, $\Delta R^2 = .04$; Model: $F(5, 249) = 15.73$, $p < .001$, $R^2 = .24$. The more participants perceive that they experienced discrimination because of COVID-19 the more stressed they felt in both the *Asian discrimination* condition ($b = .52$, $SE = .07$, $p < .001$, 95% CI [.38, .66]) and *control* condition ($b = .26$, $SE = .07$, $p < .001$, 95% CI [.12, .41]). However, there was no significant relationship between discrimination and current stress when participants were in the *Black discrimination* condition ($b = .11$, $SE = .09$, $p = .214$, 95% CI [-.07, .29]).

Perceived Control

There were significant main effects of discrimination and condition, Step: $F(3, 251) = 20.34$, $p < .001$, $\Delta R^2 = .20$, which was qualified by a significant interaction between discrimination and condition in predicting participants' perception of personal control over their lives, Step 2: $\Delta F(2, 249) = 8.05$, $p < .001$, $\Delta R^2 = .05$; Model: $F(5, 249) = 16.12$, $p < .001$, $R^2 = .24$. The more participants thought that they experienced discrimination because of COVID-19, the less control they believed they have over their lives in the *Asian discrimination* condition ($b = -.58$, $SE = .07$, $p < .001$, 95% CI [-.73, -.44]), *Control* condition ($b = -.22$, $SE = .08$, $p = .005$, 95% CI [-.37, -.07]), and *Black discrimination* condition ($b = -.19$, $SE = .09$, $p = .045$, 95% CI [-.37, -.004]).

American Identification

There were significant main effects of condition and discrimination, Step 1: $F(3, 251) = 10.11$, $p < .001$, $\Delta R^2 = .11$, which were qualified by a significant interaction between discrimination and condition in predicting participants' levels of identification with being American, Step 2: $\Delta F(2, 249) = 9.34$, $p < .001$, $\Delta R^2 = .06$; Model: $F(5, 249) = 10.21$, $p < .001$, $R^2 = .17$. The more participants in the *Asian discrimination* condition perceived COVID related discrimination, the less they identified with being American ($b = -.54$, $SE = .08$, $p < .001$, 95% CI [-.70, -.38]). There was no significant relationship between discrimination and levels of American identification for either the *control* condition ($b = -.09$, $SE = .09$, $p = .299$, 95% CI [-.26, .08]) or the *Black discrimination* condition ($b = -.09$, $SE = .10$, $p = .391$, 95% CI [-.29, .11]).

Asian Identification

There was not a significant main effect of condition or discrimination, Step 1: $F(3, 251) = .86, p = .465, \Delta R^2 = .01$. There was a significant interaction between discrimination and condition in predicting the extent to which participants identified with being Asian, Step 2: $\Delta F(2, 249) = 3.17, p = .044, \Delta R^2 = .02$; however, the overall model was not significant, Model: $F(5, 249) = 1.79, p = .116, R = .04$, indicating that the model did not explain a meaningful proportion of variance.

Moderated Mediation Analyses

To test if American and Asian identity mediated the effect of perceived COVID-related discrimination on anxiety, stress, and perceived control by condition we examined a moderated mediation model using PROCESS (Model 8; Hayes, 2018) with 5,000 bootstrapped samples and significant effects were indicated by a bootstrapped confidence interval that did not encompass zero. See the full output for all outcomes in Table 3.

Table 3

Study 2: The Relations Between COVID-Related Discrimination and Outcome Variables Through Group Identification, Moderated by Conditions

	Anxiety		Stress		Perceived Control	
	<i>b</i> (SE)	95% CI	<i>b</i> (SE)	95% CI	<i>b</i> (SE)	95% CI
Model Summary						
Discrimination	.45 (.11)**	[.24, .66]	.36 (.07)**	[.21, .50]	-.46 (.08)**	[-.61, -.30]
American identification	-.27 (.07)**	[-.42, -.13]	-.29 (.05)**	[-.40, -.19]	.27 (.05)**	[.16, .38]
Asian identification	-.01 (.09)	[-.16, .18]	.03 (.06)	[-.09, .15]	.11 (.06)	[-.02, .23]
Dummy1 (1 = Black Discrim)	.28 (.58)	[-.86, 1.42]	.60 (.41)	[-.20, 1.40]	-.81 (.42)	[-1.64, .01]
Dummy2 (1 = Control)	.12 (.53)	[-.93, 1.16]	.16 (.37)	[-.57, .89]	-.86 (.38)*	[-1.62, -.11]
Dummy1*GID	-.20 (.16)	[-.52, .11]	-.27 (.11)*	[-.49, -.04]	.30 (.12)*	[.07, .53]
Dummy2*GID	-.13 (.14)	[-.41, .16]	-.12 (.10)	[-.32, .08]	.26 (.10)*	[.06, .47]
Model R^2	.24**		.32**		.32**	
<i>F</i> (<i>df</i>)	(7, 247) = 11.26		(7, 247) = 16.81		(7, 247) = 16.94	
Direct Effect (Discrimination →DV)						
Control	.33 (.10)**	[.13, .52]	.24 (.07)**	[.10, .38]	-.19 (.07)**	[-.34, -.05]
Black Discrimination	.25 (.12)*	[.01, .49]	.10 (.09)	[-.08, .26]	-.15 (.09)	[-.33, .02]
Asian Discrimination	.45 (.11)**	[.24, .66]	.36 (.07)**	[.21, .50]	-.46 (.08)**	[-.61, -.30]
Indirect Effect: American Identification						
Control	.02 (.03)	[-.03, .08]	.03 (.03)	[-.03, .08]	-.02 (.03)	[-.08, .02]
Black Discrimination	.02 (.03)	[-.04, .08]	.03 (.03)	[-.04, .08]	-.02 (.03)	[-.08, .03]
Asian Discrimination	.15 (.05)	[.06, .25]	.16 (.04)	[.08, .24]	-.15 (.04)	[-.24, -.06]

	Anxiety		Stress		Perceived Control	
	<i>b</i> (SE)	95% CI	<i>b</i> (SE)	95% CI	<i>b</i> (SE)	95% CI
Indirect Effect: Asian Identification						
Control	.0001 (.02)	[-.01, .01]	.001 (.01)	[-.01, .01]	-.002 (.01)	[-.02, .02]
Black Discrimination	-.001 (.01)	[-.03, .03]	-.003 (.01)	[-.03, .01]	-.01 (.01)	[-.05, .01]
Asian Discrimination	-.001 (.02)	[-.03, .03]	-.005 (.01)	[-.02, .03]	.02 (.01)	[-.01, .05]

Note. Results from PROCESS Model 8; unstandardized coefficients are reported, bias-corrected 95% confidence interval (CI) from 5,000 bootstrap samples. Bolded values are significant.

* $p < .05$. ** $p < .01$.

Anxiety

The overall model was significant, Model: $F(7,247) = 11.26$, $p < .001$, $R^2 = .24$. The index of moderated mediation for identification with being American was significant, suggesting that the mediational pathway from discrimination to anxiety via identification with being American was different based on condition, Dummy1: $b = -.12$, $SE = .05$, 95% CI [-.24, -.03]; Dummy2: $b = -.12$, $SE = .05$, 95% CI [-.24, -.04]. Identification with being American mediated the relationship between discrimination and anxiety only in the *Asian discrimination* condition ($b = -.15$, $SE = .05$, 95%CI [.06, .25]). The index of moderated mediation for identification with being Asian was not significant, Dummy1: $b = -.002$, $SE = .03$, 95% CI [-.06, .05]; Dummy2: $b = -.001$, $SE = .02$, 95% CI [-.04, .04]. Identification with being Asian was not a significant mediator in any of the conditions.

Stress

The overall model was significant, Model: $F(7,247) = 16.81$, $p < .001$, $R^2 = .32$. The index of moderated mediation was significant for identification with being American, suggesting that the mediational paths from discrimination to stress were different based on condition, Dummy1: $b = -.13$, $SE = .05$, 95% CI [-.24, -.04]; Dummy2: $b = -.13$, $SE = .05$, 95% CI [-.22, -.05]. Identification with being American mediated the relationship between discrimination and stress only in the *Asian discrimination* condition, $b = .16$, $SE = .04$, 95% CI [.08, .24]. The index of moderated mediation for identification with being Asian was not significant Dummy1: $b = -.009$, $SE = .02$, 95% CI [-.05, .02]; Dummy2: $b = -.006$, $SE = .01$, 95% CI [-.04, .02]. Thus, identification with being Asian was not a significant mediator for any of the conditions.

Perceived Control

The overall model was significant, Model: $F(7,247) = 16.94$, $p < .001$, $R^2 = .32$. The index of moderated mediation was significant for identification with being American, suggesting that the mediational paths from discrimination to perceived control via identification with being American differed based on condition, Dummy1: $b = .12$, $SE = .05$, 95% CI [.03, .23]; Dummy2: $b = .12$, $SE = .05$, 95% CI [.04, .22]. Identification with being

American mediated the relationship between discrimination and perceived control only in the *Asian discrimination* condition, $b = -.15$, $SE = .04$, 95%CI [-.24, -.06]. The index of moderated mediation for identification with being Asian was not significant, Dummy1: $b = -.03$, $SE = .02$, 95% CI [-.08, .01]; Dummy2: $b = -.02$, $SE = .02$, 95% CI [-.06, .01]. Thus, identification with being Asian was not a significant mediator for any condition.

Discussion

Study 2 was designed to experimentally test the rejection-disidentification and rejection-identification models. We again did not find support for the rejection-identification model within our Asian American sample, suggesting there may be something different about group identification among Asian Americans relative to other ethnic minority groups in America. Consistent with the RDIM model (Jasinskaja-Lahti et al., 2009), participants who perceive that they have personally experienced discrimination disidentified with being American when reminded of discrimination directed toward their group (*Asian discrimination* condition). Their American identity was unaffected when reminded about the impact COVID-19 had on another ethnic group or on climate change. In turn, this disidentification with the national identity is associated with increases in anxiety and stress, and a decrease in perceived personal control. RDIM has previously only been examined among immigrants and refugee populations (Bobowik et al., 2017; Jasinskaja-Lahti et al., 2009). Our sample from Study 2 consisted of immigrants and native-born Asian Americans but is too small to disaggregate the effect of generational status on identity and well-being. Previous studies on the rejection-disidentification model have only been examined among immigrant populations such as Latino immigrants in the US (Wiley et al., 2013) and refugees in the Netherlands (Bobowik et al., 2017). It is possible our findings support the RDIM because of the representation of first-generation Asian American immigrants in our sample. However, we do not believe this is the case. Thus, we sought to replicate the results from Study 2 and test the RIM and RDIM in a US-born Asian American sample in Study 3.

Study 3

The goal of Study 3 was to test the RIM and RDIM model among US-born Asian Americans. In addition, as Asian Americans are more likely to identify with their cultural heritage or ethnicity rather than the superordinate identity of “Asian American” (Ruiz et al., 2022), we also assess their identification with their specific cultural or ethnic heritage. Perhaps, Asian Americans will respond to discrimination by turning toward their specific ethnic identity, rather than their collective Asian identity, as a source of positive self-worth and support. Thus, we explored participants’ ethnic identity as a positive identity in Study 3. Based on the RIM, participants who have experienced

COVID-19 discrimination should identify more with their ethnic group, which in turn should be associated with positive well-being when discrimination directed towards their group is salient. Based on the RDIM, we would expect to see that experiences of COVID-19 discrimination will be associated with decreased American identification. However, American identification should still be positively related to well-being, which will result in an indirect decrease in well-being overall through American identification when discrimination is salient. The moderated mediation hypothesis was preregistered on OSF (see [Nguyen et al., 2021](#)).

Method

Participants

No formal power analysis was conducted; a sample of 200 was desired based on Study 2's power analysis. To account for the potential loss of participants, 257 self-identified Asian Americans who were born in the U.S. participated in the study through Prolific. After removing participants who failed manipulation checks, attention checks, and those who indicated that they had taken a similar study before, 235 participants remained in the final analysis (Age: $M = 28.91$, $SD = 9.03$, range = 18–62; Gender: 51.50% women, 2.10% non-binary). A sensitivity analysis revealed that a Cohen's $f = .20$ can be detected at 85% power and $\alpha = .05$ for an analysis of covariance with two groups.

Procedure

The procedure used is identical to Study 2 with two exceptions. First, participants were randomly assigned to one of two conditions (the *Asian discrimination* condition or *control* condition) instead of three. Second, participants completed demographic information first so that their responses for ethnicity can be used for the ethnic identification measure. Data was collected in January 2022.

Measures

COVID-Related Discrimination ($M = 3.33$, $SD = 1.34$, $\alpha = .91$), Perceived control ($M = 4.64$, $SD = 1.23$, $\alpha = .90$), Anxiety ($M = 3.81$, $SD = 1.59$, $\alpha = .95$), Stress ($M = 3.85$, $SD = 1.17$, $\alpha = .91$), Stigma consciousness ($M = 4.58$, $SD = 1.02$, $\alpha = .86$), American identification ($M = 4.14$, $SD = 1.30$, $\alpha = .93$), and Asian identification ($M = 5.21$, $SD = 1.11$, $\alpha = .91$) were identical to the measures used in study two.

Ethnic identification was measured using the same items from the American and Asian identification scales (adapted; [Luhtanen & Crocker, 1992](#); [McCoy & Major, 2003](#)) but reworded for the ethnicity/cultural heritage participants specified ($M = 5.23$, $SD = 1.15$, $\alpha = .92$).

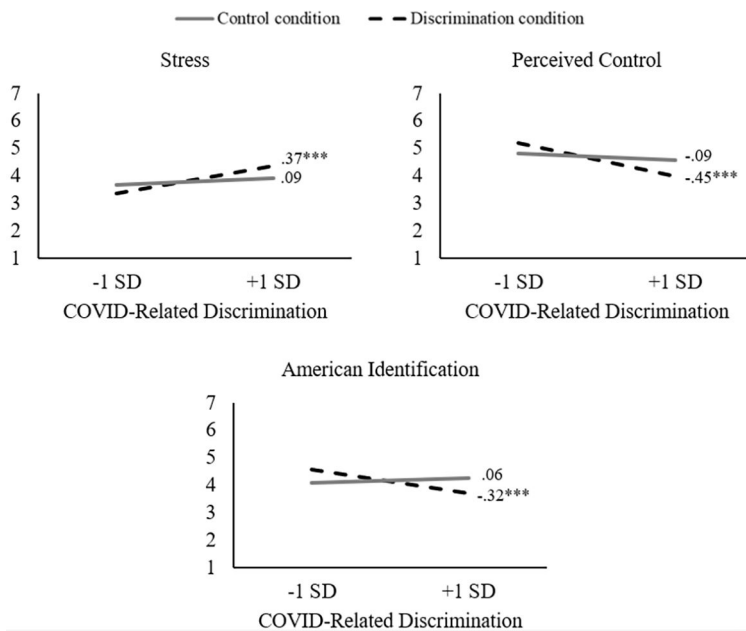
Results

Regression

Participants' perceived COVID-related discrimination reported in the *Asian discrimination condition* ($M = 3.45, SD = 1.44$) is similar to those in the *Control condition* ($M = 3.22, SD = 1.24$), $t(233) = 1.30, p = .197, d = .17$. The results suggest that participants' reported personal experiences of discrimination is not related to condition and, thus, is a viable moderator. The same analytical procedure from Study 2 was used to analyze the interaction between perceived discrimination and condition on outcome variables with the exception that there is only one dummy coded variable used to represent the two conditions. See Figure 3 for a visualization of significant interactions.

Figure 3

Study 3: Interactions Between COVID-Related Discrimination and Condition



* $p < .05$. ** $p < .01$. *** $p < .001$.

Anxiety

Condition did not significantly predict participants' anxiety, but perceived personal discrimination did, Step 1: $\Delta F(2,232) = 15.38, p < .001, \Delta R^2 = .12$. The more participants perceive that they have personally experienced discrimination, the more they feel anxious, $b = .40, SE = .07, p < .001, 95\% \text{ CI } [.25, .54]$. There was no significant interaction

between condition and perceived discrimination in predicting participants' anxiety, Step 2: $\Delta F(1,231) = 1.70, p = .194, \Delta R^2 = .01$; Model: $F(3,231) = 10.85, p < .001, R^2 = .12$.

Stress

Condition did not significantly predict participants' stress levels, but perceived personal discrimination did, Step 1: $\Delta F(2,232) = 10.96, p < .001, \Delta R^2 = .09$. The more participants perceive that they have personally experienced discrimination, the more they feel stressed, $b = .25, SE = .05, p < .001, 95\% \text{ CI } [.14, .36]$. However, the main effect of perceived discrimination is qualified by a significant interaction between condition and perceived discrimination, Step 2: $\Delta F(1,231) = 6.70, p = .010, \Delta R^2 = .03$; Model: $F(3,231) = 9.72, p < .001, R^2 = .11$. The more participants felt that they have personally experienced discrimination because of COVID-19, the more stressed they feel in the *Asian discrimination* condition ($b = .37, SE = .07, p < .001, 95\% \text{ CI } [.23, .51]$) but not the *Control* condition ($b = .09, SE = .08, p = .310, 95\% \text{ CI } [-.08, .25]$).

Perceived Control

Condition did not significantly predict participants' perception of control, but perceived personal discrimination did, Step 1: $\Delta F(2,232) = 14.89, p < .001, \Delta R^2 = .11$. The more participants reported experiencing discrimination, the less control they perceive that they have over their lives, $b = -.30, SE = .06, p < .001, 95\% \text{ CI } [-.41, -.19]$. However, the main effect of perceived discrimination is qualified by a significant interaction between condition and perceived discrimination, Step 2: $\Delta F(1, 231) = 10.10, p = .002, \Delta R^2 = .04$; Model: $F(3, 231) = 13.66, p < .001, R^2 = .15$. The more participants felt that they have personally experienced discrimination because of COVID-19, the less control they think they have in the *Asian discrimination* condition ($b = -.45, SE = .07, p < .001, 95\% \text{ CI } [-.59, -.31]$) but not the *Control* condition ($b = -.09, SE = .09, p = .284, 95\% \text{ CI } [-.26, .08]$).

American Identification

Condition did not significantly predict participants' American identification, but perceived personal discrimination did, Step 1: $\Delta F(2,232) = 3.41, p = .035, \Delta R^2 = .03$. The more participants reported experiencing discrimination, the less they identified as an American, $b = -.17, SE = .06, p = .010, 95\% \text{ CI } [-.29, -.04]$. However, the main effect of perceived discrimination is qualified by a significant interaction between condition and perceived discrimination, Step 2: $\Delta F(1,231) = 8.89, p = .003, \Delta R^2 = .04$; Model: $F(3,231) = 5.32, p = .001, R^2 = .07$. The more participants felt that they have personally experienced discrimination because of COVID-19, the less they identified as an American in the *Asian discrimination* condition ($b = -.45, SE = .07, p < .001, 95\% \text{ CI } [-.59, -.31]$) but not the *Control* condition ($b = .06, SE = .10, p = .556, 95\% \text{ CI } [-.13, .25]$).

Asian Identification

There were neither main effects of condition nor perceived discrimination in predicting participants' Asian identity, Step 1: $\Delta F(2,232) = .70, p = .497, \Delta R^2 = .01$. The interaction between condition and perceived discrimination did not predict participants' Asian identification, Step 2: $\Delta F(1,231) = .75, p = .386, \Delta R^2 = .003$; Model: $F(3,231) = .72, p = .542, R^2 = .01$.

Ethnic Identification

There were neither main effects of condition nor perceived discrimination in predicting participants' ethnic identity, Step 1: $\Delta F(2,232) = .47, p = .624, \Delta R^2 = .004$. The interaction between condition and perceived discrimination did not predict participants' ethnic identification, Step 2: $\Delta F(1,231) = 1.58, p = .210, \Delta R^2 = .01$; Model: $F(3,231) = .842, p = .472, R^2 = .01$.

Moderated Mediation Analyses

The same analytical procedure from Study 2 was followed with the exception that ethnic identification was also entered as a third mediator.

Results show that American identification mediated the relationship from perceived discrimination to anxiety, stress, and perceived control, but only when participants read the *Asian discrimination* article. In other words, participants' negative well-being is explained by the loss of their important American identity when they have personally experienced discrimination due to COVID-19 and are reminded of discrimination directed towards their group. American identification was not a significant mediator in the control condition. Asian and ethnic identification were not significant mediators between perceived discrimination and each outcome. See Table 4 for full output.

Table 4

Study 3: The Relations Between COVID-Related Discrimination and Outcome Variables Through Group Identification, Moderated by Conditions

	Anxiety		Stress		Perceived control	
	b (SE)	95% CI	b (SE)	95% CI	b (SE)	95% CI
Model Summary						
Perceived discrimination	.31 (.11)**	[.09, .52]	.10 (.08)	[-.06, .26]	-.11 (.08)	[-.27, .05]
American identification	-.36 (.08)***	[-.51, -.21]	-.26 (.06)***	[-.37, -.15]	.24 (.06)***	[.13, .36]
Asian identification	.03 (.16)	[-.29, .35]	-.13 (.12)	[-.36, .11]	.19 (.12)	[-.05, .43]
Ethnic identification	.07 (.16)	[-.24, .38]	.06 (.11)	[-.17, .28]	.04 (.12)	[-.27, .19]
Condition (1=Asian Discrim)	-.03 (.52)	[-1.05, .99]	-.57 (.38)	[-1.32, .18]	-.83 (.40)*	[-1.66, -.01]
Discrim*Condition	.05 (.15)	[-.24, .33]	.19 (.11)†	[-.02, .40]	-.28 (.11)*	[-.49, -.06]
Model R ²		.20***		.20***		.24***
F(df)		(6, 228) = 9.71		(6, 228) = 9.67		(6, 228) = 12.20

	Anxiety		Stress		Perceived control	
	<i>b</i> (SE)	95% CI	<i>b</i> (SE)	95% CI	<i>b</i> (SE)	95% CI
Direct Effect (Discrimination → DV)						
Control	.31 (.11)**	[.09, .52]	.10 (.08)	[-.06, .26]	-.11 (.08) [†]	[-.27, .05]
Asian Discrimination	.35 (.10)***	[.17, .54]	.29 (.07)***	[.15, .43]	-.39 (.07)***	[-.53, -.24]
Indirect Effect: American Identification						
Control	-.02 (.04)	[-.12, .06]	-.01 (.03)	[-.08, .04]	.01 (.03)	[-.04, .08]
Asian Discrimination	.11 (.04)	[.04, .21]	.08 (.03)	[.02, .16]	-.08 (.03)	[-.15, -.02]
Indirect Effect: Asian Identification						
Control	.000 (.01)	[-.04, .02]	-.001 (.01)	[-.04, .03]	.001 (.02)	[-.03, .05]
Asian Discrimination	.003 (.02)	[-.03, .05]	-.01 (.02)	[-.05, .02]	.02 (.02)	[-.02, .06]
Indirect Effect: Ethnic Identification						
Control	-.004 (.02)	[-.04, .03]	-.001 (.01)	[-.03, .02]	-.002 (.01)	[-.03, .02]
Asian Discrimination	.007 (.02)	[-.03, .05]	.01 (.01)	[-.02, .04]	.004 (.01)	[-.03, .03]

Note. Results from PROCESS Model 8; unstandardized coefficients are reported, bias-corrected 95% confidence interval (CI) from 5,000 bootstrap samples. Bolded values are significant.

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

Consistent with Study 2, condition and perceived COVID-19 discrimination interacted to predict participants' stress level, perceived control, and their American identification. Specifically, participants' perceived discrimination was associated with increased stress and decreased control and American identification when in the *Asian discrimination* condition, but not in the control condition. Disidentification with being American is subsequently negatively related to well-being. We replicated the RDIM predictions in a non-immigrant sample such that participants' identification with being American decreased following experiences of discrimination, which is detrimental to their well-being. Similar to Study 2, perceived discrimination and condition did not predict participants' anxiety levels or their identification with being Asian. Interestingly, Asian Americans' perceived discrimination and being exposed to discrimination condition were unrelated to their specific ethnic identification as well. Our results highlight an interesting finding that, unlike other racial minorities, Asian Americans' identification with their minority groups, be it as an Asian person or with their specific ethnicity, did not mediate the relation between perceived discrimination and psychological well-being.

General Discussion

Across 3 studies, we examined the role of COVID-19-related discrimination on Asian Americans' sense of identity and well-being. We found that perceived COVID-19 discrimination was associated with poorer physical health and greater psychological distress among Asian Americans. Of great concern, COVID-19 discrimination was also related

to decreases in Asian Americans' American (national) identification without any compensatory increases in Asian (racial) identification or ethnic identification (e.g., Korean, Thai). Further, American identification mediated the relationship between COVID-19 discrimination and well-being. Our findings are consistent with the rejection-disidentification model (Jasinskaja-Lahti et al., 2009) but not the rejection-identification model (Branscombe et al., 1999). As American identification is beneficial to well-being, this reduction was harmful as it further exacerbated the negative impact of COVID-19 discrimination on well-being. While the rejection-identification model would predict a beneficial increase in one's minority identification (Asian or ethnic identification) in response to discrimination, we found no evidence to support this prediction.

Given a wealth of prior research has found support for the rejection-identification model (see Branscombe et al., 1999; Ramos et al., 2012; Schmitt et al., 2003, for some examples), it was surprising that discrimination was not predictive of Asian Americans' identification with their racial or ethnic identities. Several potential explanations are plausible. Since the rejection-identification model has not been examined among Asian Americans before the COVID-19 pandemic, it is unclear whether the lack of group identification is because there is something unique about discrimination related to COVID-19 or because there is something unique about Asian Americans. If the COVID-19 pandemic is unique, perhaps the instances of discrimination are threatening enough that Asian Americans do not feel that identifying with their groups would provide them with social support or belonging to face discrimination. There is evidence to suggest that there may be something unique about the pandemic. Researchers have found that Asian Americans' ethnic/racial identification exacerbated the relationship between perceived discrimination and worse well-being during the pandemic (V. W. Huynh et al., 2022; Oh & Litam, 2022). These findings during the pandemic contradict previous findings about the protective role racial/ethnic identities play between discrimination and well-being among Asian Americans (Q. L. Huynh et al., 2014; Mossakowski, 2003) There may also be something unique about Asian Americans and their identities. Perhaps, their identification with their racial and ethnic groups is more stable and is not easily influenced by discrimination. Reiterating prior literature, more research is needed on Asian Americans' racial identities to understand the unique perspective that they hold (Kim & Tummala-Narra, 2022).

Our research offers new evidence that the RDIM may function not only among immigrant populations but also among a native-born ethnic minority population. Prior work has focused exclusively on immigrant populations (see Bobowik et al., 2017; Jasinskaja-Lahti et al., 2009; Wiley et al., 2013) and their relationship to their national identification with the country they migrated to. About half our sample in Study 1, more than half our sample in Study 2, and our full sample in Study 3 identified as second-generation Americans (i.e., born in the US) or beyond. Still, we saw similarities between Asian Americans and other immigrant populations that have been examined such that they disidentified

with their national identity but did not identify more with their minority identity as would be expected based on the rejection-identification model. One reason for this may be the stereotype of Asian Americans as the “perpetual foreigner” (Q.-L. Huynh et al., 2011), which has been both highlighted and exacerbated by COVID-19 with rhetoric like “go back to your own country”. Given this stereotype, it may not be surprising that even native-born Asian Americans are disidentifying with being Americans, particularly when political leaders are using or appear to promote stigmatizing terms related to COVID-19 and Asians. It is possible that our results may only generalize to groups who are perceived as more foreign in the US (e.g., Asians, Latina/o populations) as compared to those who are stigmatized but are perceived as Americans (e.g., African Americans).

Overall, our study echoes the body of literature examining the specific impact of COVID-19 discrimination on Asians and Asian Americans’ well-being (see J. Kim & Tummala-Narra, 2022, for an introduction to special issue about COVID-19 discrimination). We advance this literature by providing some causal evidence that COVID-19-related discrimination directly influences Asian Americans’ well-being. In addition, we extended the literature on Asian Americans’ responses to discrimination to show that experiences of discrimination may shape how individuals identify. Importantly, we have found that Asian Americans are losing an important national identity without the positive effect of other important racial and ethnic identities. Hence, the loss of an identity through the disidentification process is resulting in an overall net negative on Asian Americans’ well-being.

Limitations and Future Directions

While we offer new and meaningful findings for understanding the impact of COVID-19 discrimination on the well-being of Asian Americans and on social identity, it is not without its limitations. Our research utilized a cross-sectional design; thus, it remains unclear how COVID-19-related discrimination will affect Asian individuals’ identification and well-being in the long term. Future research should examine the long-term effect of COVID-related discrimination. Further, no research has tested the RIM and RIDM on Asians and Asian Americans prior to the COVID-19 pandemic, it is unclear whether the phenomenon observed in our study is unique to Asian Americans or to the COVID-19 pandemic. Future research should aim to test how discrimination unrelated to COVID-19 may affect Asian Americans’ identification. If the effect is unique to Asian Americans and not the pandemic, it would be interesting to examine other coping strategies that Asian Americans may be engaging in if they are not turning toward their group for support. Finally, our results may not generalize to other racial and ethnic groups. Future research should aim to examine these pathways among Hispanic/Latino Americans.

Conclusion

Combined with past research, our results highlight the complexity surrounding the social identities in psychological processes. It is troubling that Asian Americans appear to have lost a positive identity (i.e., American identity) without an increase in another positive identity (i.e., Asian identity) to cope with discrimination. Based on our studies, the impact of COVID-19 has been particularly damaging as Asian Americans do not appear to be responding similarly to other minority groups in the face of discrimination. As Asian Americans face an uncertain future and unique discrimination due to the pandemic, they may need social support now more than ever.

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Ethics Statement: All three studies were approved under the University of Mississippi's IRB. The approved protocol number is #20x-327. Informed consent was obtained from all participants at the start of each study.

Preregistration Statement: Hypotheses and analysis plans were preregistered for Studies 2 and 3. Our reported results align with the planned analyses, and any deviations from our plan are clearly stated in the manuscript. Preregistrations are linked in their respective studies (Study 2: see [Nguyen & Wellman, 2020](#); Study 3: see [Nguyen et al., 2021](#)).

Data Availability: All measures, data, and syntax for each study are all available on the Open Science Framework (OSF; see [Nguyen et al., 2020](#)).

Supplementary Materials

For this article, the following Supplementary Materials are available:

- Pre-registration for Study 2 (see [Nguyen & Wellman, 2020](#))
- Pre-registration for Study 3 (see [Nguyen et al., 2021](#))
- Measures, data, and syntax for each study (see [Nguyen et al., 2020](#))

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- Nguyen, T. C., & Wellman, J. D. (2020). *COVID-19 Impact* [Pre-registration Study 2]. OSF Registries. <https://doi.org/10.17605/OSF.IO/PCFWT>
- Nguyen, T. C., Wellman, J. D., Beam, A. J., & Sukhmani, P. (2021). *Asian Americans' experiences during COVID-19: A test of the Rejection Identification Model and the Rejection Disidentification Model* [Pre-registration Study 3]. OSF Registries. <https://doi.org/10.17605/OSF.IO/XS4AJ>
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