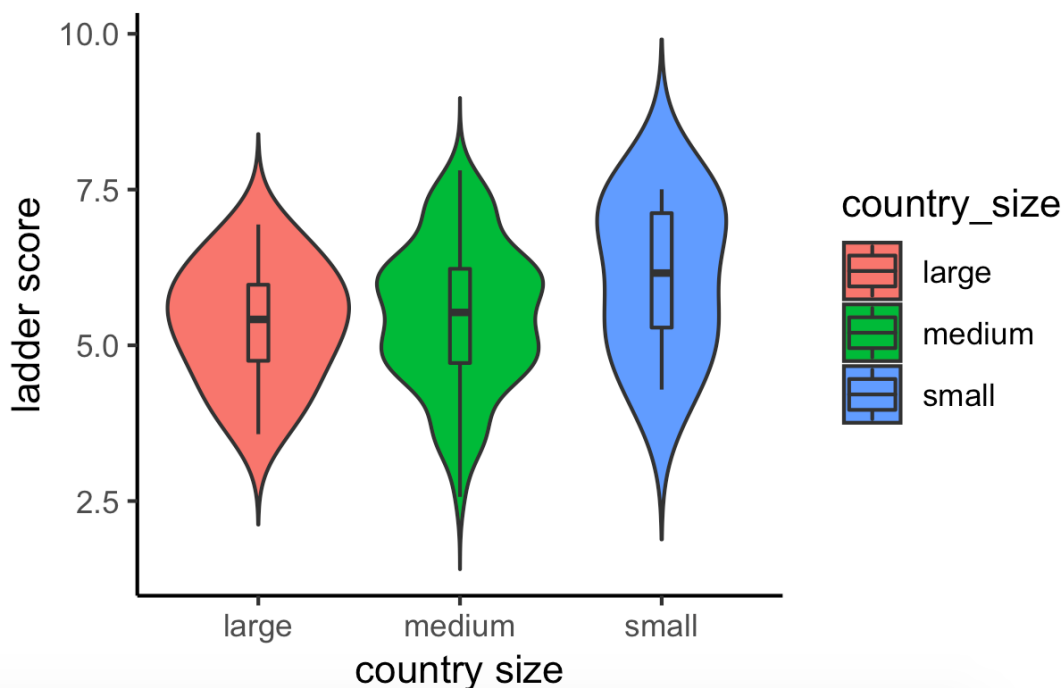


## Week 5 Practice

Elena Leib & Willa Voorhies

This week, you will be working with data from the 2020 World Happiness Report. They use a measure called “ladder score” to measure happiness in countries. They also collect a bunch of other measures for each country. We have also included population and the new variables you created last time.

- 1) Load in world-happiness\_2020.csv and look at your data
- 2) Create a violin plot relating happiness levels to social support. Use ladder\_score\_cat as the x-value and Social\_support as the y-value.
- 3) Is this relationship between social support and happiness the same for all country sizes? (hint: Remember the categorical country\_size variable you created last time).
- 4) Recreate the following violin plot looking at ladder score by country size.



- 5) Customize your plot in the following ways:
  - a) Change the y-axis to go from 0 - 10
  - b) Change the color scheme to a color of your choosing

- c) Remove the legend because it is redundant by adding the following object to the bottom of your ggplot code: `theme(legend.position = "none")`
- 6) Plot the relationship between generosity and perception of corruption.
- a) Include a regression line in your plot
  - b) Change the color of the points on your plot
  - c) Change the color of the regression line
  - d) Include the option `se = FALSE` in your regression line object. What does this do?
- 7) Recreate the plot below or create your own plot with variables of your choosing

Hint: we've set a few options in our scatter plot object.

`color = "dark green"` and `shape = "diamond"`

