

Developing Hypotheses


Levels of

- Relevance to an existing theory (BEST)
- Relevance to applied problems (\$\$\$)
- Relevance to conflicting results
- Relevance to a poorly conducted study

Steps to Generating Hypotheses

- Ask yourself, "What am I interested in?"
- Find out what has already been done in this area
- Make a prediction that no one has tested yet
 - Statement, not a question
 - Compare groups or variables

Types of Comparisons
(Review)



- Relationship of one variable to another
- Correlational design
- Ex. GPA is positively associated with the amount of time a person spends studying

- Differences between groups
- Experimental or quasi-experimental design
- Ex. People who receive an antidepressant will show significantly less depressive symptoms than people who receive a placebo

vs. Alternative Hypotheses

- _____ = there will be no effect, no relation, no difference between groups
 - Avoid "proving the null"
- Alternative hypothesis = there will be a significant effect, relation, or difference between groups

Post hoc explanations vs.

- Post hoc explanation = addressing an effect in the opposite direction
 - e.g., self-esteem and race
- _____ = Hypothesizing After the Results are Known; "I knew it all along"
 - Avoid HARKing

Remember

- Hypotheses are _____ involving a clear prediction
- Hypotheses must be _____
- Hypotheses determine:
 - The design of your project
 - The analyses you will use
 - The conclusions you can make

**Ask these questions,
answer with a hypothesis**

- WHY and HOW does the behavior occur?
- In which situations and for which type of person is the effect strongest?
- What are some alternative explanations for a behavior?
- Who doesn't "fit the mold"? Why not?
