

Part 2. Graphic design

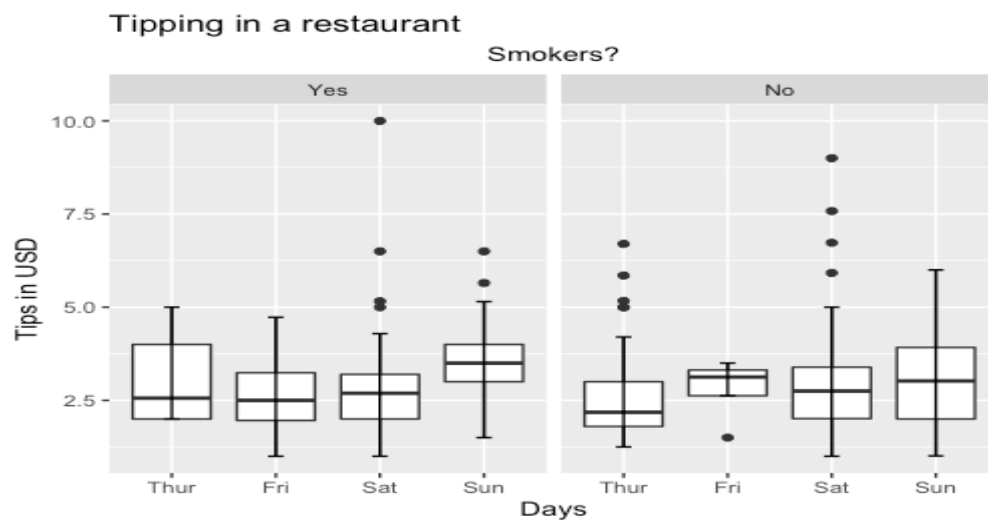
The first clear intention I had when making the graph was to make it look as easy as possible but show clearly what the intention was. I first tried to make a point graph, but the observation was too many and difficult to read because of the overlapping points. I then decided to go for a boxplot.

Background information about the graph: A waitress recorded tips and bills from the restaurant she worked at, the chart made is intended to show the difference between tips when it comes to days of the week, and if there were smokers in the group.

The choice of using the factor with smokers to divide the boxplot was to see the difference in tipping according to when it is split between if there were smokers in the group or not.

The graph also intends to address on which days the average tipping is highest, as we can see from the graph, the highest average of tipping is indeed Saturday and Sunday when it comes to the group with smokers, on the other hand- the group of non-smokers shows that Friday and Sunday have the highest average, with most outliers (highest tippers), Thursday and Saturday

The choices of design are as stated earlier, less is more. Overdoing colors, functions, etc. can often result in the message and the meaning disappearing and shifting focus. The stand-alone readability is strong because of the title and labs, that in some sense “describes” what the graph intends to show. This also comes with clear decoding and operations. The annotations in the graph are clear from the "xlab" and "ylab". It can be discussed whether the graph contains valuable information- but after trying out different themes, and trying to do it in different ways, this was the most understandable way, and where the main purpose came across in a clear way with minimizing chart junk and having a theme in mind “The simpler the better”.

Figure 1*Average tip in a restaurant**Note. Own graph, STUDID:97523*

Part 2- Critique of graph

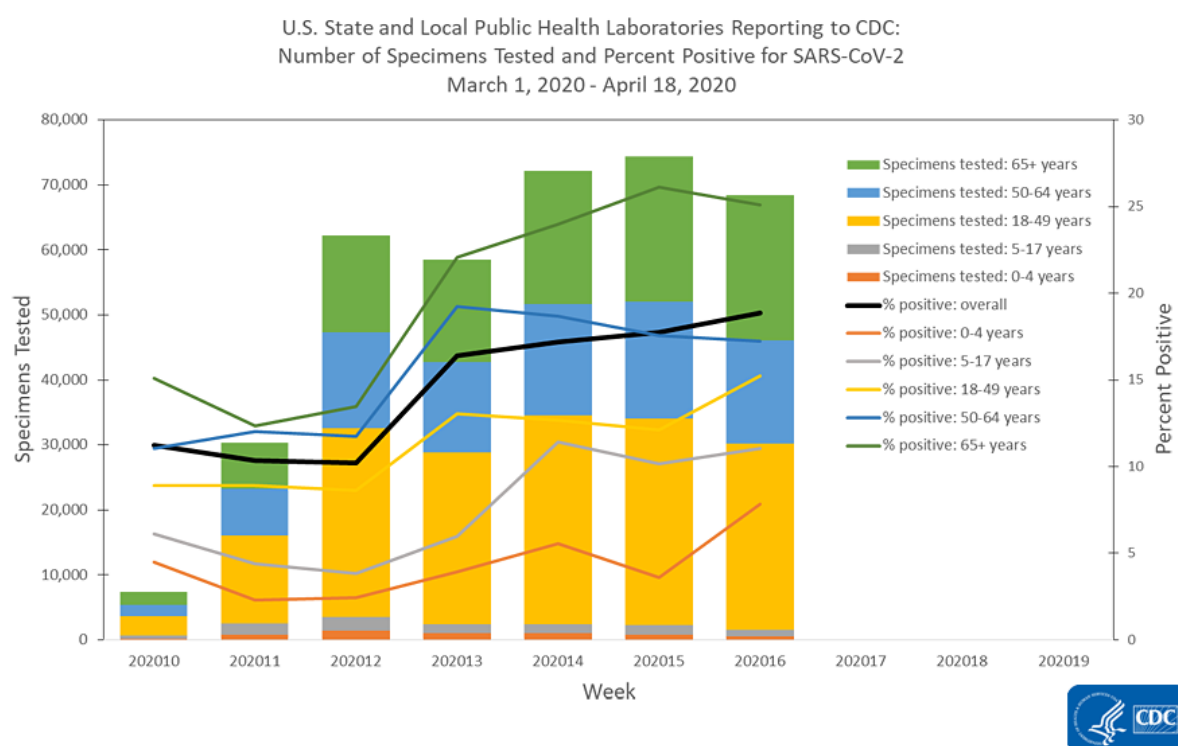
The chosen graph intends to show the number of Specimens tested and the percent positive for SARS-CoV-2 with the time interval of March 1, 2020- April 18, 2020.

When it comes to being able to read the graph without any background information, after reading the header and labels it seemed like a graph that would be relatively simple in a sense. But after having a closer look the x-axis showing weeks respectively should not be a problem, but it becomes very unclear as the different blocks are not divided into months and years, such as “202010”->”2020/10”. This would make it clearer to the reader, and the overall impression would increase.

For the Y-axis(es), first, there are two, one shows specimens tested, which seems to be the Y-axis the graph sticks to, on the other hand, there is also another Y-axis that shows the percentage of positive tests. In a way, this is somewhat forgotten by the fact that the factors are inside the graph itself and take away a bit of the purpose.

The graph itself that has been used contains both stacked plots and lines. To start with stacked plots, these make it very difficult to compare with the different weeks, since (ex: low numbers are hidden in the bar plot itself. On the other side, the stroke of genius is to choose the same colors for the line and bar plot, it is understandable that this should show similarity, and which belong together- which it does to some degree, but on the other side, the same colors go into another, making it hard to follow.

A graph should have positions on various factors so that the content is systematically easy to see. It is important to think of visualization as storytelling, which should simplify statistics, not make it harder to understand compared to seeing it in a table.

Figure 2*Public Health Laboratories*

Note. “CovidView Summary ending on April 18, 2020”. From “Centers for Disease, control and prevention”, 2020.

Sources:

Centers for Disease Control and Prevention. “COVIDView Summary ending on April 18, 2020”, From: <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/past-reports/04242020.html>