Task 2.6 Scatterplot & Bubble Chart

By: Alex Kaplan

Hypothesis: If a state has a high population with people of a vulnerable age group (People aged 65 and above), then that state will have more influenza-related deaths.

[Task 2.6 Scatterplot & Bubble Chart | Tableau Public](https://public.tableau.com/app/profile/alex.kaplan3758/viz/Task2_6ScatterplotBubbleChart/BubbleChartTop5States?publish=yes)

* 1. Scatterplot with trend line

A screen shot of a graph

Description automatically generated with medium confidence

3. **Compare Tableau’s r-squared value to the correlation coefficient you calculated in Exercise 1.8**. The correlation coefficient that I calculated using Tableau matches what I got in Excel from Exercise 1.8.

Exercise 1.8 Calculations A screenshot of a spreadsheet

Description automatically generated with medium confidence

Tableau Correlation Coefficient: 0.89176. R-Squared: 0.795238

The correlation coefficient indicated there is a strong relationship between the vulnerable population (65 and older) and the increased influenza related deaths. Therefore, we can observe that states with highly vulnerable aged populations will have a greater amount of influenza deaths.

4. **Take a moment to reflect on whether the chart provides any additional insight that the calculated correlation coefficient didn’t. Are all the data values tightly clustered around the trend line or are there a few extreme values?** The values seem to be consistent with the ones I got in Task 1.8. The visualization points to a positive correlation between populations of people 65 and older and an increase of influenza related deaths. The values are not tightly clustered around the entire trend line which indicates there are some extreme values in the data set. The scatterplot also makes the trend much easier to see than by simply looking at all the data in the raw data set. I also added labels to the bubble chart regarding the top 5 most populated states which displayed their population and deaths among those who are 65 and older. The larger the bubble, the greater amount of deaths there were in that particular state.

Bubble Chart A screenshot of a computer

Description automatically generated with medium confidence

Bubble Chart of Top 5 States with the Highest Population

A screenshot of a computer

Description automatically generated with medium confidence