Statistical Software notes

Ease of use: R < SAS < SPSS, Systat, Minitab, Stata   ???

Today's learning goals for SAS and R:

1. working with each program,
2. reading in a small data file,
3. doing simple tasks such as printing the data,
4. creating new variables,
5. calculating summary statistics, and
6. creating a plot

SAS: one of the early statistics software giants (1971)

Data steps and Proc steps

Further: Macro functions and the Interactive Matrix Language (IML)

R: a programming language to give more user control (1995)

Creating a data frame, there are several possible ways

Analyze data by applying a function to a data frame

Further: User-contributed packages on CRAN, R Studio, R Markdown