## Introduction

In my data project, I was looking at powerlifters and powerlifting meets that had occurred in the USA between the years of 2016 – 2018. I was interested in finding out if powerlifting participation rates had increased or decreased in this time while specifically looking at these rates by sex of participant, census region and division, and political party state affiliation. Because the USA saw an increase in political activity following the 2016 presidential election, I wanted to investigate any relationship between this activity and sporting activity. The arena and sport of powerlifting has been seen as primarily dominated by males, much like politics and government.

## **Data Analysis**

In my cursory scans of the data, it does appear that there were mostly increases in participation by male and female powerlifters. This is at the state, regional, divisional, and political party state affiliated levels. However, to say that the increase and/or rise in participation overall is related to the presidential election and political trending is not something I am comfortable in attributing.

One reason is because when looking at the New England division rates steadily decreased from years 2016 – 2018 with both female and male lifters. New England on the political party state affiliation map is comprised of all "Blue states." "Blue states" are assigned to the Democratic party. Blue states saw increases in each year, as well as the Northeast region which encapsulates the entire New England division. This leads me to suspect that there was at least one state (possibly more) within the New England division that is skewing the data and the negative correlation between New England and Blue states and New England and the Northeast region.

Another reason is that the state of Texas numbers of participants for meets was vastly higher than any other US state in the entire final data set. Florida, another state in the dataset with higher numbers didn't come close, nor California. These three states all located in different regions and divisions because of their population numbers and area skewed the data in these groupings. Florida was one of three states in the "Purple states". Purple states signify those that were carried by each political party (Democrat and Republican) twice in the past four elections. When looking at Florida powerlifting meets and participants there was a major increase in 400 – 600 participants from 2016 to 2017 in both the male and female powerlifting sets. Then again, in 2017 to 2018, there is a reverse – a major decrease in the male and female powerlifting sets by 300 – 500 participants. Did these major increases and decreases in Florida have anything to do with state politics going on at the time or something else? If Florida was removed from the Purple state data, how would that positively or negatively affect the data for lowa and Ohio – the other two Purple states?

It's these questions and observations that have led me to more questions about the data overall. My final thoughts can sum up where I think this project could or should go.

## **Final Thoughts and Considerations**

Was this project worth doing? Absolutely. I think that more can be done with this data. Here is a list of items that should be considered for future investigation:

1. First, look at the regions, divisions, and political party state affiliated sets that all showed decreases. Look up the states in these areas and see if there are historical and cultural phenom

- that will provide context for what was occurring at that time that may have contributed to the decrease.
- 2. Select data from years 2013, 2014, and 2015 and compare to the data from 2016, 2017, and 2018. Seeing a set of three years previous to the presidential election could help provide context for where participation rates were the same or different.
- 3. A last possibility which is time-consuming would be to look at participant data. Are the participants listed for a meet from that area? If not, how far did they travel? If they traveled, what state/region/division were they traveling from and what was the political party state affiliation of their origin state and the state they traveled to?

The third step is to look at if a place like Texas with its population and land area is a draw for out of state powerlifters or if it is getting buy-in from residents or possibly both. These are all ideas worth considering when looking at the results of this data project.