

Questions?

- Final
 - In class final on May 22nd from 10:30 to 12:30
- Preliminary design presentation
 - 04/03
- Paper review in class
 - Be ready to have a draft by May 1st

Being fair with Science

- Dirty tricks
 - Fabricating
 - Falsifying
- Questionable tricks
 - Poor experimental design
 - Poor data collection
 - Poor data analysis
 - *Check statistical test pre-conditions*
 - Misleading data presentation
 - *See Tufte's books*
- Neat tricks
 - Focusing on what conveys the most information
 - *But be sure to do your homework!*
 - Reorganizing
 - Reformulating

Experiment variables

- How do your variables relate to your hypothesis?
- Independent variables
 - How will you measure (in operational terms) your independent variables?
 - Is the range adequate?
- Dependent variables
 - How will you measure (in operational terms) your dependent variables?
 - Is this measurement reliable?
 - Is this measurement valid?

Between or Within subject design?

- Possible problems
 - Different participant backgrounds
 - Irreversible effects
 - Non-linear confounding variable
 - Symmetric skill transfer
 - Asymmetric skill transfer
 - Range effect
- What to do about them?
 - Change design
 - Counterbalancing
 - Matched-group design

Reading for next class

- Doing Psychology Experiments
 - Ch 9, 10
 - *Be prepared to explain how these ideas can be applied to your project*