

Abstract

The Jewish Relief Agency serves over 6400 diverse low-income individuals across Greater Philadelphia, including many immigrants. A Customer Satisfaction Survey is conducted every two years to see how the households are enjoying their JRA food boxes as well as other information about the households. This survey ran mid-January to mid-March and yielded over 792 responses for the 2024 data. I will look at the data collected in the interest of seeing how Food Insecurity has differed in different communities since the pandemic. I will look at the food insecurity score which is obtained by looking at questions 19 on the 2024 survey. I will look at this data from the 2022 and 2024 surveys to determine if food insecurity has improved or worsened since the pandemic. Additionally, I will compare three communities: Americans and two immigrant communities. My hypothesis was that hopefully people were starting to recover from the pandemic and are less food insecure now, however what I found was the opposite.

Introduction

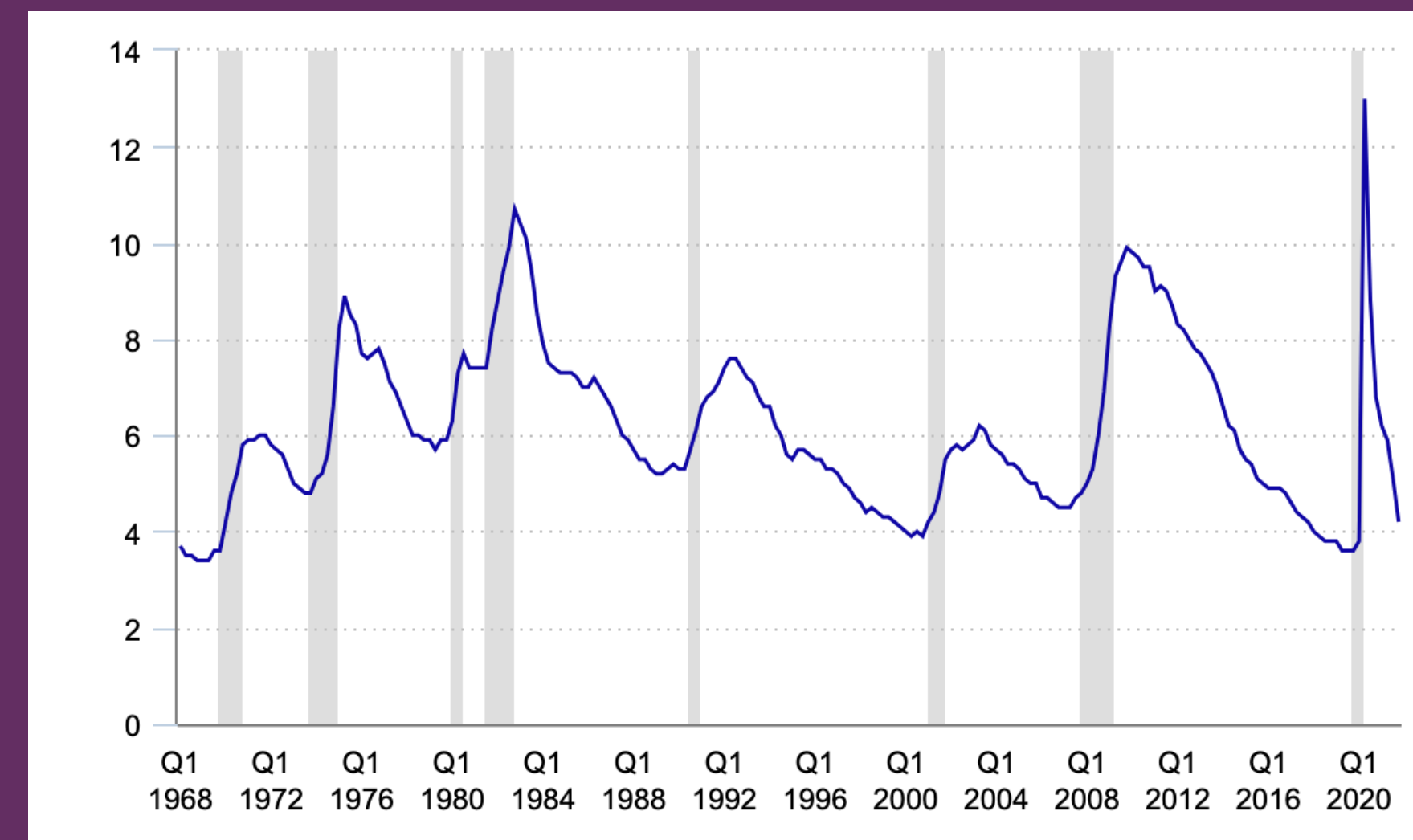
The 2020 Covid-19 pandemic brought a lot of devastation for everyone especially low-income families. During covid nearly 9.6 million Americans lost their jobs. (Pew Research Center) According to the department of labor statistics unemployment reached an all-time high during the pandemic. (figure 1) This led to a lot of families struggling to make ends meet and put food on the table. Since then, people have slowly started to recover and go back to work but that doesn't mean that all problems are solved. In this study I plan to look at trajectory of food insecurity in the years 2022 and 2024 to see how these recovery efforts have been effective for low-income families and how they are still being affected by food insecurity today.

Method:

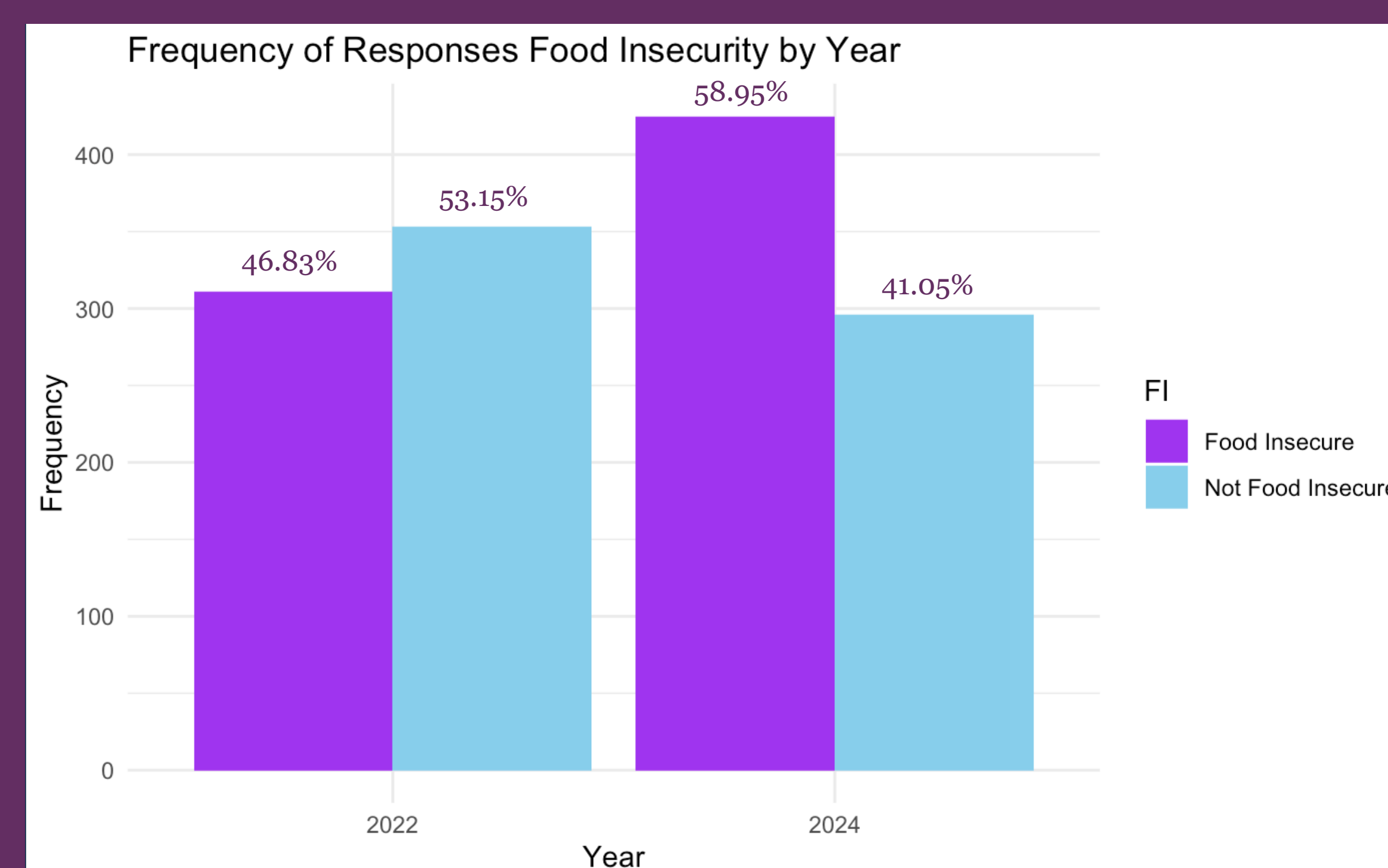
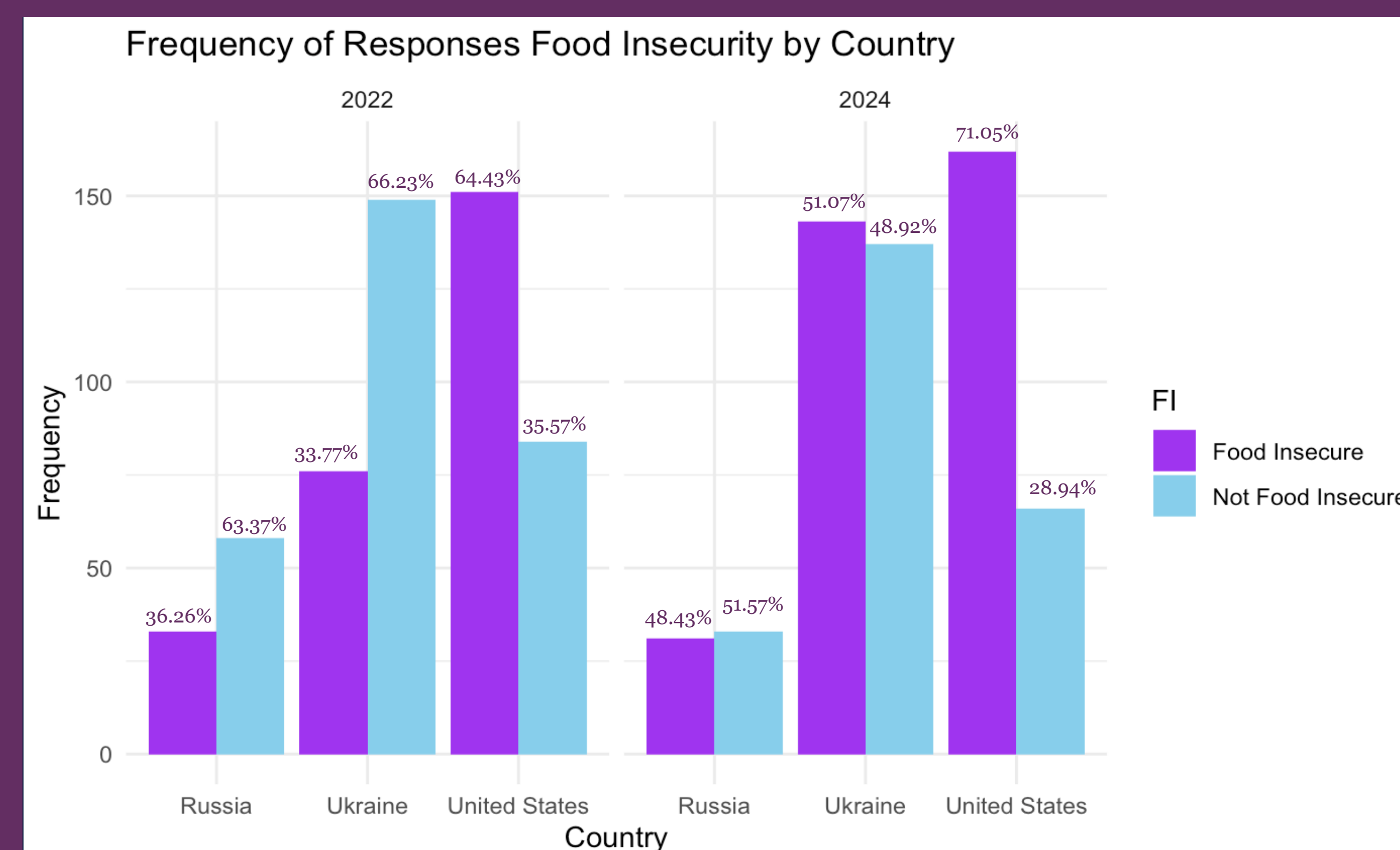
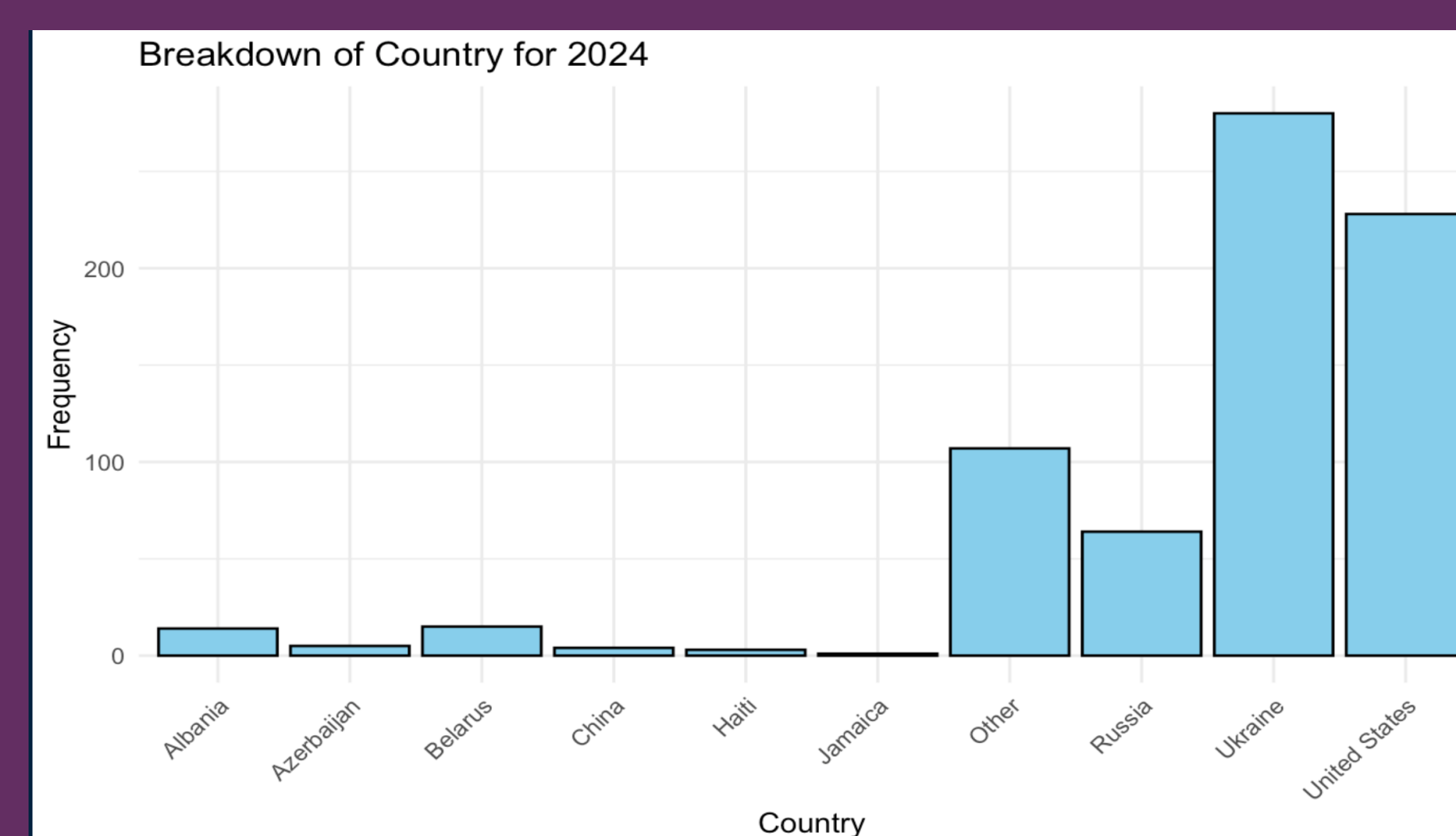
The JRA's intention with collecting the customer satisfaction survey is to ensure the recipients are happy with their boxes and to improve them, if possible, by doing analytical research. The surveys were distributed with the boxes to all the household they serve. The survey also gave a QR code option to complete it online. The surveys that weren't entered online were entered by the students in Professor Pyott's independent study.

For my analysis I focused on food insecurity by year and community by looking at the question "Within the past 12 months, the food we bought just didn't last and we didn't have money to get more." I did an analysis of the country of origin to see the breakdown to see what I should focus on for this analysis and selected the top three. I cleaned the data and then preformed a Binomial regression with the model Food Insecurity=Year + Country. I also created graphics to depict the differences between food insecurity and the factors that I considered. I also looked at the proportion of food insecurity because the sample sizes changed overall and within the different communities.

Unemployment Rate; Bureau of Labor Statistics (Figure 1)



Country Breakdown



Results:

I completed the binomial regression and found that the correlation between country and food insecurity was not significant, but year was significant. I also found that year had a negative correlation. I created two graphics to show the frequency of food insecurity first for the three counties that I focused this study on and then removing the factor of countries, since I found them to be insignificant. What I found is that immigrants from Ukraine receiving the JRA food boxes increased and so did the proportion of this community that is struggling with food insecurity. I also found that the proportion of the native US recipients has also become more food insecure. Because of this I took a deeper look at the graphic that removed the factor of country. What I found is that the proportion of households receiving the JRA food boxes that are food insecure has increased from 46.83% in 2022 to 58.95% in 2024.

Discussion and Conclusion

After doing further research I found in a 2023 report from the US department of Agriculture that food insecurity has been on the rise since 2021. With all the covid recovery efforts, food insecurity is still a scary topic for a lot of households. This is why the JRA food boxes are so important. One recipient states "I appreciate the food boxes every month because we have a hard time buying food because all our money goes to bills and rent and our food stamps were cut down to 300 and food is so expensive." This increase in food insecurity is likely due to the inflation we have seen in food and overall. Without the unemployment money from the government and cutbacks on food stamps it is evident that households are needing the JRA food boxes more than ever. Thankfully the JRA can continue to function through these tough times due to many amazing volunteers and help from grants as they work to lessen food insecurity in the greater Philadelphia area.

Food Insecure		
	2022	2024
Russia	33	31
Ukraine	76	143
United States	151	162

Not Food Insecure		
	2022	2024
Russia	58	33
Ukraine	149	137
United State	84	66

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