Application 2: Dynamic Vizzies Using Pages

1. Open a new Tableau workbook
2. Click connect to data
3. Browse to the folder where stored the three exercise datasets
4. Click on BRFSS.Dataset2.csv
5. Notice the layout of the data, its structure, and the order
6. Click on sheet 1
7. Drag MentalHealth to the Columns Shelf and PhysicalHealth to the Rows Shelf.
8. Reset both X and Y to averages, rather than sums.
9. Let’s rename the Y and Y axis to something more explanatory.
   1. Average number of physically unhealthy days
   2. Average number of mentally unhealthy days
10. Edit the X & Y axes to 2 & 6.
11. Drag year to filter and reset to max at 2017.
12. Drag state to the color mark.
13. Select shape drop down under Marks and select solid shape
14. Edit the color to Opacity = 50%
15. Drag adultpop to the size mark.
16. Edit size to make the marks larger.
17. Give it a title, “Relationship between Physically and Mentally Unhealthy Days Across US States”
18. Let’s do a little bit of statistics. From the drop down, select analysis, drop down, and show trends lines.
    1. There’s not too much variation around that line…a pretty strong correlation. To see exactly how large the correlation is, go back to Analysis, trend line, and select Describe Trend Model.
19. Edit the tooltip to read “The average number of physically unhealthy days was <AVG(Physhlthx)> in <State>. The average number of mentally unhealthy days was <AVG(Menthlthx)>.”
20. Go back to Analysis, Trend line and uncheck show trend line.
21. Now let’s drag Years up to Pages.
22. Using the pages legend, hit play forward, the right-side arrow. You can adjust the speed by selecting bar one, two, or three on the right side of the pages legend. You can use drop downs or the slide bar to adjust the view.
23. From the Pages dropdown, you can loop playback.
24. Check show history and then use the drop-down arrow to the right to access more options.
    1. Select both (trails and marks)
    2. Under format select black lines
25. Set year to 2013 on the pages legend. Select West Virginia and South Dakota…the best and worst states in terms of health in 2013. Hit play.
26. Create a new Dashboard, remove the size and state legends.
27. Right click in the graph workspace, select Annotation, and then select Field.
28. Using the drop down under Insert, add Page Name. Make it Bold and increase the font size.
29. Adjust the size of the dashboard (laptop or blog sizes are good).
30. Try moving the pages legend to the bottom of the dashboard.
31. Back on the worksheet, click the worksheet dropdown and select show caption. Use captions to address data provenance…the where, what, and how of the data.
    1. NOTES: Mentally unhealthy days is a self-report of the number of days in the last 30 when mental health was not good. Physically unhealthy days is a self-report of the number of days in the last 30 when physical health was not good. Size of circles is proportional to the sample size of each state. The data is weighted on \_llpwt and is filtered on year, which ranges from 2013 to 2017.
    2. SOURCE: Behavior Risk Factors Surveillance System, 2013-2017.
32. Let’s save your work, if you haven’t already.
33. Jump back into Application 1 and use pages to turn your map into a dynamic vizzie.