

Pre-Analysis Steps:

We collected data from a google form that was sent out to the data science class which asked if students were full time, what year they are, and if they think a hotdog is a sandwich. This data was then formatted into an excel spreadsheet which we converted to a csv, downloaded and began to clean. We removed responses that stated that they were not full time students. This left the dataset with only undergraduate students. We also checked to make sure all responses produced valid results. Once the cleaning process was completed, the dataset shrunk slightly from 79 to 76 rows.

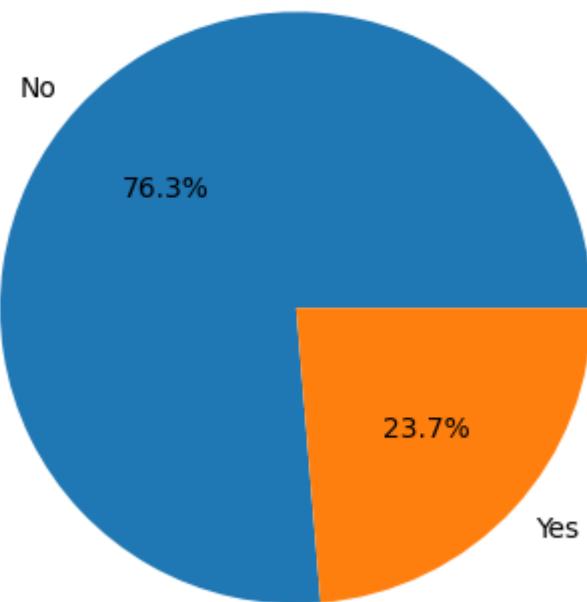
Analysis Methods

After cleaning the data, we began exploratory analysis using a pie chart to visualize the proportion of our sample of undergraduate students that believe a hotdog is or is not a sandwich. Next we broke it down by year of the student, where we first checked the distribution of students' year in school and saw that our data excluded first years, then we used a bar chart to display Yes/No answers by year. We also used a Chi Squared test to determine if we should reject or fail to reject our hypothesis that less than half of UVA undergraduate students believe a hotdog is a sandwich.

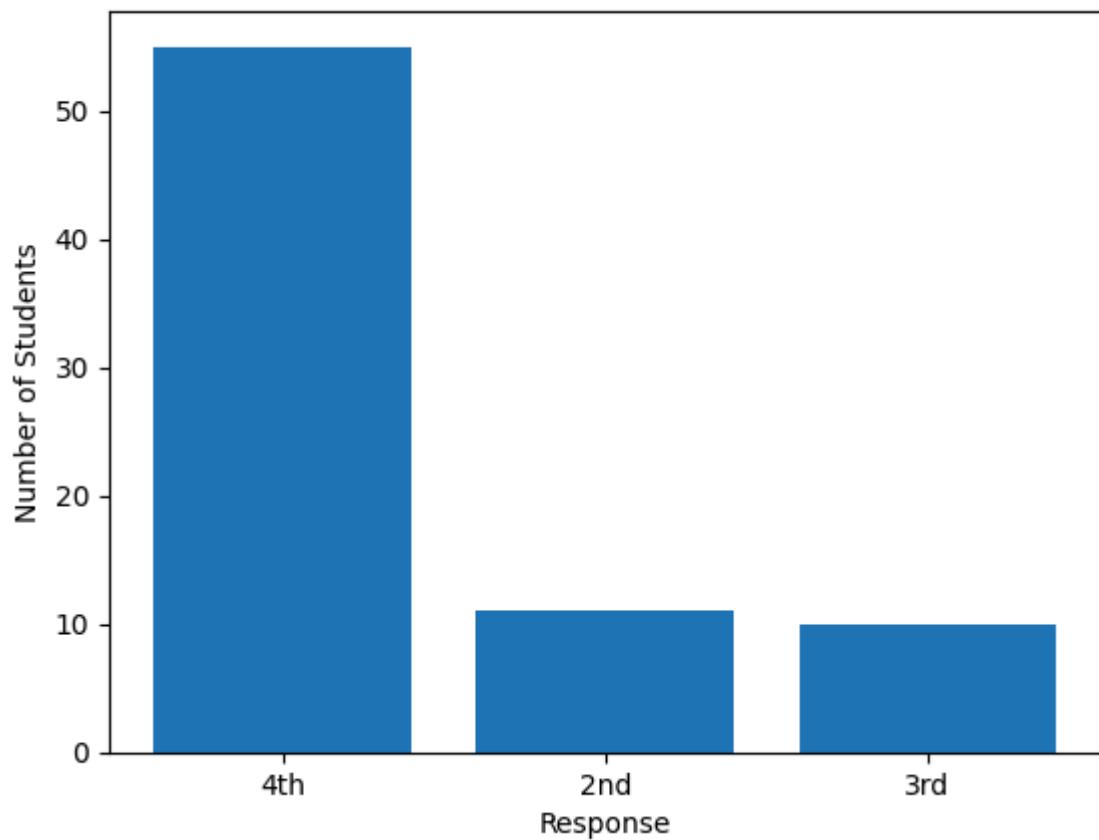
Evaluation of Success

We will define our analysis as successful if the orange spaces, in all of the graphs, are smaller than the corresponding blue spaces. This would indicate less than half of students believe that a hotdog is a sandwich, as the orange indicates "yes" and the blue indicates "no." Based on our graphs, the analysis was successful because it appears that a majority of students responded no when asked if a hotdog is a sandwich. The hypothesis is statistically significant. From the Chi Squared test, we can see that the proportion of students that say a hotdog is or is not a sandwich does not differ significantly by year (p-value of .41). This indicates that regardless of year, a majority of UVA undergrad students believe a hotdog is not a sandwich.

Is a Hotdog a Sandwich?



Distribution of Years



Is a Hotdog a Sandwich? (Percent by Year)

