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## Psychological Impact of Anti-Asian Violence on Asian Americans under COVID-19 in Rural South Alabama

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### Abstract

*This study analyzed the effect of anti-Asian American violence on Asian Americans' daily lives because the hate crimes or sentiment was not salient in the early stage of the pandemic in rural Alabama. The survey was conducted from April to May 2020. A total of 234 Laotians and 119 Cambodians participated, and multiple regression models were employed. Two communities demonstrated distinctive sociodemographic characteristics. The younger Cambodians were more concerned about anti-Asian violence, which made sense considering that Cambodians gained new community members through international marriage brides from Cambodia. They were more likely to obtain limited information due to the language barrier and depend on advice from leaders they could trust. These results explained the higher worry about the infection for younger Cambodians, the significant influence of community leaders' recommendations, and the higher fear by the educated. Laotians showed an overall moderating effect of age. Laotian fifties demonstrated that older adults handled better on the perceived disruption of COVID-19. They utilized various media sources to reduce their worry and help more appropriate damage-avoiding behavior for community members.*

**Keywords:** COVID-19; anti-Asian violence; Cambodian; Laotian

## Introduction

### Societal Impact of COVID-19

Since the first COVID-19 case was confirmed in the U.S. on January 15, 2020, the total number of American deaths is over 1 million, and of infected is more than 83 million. The first case in the United States (U.S.) was reported on February 1, 2020, and by January 8, 2023, the U.S. had documented 101,094, 670 cases and 1,091,184 deaths (CDC, 2021). Alabama reported 1,587,224 COVID-19 patients and 20,776 deaths (Alabama Department of Public Health, 2023a). Mobile county, the site of the Cambodian and Laotian communities in this study, has 131,848 COVID-19 patients and 1,763 deaths (Alabama Department of Public Health, 2023b).

COVID-19 has affected a tremendous toll on various aspects of society, such as healthcare, political and economic, and social institutions (Dubey et al., 2020; Horesh & Brown, 2020;

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Klinenberg, 2020; Prime et al., 2020; Smith & Fraser, 2020; Tierney, 2020). The pandemic significantly affects the well-being of families and communities (Dubey et al., 2020; Fegert & Fraser, 2020; Horesh & Brown, 2020; Prime et al., 2020). Also, the impact of COVID-19 is varied by race and ethnicity. For instance, African Americans and Native Americans showed higher mortality rates due to pre-existing conditions and health disparities (Kantamneni, 2020; Laurencin & McClinton, 2020; Rentsch et al., 2020). Asian Americans are not experiencing severe mortality like other minorities but have experienced the highest racial discrimination. Asian hate crimes, such as hate speech, discrimination, and physical attacks, have increased by more than 150% in 2020 (Aspegren, 2021; Cheng et al., 2021; Han et al., 2022; Lantz & Wenger, 2022; Tessler et al., 2020; Yam, 2021), which is the main focus of this study.

The current anti-Chinese/Asian rhetoric started by politicians. For example, then-President Trump said COVID-19 was “the Chinese Virus” in mid-March, although he said he would refrain from using the phrase later (Artiga et al., n.d.; Benjamin, 2021). The discrimination against Asians, however, is rooted in longstanding biases toward Asian Americans: e.g., the 1876 outbreak of smallpox in California and the 2003 SARS epidemic (Chen et al., 2020; Xu et al., 2021). Anti-Asian discrimination also has been reported under COVID-19 (Reny & Barreto, 2020; Ruiz et al., n.d.). For instance, Reny and Barreto (2020) empirically analyzed this issue in March 2020. The survey collected 4,311 samples based on quota-based sampling methods and asked the concerns about COVID-19, practicing social distancing, violence towards Asian Americans, and violence on the policy to build a wall along the US-Mexico border. They found that anti-Asian violence is associated with concerns about disease, xenophobic behaviors, and policy preferences. People who were worried about the COVID-19 infection showed a higher level of negative attitude against Asians.

### **Psychological Impact of Racial Discrimination**

Most studies about hate crimes against Asian Americans focus on the effect of the discriminatory experience on mental health or psychological well-being. For instance, Yip et al. (Yip et al., 2008) analyzed the relationships between racial discrimination and psychological distress among Asian Americans using ethnic identity as either a protective or exacerbating factor. They found that ethnic identity buffered the association between discrimination and mental health for U.S.-born individuals 41 to 50 years of age but exacerbated the adverse effects of discrimination on mental health for U.S.-born individuals 31 to 40 years of age and 51 to 75 years of age. Lee and Waters (Lee & Waters, 2021) also reported the negative effect of discrimination on the mental and physical health of Asian men and women. However, the perceived discrimination threshold was lower for Asian women in affecting their health. Zhang and Hong (Zhang & Hong, 2013) found the detrimental effect of discrimination is more substantial for Asian Americans with college or more education levels than for Asian Americans with college levels of education. They also found that younger adults, females, and not in the labor force experienced more daily discrimination, which was negatively associated with their psychological well-being. Carney et al. (2021) found the mediating effect of age on psychological well-being. They reported that middle- and older- adults regulate better adverse emotional consequences, such as stress and depression, from COVID-19 than younger adults. Media consumption is another factor to contribute to the negative effect of COVID-19: positive associations between media exposure and anti-Asian violence (Powers et al., 2022).



## Asian Americans in Rural Alabama

The main subjects of our study, Cambodians and Laotians, have been living in Bayou La Batre (BLB), Alabama, for several decades and have experienced several disasters, such as hurricanes, tornados, flooding, and BP Oil Spill. Our research team has maintained reliable and trustable relationships with both communities since 2018 and has conducted disaster resilience projects. Even one of our researchers has conducted her research with these communities in the last couple of decades. Therefore, we considered this pandemic another type of disaster and conducted a pandemic-related study that would be timely and appropriate. Our previous study found serious socioeconomic disadvantages in these populations (Min et al., 2020). For instance, most community people living under the poverty level had lower educational attainment compared to the national average and more manual labor-related occupations, including fishing and crab or oyster-related industries. Both community members are fit into the conflict theory of migration (Sirkeci, 2009), as they have gone through a similar experience, such as war, violence, hunger, refugee camp, poverty (DeYoung et al., 2019; Lewis, 2009; Lewis, 2010; Muruthi & Lewis, 2017; Seponski et al., 2014), and hardships of settlement in rural Alabama. One of the significant difficulties for them is cultural differences between the culture of the Deep South and their home countries, including language barriers and racism (Olson & Bode, 1999; Shiu-Thornton et al., 2007; Xu et al., 2016). Community leaders played an essential role in building strong community cohesion, and their leadership helped them out under emergent situations like disasters (Nguyen & Salvesen, 2015; VanLandingham, 2017). Our research started with this unique rural setting for Asian Americans.

This study concentrates on the psychological effect of anti-Asian violence on Asian Americans under COVID-19, as most Asian Americans in this area are not direct victims of violence yet worry about the possibility of becoming victims. Also, it was the early stage of COVID-19 when this study was conducted, in which anti-Asian sentiment and violence due to COVID-19 were not visibly observed. This study will examine how this anti-Asian American violence influences Asian Americans' daily lives. More specifically, how much Asian Americans in rural Alabama are worried about going out due to anti-Asian American violence? When we began to discuss this study, the pandemic was still in the early stage in the study area. The hate crimes against Asians were mainly from the news, which was happening primarily in metropolitan areas. Thus, we tried to analyze the results of the psychological effect of anti-Asian violence on Asian Americans under COVID-19 in rural areas.

Our research questions are: 1) Does age hinder Cambodians and Laotians from going out due to anti-Asian violence? 2) Do educational attainment show a stronger reaction to anti-Asian violence? 3) Do watching various media lessen the worries about anti-Asian violence? 4) Does the concern about infection increase the worries about anti-Asian violence? 5) Do leaders' advice on COVID-19 reach out to the members well and help members' well-being?

It would be meaningful to understand the different effects of anti-Asian American violence by COVID-19 on a small and underserved population. As stated above, Cambodians and Laotians in BLB are small and unrecognized. They have not received sufficient government support for disasters due to cultural and language barriers. Again, we consider COVID-19 one of the natural disasters and want to examine whether this pandemic influenced these communities like the national trend. Min and his colleagues (2021) found that these two communities have experienced similar migration processes as refugees and adjusted their lives

in the BLB area yet demonstrated different sociodemographic characteristics. More specifically, one of the main research questions is if these two communities vary the effects of anti-Asian American violence by COVID-19. It is expected to provide meaningful implications on policies and programs to help underserved rural Asian Americans.

## **Data and Methods**

### **Study Design**

This study was designed as a cross-sectional study and was conducted using an online survey platform, Qualtrics, from April 13 to May 10 in 2020, as we could not do the face-to-face survey due to the novel COVID-19 pandemic. Community leaders recommended the researchers use the communities' Facebook page, as many members used and connected through Facebook. The survey link was posted on each community's Facebook page, and respondents could answer the survey questions by clicking the link (Min et al., 2021). All the participants were 18 years and older, and either Cambodians or Laotians were living in Bayou La Batre, Alabama. Community leaders spread the word to community members after posting the survey link. The survey's Institutional Review Board (IRB) was approved by the research team's institution. The survey questionnaire was translated into Cambodian and Laotian by native speakers. The Facebook page has two versions of the survey links, the English and Cambodian or Laotian versions.

The questions were about the reception time of COVID-19 information, the reception of COVID-19 information by community leaders, the CDC (Center for Disease Control and Prevention) recommendations regarding social distancing, stress, unemployment, and key demographic characteristics (age, gender, educational attainment, and occupation). More importantly, the survey had questions directly linked with this study's dependent variable, "Are you afraid to go out because people think COVID-19 is from Asia or Asian people? (Worry about anti-Asian violence)." Worry about anti-Asian violence was asked on a five-point scale from definitely no to definitely yes and was recoded into yes (probably yes and definitely yes) and no (might or might not, probably not, and definitely not) for the sake of the analysis. Subsequently, the logistic regression model was utilized (Hamilton, 2013). Stata 16.1 was used as a statistical package.

Independent variables were media use, concern about infection, leaders' advice, and demographic characteristics such as age, gender, and educational attainment. Media use was defined as the number of media a respondent watched to obtain COVID-19 information and ranged from 1 source to 6 or more sources. The concern about infection was defined how much a respondent was concerned about the COVID-19 infection and was measured on a 5-point scale (afraid a great deal, afraid a lot, afraid a moderately, afraid a little, did not afraid at all). The community leaders' advice was defined as if a respondent had received advice about COVID-19 response from the community leaders, which was measured as a binary (yes = received, no = not received). Age was measured in a 10-year cohort; the twenties (18 and 19 years old were combined into this group), thirties, forties, and fifties and over. Gender was measured in a binary variable (yes = female, no = male). Educational attainment was measured in three categories, less than high school, some college, and college and beyond.

A total of two hundred thirty-four Laotians and one hundred nineteen Cambodians were used for the analysis after deleting missing cases. The study wanted to know whether the media use and leaders' advice had negative associations with respondents' worry about going out due to



anti-Asian sentiment and whether the concern of infection would have increased respondents' fear of going out due to anti-Asian violence. In addition, this study expected that age would show a negative association with fear of going out: middle- and older-adults compared to younger ones were better at handling negative emotions from COVID-19 (Charles, 2010). The more educated worried more about going out due to anti-Asian sentiment.

However, this study has several limitations. First, interpreting the results requires caution as the sample is relatively small and not representative (Min, 2019). The respondents were recruited through Facebook pages, where community members shared information, but people who joined or are familiar with Facebook were less likely to participate in the survey. Second, related to the first, this survey had more young adults than those in the previous study (Min et al., 2020). Conducting this survey through the Internet might be why young adults who were more familiar with using the Internet were more likely to participate. Third, this study could not distinguish the impact of immigration status on the dependent variable, as the study did not include immigration-related questions. Including immigration questions, such as the length of the stay and language fluency, would better understand the responses on anti-Asian violence for two communities and other aspects of community issues, such as educational attainment and media use. Finally, As the pandemic has lasted more than two years and the crimes against Asian Americans have increased, it would be meaningful if the rural setting compared to the urban one provides a safer community environment for Asian Americans. Another interesting question related to this rural setting in the further analysis is to analyze the association between anti-Asian violence and gender.

## Results

Table 1 presents the descriptive statistics for each community. Out of three hundred fifty-three samples, 119 Cambodians and 234 Laotians. The data showed that both communities had more younger adults, unlike the previous survey (Min et al., 2020); in particular, about 43% of Cambodians were their twenties. More than half of Cambodians were females, while 44% of Laotians were females. Educational attainment showed one of the significant differences between the two groups. About two-thirds of Cambodians had less than a high school education (62%), while 92% of Laotians had at least some college education.

**Table 1.** Descriptive Statistics for Cambodians and Laotians in Rural Alabama

Variable	Cambodian (n=119)		Laotian (n=234)		Min.	Max.
	%	s.d.	%	s.d.		
<b>Age Group</b>						
20s	42.9	0.50	6.4	0.25	0	1
30s	26.9	0.45	35.0	0.48	0	1
40s	10.9	0.31	53.9	0.50	0	1
50s +	19.3	0.40	4.7	0.21	0	1
Female	54.6	0.55	44.4	0.50	0	1
<b>Education</b>						
Less than HS	62.2	0.62	7.7	0.27	0	1
More than HS	27.8	0.19	92.3	0.50	0	1
Media Source #	1.8	1.43	4.4	1.30	1	6
Afraid of Infection ##	4.1	0.92	3.4	1.34	0	5
Leader's Advice	81.5	0.39	93.6	0.25	0	1

Note: # Average, 6-point scale (1- 1 media source, 6 – more than 6 media sources)

## Average, 5-point scale (1- not at all, 5 – a great deal)

The media use was another noticeable difference between the two groups: on average, Laotians watched 4.4 different media sources to obtain COVID-19 information, while Cambodians watched 1.8. More Cambodians than Laotians were worried about the COVID-19 infection (4.1 for Cambodians vs. 3.4 for Laotians, respectively). Most community members received advice about COVID-19 from their community leaders (93.6% for Laotians vs. 81.5% for Cambodians, respectively).

Table 2 shows the logistic regression results for worry about going out due to anti-Asian violence. Compared to Cambodian twenties, Cambodians in their thirties were 18 times more likely to worry about going out due to anti-Asian violence, which was the highest among all other variables in the model. Cambodians with more than a high school education were five times more likely to worry about going out due to anti-Asian violence. Cambodians who were worried about infection were 2.4 times more likely to worry about going out due to anti-Asian violence. Cambodian community leaders' recommendations about COVID-19 lowered respondents' worry about going out due to anti-Asian sentiment by 85%.

Meanwhile, compared to Laotian twenties, Laotian fifties and over showed 95% less likely to worry about going out due to anti-Asian violence. Watching various media sources to obtain COVID-19 information also lowered respondents' worry about going out due to anti-Asian sentiment by 40%.

**Table 2.** The Results of the Logistic Regression Models

Variable	Cambodian (n=119)				Laotian (n=234)					
	Odds Ratio	S.E.	[95% CI]		Odds Ratio	S.E.	[95% CI]			
<b>Age Group</b>										
20s	(Reference group)									
30s	19.26	**	21.84	2.09	117.69	0.13	0.17	0.01	1.57	
40s	1.82		1.47	0.38	8.81	0.12	0.15	0.01	1.49	
50s+	1.09		0.74	0.29	4.10	0.05	*	0.07	0.00	0.89
Female	0.86		0.47	0.30	2.49	0.89	0.26	0.50	1.58	
<b>Education</b>										
Less than HS	(Reference group)									
More than HS	6.18	*	4.55	1.46	26.17	2.32	1.85	0.49	11.04	
Media Source	0.84		0.21	0.52	1.37	0.60	**	0.11	0.42	0.87
Afraid of Infection	3.37	***	1.16	1.72	6.60	0.82		0.09	0.66	1.01
Leader's Advice	0.15	*	0.13	0.03	0.78	0.11		0.13	0.01	1.03
Constant	-2.89	***				6.44	***			
Log likelihood	-45.77					-141.84				
X <sup>2</sup>	47.02	***				40.29	***			

Note: \* <.05, \*\* <.01, \*\*\* <.001

## Discussion

This study ascertained the daily life disruption for Asian Americans in rural Alabama by the anti-Asian violence under the novel COVID-19. More specifically, we examined how much the daily lives of Cambodians and Laotians in rural Alabama were influenced by anti-Asian sentiment. We ran the same analytical model for each community to see differences, as the two communities demonstrated distinctive sociodemographic characteristics. For example, Cambodians had more younger adults, a lower level of educational attainment, and media use in the survey. Meanwhile, most Laotians were in their thirties and forties, had some higher education levels, and received leaders' advice on COVID-19.



Although the research questions did not ask about the direct experience of anti-Asian violence under COVID-19, the results found the different psychological effects of anti-Asian sentiment for Cambodians and Laotians. The younger Cambodian adults were substantially more concerned about anti-Asian violence, which made sense considering the recent immigration pattern for this community. Although we hypothesized the opposite outcome for the age variable, Min et al. (2021) reported that Cambodians gained new community members through international marriage brides from Cambodia. These new young members are more likely to have cultural obstacles like the first generation have had, obtain limited information due to the language barrier, and depend on advice from leaders they can trust. That might explain why Cambodians' educational level was lower than Laotians, younger Cambodians' worry about the infection was the highest, and community leaders' recommendations influenced Cambodians significantly. Community leaders' advice lowered respondents' concerns for Cambodians and re-assured the vital role of community leaders under COVID-19. As for education, the more educated Cambodians were worried about going out due to anti-Asian violence.

Meanwhile, the age variable for Laotians showed an overall moderating effect of age, as expected (Charles, 2010). Compared to their twenties, Laotians in their fifties showed a lower concern about going out due to anti-Asian violence. Laotian fifties demonstrated that older adults handled better on the perceived disruption of COVID-19 and showed superior well-being than younger Laotians. The community leaders' recommendations for Laotians did not show any significance, although the percentage of leaders' advice reception was higher for Laotians than for Cambodians. The insignificant result of leaders' recommendations did not mean Laotians overlooked their leaders' advice. Instead, we assumed that Laotians, particularly educated ones who did not face language barriers and could obtain COVID-19-related information, decided their behaviors by incorporating leaders' suggestions. We found a negative association between media use and fears of going out, which we hypothesized a positive outcome. A plausible explanation for this result would be that the media use question was not for anti-Asian violence but for acquiring COVID-19 information. Community members had not received accurate information from governments in previous disasters. For instance, about 30% of residents received Wireless Emergency Alerts (WEA), which worsened the disaster damage (Min et al., 2020). Respondents were more likely to interpret this question as to how they obtained the COVID-19 information, as this survey was a part of the disaster study. Thus, the media use in this study was linked to reducing uncertainty, like Sakurai and Murayama's study (Sakurai & Murayama, 2019). Obtaining accurate and prompt information reduced stress, which helped more appropriate damage-avoiding behavior for community members.

Another implication of this study is considering other small and underserved Asian Americans. The total Cambodian and Laotian populations in the U.S. are still small compared to other Asian American groups (Pew Research Center, 2021a; Pew Research Center, 2021b). Also, Cambodians and Laotians are not fit into the model minority myth (Chou & Feagan, 2015), as many of them are living with a lower household income (Pew Research Center, 2021a; Pew Research Center, 2021b). However, their presence and immigration history are distinctive and ongoing (Cowley et al., 2012). The first generation is getting old, and the second generation is now taking responsible roles, such as preserving the culture and language in the community. The small communities of these people surrounding the Gulf Coast might



face similar situations, which we need to pay attention to. Thus, policies and programs to help them must consider these results.

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