
Miscellaneous

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Submitted

October 12, 2024

Approved

June 19, 2025

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Communication & Society

ISSN 0214-0039

E ISSN 2386-7876

www.communication-society.com

2026 – Vol. 39 (1)

pp. 128-144

How to cite this article:

Vishnevskaya, A., Bolls, P., Zhang, Z., & Tan, A. (2026). Countering Asian American hate: media primes, feelings, opinions and bystander intervention in the context of COVID-19, *Communication & Society*, 39(1), 128-144.
<https://doi.org/10.15581/003.39.1.009>

Countering Asian American hate: media primes, feelings, opinions and bystander intervention in the context of COVID-19

Abstract

The increase in verbal and physical aggressions directed at Asian Americans during the COVID-19 pandemic and after has brought into focus a need to understand the reasons for such aggressions and identify interventions. Our study addresses these needs by investigating whether photographs accompanying a news report depicting Asian Americans positively or negatively in the context of the COVID-19 pandemic activate positive or negative perceptions of Asian Americans and whether the valence of the photographs differentially influences intent to intervene in anti-Asian aggressions. In a 2 (image: positive vs. negative) X 2 (political ideology: liberal vs. conservative) mixed between-subject online experiment with adult white Americans, we found that liberals showed more positive perceptions and greater intent to intervene with the negative photos compared to the positive photos, while conservatives showed more negative perceptions and lower intent to intervene with the negative photos. Implications of these findings for activation and activation control theories of primes and biases are discussed. Some recommendations on how the results might guide media content providers to mitigate the spread of anti-Asian aggressions are also provided.

Keywords

COVID-19, Asian American Hate, Hate Crime, Media Primes, Bystander Interventions.

1. Introduction

Prejudice toward Asians in the United States has been documented as early as the Chinese Exclusion Act of 1882 (Zhou, 2021). More recently, the escalation of the global pandemic spiked anti-Asian sentiments (Turton, 2021). In particular, an increase in anti-Asian rhetoric was observed after the virus was referred to as “Chinese virus” and “Kung flu” by U.S. political leadership on social media (Zheng & Zompetti, 2023).

Research on priming consistently shows that images are powerful determinants of perception, activating latent or subconscious evaluations of people and objects. The fundamental assumptions of priming theory are that people have accumulated a store of affective evaluations of their environment, including other people, groups, objects, and issues;

examples of these affective evaluations are unconscious biases, liking or disliking, positive or negative perceptions; that these evaluations are stored in long-term memory; and that these evaluations can be activated by primes in the environment (Bargh et al., 2012). Primes include symbols that can be verbal or visual. Photographs, moving images such as videos, and cartoons are common visual primes (Luttig et al., 2017). In the present study, we test whether photographs can activate perceptions of Asian Americans and bystander intent to intervene in the context of the COVID-19 pandemic.

Building on prior research that demonstrated the moderating role of political ideology in responses to media primes involving other marginalized groups, such as Muslim women (e.g., Tan & Vishnevskaya, 2022), this study extends activation control theory to the context of anti-Asian prejudice during the COVID-19 pandemic. While previous studies have primarily examined attitudinal responses, this research advances the activation control scholarship by also incorporating behavioral intent, more specifically, bystander intent to intervene when aggression is observed toward Asian Americans. This study not only expands the theoretical application of priming and activation control but also addresses a pressing social issue that was amplified by recent global and political events.

1.1. Theoretical Significance

Although priming theories of perception have been influential in psychology and sociology for decades, communication researchers have only recently adapted them (e.g., Roskos-Ewoldson et al., 2007; Arendt, 2013; Tan & Vishnevskaya, 2022). Previous research highlighted how political ideology moderates responses to media primes in the context of Muslim women stereotypes (Tan & Vishnevskaya, 2022). The present study builds upon these findings by testing whether similar mechanisms apply to anti-Asian biases, particularly in the light of the COVID-19 pandemic. By extending activation control theory to a different minority group and introducing bystander intervention as a key behavioral variable, this study expands the theoretical understanding of how primes influence both perceptions and actions within politically polarized environments.

1.2. Practical Significance

Advocacy groups have criticized the media for visually depicting minorities negatively in stereotypical portrayals (Wilson et al., 2013). Recently, the Asian American Journalists Association (AAJA) and other anti-Asian hate advocacy groups asked the New York Times and other news outlets to cease using stock photos of Chinatown in their news reports about COVID-19. The New York Times acceded to this request (NBC News, 2020). The assumption was that the photos would link Asians in general and Asian Americans, in particular, to COVID-19, even when the news reports did not mention Asians or Asian Americans. Thus, in our study, we test these priming propositions and activation control of priming in a media-related context: photographs accompanying a news report. Results can provide guidance to news and entertainment producers.

Our study investigates aggressions and biases towards Asian Americans, a minority in the United States that has recently been at the center of public and media discourse. For decades, prejudice against Asian Americans has been understudied and generally ignored, primarily because of a “model minority” label that we later discuss in this paper. With the COVID-19 pandemic and blame assigned to Asians, hate crimes against Asians in the United States have increased significantly. Hate crimes in the United States in 2020 decreased 7% from 2019. However, hate crimes specifically targeting Asian Americans increased 149% during the same period (Levin, 2021). As a result, our study can provide guidance to media content

producers on how photos and narratives can activate or control negative perceptions of Asian Americans and how bystander interventions can be activated. This research also continues our broader agenda of examining how media primes influence biases and social behaviors toward marginalized groups, offering practical knowledge for reducing prejudice and encouraging prosocial interventions.

2. Literature Review

2.1. Hate Crimes Against Asian Americans

Historically, Asian Americans have been viewed as "the other" by mainstream Americans and have been victims of racial prejudice, discrimination, and racial violence (Lee, 2015). Large-scale Asian immigration to the United States began in the mid-19th century, primarily to fill labor gaps in Western cities (Lee, 2015). In the 1960s, Asian Americans were labeled a "model minority" in public and media discourses in the United States as they achieved significant success in the economic and educational areas (Lee, 2015). On the surface, the "model minority" label represents an improvement in the acceptance of Asian Americans in mainstream society. However, it obscures disparities within the Asian American community, which includes more than 75 ethnic groups, and ignores the prejudice that Asians in general still experience in American society. Also, the "model minority" stereotype suggested comparisons with other minorities, resulting in inter-minority competition and providing the mainstream with the flawed logic to criticize other minorities (Park, 2016).

Public rejection of Asians in the United States was exacerbated by Asian stereotypes during particular periods such as the Cold War, economic downturns, and the overseas "war on terror." For example, some stereotypes labeled Asian workers as "job-stealing thieves," Asian students as "technological spies," and Sikhs as "terrorists" (Lee, 2015).

From 1980 to 2000, the Asian American population grew from 3.5 million to 11.9 million (Yang, 2010). In 2013, Asian Americans comprised 5.6% of the U.S. population, or about 19.4 million people (Zhang et al., 2022). With increased economic competition and contact with the American public, hate crimes against Asian Americans also increased (Zhang et al., 2022). Examples were the 1982 Vincent Chin murder, the 1992 Los Angeles protests, and post-9/11 violence against Asian Americans (Zhang et al., 2022).

The Vincent Chin murder has been attributed to the economic rivalry between the United States and Japan (Kurashige, 2002). Vincent Chin was mistaken for a Japanese national and was killed in Detroit. This incident was a landmark anti-Asian hate crime that led directly to the Pan-Asian civil rights movement, which spread throughout the United States (Kurashige, 2002). The post-9/11 period saw a major explosion of religious discrimination against South Asian Americans and Muslims in American society. Sikhs were discriminated against and attacked because of misconceptions about their religious identity (Mishra, 2013).

There are some unique features of hate crimes against Asians in the United States. Unlike racially motivated aggressions against African American and Latino youth, which primarily come from adults, racial discrimination and racial violence against Asian youth primarily originate among peers. Asian students are portrayed in public and media discourses as "model minorities," which may lead to resentment by students of other ethnicities (Zhang et al., 2022).

With the COVID-19 pandemic, anti-Asian hate crimes have become a growing concern for the Asian American community and American society at large. Overall, hate crimes in 2020 decreased by 7% compared to 2019, but hate crimes against Asians increased by 149% (Levin, 2021). A recent analysis by Stop AAPI Hate, a U.S. anti-discrimination organization that collects reports of hate incidents against Asian American and Pacific Islander communities,

found that they received 10,905 reports between March 19, 2020, and December 31, 2021, the years the COVID-19 pandemic spread across the United States (STOP AAPI HATE, 2022). Since not all hate crimes are reported in general, this is just the tip of the iceberg of all the incidents of discrimination against Asians in the United States. Given this alarming surge in anti-Asian incidents, it is important to consider how media imagery might reinforce or mitigate such biases.

2.2. Visual Images and Group Biases

Numerous studies have confirmed the power of visual images, including photographs, to influence groups' perceptions, particularly outgroups, such as racial and ethnic minorities (e.g., Hellmann & Oppermann, 2022). Visual images, especially photographs, are powerful determinants of perception because of three properties. First, images are considered by most audiences to be "real," direct copies of reality, because "seeing is believing" (Bleiker & Kay, 2007). Second, images, more than narratives, evoke stronger emotions, generating excitement and anxiety (Bleiker, 2019). Third, compared to verbal language, images are more universal and can "travel more easily across linguistic and cultural boundaries" (Hellman & Oppermann, 2022, p.182).

Photographs have influenced American public opinion about China and COVID-19, the "war on terror," environmental issues, and other public policy issues (e.g., Hellmann & Oppermann, 2022; Boscarino, 2022). As a result, the recent surge in hate crimes and aggressions against Asian Americans (Levin, 2021) raises two research questions with implications for identifying intentions to mitigate the spread of anti-Asian hate: **RQ1:** What visual primes in the media activate subconscious or latent prejudices toward Asian Americans? More specifically, does the valence (positive or negative) of a photo linking Asian Americans to COVID-19 influence opinions about COVID-19 and feelings toward Asian Americans? **RQ2:** What visual primes in the media activate bystander intent to intervene when they observe aggressions toward Asian Americans? Does the valence (positive or negative) of a photo linking Asian Americans to COVID-19 influence the intent to intervene?

2.3. The Effects of Positive vs. Negative Images

Previous research suggests that the valence of primes or symbols in the environment, such as verbal (e.g., news stories) and visual (e.g., photographs, cartoons), influences audience responses to the depicted groups, particularly community outgroups such as ethnic minorities. Arendt (2013) and Levin (2021), for example, provide evidence that news stories depicting immigrants as criminals and as real and symbolic threats, compared to news stories depicting immigrants as positive contributors to the economic and cultural health of the community, led to negative feelings (warmth, negative stereotypes) and opinions about immigrants (e.g., agreement with restricting immigration). Dasgupta and Greenwald (2001) showed in laboratory experiments that positive exemplars (photos of admired Blacks and the elderly) led to positive feelings and positive stereotypes, while photos of negative exemplars led to negative feelings and negative stereotypes. Haft and Zhou (2021) also found that exposure to negative media portrayals of China partially mediates group differences in perceived discrimination toward Chinese Americans.

These studies and theories of priming (e.g., Bargh et al., 2012) support the present study's research and theoretical assumption: positive primes, such as photos, lead to positive evaluations of related behavioral responses towards Asian Americans, while negative primes lead to negative responses. Priming theories explain the connection between the valence of the prime and audience responses as activation of stored perceptions of the depicted group,

which can be a mix of positive and negative memory bits. The activation of positive or negative responses depends on situational (e.g., the valence of the prime) and chronic individual variables (e.g., political ideology). In this study, we explored the possible influence of negative and positive photos on feelings, opinions, and intent to intervene in hate and other aggressive behaviors toward Asians in the context of the COVID-19 pandemic.

2.4. Priming Theories

According to priming theories, by the time they are young adults, most people have accumulated a store of emotional and cognitive representations of the environment, including those of other people. Examples are biases and prejudices toward groups and their members. These representations, accumulated from observations and experiences, are stored in long-term memory and are mostly unconsciously held (e.g., Bargh et al., 2012). At any given moment, a person will not be consciously aware of a particular representation, such as bias toward a group (e.g., racism). These stored representations can be activated (“drawn out”) by “primes” in the environment, including the mere presence of the represented object, words connecting an object to a stored representation, and images, such as a photo. When primes are activated, the stored representation influences the perceiver’s behavior. Priming activation requires little cognitive effort, which is a useful and relatively effortless heuristic for dealing with the environment (e.g., Moskowitz, 2010).

2.5. Bystander Interventions

Interventions by bystanders have been studied as strategies to mitigate the harm to victims from verbal and physical aggressions directed at members of marginalized groups. There is consistent evidence that bystander interventions are effective in reducing harm from aggressions toward bullied children and adolescents (e.g., Palmer et al., 2017), racial minorities (e.g., Wallrich et al., 2021), victims of sexual assault (e.g., Kleinsasser et al., 2015), and children of immigrants (e.g., Abbott & Cameron, 2014).

Bystander intervention is defined as the actions of a bystander that would interrupt the aggressive behavior directed at the victim. Aggressive behaviors could be verbal (such as name-calling and slurs) or physical (such as hitting or pushing). Bystander actions include calling for help, verbal admonition to the aggressor, distracting the aggressor, or physically restraining the aggressor (e.g., Abbott & Cameron, 2014). Besides interventions, bystanders can ignore the observed aggression (doing nothing), prevent the victim from seeking help (e.g., shutting a door), or enable the aggressor through verbal or physical encouragement.

Research has identified conditions that facilitate interventions (e.g., Wallrich et al., 2021; Abbott & Cameron, 2014). These conditions include empathy, intergroup contact, cultural openness, and other bystander support, such as group discussions, self-efficacy, and knowledge of intervention strategies. These facilitators can be learned and rehearsed in workshops and training programs.

In the current study, we look at interventions to reduce the harm from aggression toward Asian Americans. Bystander interventions have been a focus of anti-Asian hate programs, mobilized by well-publicized incidents in which bystanders did nothing or facilitated the aggression, such as shutting a door to a building in which a victim could seek refuge (Hsu, 2021). In response, anti-Asian hate advocates have pushed for better reporting of Asian hate crimes and workshops on bystander interventions. For instance, one workshop offered by Hollaback!, an advocacy group, trains bystanders in intervention tactics called “the Five Ds”: distract, delegate, document, delay, and direct (Hsu, 2021).

Anti-Asian hate organizations have proposed that bystander intervention can mitigate aggression toward Asian Americans (e.g., Pham & Samuel, 2021). Recent research has shown that intervention is facilitated by empathy and cultural openness and is suppressed by bias and negative perceptions of the victim and their group (Abbott & Cameron, 2014). Our study, thus, investigates whether photographic primes influence perceptions of Asian Americans and bystander intent to intervene. Based on the principles of priming theory, we test the following hypotheses:

H-1: Adult Americans who see a positive photo of Asians engaged in controlling the spread of COVID-19 will express more positive opinions of Asian Americans compared to adult Americans who see a negative photo of Asians contributing to the spread of COVID-19.

H-2: Adult Americans who see the positive photo will express more positive feelings than adults who see the negative photo.

H-3: Adult Americans who see the positive photo will express greater intent to intervene in aggression toward Asian Americans compared to adult Americans who see the negative photo.

2.6. Activation Control and Political Ideology

Priming theories explain how symbols in the environment activate unconscious biases, typically assuming that such activation is automatic and universal (e.g., Bargh et al., 2012). A competing theory is activation control, which argues that the influence of primes depends on an individual's motivation and capacity to regulate these activated biases (e.g., Blair & Banaji, 1996; Tan & Vishnevskaya, 2022). This motivation is shaped by individual-level factors such as education, political ideology, and information processing capacity.

Whereas traditional activation research focuses on how negative biases are triggered by negative media images and how positive images might mitigate these biases, activation control research emphasizes how individuals can suppress negative biases even when exposed to negative primes. Activation control assumes that most people have unconscious biases (e.g., Greenwald, Poehlman, Uhlmann & Banaji, 2009) but that upon activation, some individuals, depending on their motivation and cognitive resources, respond in ways that counteract, or “control,” these biases. For example, judges primed with Black stereotypes have been shown to give equal sentences to Black and White defendants, demonstrating motivated bias control likely due to their professional training, education, and self-selection (Rachlinski et al., 2009).

Several studies have shown that political ideology can also explain motivation to control biases activated by negative primes (e.g., Arendt, 2013; Tan & Vishnevskaya, 2022). Liberals are more likely than conservatives to demonstrate activation control; conservatives are more likely than liberals to demonstrate activation of negative biases.

The difference in responses to negative primes can be explained by how people who endorse conservative ideologies process information and perceive their environment (e.g., Hodson & Busseri, 2012). Compared with liberals, conservatives are more fearful and anxious about outgroups, are more resistant to change, prefer order and predictability to change, and prefer simple answers (such as “Yes” or “No”) to complex answers (e.g., Hodson & Busseri, 2012).

Surveys and experiments have suggested that “conservatives desire security, predictability and authority more than liberals do, and liberals are more comfortable with novelty, nuance and complexity” (Denworth, 2020). These findings are supported by recent research in political neuroscience. Using brain scans, Haas et al. (2017) found that liberals, compared to conservatives, showed greater brain activation in two brain regions associated with thought activity when presented with information incongruent with existing beliefs. According to Haas et al. (2017), increased brain activity in liberals indicated that liberals were more attentive to incongruent information.

Differences in information processing can explain why liberals and conservatives might respond differently to positive and negative primes about groups that have been victims of prejudice. Recent research has suggested that the effect of primes in activating evaluations of outgroups is moderated by political ideology. Liberals and conservatives may respond differently to positive and negative primes (e.g., Arendt, 2013; Tan & Vishnevskaya, 2022). Holt et al. (2022) also found that the effect of media frames, such as “Chinese Virus” versus the “COVID-19 virus,” on the public’s attitudes and feelings of blame for the pandemic is moderated by political ideology. We seek evidence for this proposition in our study of Asian Americans in the context of COVID-19. More specifically, we ask whether activation by primes is influenced by political ideology. That is, **RQ3**: Will liberals demonstrate activation control? Will conservatives demonstrate activation?

3. Methods

3.1. Design

We conducted a 2×2 mixed between-groups randomized online experiment to answer our research questions and test hypotheses. Factor 1 was Photo valence (positive, depicting positive stereotypes of Asians in controlling the spread of COVID-19, or negative, depicting negative stereotypes of Asians contributing to the spread of COVID-19). Factor 2 was political ideology (liberal or conservative).

3.2. Participants

The study obtained an exemption certificate from the IRB at a public university in the Northwestern United States. We recruited 400 White American adults aged 18 and older from the mTurk platform. We recruited participants who self-reported their race as “White” as anti-Asian biases are attributed mainly to White Americans (Yam, 2021). All the participants were given the consent form, read it, and agreed to participate in the study voluntarily. After the completion of the study, \$1 was distributed to each respondent by mTurk. After cleaning the data, our final sample size was 236 (70.8% men). For analysis involving *political ideology*, response categories were collapsed, resulting in 208 usable observations.

The mTurk platform is a cost-efficient way to collect survey and experimental data. It allows a higher generalizability of the findings with representative samples that would be difficult to reach with other sampling methods (e.g., random surveys of adult Americans). Also, mTurk participants are more likely to follow study instructions than other participants, such as college students (Hauser & Schwarz, 2016).

3.3. Demographics

The average age of our participants was 35.51; 0.4% ($N=1$) of the respondents had some high school experience, 6% ($N=14$) had a high school diploma, 3.4% ($N=8$) had some college experience, 1.3% ($N=3$) held an associate degree, 60.6% ($N=143$) had a bachelor’s degree, 28% ($N=66$) had a master’s degree, and 0.4% ($N=1$) had a doctoral or professional degree.

3.4. Experimental Manipulations

The first independent variable was photo valence. We selected a positive or negative photo to accompany a news report about COVID-19 booster shots in the context of some public discourse blaming Asians for the spread of the virus. The positive photo showed Asian healthcare workers in white gowns and masks loading medical equipment and supplies into a helicopter. The negative photo showed an Asian man in a wet market with butchered meat on tables and dogs in a cage. The positive photo showed Asians working to control the spread of the virus. The negative photo was a vivid depiction of a wet market, which, according to some speculation in the United States, was the source of the virus. The two photos were rated as the most positive and most negative portrayals of

Asians in the context of COVID-19 from an array of six photos for each category (positive and negative) by 34 undergraduate students in a public university in the Northwestern United States. Each student was asked to evaluate every photo.

3.5. *Manipulations Check*

Participants were asked the following question: “To what extent does the photo that you have just seen present a positive or a negative image of Asian Americans?” on a five-point Likert scale. Of 34 respondents, 26.47% (N=9) identified Photo 2 as “Very Negative” for the negative photo condition, and 23.53% (N=8) identified the same photo as “Somewhat Negative”. Thus, 50% of respondents (N=17) identified Photo 2 as, overall, “Negative”. This photo was used in the Negative Photo condition for the experiment in this study.

Of 34 respondents, 32.35% (N=11) identified Photo 2 as “Very Positive” for the positive photo condition, and 35.29% (N=12) identified the same photo as “Somewhat Positive”. Thus, 67.64% of respondents (N=23) identified Photo 2 as, overall, “Positive”. This photo was used in the Positive Photo condition for the experiment in this study.

3.6. *Political Ideology*

The second factor in our experiment was political ideology, measured by asking participants to self-identify as very liberal, liberal, neither liberal nor conservative, conservative, or very conservative. Based on previous studies showing little difference in bias perceptions of outgroups between “very conservative” and “conservative” and between “very liberal” and “liberal” (e.g., Tan & Vishnevskaya, 2022), we collapsed responses into two categories: “liberal” and “conservative.” Those respondents who self-identified as “neither liberal nor conservative” (11.9%, $N = 28$) were excluded from the analysis. After collapsing the categories, 55.9% ($N=32$) of our respondents were “conservative” and 32.2% ($N=76$) were “liberal”.

3.7. *Dependent Variables*

We analyzed the effects of photo valence and political ideology on three dependent variables. The measurement scales were adapted from recent Pew Research Center studies (Silver et al., 2021; Ruiz et al., 2020).

Opinion on whether Asian Americans were responsible for spreading the COVID-19 virus was measured with two five-point Likert scale items: “To what extent do you agree that Asian Americans are responsible for the spread of COVID-19 in the United States?” (reverse-coded, $M=2.22$, $S.E.=.07$) and “Asian-Americans in general have done a good job dealing with the COVID-19 outbreak” ($M=3.96$, $S.E.=.06$). The correlation between these two items was .482. Single-item measures were used in the analysis.

Although multiple-item measures typically have greater validity and reliability, employing single-item measures can help decrease measurement error (e.g., Bergqvist & Rossiter, 2007; Matthews et al., 2022; Santia et al., 2022). For example, Hoeppepner et al. (2011) provide evidence that self-efficacy is best measured (has higher predictive validity) by a single item compared to a 20-item scale.

Feelings towards Asian Americans were measured with a thermometer scale using the following statement: “Please choose a ‘temperature’ between 0 and 100 that reflects your feelings toward Asian Americans, where 0 represents the coldest possible feeling, and 100 is the warmest possible feeling. Type in a temperature between 0 and 100 in the box below” ($M=58.62$, $S.E.=1.54$).

Intent to intervene was measured by a scale adapted from Abbott and Cameron (2014). We asked our respondents whether and how they would intervene if witnessing either verbal slurs or physical aggressions directed at Asian Americans. Intent to intervene in a situation with verbal slurs was

measured using the following adapted item: “Since the onset of the COVID-19 pandemic, there has been an increase in aggressions and uncivil behaviors in the United States. In particular, there has been a significant increase in aggressions directed towards Asian Americans, such as racial slurs and physical violence. How would you react if you witnessed racial slurs directed at Asian Americans? Please check all responses that you would do.” The response options presented to the participants were the following: “I would try and make the victim feel better by comforting them,” “I would tell the aggressor to stop,” “I would call 911 or other authority,” “I would go on my way and do nothing” ($M = 2.05$, $S.E. = .06$).

Intent to intervene in a situation with physical violence was measured using the following adapted item: “Since the onset of the COVID-19 pandemic, there has been an increase in aggressions and uncivil behaviors in the United States. In particular, there has been a significant increase in aggressions directed towards Asian Americans, such as racial slurs and physical violence. How would you react if you witnessed physical violence directed at Asian Americans? Please check all responses that you would do.” The response options were the following: “I would comfort the victim by offering aid,” “I would tell the aggressor to stop,” “I would physically try to stop the aggressor from inflicting harm to the victim,” “I would call 911 or other authority”, “I would go on my way and do nothing” ($M = 2.48$, $S.E. = .08$).

The total number of response checks for both intent to intervene in a racial slur situation and intent to intervene in a situation with physical violence was used as a measure of intent to intervene.

4. Procedures

Participants were randomly assigned to two experimental conditions. Participants in the positive prime condition read a news report about COVID-19 booster shots accompanied by the positive photo at the top of the report. Participants in the negative prime condition read the same news report accompanied by the negative photo at the top.

This study relied on the participants’ exposure to a single stimulus. While using a repeated-measures experimental design can help better understand the long-term effect of the consumed media images on the subject of race, our study reveals the first sign of the effect that would have been observed in the long run (e.g., Santia et al., 2022; Vishnevskaya et al., 2023).

Cell sizes were 91 for the positive stimulus and 117 for the negative stimulus. Participants completed the survey through the mTurk platform by following the Qualtrics link attached to the platform. At the end of the survey generated by Qualtrics, participants were asked to provide a randomized four-digit code. After the survey was completed, participants received a \$1 participation incentive.

5. Results

5.1. Activation of Opinions and Feelings Toward Asian Americans

Two-way ANOVA analysis did not show significant main effects for prime (positive or negative photo) on opinions about COVID-19 and feelings towards Asian Americans and intent to intervene (RQ1, RQ2). Our priming hypotheses predicted that positive photos, compared to negative photos, would activate more positive opinions (H-1) and feelings (H-2) toward Asian Americans and would activate a stronger intent to intervene when aggressions toward Asian Americans are observed (H-3). The mean scores of the positive and negative prime groups did not differ significantly for each dependent variable at $\alpha = 0.05$. Therefore, the main effects hypotheses were also rejected.

5.2. Activation Control

We tested the moderating role of political ideology for opinions, feelings, and intent to intervene (RQ3). Two-way ANOVA analyses showed that the moderating effect of political ideology approached

statistical significance for two outcome variables: feelings toward Asian Americans and intent to intervene against physical violence toward Asian Americans. The moderating effect of political ideology was not significant for opinions toward Asian Americans or for intent to intervene in the racial slur scenario.

For *Feelings*, the overall model (Model 1) was not statistically significant: $F(3,204) = 1.198, p = .312$. However, the interaction of photo valence $\times$ political ideology approached statistical significance: $F(1,204) = 3.01, p < .05$ (Table 1).

Table 1. Two-Way ANOVA Results for the Impact of Photo Stimuli and Political Ideology on Feelings Towards Asian Americans – Model 1

Variable	Type III SS	df	MS	F	Sig.	η_p^2
Photo Stimuli	458.223	1	458.223	.835	.362	.004
Political Ideology	89.085	1	89.085	.162	.687	.001
Photo Stimuli x Political Ideology	1,651.940	1	1,651.940	3.011	.084	.015
Error	111,918.210	204	548.619			
Total	861,371.000	208				

Note: $R^2 = .017$ (Adj. $R^2 = .003$). * $p < .05$, ** $p < .01$, and *** $p < .001$.

Source: Own elaboration.

The analyses of the feeling thermometer means (Table 2) indicated that among liberals, feelings toward Asian Americans were more positive in the negative photo group ($M = 65.26, SD = 20.56$) compared to the positive photo group ($M = 56.26, SD = 22.45$). In contrast, conservatives expressed slightly more negative feelings in the negative photo group ($M = 58.00, SD = 23.60$) compared to the positive photo group ($M = 60.79, SD = 25.60$).

Table 2. Estimated Means of Feelings in Response to Photo Stimuli by Political Ideology – Model 1

Photo Stimuli	Ideology	Mean	SD	N
Positive Image	Conservative	60.79	25.60	57
	Liberal	56.26	22.45	34
	Total	59.10	24.44	91
Negative Image	Conservative	58.00	23.60	75
	Liberal	65.26	20.56	42
	Total	60.61	22.74	117
Total	Conservative	59.20	24.43	132
	Liberal	61.24	21.75	76
	Total	59.95	23.45	208

Significance level: $p < .05$

Source: Own elaboration.

These results suggest that the negative photo prompted liberals to control activated unconscious negative biases by rating Asian Americans more positively (i.e., evidence of activation control among liberals). Conservatives did not exhibit such control of biases; for them, the negative photo reinforced existing negative biases, resulting in slightly more negative mean scores.

5.3. Bystander Intervention, Racial Slurs

For bystander intervention in the racial slur scenario, the overall model (Model 2) was statistically significant: $F(3,204) = 3.235, p < .05$. The moderating role of political ideology on the stimuli effects was not statistically significant: $F(1,204) = 1.379, p = .242$. The main effect of political ideology on intent to intervene when a racial slur is observed was found statistically significant: $F(1, 204) = 7.411, p < .05$ (Table 3).

Table 3. Two-Way ANOVA Results for the Impact of Photo Stimuli and Political Ideology on Intent to Intervene (Racial Slur) – Model 2

Variable	Type III SS	df	MS	F	Sig.	η_p^2
Photo Stimuli	.747	1	.747	.857	.356	.004
Political Ideology	6.456	1	6.456	7.411	.007**	.035
Photo Stimuli x Political Ideology	1.201	1	1.201	1.379	.242	.007
Error	177.733	204	.871			
Total	1,071.000	208				

Note: $R^2 = .045$ (Adj. $R^2 = .031$). * $p < .05$, ** $p < .01$, and *** $p < .001$.

Source: Own elaboration.

The results show that liberals who saw the negative photo expressed greater intention to intervene when observing racial slurs directed at Asian Americans ($M = 1.85, SD = .95$) compared to liberals who saw the positive photo ($M = 1.82, SD = .75$). Conservatives, on the other hand, showed a decrease in intent to intervene from the positive photo condition ($M = 2.35, SD = 1.04$) to the negative photo condition ($M = 2.06, SD = .90$) (Table 4).

Table 4. Estimated Means for Bystander Intervention (Racial Slurs) in Response to Photo Stimuli by Political Ideology – Model 2

Photo Stimuli	Ideology	Mean	SD	N
Positive Image	Conservative	2.35	1.04	57
	Liberal	1.82	.75	34
	Total	2.15	.97	91
Negative Image	Conservative	2.06	.90	75
	Liberal	1.85	.95	42
	Total	1.99	.92	117
Total	Conservative	2.18	.97	132
	Liberal	1.84	.86	76
	Total	2.06	.94	208

Significance level: $p < .05$

Source: Own elaboration.

5.4. Bystander Intervention, Physical Aggression

For bystander intervention in the physical aggression scenario, the overall model (Model 3) was also statistically significant: $F(3,204) = 3.441, p < .05$. The moderating role of political ideology on the stimuli effects approached statistical significance: $F(1,204) = 2.816, p < .05$. The main effect of political ideology on intent to intervene when physical violence towards Asian Americans is observed was found statistically significant: $F(1, 204) = 7.883, p < .05$ (Table 5).

Table 5. Two-Way ANOVA Results for the Impact of Photo Stimuli and Political Ideology on Intent to Intervene (Physical Violence) – Model 3

Variable	Type III SS	df	MS	F	Sig.	η_p^2
Photo Stimuli	.183	1	.183	.111	.740	.001
Political Ideology	13.020	1	13.020	7.883	.005**	.037
Photo Stimuli x Political Ideology	4.651	1	4.651	2.816	.095	.014
Error	336.947	204	1.652			
Total	861,371.000	208				

Note: $R^2 = .048$ (Adj. $R^2 = .034$). * $p < .05$, ** $p < .01$, and *** $p < .001$.

Source: Own elaboration.

In this model, the results indicate that liberals expressed a stronger intent to intervene in cases of physical aggression towards Asian Americans when shown a negative photo ($M = 2.31$, $SD = 1.07$) compared to when they saw a positive photo ($M = 2.05$, $SD = 1.01$). Conservatives reported less intent to intervene when they saw a negative photo ($M = 2.52$, $SD = 1.44$) compared to when they saw a positive photo ($M = 2.89$, $SD = 1.34$).

Our results showed evidence of activation control by liberals and activation of bias by conservatives. These results suggest that liberals controlled their biases activated by the negative photo by expressing greater intent to intervene, whereas conservatives demonstrated bias activation without control, as their intent to intervene was weaker when the negative photo was shown. We discuss these findings and their implications in the next section of our manuscript.

6. Discussion

In this study, our goal was to explore the impact of visual primes (positive and negative) linking Asian Americans to COVID-19 on activating subconscious prejudices (RQ1). Contrary to Hypothesis 1 (H1), our findings indicate that exposure to positive images did not result in significantly more positive opinions of Asian Americans compared to exposure to negative images. Similarly, Hypothesis 2 (H2) was not supported. Our findings suggest that positive images do not significantly enhance positive feelings toward Asian Americans compared to negative images. We also examined how visual primes affect the intent to intervene in aggressions toward Asian Americans (RQ2). Hypothesis 3 (H3), predicting greater intent to intervene following exposure to positive images, was not supported. Instead, our findings showed that the intent to intervene was influenced primarily by the interaction of image valence and political ideology rather than image valence alone (RQ3).

These findings challenge traditional activation theories, which suggest that negative visual primes universally activate negative biases, and positive primes mitigate them (e.g., Bargh et al., 2012). Instead, consistent with activation control theory (e.g., Arendt, 2013; Blair & Banaji, 1996; Tan & Vishnevskaya, 2022), our findings emphasize that individual-level differences, particularly political ideology, can significantly moderate these effects. More specifically, in this study, we found evidence of activation control by liberals and activation by conservatives in the context of anti-Asian prejudice. Liberals demonstrated activation control, responding to negative primes with more positive feelings and greater intent to intervene in physical aggressions due to heightened motivation to control biases, as explained by theories of stereotype inhibition

(Moskowitz, 2010). Conservatives showed activation, with negative images reinforcing negative biases and reducing intent to intervene. Overall, these findings align with research on biases toward other marginalized groups, where ideology consistently moderates responses (e.g., Arendt, 2013; Tan & Vishnevskaya, 2022).

Our study also emphasizes that the moderating effect of political ideology was observed only in the situation of physical violence against Asian Americans but not racial slurs, suggesting that physical threats may trigger stronger motivations for intervention (e.g., Mainwaring et al., 2022; Reynolds et al., 2023) whereas verbal aggressions might be perceived as less severe, thus diminishing ideological differences in response.

Thus, our findings indicate that media primes alone do not influence public attitudes toward Asian Americans. Rather, their effectiveness significantly depends on the audience's political ideology. Among conservatives, negative images reinforce existing biases. Among liberals, negative images can result in activation control and reduce biases. Bystander interventions are activated by positive images among conservatives and are facilitated by negative images among liberals.

7. Recommendations and Limitations

7.1. Recommendations

A key practical implication of these findings is for content creators of news and entertainment to include balanced portrayals of Asian Americans, as suggested by organizations like the Asian American Journalists Association and scholars of media and race (Wilson et al., 2013; Tan, 2021a, 2021b). These portrayals should avoid perpetuating exclusively negative narratives, which might reinforce biases among certain groups (e.g., conservatives), and instead offer nuanced, realistic representations that prompt reflection and activation control. More specifically, in the context of the global pandemic, such examples of balanced portrayals could have included news stories featuring Asian American healthcare professionals actively working on the front lines during the COVID-19 pandemic, emphasizing their contributions to the safety of the community.

Media entertainment, in turn, could portray Asian American characters in roles that break stereotypes, such as lead roles in dramas, action series, or portrayals of everyday life rather than exoticized or villainized characters. Media producers could also explicitly highlight collaborative efforts between Asian American communities and broader societal groups to counter misinformation and prejudice, offering audiences role models to whom they can relate and who encourage positive social actions.

Overall, journalists and media professionals should be aware that words and images do matter and that the effects on audiences will also depend on existing predispositions such as political ideology. For bystanders, intervention may depend on the activation and control of implicit biases. Narratives and images tailor-fitted to address these biases can motivate intervention and control of negative prejudices.

The existing studies also focus on intent to intervene in interpersonal relationships and do not refer to multicultural relationships in a given society. As a result, our study prompts future research to understand the patterns of hate behavior (verbal and physical) towards minority groups in the U.S. and their prevention mechanisms.

Last but not least, theoretically, the influence of primes depends on third variables, such as political ideology, and the literature on information processing and activation control of implicit biases can explain why self-identified liberals and conservatives respond differently to positive and negative primes. Future research, however, should

further investigate why verbal aggressions are less moderated by ideological differences and how intervention strategies might differ accordingly.

7.2. Limitations

Our study also has some limitations. First, this study examined the short-term effects of single media exposure using single-item measures. Future research should incorporate longitudinal designs and multi-item scales to validate findings over time. Second, our sample consisted exclusively of adult white Americans, limiting generalizability to more diverse populations. Future studies should replicate our methodology with a more diverse sample.

Finally, although we examined political ideology as a moderator, other individual differences, such as educational background, personal contact with Asian Americans, and explicit biases, likely contribute to activation or control responses. Future research should systematically explore these potential moderators to improve the understanding of prejudice activation mechanisms and effective intervention strategies.

References

- Abbott, N., & Cameron, L. (2014). What makes a young, assertive bystander? the effect of intergroup contact, empathy, cultural openness, and in-group bias on assertive bystander intervention intentions. *Journal of Social Issues*, 70(1), 167–182.
<https://doi.org/10.1111/josi.12053>
- Arendt, F. (2013). Dose dependent media priming effects of stereotypic newspaper articles on implicit and explicit stereotypes. *Journal of Communication*, 63(5), 830–851.
<https://doi.org/10.1111/jcom.12056>
- Bargh, J. A., Schwader, K. L., Hailey, S. E., Dyer, R. L., & Boothby, E. J. (2012). Automaticity in social-cognitive processes. *Trends in Cognitive Sciences*, 16(12), 593–605.
<https://doi.org/10.1016/j.tics.2012.10.002>
- Bergkvist, L., & Rossiter, J. R. (2007). The predictive validity of multiple-item versus single-item measures of the same constructs. *Journal of Marketing Research*, 44(2), 175–184.
- Blair, I. V., & Banaji, M. R. (1996). Automatic and controlled processes in stereotype priming. *Journal of personality and social psychology*, 70(6), 1142.
- Bleiker, R. & Kay, A. (2007). Representing HIV/AIDS in Africa: Pluralist Photography and Local Empowerment. *International Studies Quarterly*, 51(1), pp. 139–163.
- Bleiker, R. (2019). *The politics of images: A pluralist methodological framework*. En *Critical Methods for the Study of World Politics* (pp. 272–288). Routledge.
- Boscarino, J. E. (2022). Is seeing believing? Comparing the influence of textual and visual policy narratives on public opinion. *Politics & Policy*, 50(4), 720–751.
<http://dx.doi.org/10.1111/polp.12471>
- Dasgupta, N., & Greenwald, A. G. (2001). On the malleability of automatic attitudes: Combating automatic prejudice with images of admired and disliked individuals. *Journal of Personality and Social Psychology*, 81(5), 800–814. <https://doi.org/10.1037/0022-3514.81.5.800>
- Denworth, L. (2020). *Conservative and liberal brains might have some real differences*. Scientific American. Retrieved June 17, 2022, from
<https://www.scientificamerican.com/article/conservative-and-liberal-brains-might-have-some-real-differences/>
- Greenwald, A. G., Poehlman, T. A., Uhlmann, E. L., & Banaji, M. R. (2009). Understanding and using the implicit association test: III. meta-analysis of predictive validity. *Journal of Personality and Social Psychology*, 97(1), 17–41. <https://doi.org/10.1037/a0015575>
- Haas, I. J., Baker, M. N., & Gonzalez, F. J. (2017). Who can deviate from the party line? Political ideology moderates evaluation of incongruent policy positions in insula and anterior

- cingulate cortex. *Social Justice Research*, 30(4), 355–380. <https://doi.org/10.1007/s11211-017-0295-0>
- Haft, S. L., & Zhou, Q. (2021). An outbreak of xenophobia: Perceived discrimination and anxiety in Chinese American college students before and during the COVID-19 pandemic. *International journal of psychology: Journal international de psychologie*, 56(4), 522–531. <https://doi.org/10.1002/ijop.12740>
- Hauser, D. J., & Schwarz, N. (2016). Attentive turkers: Mturk participants perform better on online attention checks than do subject pool participants. *Behavior Research Methods*, 48(1), 400–407. <https://doi.org/10.3758/s13428-015-0578-z>
- Hellmann, O., & Oppermann, K. (2022). Photographs as Instruments of Public Diplomacy: China's Visual Storytelling during the Covid-19 Pandemic. *The Hague Journal of Diplomacy*, 17(2), 177–215. <https://doi.org/10.1163/1871191X-bja10097>
- Hodson, G., & Busseri, M. A. (2012). Bright minds and dark attitudes: Lower cognitive ability predicts greater prejudice through right-wing ideology and low intergroup contact. *Psychological Science*, 23(2), 187–195. <https://doi.org/10.1177/0956797611421206>
- Hoepfner, B. B., Kelly, J. F., Urbanoski, K. A., & Slaymaker, V. (2011). Comparative utility of a single-item versus multiple-item measure of self-efficacy in predicting relapse among young adults. *Journal of substance abuse treatment*, 41(3), 305–312. <https://doi.org/10.1016/j.jsat.2011.04.005>
- Holt, L. F., Kjærvi, S. L., & Bushman, B. J. (2022). Harming and shaming through naming: Examining why calling the Coronavirus the “COVID-19 Virus,” not the “Chinese Virus,” matters. *Media Psychology*, 25(5), 639–652. <https://doi.org/10.1080/15213269.2022.2034021>
- Hsu, A. (2021, April 3). *In response to Anti-Asian hate incidents, groups step up trainings for bystanders*. NPR. Retrieved April 21, 2025 from <https://www.npr.org/2021/04/03/983406365/in-response-to-anti-asian-hate-incidents-groups-step-up-trainings-for-bystanders>
- Kleinsasser, A., Jouriles, E. N., McDonald, R., & Rosenfield, D. (2015). An online bystander intervention program for the prevention of sexual violence. *Psychology of Violence*, 5(3), 227–235. <https://doi.org/10.1037/a0037393>
- Kurashige, S. (2002). Detroit and the legacy of Vincent Chin. *Amerasia Journal*, 28(3), 51–55. <https://doi.org/10.17953/amer.28.3.f1356xv7hqwx2024>
- Lee, E. (2015). *The making of Asian America: A history*. Simon & Schuster Paperbacks.
- Levin, B. (2021). *Report to the nation: Anti-Asian prejudice & hate crime*. Center for the Study of Hate & Extremism, California State University San Bernardino. Retrieved March 17, 2022 from <http://arks.princeton.edu/ark:/88435/dsp01sq87bx76c>
- Luttig, M. D., Federico, C. M., & Lavine, H. (2017). Supporters and opponents of Donald Trump respond differently to racial cues: An experimental analysis. *Research & Politics*, 4(4), 205316801773741. <https://doi.org/10.1177/2053168017737411>
- Mainwaring, C., Gabbert, F., & Scott, A. J. (2022). A systematic review exploring variables related to bystander intervention in sexual violence contexts. *Trauma, Violence, & Abuse*, 24(3), 1727–1742. <https://doi.org/10.1177/15248380221079660>
- Matthews, R. A., Pineault, L., & Hong, Y. H. (2022). Normalizing the use of single-item measures: Validation of the single-item compendium for organizational psychology. *Journal of Business and Psychology*, 37(4), 639–673.
- Mishra, S. (2013). Race, religion, and political mobilization: South Asians in the Post-9/11 United States. *Studies in Ethnicity and Nationalism*, 13(2), 115–137. <https://doi.org/10.1111/sena.12034>
- Moskowitz, G. B. (2010). On the control over stereotype activation and stereotype inhibition. *Social and Personality Psychology Compass*, 4(2), 140–158. <https://doi.org/10.1111/j.1751-9004.2009.00251.x>

- NBC News. (2020, March 6). *News outlets criticized for using Chinatown photos in coronavirus articles*. NBC News.com. Retrieved March 17, 2022 from <https://www.nbcnews.com/news/asian-america/news-outlets-criticized-using-chinatown-photos-coronavirus-articles-n1150626>
- Palmer, S. B., Cameron, L., Rutland, A., & Blake, B. (2017). Majority and minority ethnic status adolescents' bystander responses to racism in school. *Journal of Community & Applied Social Psychology*, 27(5), 374–380. <https://doi.org/10.1002/casp.2313>
- Park, L. (2016). Continuing Significance of the Model Minority Myth: The Second Generation. In M. Zhou & A. Ocampo (Ed.), *Contemporary Asian America (third edition): A Multidisciplinary Reader* (pp. 497–507). New York, USA: New York University Press. <https://doi.org/10.18574/nyu/9781479849994.003.0029>
- Pham, E., & Samuel, R. E. (2021, April 8). *Bystander intervention meets community care: How to respond to anti-Asian hate*. Today, Retrieved March 17, 2022, from <https://www.today.com/news/anti-asian-hate-here-s-what-do-if-you-re-t213792>
- Rachlinski, J., Johnsen, S.L., Wistrich, A.J., & Guthrie, C. (2009). Does unconscious racial bias affect trial judges? *Notre Dame Law Review*, 84(3), 1195–1246. Available at: <https://scholarship.law.vanderbilt.edu/faculty-publications/816>
- Reynolds, H., Ng Tseung-Wong, C., & Kelty, S. F. (2024). Bystander Intervention in Coercive Control: Do Ethnic Identity and Acceptance of Coercive Control Influence Willingness to Intervene? *Journal of Interpersonal Violence*, 39(5–6), 1082–1103. <https://doi.org/10.1177/08862605231212177>
- Roskos-Ewoldsen, D. R., Klinger, M. R., & Roskos-Ewoldsen, B. (2007). Media Priming: A Meta-Analysis. In R. W. Preiss, B. M. Gayle, N. Burrell, M. Allen, & J. Bryant (Eds.), *Mass media effects research: Advances through meta-analysis* (pp. 53–80). Lawrence Erlbaum Associates Publishers.
- Ruiz, N., Menasce Horowitz, J., & Tamir, C. (2020, July 1). *Many Black and Asian Americans Say They Have Experienced Discrimination Amid the COVID-19 Outbreak*. Pew Research Center. Retrieved March 27, 2022, from <https://www.pewresearch.org/social-trends/2020/07/01/many-black-and-asian-americans-say-they-have-experienced-discrimination-amid-the-covid-19-outbreak/>
- Santia, M., Oden, A., Kim, S. W., Pingree, R. J., Wyers, J., & Bryanov, K. (2022). The other Side of the pandemic: Effects of racialized news coverage on attitudes toward Asians and immigrants. *International Journal of Communication*, 16, 5717–5738.
- Silver, L., Devlin, K., & Huang, C. (2021, May 11). *Americans Fault China for its role in the spread of covid-19*. Pew Research Center. Retrieved March 29, 2022, from <https://www.pewresearch.org/global/2020/07/30/americans-fault-china-for-its-role-in-the-spread-of-covid-19/>
- Stop AAPI Hate. (2022, March). *National Report (through December 31, 2021)*. Stop AAPI Hate. Retrieved March 18, 2022 from <https://stopaapihate.org/national-report-through-december-31-2021/>
- Tan, A. S. (2021a). *Communication and prejudice: Theories, effects, and interventions*. Cognella Academic Publishing.
- Tan, A. S. (2021b). *Who Is Racist? Why Racism Matters?* Cognella Academic Publishing.
- Tan, A., & Vishnevskaya, A. (2022). *Stereotypes of Muslim women in the United States: Media primes and consequences*. Rowman & Littlefield.
- Turton, N. (2021). Stop AAPI hate: New data on anti-Asian hate incidents against elderly and total national incidents in 2020. *Stop AAPI Hate*.
- Vishnevskaya, A., Hilton, K., Price, R., Thatcher, G., Zhang, Z., & Tan, A. (2023). 2022 Beijing winter Olympic games: The effect of media visual primes on American public opinion about the Olympics and China. *International Communication Gazette*, 86(6), 502–518. <https://doi.org/10.1177/17480485231165590>

- Wallrich, L., Palmer, S. B., & Rutland, A. (2021). Adolescents challenging discrimination: The benefits of a perspective-taking and action-planning intervention on self-efficacy. *Journal of Community & Applied Social Psychology*, 31(5), 530–536. <https://doi.org/10.1002/casp.2530>
- Wilson, C. C., Gutiérrez, F., & Chao, L. M. (2013). *Racism, sexism, and the media: Multicultural issues into the new communications age*. Thousand Oaks, CA: Sage.
- Yam, K. (2021, June 15). *Viral images show people of color as anti-Asian perpetrators. that misses the big picture*. NBCNews.com. Retrieved March 31, 2022, from <https://www.nbcnews.com/news/asian-america/viral-images-show-people-color-anti-asian-perpetrators-misses-big-n1270821>
- Yang, P. Q. (2010). A theory of Asian immigration to the United States. *Journal of Asian American Studies*, 13(1), 1–34. <https://doi.org/10.1353/jaas.0.0061>
- Zhang, Y., Zhang, L., & Benton, F. (2022). Hate crimes against Asian Americans. *American Journal of Criminal Justice*, 47(3), 441–461.
- Zheng, J., & Zompetti, J. P. (2023). ‘I’m not a virus’: Asian hate in Donald Trump’s rhetoric. *Asian Journal of Communication*, 33(5), 470–503. <https://doi.org/10.1080/01292986.2023.2246509>
- Zhou, L. (2021, March 5). *The long history of anti-Asian hate in America, explained*. Vox. <https://www.vox.com/identities/2020/4/21/21221007/anti-asian-racism-coronavirus-xenophobia>