

## Week 6 Practice

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This week, you will be working with data from the World Happiness Report again. After exploring the data from the 2020 report, you decide that you are interested in examining some of the variables longitudinally. You look to see whether they have data from previous years, and they do! They just released data from their 2021 report, and they also had a file available for download that has data collected between 2007 and 2018. You loaded in all those files and combined them to get data for all the years.

1) Load in data file with all the happiness data (we took care of putting the data frames together for you!)

2) Keep data only for countries that have at least 5 years of data

3) Make a plot that compares happiness (i.e., ladder score) in 2019 versus in 2020 by region. What do you see? Is there anything else you'd want to explore?

4) Pick a few variables that you are interested in. Spend the rest of class visualizing these variables and the relations between them. You can look at just one year (e.g., 2020), two years, over all the years, etc.. Reshape your data as needed to make the plots that you need to explore these variables and the relations thoroughly.

5) Take at least one of your plots and make it "publication ready"! Publication-ready plots are plots that:

- Have nice names for the x- and y-axes, title of the plot, and legend
- Have a white background (i.e., not the default theme of the plot)
- Axes are scaled properly
- You may choose to change the color scheme (Have fun with different palettes! You can look up color brewer, for example)

6) Toward the end of class, share your plots on [this Jamboard](#) (one slide per person)! On your slide, be sure to include:

1. Your name
2. What question(s) motivated your data exploration
3. What variables you explored
4. At least one plot (but as many as you'd like!)
5. A few sentences summarizing your findings