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INFO 3300 Project 1

Description of Data

We used three sets of data in order to create our visualization:

1) The Depression Data:
   This data set is from a 2006-2008 study by the CDC that presents the average percentage of adults that meet the criteria for any current form of depression in the US categorized by state. Current depression is found by adding together the percentages of major depression and other depression found in the data. Data for only "any depression" was used while the rest of the data was discarded. Some of the states (Kentucky, New Jersey, North Carolina, Pennsylvania, and South Dakota) were missing data so we left these states out of our visualization.
   http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5938a2.htm?s_cid=mm5938a2_w#tab1
   2) The Pizza Store Data:
   This data set is from PMQ's report on the number of pizza stores per capita in the US in 2015. All the data in this data file was used. This was combined with the depression data into one data file.
   http://www.pmq.com/December-2014/Pizza-PowerThe-2015-Pizza-Power-Report/
   3) The Map Data:
   In order to create our map we used two Json files:
   "us.json" & "depressionDataStateUpdate.json".
   The file "depressionDataStateUpdate.json" was based on the us.json file and modified so that the id of the state was in numerical order.

Data Mapping

The data for the percentage of adults with any current depression per state was divided into 5 different groups. These groups were differentiated with varying intensities of the color blue (the higher percentage corresponding to a darker shade of blue). The percentages were incremented by 2.0% and the groups are as follows:

13.2 - 14.8
11.1 - 13.
9.0 - 11.0
6.9 - 8.9
4.8 - 6.8

The data for the number of pizza stores per capita was divided into 8 ranges, each corresponding to 1 to 8 pizzas on the grid. The more pizzas stores in a state, the more pizza slices were placed. The ranges are as follows:

0 - 1.3625
1.3626 - 1.725
1.726 - 2.0875
2.0876 - 2.45
2.46 - 2.8125
2.8126 - 3.175
3.176 - 3.5375
3.5375 - 3.9

The Story

We originally wanted to see if we could find a relationship between pizza consumption and happiness per capita in the US. Because “happiness” is not something that can be objectively measured, we chose to compare the number of pizza stores per capita in the US to depression rates instead, with depression serving as a loose analogue. Since depression is a mental illness and not an emotion, we were not expecting strong correlation between the two data sets. However, much to our surprise, the data showed that there is a pattern of less depressed states having more pizza stores per capita.

The two visualizations on our page showcase the same data in two different ways. The map shows us patterns of depression and pizza stores per capita by relative location. From inspecting the map, we can generalize that the most “depressed” states are located in the Southeast, and the states with the most pizza stores per capita are in the Northeast. The states in the Northeast also happen to be significantly lighter in color (and thus less depressed) than the states in the Southeast.

The second visualization is ordered by decreasing rate of depression and gives us a closer look at whether there is a pattern in the number of pizza stores per capita. Although at first glance there does not seem to be anything, once you zoom out of the page so that the visualization is really small on the screen, it can be seen that there is a higher concentration of pizzas at the bottom as opposed to the top. Although this obviously does not imply causation in any way, it is interesting to see that there is a slight negative correlation between the number of pizza stores per capita and depression rates in the US (As pizza stores increase, depression rates decrease).