MAT5314 Project 1: Data Visualization

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Introduction

A data set of the 2016 US election polls was given. In this project we aim to understand the data structure by creating various visualizations.

Method

We use various R packages to present the data set and to plot the graphs.

Result

We first create a data variable definition table to give an initial understanding of the data. As we can see, there are a few variables with missing values:

Table 1: Data Variable Definition

Variables	Size	Type	Number.Unique	Number.Missing	Comment
state	4208	character	57	0	The name of the state where the election is held, "U.S." means national polls
startdate	4208	character	352	0	Start date of poll
enddate	4208	character	345	0	End date of poll
pollster	4208	character	196	0	Organization name that conducts or analyzes opinion polls
grade	4208	character	11	429	Grade assigned by Fivethirtyeight (sometimes as 538, an American website that focuses on opinion poll) to pollster-
samplesize	4208	integer	1767	1	Sample size of polls for each pollster
population	4208	character	4	0	Type of population being polled
rawpoll_clinton	4208	numeric	1312	0	Percentage for Hillary Clinton
rawpoll_trump	4208	numeric	1385	0	Percentage for Donald Trump
rawpoll_johnson	4208	numeric	585	1409	Percentage for Gary Johnson
rawpoll_mcmullin	4208	numeric	17	4178	Percentage for Evan Mcmullin
adjpoll_clinton	4208	numeric	4200	0	Fivethirtyeight adjusted percentage for Hillary Clinton
adjpoll_trump	4208	numeric	4204	0	Fivethirtyeight adjusted percentage for Donald Trump
adjpoll_johnson	4208	numeric	2211	1409	Fivethirtyeight adjusted percentage for Gary Johnson
adjpoll_mcmullin	4208	numeric	31	4178	Fivethirtyeight adjusted percentage for Evan Mcmullin

Discussion

Conclusion