In Search of Food Justice: Analyzing Variation across Californian Asian American Food Security in 2017

Joshua T. W.-A. Lin

ABSTRACT

The Asian American community consists of about 20 ethnic groups, but oftentimes, discourse surrounding the community often homogenizes the group into a singular entity. However, this aggregation erases the unique ethnographic histories, cultures, and the distinct challenges each ethnic group faces. One problem area that disproportionately affects certain groups more than others is food security. Previous research suggests that it is likely some ethnic groups may be more prone to food insecurity compared to others, but the current field of literature is quite small. This project seeks to further this research by providing more evidence for this hypothesis. For my research, I utilized a mixed-methods approach. First, I conducted a cross-sectional multivariate regression analysis on ethnic food security data from the 2017 California Health Interview Survey. I found the following regression coefficients: Chinese (-0.0524), Japanese (-0.0823), Korean (-0.0229), Vietnamese (0.0592), Filipino (-0.0260), Other Asian (-0.0616). Each group tested statistically significant, except for Korean and Filipino Americans. Additional tests with added controls (language fluency, location, and gender) were done as well. Then, in order to supplement my discussion of my quantitative results, I held seven interviews with individuals from food bank organizations, Asian American community organizations, research institutions, and the California state CalFresh office. My data suggests that there is variation in food security levels across different ethnic groups, and this could be due to varying access to wealth and capital and distinct ethnographic histories. My research also exposes the lack of sufficient government support for the Asian American community.

KEYWORDS

food systems studies, food security, Asian Americans, model minority, environmental justice, , cross-sectional multivariate regression, cross-sectional interviews

INTRODUCTION

Despite the economic growth in recent years in the US, food insecurity remains an unsolved problem, affecting 11 percent of families nationwide (Coleman-Jensen et al. 2019). In other words, 37 million Americans do not have "consistent access to and availability of enough food for all members of a household to lead an active and healthy lifestyle" (Becerra et al. 2018). Based on this definition, there are a variety of tangible consequences. Families suffering from food insecurity might consistently miss a meal or more every day or resort to eating fast food to stave off hunger due to insufficient means to obtain fresh produce and nutritious foodstuffs (Sbicca 2012). A household might also live in a poorer neighborhood with few grocery stores. Aside from this definition of food insecurity, it is also important to realize that rates of food insecurity are higher among families of color and low-income households (Alkon and Mares 2012; Coleman-Jensen et al. 2019). Adding this layer of race and class to the discussion, it is clear that the nature of this problem requires structural responses to combat food insecurity.

In order to bring families out of food insecurity, the food justice movement has emerged to better incorporate marginalized communities into the national, state, and local food systems. Food justice refers to the idea that every individual should have the same level of access to high-quality and nutritious foodstuffs regardless of their race, socioeconomic background, and gender (Sbicca 2012; Clendenning et al. 2016). Examples of food justice projects include farmer's markets within communities of color, increasing the number of foodstuffs specific to certain cultures, and planting community gardens (Alkon and Mares 2012; McEntee and Naumova 2012). Despite the emergence of the food justice movement, however, a closer look at food systems research and food justice initiatives reveals a lack of attention on the Asian American community. The USDA's latest food insecurity report does not explore trends in Asian American food insecurity, and research on food justice initiatives often explore projects in other racial communities, leaving Asian Americans outside the picture. This begs the question as to why food justice discourse neglects this racial category.

I suggest that one reason why little research hones in on Asian American food insecurity is due to their perceived "success." Compared to other racial minorities, the Asian American community is less likely to be food insecure. Only 10 percent of Asian Americans are reportedly

food insecure—much lower than other racial minorities (Coleman-Jensen et al. 2019). On paper, this low rate of food insecurity is something to be praised; our nation is doing well to combat food insecurity in the fastest growing racial minority (Hoeffel et al. 2014). Since this racial group is prospering in the US, politicians and the media have begun calling Asian Americans the model minority (Wu 2014). However, this idea that the Asian Americans constitute a model minority actually obscures challenges they face. More disadvantaged Asian American minorities, like the Hmong refugees and Filipino Americans, may actually face higher food insecurity rates than their wealthier, more educated counterparts (Minkoff-Zern et al. 2011). Based on this possibility, it is clear that although the food justice movement is gradually responding to the needs of food insecure households, further investigation is necessary to research food insecurity within the Asian American community.

To better understand the prevalence of food insecurity among Asian American households, the research presented here is interested in whether certain Asian American ethnic groups are more likely to be food insecure. I sought to answer this question by researching the variation in the proportion of food insecurity households among different Asian American ethnicities: Chinese, Korean, Japanese, Filipino, Vietnamese, and Other Asians. In addition, I was curious what might be the impact of various confounding variables on food security. First, I wondered if immigrants might be more likely to be food insecure, and whether immigrants of certain ethnic groups would exhibit higher food insecurity rates compared to those of other ethnic groups. Another question I hoped to investigate was whether rural Asian Americans were more likely to be food insecure compared to their urban counterparts. Last but not least, I also intended to look at the influence of gender and age. Keeping in mind all these different questions, I hypothesize that food security levels do vary across Asian American ethnic groups due to different levels of social and human capital. However, I do believe that certain factors like gender and age might impact the food security of individuals among all ethnic groups. Therefore, I also hypothesize that there could be multiple factors causing variation in regards to Asian American food security.

BACKGROUND

Historical Context

To begin understanding the unique circumstances of the Asian American community, we must first understand the history of immigration laws barring or limiting the immigration of first-generation Asians into the US. The Chinese and Japanese were the first Asian immigrants to step foot into the US, trickling in during the famous 19th century California Gold Rush. They found jobs in various sectors: working in the gold mines to strike it rich, laboring in the fields of wealthy American farmers, or establishing themselves in the service industry with their own restaurants or laundromats (Takaki 1989; Chang 2004). However, both the Chinese and Japanese faced widespread xenophobia, as their fellow white laborers complained of dwindling employment opportunities and the corruption of "American" culture (Wu 2013). Eventually, to protect the interests of "true" American citizens, the government passed the Chinese Exclusion Act of 1882, barring future Chinese immigration (Takaki 1989). Around the same time, the government also entered an immigration agreement with Japan known as the Gentleman's Agreement to obstruct Japanese immigration (Minkoff-Zern et al. 2011). Despite this, Chinese and Japanese immigrants still managed to sneak into the US, and some even obtained citizenship. However, it took almost a century until the US government lightened the restrictions with the passage of the Immigration Act of 1965. Only then did American society seem to open up to the Asian Americans. Based on this understanding of the difficult history of immigration and discrimination, we can now look at how the modern struggles of the community trace back to this speckled history.

The primary issue facing the Asian American community is the myth of the model minority, as it hinders the community from procuring the resources and redress more marginalized members need. Going back to the Immigration Act of 1965, shortly after its passage, immigrants from all over Asia were coming to the US to achieve their own American dream, but these individuals were of a different breed. They were not the blue-collar workers of the past; they had university degrees, professional experience, and wealth. This new group were already model citizens in their own countries, and they were ready to step into the role of the model minority. And the American government eagerly capitalized on this fact. Suddenly, news about the model minority began

appearing in the news: the Asian American community had successfully assimilated into mainstream American society. They were intelligent, modest, and obedient members of the American nation—an ideal role model for other racial and ethnic minorities. However, these statements effectively erased the history of marginalization earlier generations experienced. In reality, this was a government ploy in response to the black Civil Rights Movement (Wu 2013). The government wanted to counter the claims for civil rights by the black community, claiming that civil freedoms were already available to all racial minority communities. Thus, Asian Americans did not obtain success through hard work but by political convenience. However, while the model minority was a descriptive modifier borne in the 1960s, it still clouds Asian American discourse today, particularly writing out the unique experiences of the older generation and more marginalized ethnic communities in modern America. Therefore, this model minority myth impedes the adequate amelioration of specific Asian American communities, and studies of food justice and food systems are no different.

Before we continue with our discussion of the position of Asian Americans in the American food system, a more profound grasp of food justice terminology is key. The primary terms are food (in)security, food justice, and food deserts. First, the US Department of Agriculture (USDA) states that food security is the "consistent access to and availability of enough food for all members of a household to lead an active and healthy lifestyle" (Becerra et al. 2018). Since this is quintessentially a subjective measurement, the USDA goes on to further break down the term into two additional levels: low food security (or food insecurity without hunger) and very low food security (or food insecurity with hunger). Low food security refers to an inability to maintain a high-quality diet or appetite consisting of the different food groups. Very low food security has the same definition as low food security while also taking into account irregular consumption patterns due to food scarcity or the inability to obtain food (Becerra et al. 2018). For the purpose of this review, I will refer to both low food security and very low food security as food insecurity.

While food security is a measurement of an individual's access to food, food justice is a social justice movement that attempts to improve food security for all communities (Sbicca 2012). Environmental justice seeks to preserve the environment "as a site where people (in particular people of color) can 'live, work, and play'" (Sze 2004). Therefore, it is interested in combatting forms of racism that systematically marginalize a certain group of people from enjoying the same rights to living in and using the resources provided by the environment. As an offshoot of

environmental justice, the objective of food justice is to provide redress to communities that have been excluded from the food system due to race and socioeconomic class, attempting to amend the food system to adequately provide equitable access to these marginalized communities (Clendenning et al. 2016; McEntee and Naumova 2012).

Following this definition, many food justice movements focus on improving food security for specific racial/ethnic communities or poor neighborhoods (although it is often the case that a neighborhood is both impoverished and racially marginalized). In order to do so, food justice advocates often are interested in alleviating food deserts. Food deserts refer to neighborhoods that have a scarcity of high-quality foodstuffs, like organic produce, and whatever does exist is often sold at prices too costly for local residents (Sullivan 2013). Typically, the food desert occurs, because there is no supermarket within reasonable distance, or because the local supermarket is too expensive for the neighboring households. As a result, food justice movements have pushed for the establishment of affordable grocers, farmer's markets, and culturally appropriate food banks to supply these neighborhoods with the quality produce and foodstuffs they need (McEntee and Naumova 2012). For instance, farmers' markets in recent years have appeared in Oakland to serve the black community (Alkon and Mares 2012). With this understanding, we can begin to look at the state of previous literature concerning the variation in Asian American food security levels across different ethnic groups.

Research Framework

The current field of Asian American food justice research is quite small; however, the few existing papers show that there are significant departures in food security levels across different ethnic groups. Becerra et al. (2018) researched levels of food security among Asian Americans. They found that "the highest period prevalence of food insecurity was noted among the Vietnamese subgroup (16.42%) and lowest among the Japanese subgroup (2.28%)." Therefore, there is clear variation among ethnic groups. These findings were echoed by Cook et al. (2017) who found both socioeconomic and nutritional variation among Asian American ethnic groups. South Asians and Northeast Asians on average had higher socioeconomic standings than their other Asian counterparts. In addition, they also found that there was a correlation between socioeconomic standing and rates of obesity; except for South Asians, who were an outlier,

Northeast Asians exhibited lower rates of obesity. In contrast, ethnic groups which exhibited lower socioeconomic standing, such as Vietnamese and Filipinos, on average also encountered higher rates of obesity. While the study focused on rates of obesity, these health issues could have resulted from diets poor in nutrition caused by food insecurity. This is highly likely, since Asian Americans have exhibited higher rates of malnutrition due to food insecurity (Leung and Tester 2018).

Some studies have taken this research further by adding the additional layer of levels of acculturation as well as citizenship status to compare naturalized Asian Americans to their immigrant counterparts. In terms of acculturation levels (this was measured by the language spoken at home), households that spoke only a non-English language were more likely to experience food insecurity than households that spoke English and another language and much more likely compared to households that only spoke English (Becerra et al. 2018). In terms of citizenship status, findings are somewhat mixed. Returning to the study conducted by Cook et al. (2017), there were elevated risks of obesity among foreign-born and lower-income ethnic communities, particularly for Southeast Asian ethnic communities. In addition, Walsemann et al. (2017) found that US-born Asian Americans exhibited higher food security levels than their foreign-born counterparts. However, they also found that Asian immigrants who have become naturalized citizens or have obtained their green card were more likely to be food insecure than those who had not. They speculate that this might be due to the presence of Asian immigrants who are only here for a short period, i.e. exchange students who may have more resources than their naturalized counterparts or even American-born Asians. It must be noted, though, that this study did not focus on examining individual ethnic groups. Therefore, they state that their findings could have over- or under-estimated food security levels for specific ethnic groups, such as underestimating food insecurity among Cambodian immigrants.

This deviation is definitely possible, when we consider the fact that the forms used survey levels of food security among different demographics lack translations into many Asian languages (Kwan et al. 2014). These surveys include the US Household Security Survey Module and the Food Security Supplement to the Current Population Survey. The unavailability of translations was one of the reasons cited for the lack of participation by the elderly Korean population in food aid programs (Gabor et al. 2002). Therefore, while some research exists pertaining to the Asian American population, it is important to keep in mind that much research focuses on the community on the whole, rather than individual ethnic groups. Building upon the previous research, the study

presented here seeks to echo their methodology to understand the links between food security and ethnicity in order to fill the gap in current Asian American food systems discourse.

METHODS

Quantitative Analysis

Study Site Description

To answer my central research question, I used a mixed-methods approach, studying the following Asian American populations in California: Chinese, Japanese, Korean, Vietnamese, Filipino, and Other Asian. I chose these groups for two primary reasons. First, although I aimed to study as many ethnic groups as possible, virtually all available datasets containing data on food security and ethnicity only contain these groups; many of them simply lack information for other ethnicities not stated above, like Bangladeshis, Burmese, Indonesians, etc. Second, these groups are still representative of the Asian American population, in that individuals from these groups come from a variety of immigrant histories and share traits in common with individuals from the missing ethnic groups, such as having similar socioeconomic backgrounds. Of course, they do not serve as perfect stand-ins for individuals of other ethnic communities, and I planned to fill in the blanks of my data with information garnered from my interviews (see below for my qualitative analysis). In addition to the decisions made regarding ethnicity, I chose to analyze California among other states, since California has the largest Asian population, and since a high proportion of each ethnic group stated above live in California (Hoeffel et al. 2012).

Data Collection and Analysis

The first portion of my research involved a cross-sectional quantitative analysis of the current average food security levels across the different Asian American ethnic groups. To obtain data regarding the proportion of food insecure households for each ethnic group, I used data from the 2017 California Health Interview Survey (CHIS), which studies an array of different health topics concerning California households by conducting web and telephone interviews. The dataset

interviewed a total 21,294 households. Of those households, 21,153 adults were interviewed, and that number included 1,504 Asian adults. There was also an even age distribution across all ethnic groups, in that there were primarily respondents below age 70. The CHIS surveyed these individuals with 483 different variables related to their background, medical history, habits, etc. in mind. Because the original dataset had a large number of different variables, I first cleaned the data in Excel to relabel each variable and to remove unwanted variables. The variables I focused on for this project included the following: ethnicity, gender, location, birthplace, citizenship status, English fluency, and food security status. Income was not examined, since food security is defined based on income levels. Therefore, lower income individuals are expected to be more likely to be food insecure and vice versa (Coleman-Jensen 2016).

After cleaning the data, I used R software to conduct several regression tests to compare the variation in food security levels across each ethnicity, using data for non-Asian American groups as the control. Multivariate regression analysis was chosen as the primary mode of statistical analysis, since it could help determine whether food security levels across each ethnicity actually did vary and the degree of variation, while taking into account other confounding variables. First, I conducted a simple multivariate regression analysis, only looking at food insecurity rates across different Asian American ethnic groups. Then, I performed multiple multivariate regression tests to control for different variables to see their impact on the relationship between ethnicity and food security levels. These additional controls included gender, assimilation/acculturation proxies (language fluency, birthplace, and citizenship status), and location (urban versus rural status). Finally, I included one regression model that took into account all of these controls together.

While investigating each different regression model, I chose the average food insecurity rate for all non-Asian groups included in the 2017 CHIS dataset as my control, since I needed to compare rates of food insecurity for each distinct Asian American group to a group of individuals external from the Asian American population. If I used the average food insecurity rate for the Asian American group as my control, the results might be fallacious, since the average rate of Asian American food insecurity is the quantitative result of the data I analyzed: the food insecurity rates of each Asian American ethnic group. Furthermore, I used the standard error of the regression as my measure of variability, and I used an p-value of 0.05 to test my hypothesis. As for assessing the robustness of each of my regression models, I crafted and analyzed diagnostic plots for all of

my models. However, since most of the variables I analyzed were categorical variables, I did not apply any transformations to my data.

Qualitative Analysis

Study Site Description and Data Collection

To enrich my understanding of my statistical analysis, I conducted both in-person (prior to the COVID-19 pandemic) and over-the-phone interviews with nine individuals involved in either Asian American community organizations or food aid organizations. The purpose was to add more texture to the results of my quantitative analysis. In other words, I hoped to discover what might be the underlying reasons behind my findings, and what is being done currently to address Asian American food insecurity. Based on this intent, I crafted a list of potential organizations to contact, and after further investigation into the nature and scope of each organization, I triangulated my list of potential contacts to focus on organizations that would likely have the most expertise on Asian American food insecurity. Afterwards, I contacted the interviewees through various methods: messaging through LinkedIn, cold emailing non-profit organizations, and utilizing my own personal network and that of my mentor, Kathryn De Master (who has conducted similar research).

There were two main categories of interviewees. The first group consisted of individuals involved in some form of social or environmental justice work pertaining to the Asian American community as a whole or a specific ethnic group. Therefore, they had in-depth knowledge of the Asian American population and the present challenges they face. The other category included individuals that worked in food security organizations. While some of them shared that they had not worked with Asian American individuals specifically, they all had varying understanding of the outreach work done by their respective organizations to reach out to the Asian American community.

To interview these individuals, I developed a list of interview protocols and questions following IRB guidelines (see Appendix A). Since I did not ask questions regarding personal information or experiences, I did not apply for IRB approval, but I did verify that I did not need to apply using an online quiz provided by UC Berkeley's Committee for Protection of Human Subjects to determine the need for research consent. However, at the start of each of my interviews,

I reminded my interviewees that their privacy would be respected, and that their anonymity would be maintained in my research. For my in-person interviews, I recorded the interview with the permission of the interviewee and then used Express Scribe to transcribe my interviews. For over-the-phone interviews, given the limitations of my resources, I simply took notes throughout the entire interview rather than recording their responses. Once I compiled all my interviews, I then went about analyzing my transcriptions and notes in search of themes that deepened my understanding of Asian American food security.

Data Analysis

Most of my interviews occurred after shelter-in-place orders commenced; therefore, due to time limitations, I did not formally code my interview transcriptions and notes to search for certain themes. Instead, I first categorized general details and responses based on the different topics we discussed: general understanding of Asian American food security, anecdotes and theories, knowledge of current public and private efforts to address food security. Using these different categories, I summarized each of my interviewee's responses for each category. Then, based on general themes that seemed to appear repeatedly across each interview for each category as well as noteworthy details, I created a list of significant themes: sources of ethnic variation, collective community challenges, and the role of the state. Putting this information together, I used this knowledge of these emergent themes to enhance my discussion of my quantitative findings.

RESULTS

My research results are divided into two sections reflecting the methods I used. First, I will go over the results of my multivariate regression analysis of the 2017 CHIS data I used. Second, I will detail the interview responses I received in regards to California Asian American food security.

Quantitative Analysis

Sample Characteristics

Among the Asian Americans sampled in the 2017 California Health Interview Survey, 8.44% stated that they were food insecure, an average rate considerably lower compared to other racial/ethnic groups (Figure 1). Separating this into different ethnic groups, Vietnamese Americans exhibited the highest food insecurity (18.2%), whereas Japanese Americans were the least food insecure (4.11%). In this case, Vietnamese Americans might appear as an outlier, but the variation in food security levels among the other Asian American categories is still readily apparent.

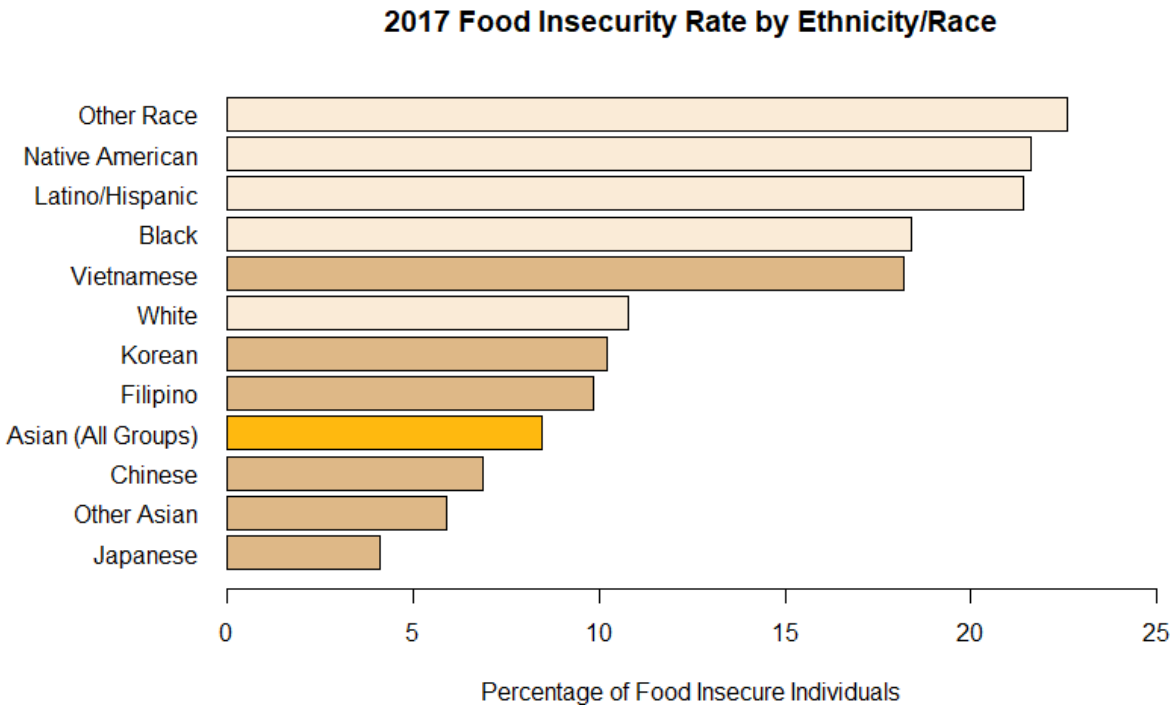

Figure 1. Food Insecurity Rate by Race/Ethnicity in 2017.

Additional observations were made in respects to gender, income, geographic location, and assimilation proxies (Table 1). Across the board, almost all Asian respondents reported that they lived in urban areas. This is likely due to significant undercounting of rural Asian individuals. In addition, there was about an even split between male and female Asian respondents. It must be noted that the survey did not include a choice for respondents to report non-binary gender identities. Interestingly, most Japanese individuals were born in the US; there were very few non-citizen and naturalized Japanese individuals. Japanese Americans also exhibited much higher rates of English fluency. In contrast, Vietnamese Americans had the lowest rates of English fluency.

Table 1. Sample characteristics by Asian American subgroup. Data was downloaded from the 2017 California Health Interview Survey. Results are reported in percentages.

	Asian	**Chinese**	**Japanese**	**Korean**	**Vietnamese**	**Filipino**	**Other (Asian)**	**Non-Asian**
Food Insecurity Rate	8.44	6.89	4.11	10.2	18.2	9.85	5.90	12.5
Location								
Urban	94.8	96.0	94.5	91.7	96.5	94.9	92.9	79.9
Rural	0.0519	0.0380	4.79	8.33	2.80	4.74	6.78	20.1
Birthplace								
US-born	42.2	38.0	84.2	31.5	23.8	39.1	35.4	83.7
Foreign-born	57.8	61.8	15.1	68.5	75.5	60.6	64.3	16.3
Citizenship								
US citizen	42.2	38.0	84.2	31.5	23.8	39.1	35.4	83.7
Naturalized US citizen	43.8	45.6	7.53	50.9	66.4	49.3	46.6	9.32
Non-citizen	14.0	16.2	7.53	17.6	9.09	11.3	17.7	6.94
Language Fluency								
English Only	37.5	14.7	73.3	27.8	12.6	45.3	33.6	75.2
English (Moderate)	51.3	53.7	24.0	46.3	51.0	52.2	61.4	17.9
English (Not Well)	11.2	14.7	2.05	25.9	35.7	2.19	4.72	6.95
Gender								
Male	49.5	49.4	39.7	46.3	46.2	46.7	55.8	43.6
Female	50.5	50.4	59.6	53.7	53.1	52.9	44.0	56.4

In addition, I filtered the data by ethnicity and grouped the data to look at the instance of food insecurity along with an additional control variable. For instance, I looked at the rate of food insecurity for a given ethnic group based on different levels of language fluency. The results are summarized below (Table 2). It is interesting to note that male Asians perform better on average, and that foreign-born Asians have higher food insecurity across all ethnic groups. However, patterns are not clear for citizenship and language fluency. It must be noted that there is potential undercounting of certain groups, such as Japanese Americans with low English-speaking skills.

Table 2. Summary of ethnic food insecurity rates with controls. Results are shown in percentages.

	Asian	**Chinese**	**Japanese**	**Korean**	**Vietnamese**	**Filipino**	**Other (Asian)**	**Non-Asian**
Location								
Urban	7.98	6.89	4.11	8.33	18.2	9.49	5.31	9.35
Rural	0.465	N/A	N/A	1.85	N/A	0.365	0.590	3.15
Birthplace								
US-born	3.32	2.38	3.42	3.70	2.80	3.65	3.24	9.13
Foreign-born	5.12	4.51	0.685	6.48	15.4	6.20	2.65	3.37
Citizenship								
US citizen	3.32	2.38	3.42	3.70	2.80	3.65	3.24	9.13
Naturalized US citizen	3.86	3.33	N/A	4.63	14.0	5.11	1.77	1.35
Non-citizen	1.26	1.19	0.685	1.85	1.40	1.09	0.885	2.03
Language Fluency								
English Only	2.26	1.43	2.05	2.78	N/A	2.92	2.36	7.66
English (Moderate)	3.26	2.14	1.37	1.85	6.29	6.20	2.65	2.50
English (Not Well)	2.93	3.33	0.685	5.56	11.9	0.730	0.885	2.34
Gender								
Male	3.52	2.61	3.42	2.78	7.69	3.28	2.65	4.63
Female	4.92	4.28	0.685	7.41	10.5	6.57	3.24	7.87

Multivariate Analysis

I conducted a multivariate regression analysis of the data between ethnicity and food security status and found the following regression coefficients (Table 3). I then ran different models to control for different variables as stated earlier (Table 3). All ethnic groups were statistically significant except for Korean and Filipino Americans, thus providing some evidence to support my hypothesis: that food insecurity rates correlate with ethnicity. Interestingly, only the regression coefficient for Japanese American and Other (Asian) food insecurity rates remained robust across all different regression models. In addition, while the regression coefficients for Chinese Americans varied widely across each different model, the rates of food insecurity still remained statistically significant. For all ethnicities, I found that although gender did not have a strong association with food insecurity, the prevalence of food insecurity across different ethnic groups strongly varied based on geographic location and language fluency. Urban Chinese, Japanese, Filipino, and Vietnamese Americans had a higher prevalence of food insecurity compared to their urban counterparts. Meanwhile, the prevalence of food insecurity increased for each ethnic group the less fluent the individual's English ability was.

It must be noted, however, that the respective relationships between food security status with birthplace, citizenship as well as age were unclear. Each had mixed effects when related to food security and ethnicity. This could be due to undercounting of certain demographic groups. For instance, majority of Japanese respondents were US-born and, thus, US-born citizens. Meanwhile, only the Vietnamese American group exhibited higher food insecurity if they were foreign-born or non-US citizens. I also had hypothesized that rural individuals across all ethnic groups would exhibit higher rates of food insecurity. My data suggested otherwise, but taking a closer look at the proportion of responses from urban versus rural areas, my model may not have held true due to considerable undercounting of rural individuals for all ethnicities. Lastly, for age, although there was a fairly even distribution across all ages for each ethnic group, there were certain age groups that did not respond for each ethnic group, except the Vietnamese. I had hypothesized that older age individuals might be more likely to be food insecure, but the majority of my data comes from younger age ranges. Therefore, I could not come to a clear conclusion on aside from the fact that age may have some influence. The nature of it, however, is unclear.

Table 3. Association between Ethnicity and Food Insecurity. Data from the 2017 CHIS was used to create various regression models with different controls to determine the association and variation between ethnicity and the rate of food insecurity. Data for non-Asian respondents served as the base group for each model.

Regression Models

	Dependent variable:								
	Food Insecurity Rate								
	M1	M2	M3	M4	M5	M6	M7	M8	M9
Chinese	-0.052***	-0.046***	-0.091***	-0.067***	-0.079***	-0.082***	-0.051***	-0.068***	-0.078***
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Japanese	-0.082***	-0.077***	-0.080***	-0.083***	-0.082***	-0.072***	-0.084***	-0.082***	-0.066**
	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)
Korean	-0.023	-0.018	-0.068**	-0.040	-0.054*	-0.076**	-0.022	-0.040	-0.076**
	(0.032)	(0.032)	(0.032)	(0.031)	(0.031)	(0.031)	(0.032)	(0.031)	(0.031)
Vietnamese	0.059**	0.066**	0.008	0.056**	0.037	-0.018	0.060**	0.042	-0.012
	(0.027)	(0.027)	(0.028)	(0.027)	(0.028)	(0.027)	(0.027)	(0.027)	(0.027)
Filipino	-0.026	-0.020	-0.064***	-0.033*	-0.046**	-0.026	-0.025	-0.044**	-0.027
	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)
Other (Asian)	-0.062***	-0.057***	-0.102***	-0.078***	-0.091***	-0.070***	-0.058***	-0.089***	-0.077***
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Constant	0.125***	0.117***	0.111***	0.114***	0.110***	0.334***	0.106***	0.192***	0.368***
	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)	(0.008)	(0.003)	(0.008)	(0.014)
Location Control	No	Yes	No	No	No	No	No	No	Yes
Birthplace Control	No	No	Yes	No	Yes	No	No	No	Yes
Citizenship Control	No	No	No	Yes	Yes	No	No	No	Yes
Language Fluency Control	No	No	No	No	No	Yes	No	No	Yes
Gender Control	No	No	No	No	No	No	Yes	No	Yes
Age Control	No	No	No	No	No	No	No	Yes	Yes
Observations	21,153	21,153	21,153	21,153	21,153	21,153	21,153	21,153	21,153
R^2	0.002	0.004	0.012	0.018	0.019	0.034	0.004	0.017	0.053
Note:									*p<0.1; **p<0.05; ***p<0.01

Qualitative Analysis

I interviewed nine individuals from around the Bay Area, Los Angeles County, and Sacramento County from various Asian American community organizations and local government agencies. Members of Asian American community organizations were involved in different focus areas: food insecurity/aid, environmental justice, and community organizations. They were of various ethnic backgrounds—Chinese, Japanese, Vietnamese, Hmong—and their occupations included research, public service, and advocacy. Meanwhile, individuals from government agencies and non-profit food bank organizations were involved in CalFresh outreach, local

community development projects, and participation in food aid programs, although not all necessarily worked with the Asian American community. I then divided the responses based on interview section: (1) initial perception regarding Asian American food insecurity, (2) reasons for ethnic variation, (3) community, public, and private initiatives to alleviate Asian American food insecurity.

Initial perception of Asian American food insecurity

When I first asked many of the interviewees about their knowledge of Californian Asian American food insecurity, many expressed that they did not possess such knowledge. This lack of expertise was primarily due to a lack of data gathering. In order to maintain their clients' privacy, those I interviewed from food bank organizations stated that they generally do not collect personal information so that clients can come free of fears. My interviewees shared that sometimes the biggest barrier why an individual might not visit a food bank is because they are worried their personal information might be used against them, especially if they are an immigrant. However, some stated that they could make guesses based on anecdotes about the number of Asian American individuals that come by to their respective agencies.

These anecdotes varied widely, however. Those who worked at food banks located in Asian-dominant communities shared that their clientele was primarily made up of Asian Americans. In fact, some food banks reported that Chinese, Filipino, and Vietnamese comprised the majority. On the other hand, a few of my interviewees could only guess from what they heard from their colleagues, being further removed from daily interactions with members of the Asian American community. Still, they shared that for the entire state of California, the Asian American community exhibited lower rates of food aid use and participation in food aid programs, like CalFresh. Others stated that they felt they had a general understanding based on their knowledge or research on food insecurity in general, but were not confident enough to make a definitive statement.

The picture was slightly clearer for those who worked at Asian American-specific organizations. Two of my interviewees specifically wrote with marginalized Asian American populations, primarily within the Sacramento county. They highlighted that food security is indeed an issue for many Asian Americans, particularly for immigrants and refugees. They also noted that

the majority of their Asian clients were of older age. Still, they noted that both young and old Asian Americans can suffer from food insecurity. Overall, they noted that statistics might undercount the rates of food insecurity for these groups, emphasizing the need of continued outreach. However, one of my other interviewees shared that food insecurity is still prevalent among immigrants across all Asian American ethnic groups, even more predominant groups like Koreans and Japanese.

Reasons for ethnic variation

Once I told each of them that my quantitative results showed that Asian American food insecurity varied widely based on ethnicity, many of the interviewees were not surprised. Many of them argued that the issue intersected with class, stating that certain ethnic groups have lower social capital and wealth compared to their other Asian counterparts. A few of my interviewees shared that certain groups have a significantly lower median income compared to others, and therefore, might be more likely to be food insecure. Some interviewees, however, mentioned that there are also geographic differences. One of my interviewees noted that not all individuals coming from generally more affluent ethnic groups have the same access to resources, and those poorer individuals often do not inhabit the same geographic spaces as their wealthier counterparts. That lack to fewer resources, they stated, can inhibit other aspects of their lives that might influence their food security, like access to education and learning English. Nonetheless, while there may be food insecure individuals across all ethnic groups, some of my interviewees posited that a higher proportion of individuals from poorer ethnic communities could be food insecure compared to a more affluent ethnic group.

Another potential source of uneven food insecurity rates across Asian Americans was unique ethnographic histories of migration. A majority of my interviewees shared that individuals who frequented their organizations for food aid or general assistance were often immigrants. Of course, my interviewees noted that immigrants and refugees exist across all Asian American ethnic groups. However, immigrants from a certain community may have more or less access to resources that may correlate with the level of representation of their ethnic community. My interviewees shared that certain groups, like Chinese and Japanese Americans, have existed in the US since the 19th century, and therefore many community and non-profit organizations came into being to support their needs. However, other groups are not as well established within the US. Vietnamese

Americans came primarily during and after the Vietnam War, while Hmong refugees came largely during the 70s. As these groups lack an established footing within American society, there are varying levels of assistance available for these more 'novel' groups, especially for those with smaller populations.

Last but not least, some of my interviewees attributed the varying levels of food insecurity to cultural differences. stating that concepts of "face," or their social reputation, discourage them from seeking welfare assistance. One of my interviewees who worked closely with the Hmong community shared that they often faced challenges while offering CalFresh application assistance or providing general welfare information. They stated that many individuals within the community would feel a sense of shame if others in the community found out they relied on welfare assistance. On the other hand, individuals also lack the courage to visit food aid assistance organizations on their own due to doubts about their own English-speaking skills. However, it was unclear whether this potential factor was unique to certain ethnic groups, or held true across the Asian American community in general. Two of my other interviewees noted that this notion of face or individual pride appeared in the Korean and Chinese communities they worked with. There was an individual sense of humiliation for continued dependence on "government hand-outs."

Community, public, and private initiatives

After discussing the scope of Asian American food insecurity in California, I asked my interviewees if there are any current projects to alleviate food insecurity within the community. One individual I spoke to shared that many ethnic groups likely rely on community measures, such as food drives by religious centers, to help individuals secure an additional meal for the day or acquire some foodstuffs. Agency workers I spoke with shared that they and other community food banks collaborate with the local community organizations to help individuals sign up for SNAP and CalFresh or simply provide foodstuffs. One example an interviewee gave was that their organization worked with ethnic-specific communities, e.g. the Korean Youth Community Center in LA, to organize pop-up food pantries. Another interviewee shared that their staff works with Chinese community centers in San Francisco Chinatown to assist older Chinese immigrants. One of my interviewees even noted that their organization offers English language lessons to Asian

American immigrants and refugees, which will further their abilities to establish a greater degree of independence in the long-term.

It is important to note, however, that many of my interviewees were not sure what measures the state and national government were undertaking. Some mentioned the recent translations the government has published for food aid applications, but aside from that, many shared that it seems that local public and private groups must undertake the initiative to penetrate local Asian American communities to combat food insecurity. In fact, many interviewees highlighted that measures to continue outreach are especially imperative given the recent changes to CalFresh eligibility as well as the national food stamp program. In 2019, Trump decided to cut the national food stamp program by enforcing work requirements that states, including California, often waive. Meanwhile, the California state government altered CalFresh eligibility requirements so that recipients of Supplemental Security Income (SSI)/State Supplemental Payment (SSP) may be eligible for CalFresh. But this change on the surface may mean some might lose their eligibility, but that is actually not he case. Many of my interviewees noted that since some individuals believe they might lose eligibility and access to food assistance, it is more important now than ever to increase the circulation of information so that those in need of assistance are actually aware of their continued eligibility. However, once again, the interviewees emphasized that non-profit organizations should and need to fill in the gap rather than make a combined effort with local, state, and federal government agencies.

DISCUSSION

Altogether, my findings suggest that food systems discourse should not generalize the Asian American community. I found that the regression coefficient describing the relationship between ethnicity and food security status among California Asian Americans was statistically significant for the Chinese, Japanese, Vietnamese, and other Asian American group. In contrast, the test for Korean and Filipino Americans was inconclusive. Although Asian Americans as a whole exhibit lower rates of food insecurity, my results show that certain ethnic groups within the community, such as Vietnamese Americans, are more structurally disadvantaged. Therefore, these findings underline the idea that each ethnic group have varying access to capital. Meanwhile, underlying this socioeconomic diversity are the distinct ethnographic histories as described by the

interview responses I collected. These findings are supported by previous studies on ethnic variation in the Asian American community (Becerra et al. 2018; Walsemann et al. 2017). These different structural barriers then obstruct the assimilation and acculturation of families into mainstream American society, further disadvantaging them. However, a closer look at these structural barriers expose the state's lack of concern to adequately support and protect these families from food insecurity. The state has not sufficiently acted to provide equity for marginalized ethnic groups, as my interviews suggest that the burden lies on local community and non-profit organizations. The state's failure to do so suggests that the state should pay more attention to the Asian American community and commence statewide and national projects that build upon local public initiatives to properly address Asian American food insecurity.

Breaking Down Ethnic Inequality

Although the Asian American community is often stereotyped as wealthy, I posit that widespread economic inequality disadvantage certain ethnic groups. For instance, the 2017 CHIS survey shows that about 18.20% of Vietnamese individuals are food insecure while only 4.11% of Japanese are food insecure (Table 1). Comparing the median income for both groups in 2017, Vietnamese Americans have a national median income of approximately $65,643, and Japanese Americans have a national median income of around $74,000 (US Census Bureau 2017). Whether one considers the difference to be large or small is subjective. However, the difference still indicates that Vietnamese Americans comparatively have fewer resources. The variation between different ethnic group is more striking if we include ethnic groups not included in the dataset. The national median income of Bangladeshi and Hmong Americans was around $48-49,000 in 2017 (US Census Bureau 2017).

While it is hard to suggest how those levels for median income relate to food security due to lack of data, these numbers nonetheless expose the large variation among Asian American ethnic groups. Therefore, it is plausible that different ethnic groups have discrepant levels of wealth and access to capital (Wu 2014). And these different levels of wealth and access creates a positive feedback loop that further sets back certain ethnic groups and jeopardizes their food security (Cook et al. 2017). Low income stems the advancement of Hmong refugee farmers in California as they cannot afford insurance for temporary laborers (who are often their kinsmen) (Minkoff-Zern et al.

2011). The plight of Hmong refugees is further underlined by one of my interviewee's responses, as they had worked closely with the Hmong population. They shared that based on her estimates a large portion of the California Hmong population must be eligible for food aid based on their income. Descendants of Filipino Americans exhibit lower rates of secondary education completion compared to their immigrant predecessors, since they lack economic resources to support their primary education (Ong and Viernes 2012). These two cases demonstrate how lack of wealth and access to capital can stem the advancement of certain ethnic groups. However, these two examples hint that a larger issue is at play: economic inequality influence an ethnic group's ability to assimilate into American society and, thus, their ability to procure necessary resources.

Assimilation into mainstream American society prevents many Asian Americans, particularly immigrants, from attaining food security, because it bars access from resources that would otherwise bolster food security. This includes access to adequate food aid application translations, interview translators, culturally appropriate foodstuffs, etc. However, this issue is more prevalent in certain ethnic groups based on assimilation proxies. There are many different proxies for assimilation, one of which is language. Each ethnic group exhibits different rates of fluency in English, but with fluency comes more opportunities, such as the ability to comprehend and complete food assistance program applications (Gabor et al. 2002; Kwan et al. 2013). That is why one of my interviewees noted that one of their organization's services is to provide English language classes to the Asian immigrant and refugee population. They shared that language fluency bars many individuals eligible for welfare program from applying due to the confusing language used on the application forms. Therefore, the data suggests that ethnic groups with lower fluency are more likely to exhibit higher rates of food insecurity.

Looking at the numbers, this is the case with Vietnamese Americans. About 11.9% of Vietnamese Americans reported being unable to speak English well and being food insecure compared to the 6.9% of Vietnamese Americans who could speak English well or only English and were food insecure (Table 2). The higher rates of fluency for other groups is quite telling as well. High fluency rates among Filipinos are likely due to the fact that the Philippines is a former US colony, and thus, many foreign-born Filipinos already have learned English prior to immigrating. Meanwhile, the majority of present-day Japanese Americans come from generations of immigrants who came in the 19th century (Takaki 1989). Other researchers have found similar findings in that fluency in English is related to socioeconomic opportunities, and that a lack of

fluency can inhibit the attainment of food security (Becerra et al. 2018). It is clear that fluency as an assimilation proxy is telling of the different ethnographic histories and the way these different histories impede or benefit different ethnic groups from becoming food secure.

Another measure of assimilation is citizenship status. Compared to the other ethnic groups, Vietnamese Americans and Filipino Americans exhibited higher rates of food insecurity among non-US citizens and naturalized citizens (Table 2). This suggests that Vietnamese and Filipino immigrants that migrate are of lower socioeconomic status compared to other Asians. This is supported by the idea that Wu (2014) presented in her paper: when the Immigration Act of 1965 opened immigration to more Asian countries, it privileged those from Northeast Asia and India, as they were deemed to have higher quality college educated individuals. Therefore, the immigrant histories of each ethnic group are distinct, and immigrants of certain ethnic groups face more structural disadvantages. And those impediments can extend generations, as Cook et al. (2017) and Ong and Viernes (2012) demonstrated in their research that the children of lower socioeconomic status immigrants faced more challenges in life.

I must note that trends in citizenship status are comparatively more unclear compared to language. For instance, naturalized citizens are foreign-born, but have much higher food insecurity rates than their non-citizen counterparts. However, as a whole, foreign-born individuals on average had higher rates of food insecurity for Asian Americans. Although foreign-born and descendants of foreign-born individuals seem to be more likely to be food insecure based on my quantitative and qualitative data, the disparity between citizenship status and place of birth may be due to the difference between length of stay. Those staying in the US temporarily may have access to more resources, such as international students at higher education institutions and visiting businessmen who only plan to stay in the US for a short period of time (Walsemann et al. 2017). Despite that, my data does not contain information regarding how long individuals have resided in the US. I also cannot assume all Asian American immigrants come with affluent resources, and immigrants still exhibit higher rates of food insecurity compared to their US-born counterparts if we only look at place of birth. Therefore, even in spite of the heterogeneity in my data, by looking at fluency and citizenship status, I argue that there is widespread variation in food security levels within the Asian American community, impacting certain ethnic groups more than others. However, while poverty and lack of access to resources inhibit the ability for immigrants to attain fluency and limit

their opportunities for advancement, I posit that there is another point of topic to be address—the role of the state.

Analyzing the Role of the State

Many of my qualitative interviews voiced concerns over the strength of public measures to penetrate the Asian American community, suggesting that the state is not fulfilling its responsibilities to meet the individual needs of marginalized Asians. First, there was the issue of a lack of data. Various public agencies at the national, state, and local level have collected data on food security, but according to those I interviewed, almost all of them only look at the Asian American community as a whole, foregoing any efforts to disaggregate the data. Second, several interviewees mentioned that at the state and national level, there are little, if any, efforts to reach out to different ethnic communities, leaving the burden to local public and private social welfare agencies. For instance, Kwan et al. (2013) found that the US Census Food Security Supplement did not contain adequate and culturally comprehensible translations of food security related terms. Gabor et al. (2002) found that older Korean citizens felt reluctant to apply for food assistance programs, since they did not have access to a translator to help them fill out the application.

My interviewees also noted that government agencies often lack language interpreters on standby and must rely on third party interpretation services. In contrast, it seemed that the non-profit agencies my interviewees worked at were more prepared having workers fluent in various languages: Chinese (particularly both Mandarin and Cantonese), Vietnamese, Tagalog, Korean, Hmong, etc. Meanwhile, although local public efforts should be commended, they might not be enough. My interviewees noted that often times their client's applications for social welfare benefits are often not processed by local public agencies. It is up to the individual's or non-profit agency's initiative to frequently check in with the government offices if their applications have gone through. It also seemed that based on my interviews, non-profits undergo extensive endeavors to dispel misinformation and confusion caused by rumors among immigrants, media, and even the constant changes to government social welfare benefit guidelines.

These examples overall demonstrate that the state is not taking adequate measures to resolve these issues on all levels. And if even the more affluent Asian American groups, like Chinese Americans, face challenges, then the consequences may be worse for other ethnic groups.

One possible explanation for this lack of care is found in Wu's (2014) documentation of the creation of the model minority in the 1960's. She suggested that the state left the Asian American community to fend for itself, stating that Asian Americans had already assimilated into mainstream American society and had the resources and capacity to address these socioeconomic issues themselves. However, based on the varying levels of fluency and barriers to certain immigrant households from marginalized ethnic groups, this argument is invalid. This is supported by previous research that also finds that there is widespread variation in Asian American food security (Becerra et al. 2018; Walsemann et al. 2017). Meanwhile, there is history of rampant racism against the Asian American community as demonstrated by the history of recorded of early Chinese and Japanese Americans by Takaki (1989) and Chang (2004). And it is clearly evident that racism continues to exist today within the context of the current Covid-19 pandemic. In other words, while we can look at barriers within the Asian American community that bar certain ethnic groups from food security, we must not discount the lack of action from the state.

Limitations and Next Steps

Despite my efforts to increase understanding on Asian American food security, I faced several challenges in my research. My main obstacle was the lack of data disaggregation on Asian American food security. Although I was interested in studying variation in food security across different ethnic groups, I could only study the Chinese, Korean, Japanese, Filipino, and Vietnamese populations in California. Attempts to find more information in other datasets proved futile, as the majority of data aggregates the Asian American population into a single category. Furthermore, there was also a missing data for certain demographic categories for each ethnic group, such as respondents in certain age groups. Therefore, my findings based on the CHIS 2017 data are not entirely representative of trends across all Asian American ethnic groups in California, let alone the entire nation. Meanwhile, the data is not entirely comprehensive; for instance, it drastically undercounted the rural Asian population in California. I also was only able to look at a single year of data; therefore, I cannot claim my findings are robust over time.

Another limitation in my research was that I could only conduct nine interviews given my time and resources due to the onset of the Covid-19 pandemic. I primarily conducted interviews with individuals from the Bay Area, LA county, and Sacramento County. The qualitative research

I have presented here is, therefore, biased towards the experiences of Asian Americans in these three regions of California, and those experiences are not representative of Asian Americans elsewhere in California and the United States. Furthermore, my interviewees came from urban areas, and the livelihoods of Asian Americans in rural areas are likely to differ from those in urban areas. Meanwhile, my interviewees are only knowledgeable about California food aid program qualifications and benefits, and those vary from state to state. Due to the widespread heterogeneity, my data only provides a snapshot of the food security issues within the entire Asian American population.

Given these limitations, to move the research further, I suggest more work be done to increase data disaggregation of Asian American food security research. Even though the populations of different ethnic groups are scattered throughout the country and are of varying sizes, I suggest work be done to properly record their experiences—rates of food insecurity, struggles to amend food insecurity, etc.—both quantitatively or qualitatively. Either method would prove valuable, but utilizing both would better resolve the issue for *all* Asian American ethnic groups. Quantitative data would provide a quick snapshot of the current conditions for all Asian American groups, whereas qualitative data can better pinpoint the challenges that have obstructed certain groups from food security. This is especially pertinent as my results already pinpointed the lack of data disaggregation: Malaysians, Burmese, Pakistanis are just a few of the ethnic groups missing from the picture. In addition to increasing the amount of data on the topic, more work should be done to improve public measures to address food security.

As stated earlier, only local public food assistance offices have attempted to help specific Asian American communities in need. Work should be done at the state and national level to better address these issues. Measures can include reducing the time restrictions placed on social welfare programs as well as providing more linguistic and cultural support for less fluent Asian American individuals, especially those speaking languages more obscure languages. Both public and private food banks should also introduce measures to better understand the cultural differences of Asian American groups to improve their outreach as well as the ability to provide more culturally appropriate foods. These initiatives can help Asian Americans, especially those of marginalized ethnic groups, attain food security, and this work is now imperative more than ever given the high rates of unemployment, poverty, and starvation caused by the Covid-19 pandemic.

Although more work needs to be done, my study moves food security discourse surrounding the Asian American community one step further than before. My research illustrates that the Asian American community is vast; under one label, there are millions of Asian American individuals living in the US comprising a wide assortment of ethnic, cultural, and historical experiences. It demonstrates that policy and discourse regarding the Asian American community cannot discount the widespread heterogeneity, as doing so marginalizes ethnic groups who lack the resources others possess. Only by recognizing that each ethnic group, each family, each individual is unique can we better move forward on raising up those that have been marginalized from the right they have to live an active and healthy lifestyle.

ACKNOWLEDGEMENTS

I would like to thank the ESPM 175 Samuel Evans, Patina Mendez, Leslie McGinnis, Jessica Heiges, and Roxy Cruz for working together as my class's senior undergraduate thesis mentors. They provided constant physical, mental, emotional, and academic support even during this period of uncertainty due to the COVID-19 pandemic. I want to especially thank Samuel Evans for his guidance on how to conduct my statistical analysis as well as how to use the software platform R. I would also like to share my gratitude to Associate Professor Kathryn De Master of UC Berkeley's Department of Environmental Science, Policy, and Management. She provided me the knowhow on conducting qualitative analysis. With her tips and expertise, I was able to successfully conduct my interviews as well as acquire additional contacts for the interview process. I would also like to give my thanks to everyone I interviewed. Because of their honest and insightful responses, I was able to deepen my understanding of Asian American food security as well as gain an appreciation for the hard work done by various community organizations and food banks. Additionally, I would like to thank the members of my peer workgroup, Cal's Next Top Modelers. I also want to share my gratitude to my close friends Remie Sai, Jenny Chiu, Eileen Alcantar-Williams, Ashley Paik, Shehla Chowdury, and all the members of FEED Berkeley for supporting me through this process. Finally, I would also like to thank my family and the members of my Indonesian community in Los Angeles, since my project stems from my upbringing as a Chinese Indonesian American.

REFERENCES

Alkon, A. and T. Mares. 2012. Food Sovereignty in US Food Movements: Radical Visions and Neoliberal Constraints. Agriculture and Human Values 29: 347-359.

Becerra, M. B., S. K. Mshigeni, and B. J. Becerra. 2018. The Overlooked Burden of Food Insecurity among Asian Americans: Results from the California Health Interview Survey. International Journal of Environmental Research and Public Health 15: 1-11.

Chang, I. 2004. Chapter 4: Gold Rushers on Gold Mountain. Pages 38-46 in I. Chang, author. The Chinese in America: A Narrative History. Penguin Books, London, UK.

Clendenning, J., W. Dressler, and C. Richards. 2016. Food Justice Or Food Sovereignty? Understanding the Rise of Urban Food Movements in the USA. Agriculture and Human Values 33: 165-177.

Coleman-Jensen, A., M. P. Rabbitt, C. A. Gregory, and A. Singh. 2016. Household Food Security in the United States in 2015.

Cook, W. K., W. Tseng, C. Tam, I. John, and C. Lui. 2017. Ethnic-Group Socioeconomic Status as an Indicator of Community-Level Disadvantage: A Study of Overweight/Obesity in Asian American Adolescents. Social Science & Medicine 184: 15-22.

Gabor, V., S. S. Williams, H. Bellamy, and B. L. Hardison. 2002. Seniors' Views of the Food Stamp Program and Ways to Improve Participation. Economic Research Service, Washington D.C.

Hoeffel, E., S. Rastogi, M. Kim, and H. Shahid. 2014. The Asian Population: 2010.

Kwan, C. M.-L., A. M. Napoles, J. Chou, and H. K. Seligman. 2013. Development of a conceptually equivalent Chinese-language translation of the US Household Food Security Survey Module for Chinese immigrants to the USA. Public Health Nutrition 18: 242-250.

Leung, C. W. and J. M. Tester. 2018. The Association between Food Insecurity and Diet Quality Varies by Race/Ethnicity: An Analysis of National Health and Nutrition Examination Survey 2011-2014 Results. Journal of the Academy of Nutrition and Dietetics 119:1676-1686.

McEntee, J. and E. Naumova. 2012. Building Capacity between the Private Emergency Food System and the Local Food Movement: Working Toward Food Justice and Sovereignty in the Global North. Journal of Agriculture, Food Systems, and Community Development 3: 235-253.

Minkoff-Zern, L. A., N. Peluso, J. Sowerwine, and C. Getz. 2011. Race and Regulation: Asian Immigrants in California Agriculture. Pages 65-85 in A. H. Alkon and J. Agyeman, editors. Cultivating Food Justice: Race, Class, and Sustainability. The MIT Press, Cambridge, Massachusetts, USA.

Ong, P. and K. Viernes. 2013. Filipino Americans and Educational Downward Mobility. Asian American Policy Review 23: 21-39.

Sbicca, J. 2012. Growing Food Justice by Planting an Anti-Oppression Foundation: Opportunities and Obstacles for a Budding Social Movement. Agriculture and Human Values 29: 455-466.

Sullivan, D. M.. 2014. From Food Desert to Food Mirage: Race, Social Class, and Food Shopping in a Gentrifying Neighborhood. Advances in Applied Sociology 4: 30-35.

Sze, J. 2004. Asian American Activism for Environmental Justice. Peace Review 16: 149-156.

Takaki, R. T. 1989. Chapter 2: Overblown with Hope: The First Wave of Asian Immigration. Pages 21-42 in R. T. Takaki, author. Strangers from a Different Shore: A History of Asian Americans. Little, Brown and Company, New York City, New York, USA.

Walsemann, K. M., A. Ro, and G. C. Gee. 2017. Trends in Food Insecurity among California Residents from 2001 to 2011: Inequities at the Intersection of Immigration Status and Ethnicity. Preventive Medicine 105: 142-148.

Wu, E. D. 2014. Introduction. Pages 1-9 in E. D. Wu, author. The Color of Success: Asian Americans and the Origins of the Model Minority. Princeton University Press, Princeton, New Jersey, USA.

APPENDIX A: Interview Guide

Central Question: From 2001 to 2012, it was reported that 16.42 percent of Vietnamese Americans and 8.26 percent of Filipino Americans were food insecure, while only 2.28 percent of Japanese Americans and 3.14 percent of South Asians faced food insecurity (Becerra et al. 2018). Why does food insecurity vary so much between different ethnicities within the Asian American community in California, and what is being done currently to address this?

Current role/work:

Begin with compliments and introduction to my research (what, why, etc.)

- How long have you been a part of __ organization?
- What tasks and responsibilities does your role involve?
- Do you feel like your intended goals align well with the mission of ___?
- Are there any specific issues that your organization focuses on?
- What about food security?
    - Does this topic ever come up in your personal work and/or the mission of the organization?
- In your experience in [x organization], how familiar are you with resources that individuals with high food insecurity might use to help alleviate food insecurity?
    - Do you have a sense of how many individuals/households/families use those resources currently?

Food Insecurity and Asians/Asian Americans:

- In regards to the Asian American community, is food insecurity a big topic of concern? How is the Asian American community currently coping with food insecurity?
    - Are there community initiatives?
    - Any government programs?
    - Food aid/welfare/charity organizations?
- In my own research, I conducted a statiscal analysis of food security data for Asian Americans living in California in 2017. I found that food security status varied widely based on ethnicity within the Asian American community. Only 2.28% Japanese, 3.14%

South Asian, and 6.57% Korean Americans were food insecure compared to 8.26% Filipino Americans and 16.42% Vietnamese Americans. Why do you think this might be the case?

- My data didn't include many other ethnicities. Do you have any guesses on the level of food insecurity for other ethnicities, like Indonesians, Indians, Cambodians, etc.? Could you explain your reasoning behind your response?
- As a follow up question, do you think this variation across ethnicity intersects with other issues or potential variables? For instance, class, gender, age, etc.?
- What is the potential effect of the disparity between the average food security propensity for the entire Asian American community and the actual food security level propensity for individual communities?
- What additional efforts can be made to mitigate food insecurity within the Asian American community?
    - Efforts by both the Asian American community
    - Efforts by the government (local, state, and federal)
    - Efforts by other organizations outside the Asian American community

To close

- As we approach the end of our chat, would you have any resources to recommend I look into?
- What about folks you recommend that I talk to?
- Would it be okay if I followed up with additional questions in the future?