

# Introduction to the R Statistical Environment

Sarah Hunter

*sghunter@umich.edu*

ICPSR Day 5

# Overview

- 1 Review
- 2 Making Figures in R

# Announcements

- Fixed code/data for reshaping data has been posted on Canvas (the issue was how the dataset I made for this saved)
- We are running .5 classes behind, but we should be able to catch up soon.
- Tomorrow will be mostly an activity day (you practicing R Code while I am on standby for help if needed)
- We have moved quickly. You are all doing very well.
- Office Hours Exist!

# Some Guidelines for Effective Figures in R

- 1 Clean data make clean figures
- 2 Always add a descriptive title/labels
- 3 Plots should be easily read and understood
- 4 When using color, remember that some people cannot see well in color.
- 5 Don't do too much on one figure

# Today's Topic: R figures with ggplot2

# ggplot2

- ggplot2 uses layers to create figures
- Start with the core ggplot command: `ggplot(data= dataname, aes(x= , y= , )`
- The core command established the basics:
  - data to be used
  - x and y axes information
  - where/when color will be applied (can also be established in later layers)
- After the core command, the layers of the plot are added with a `+`

# Rules of the Road

- Know your data!
- Clean data make clean figures
- Less is more (don't over do it)
- Figures > Tables
- Only use figures that contribute to the story you are trying to tell.

# The most important thing to remember...



# The most important thing to remember...



# And Now...

To R!

# Until Next Time