

Stat 245 – 3+ Variable Plots

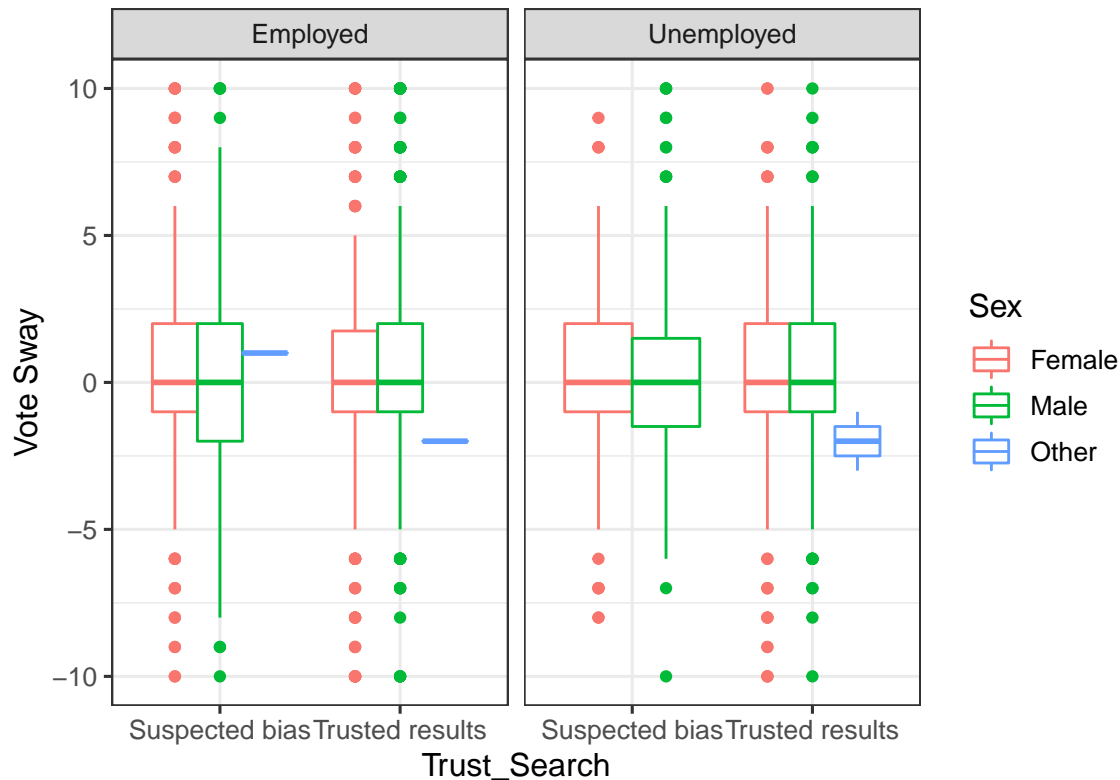
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```
searches <- read_csv('https://sldr.netlify.app/data/election_searches.csv')
```

I chose one quantitative variables, vote sway, and three categorical, their employment status, whether they trusted the search results, and sex.

```
gf_boxplot(Vote_Sway ~ Trust_Search|Employment_Status, data = searches, color = ~Sex, ylab = "Vote Sway")
```



A pattern I see in these boxplots is that every single median (for male and female) is at zero. This does not tell us that there is no vote sway on average, but that the vote sway on each side is even. Given the fact that there is outliers on both sides of each boxplot, I suspect that there was actually quite a bit of vote sway, they just happened to even out. Sex does not seem to have much of an effect on vote sway, however, “other” has the only boxplots that are not at a median of zero, although this is likely because of a small sample size of the sex “other” in this dataset. Employment and whether they trusted the results also does not seem to have much of an effect on vote sway. The one slightly different one is employed males that suspected bias in the search results; their range is a lot larger, but they also have less outliers and this is likely why.