

Theories and Hypotheses



Theories vs. Hypotheses

- _____
- Broad explanation and prediction concerning a phenomenon of interest
- General statement
- _____
- A prediction, stemming from a theory, stated in a way that allows it to be tested
- Specific statement

Good

- Are _____ ...
- Are broad and can be generalized
- Withstand the test of time
- Are practical to real life
- Solve an important problem
- Provide a better explanation than previous theories



_____ as the
basis of research

- _____ variability
- _____ differences
- _____ variability



Two causes of variability

- _____ = What you have identified as a cause of variability
– e.g., provocation causes aggression
- _____ = What you have not accounted for
– e.g., past behavior, situational cues, personality



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

- Ask yourself, "Why am I interested in psychology?"
- 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



Null vs. Alternative Hypotheses

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

Post hoc explanations vs. HARKing

- _____ = 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 _____

- 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?
