

Bryant-Taneda

Ch. 1 Review

Statistics and the Experiment

AP Psychology 12



Hindsight Bias

- The *I knew it all along* idea; we think that somehow psychology ideology is part of our intuition
- See the *Ramona* case
- The idea of *suggestion* is understood such that Lawyers are held accountable for *leading the witness*



False Consensus Effect

- I think that *my peers agree with me* more than disagree with me
- I think more agree than actually do!



Overconfidence

- We *excessively assume* that we are *correct*; so we think our judgment is reliably more accurate



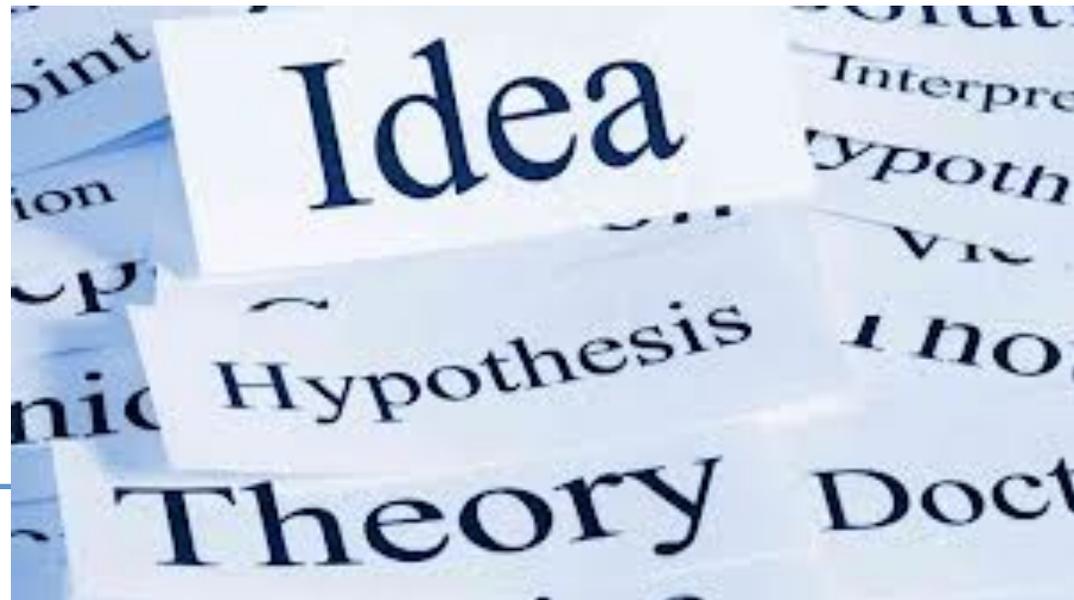
Experiment

- The Scientific method helps to determine the cause (with an *independent variable*) and the effect (with the *dependent variable*)



Theory

- The *belief or idea* that a person may hold; this may turn into an hypothesis for an experiment



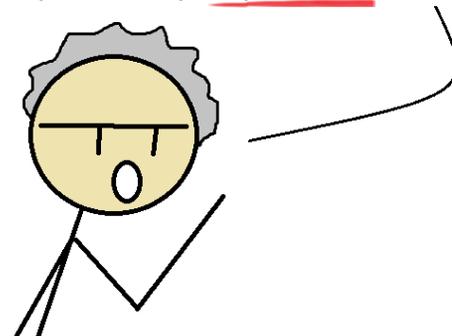
Operational Definition

- The *procedure* for the experiment; the recipe that you will follow in order to execute your experiment

What is the **Operational Definition** of Infection?

How do we translate the concept into something concrete?

"...a concept that gives **meaning** to your variables/operations/functions in your study/experiment."



Replication



- Repeating an experiment - generally *using different situations* - to see if the same findings of the original study can be generalized to other participants and circumstances

Case Study

- An in-depth study *of one person*; a single subject study may be carried over a long period to discover patterns & causes for behaviour



Survey

- *A data collection tool* which is usually a questionnaire; usually questions are set up and individuals respond



Random sample & assignment

- A subset of individuals that are selected with *equal chances*; they are to be a representative of the larger group
- Each participant has the same opportunity to be assigned to a *experimental* or *control* group

Naturalistic observation

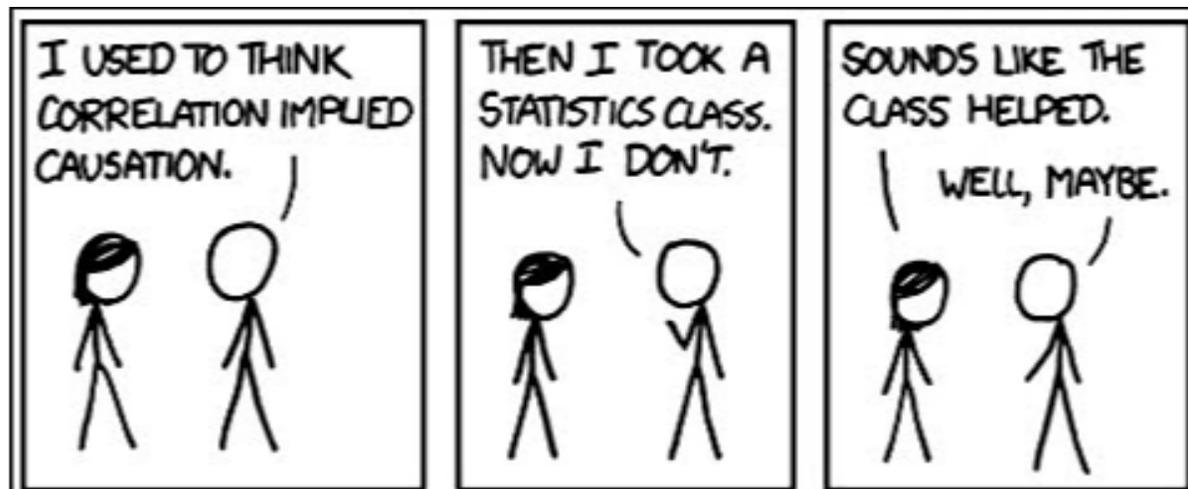
- *Research method* used by psychologists where subjects are observed in their *natural environment*

Eg, Jane Goodall
British primatologist



Illusory correlation

- The *perception* of a relationship between 2 variables when only a minor or absolutely no relationship exists



CAUSATION



Why do people dance?

Why do we need rules for this game?

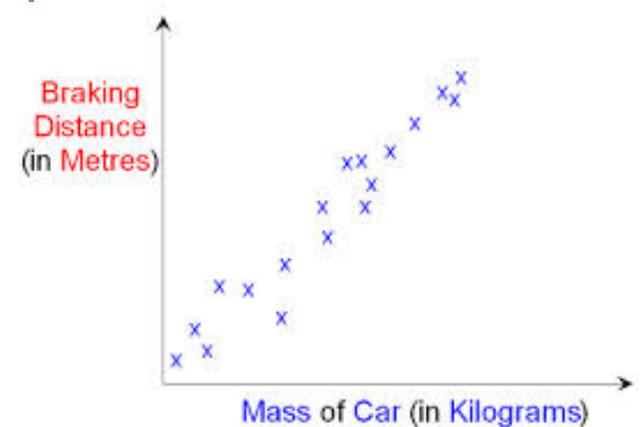
Why is it like it is?

Why does your body change when you exercise?

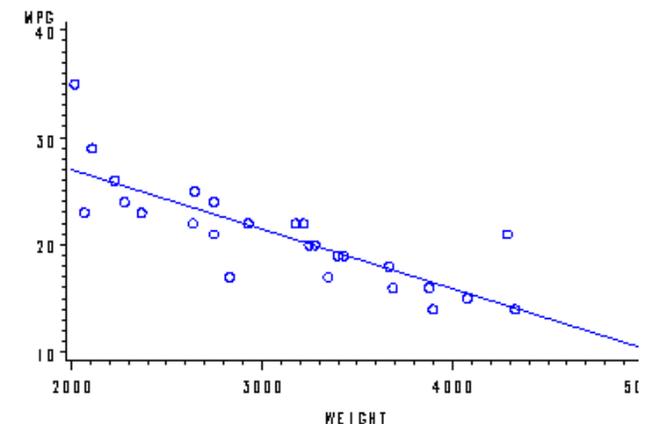
Correlation & coefficient

There are 3 results of a correlational study:

A *positive* correlation, a *negative* correlation, & *no* correlation. The measure of correlation strength can range from -1.00 to +1.00

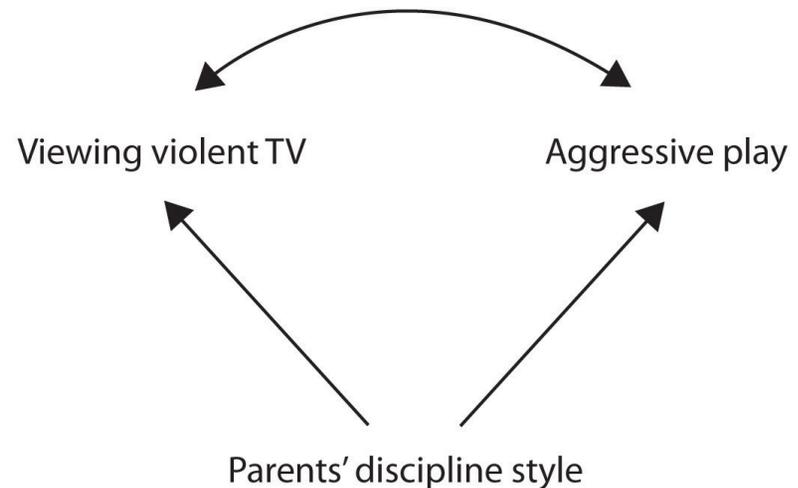


Scatteplot — With Regression Line



Correlational research

- Research done when there is a strong *relationship* or strong correlation determined between two variables



Double Blind experiment

Neither the *participants* or the *experimenters* know who is the receiving the treatment; this is used to prevent bias in research

