



# **Intro to Data Visualisation II**

Lab 3 - Excel & Rstudio



# Self-Assessment and Employability

- Assess your Excel skills
- Consider technical proficiencies needed for your career path
- Importance of data skills for employability



# Data Analysis Exercise

- Open the collected data in Excel
- Calculate the mean of variables x, y, and z
- Practice basic data manipulation skills



# Key Concepts in Research Methods

- Levels of measurement and types of data
- Measures of Central Tendency
- Measures of Variability



## Note

These concepts are crucial for understanding research methods, even without advanced math skills.



# DataSkills Refreshers

Available resources:

1. Types of Data
2. Central Tendency and Variability
3. Calculating measures by hand
4. Visualization cheat sheet



## Note

These resources are designed to support you throughout your studies.



# Introduction to R, RStudio, and ggplot2

- Powerful tools for data visualization
- You'll become proficient with these tools over time



# Literate Coding

- Blending narrative and code 'chunks'
- Creating dynamic documents with:
  - Words
  - Calculations
  - Pictures
  - And more!



# RStudioServer

- Access through your browser
- No downloads required
- Capable of serious calculations





# Hands-on Exercise

1. Log in to RStudioServer
2. Upload the dataset
3. Load data into an active session
4. Upload a template document
5. Add interesting content with commentary
6. Render to HTML or PDF
7. Download and submit to DataSkills



# Looking Ahead

- Next week: Open Science
- Following weeks: Mixed and Qualitative Research
- We'll return to R and RStudio later in the term



# Additional Resources

- Introductory materials available for R and RStudio
- Practice using your RStudioServer login