

Illusory Correlation

- This demonstration illustrates an Illusory Correlation - the perception of a relationship where none exists, or perception of a stronger relationship than actually exists. Another way to think of it - a false impression that two variables correlate.

Illusory Correlation

- The joint occurrence of two distinctive events (minority member - Group B & distinctive event - negative behavior) probably attracted more attention and caused faulty impressions.

Illusory Correlation

Examples:

- You believe that people in urban environments tend to be rude. Therefore, when you meet someone who is rude you assume that the person lives in a city.
- A woman believes that pit bulls are inherently dangerous. When she hears of a dog attack in the news, she assumes it is a pit bull that attacked.
- A student does well on a test when he uses his blue pencil. For all future tests he uses only his blue pencil.
- You catch a lot of fish off of one dock, you feel that there are more fish there than anywhere else on the lake.

Illusory Correlation

- How could Illusory correlation be one reason individuals become prejudiced?
- Research has shown that White Americans overestimate the arrest rate of African Americans (Hamilton & Sherman, 1996).
 - African Americans = minority
 - Arrest Rate = distinctive event



What is going on in this picture?

We cannot say exactly, but we can describe what we see.

Thus we have.....

Descriptive Research

a systematic, objective observation of people.

- Any research that observes and records.
- Does not talk about relationships, it just seeks to describe thoughts, behaviors, and attributes.

Research goal and strategy: description

Descriptive research is a *systematic, objective observation of people.*

The goal is to provide a clear, accurate picture of people's behaviors, thoughts, and attributes.

Strategies for gathering this information:

- **Case Study:** observing and gathering information to compile an in-depth study of one individual
- **Naturalistic Observation:** gathering data about behavior; watching but not intervening
- **Surveys and Interviews:** having other people report on their own attitudes and behavior

Case Study

- *Examining one individual or group in depth*
- **Benefit:** can be a source of ideas about human nature or biology in general.
- **Example:** cases of brain damage have suggested the function of different parts of the brain (e.g. Clive Wearing)
- **Danger:** overgeneralization from one example; "the Kardashians are a family from the United States, so I guess that is what it is like in the US!"

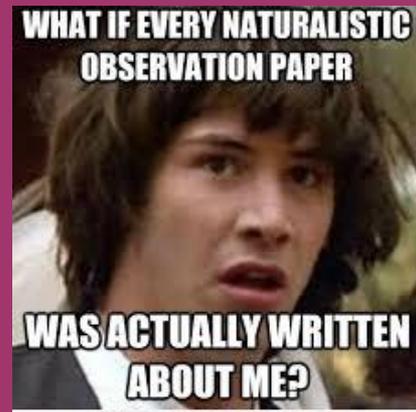
Especially effective for studying unusually complex or rare phenomena



Naturalistic Observation



Observing "natural" behavior means just watching (and taking notes), and not trying to change anything.



What term/concept that we have discussed is a drawback to naturalistic observation?



This method can be used to study more than one individual, and to find truths that apply to a broader population.



The Survey

- Gathering information through self-report rather than observation.
- Benefits: Cheap, anonymous
- Keys to getting useful information:
 - Be careful about the **wording** of questions
 - Acknowledge the social desirability bias
 - Only question **randomly sampled** people

Wording effects: the results you get from a survey can be changed by your word selection.

Example:

Q: Do you support enhancing revenues to provide quality educational materials to our children?

Q: Do you support raising taxes to buy kids new books?

What psychology science mistake was made here?



Hint #2: The *Chicago Tribune* interviewed people about whom they would vote for.

This illustrates the importance of random sampling...

Hint #1: Harry Truman won.

Hint #3: in 1948.

Hint #4: by phone.

A possible result of many descriptive studies:

discovering a correlation

Correlation

General Definition: *an observation that two traits or attributes are related to each other (thus, they are “co”-related)*

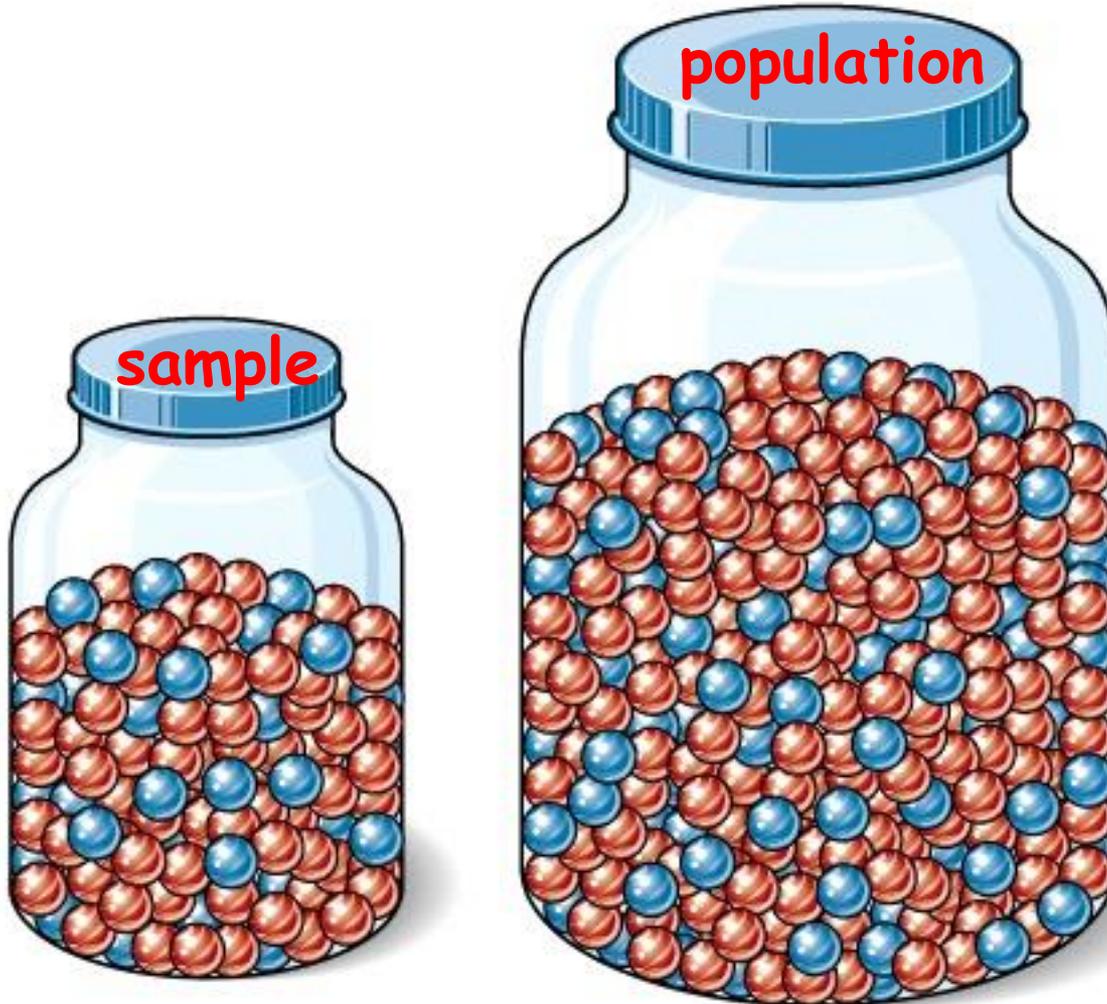
Scientific definition: *a measure of how closely two factors vary together, or how well you can predict a change in one from observing a change in the other*

In a case study: The fewer hours the boy was allowed to sleep, the more episodes of aggression he displayed.

In a naturalistic observation: Children in a classroom who were dressed in heavier clothes were more likely to fall asleep than those wearing lighter clothes.

In a survey: The greater the number of Facebook friends, the less time was spent studying.

Random Sampling



Again, the importance of obtaining a random sample is evident...

Keep Up With the Kardashians is a good TV show.

- Do you agree with this statement?
 - Yes or no?
 - Estimate how many others in this class will agree with your prediction.
- False consensus effect
 - A tendency to overestimate others' agreement with us.

Some problems with assuming

- Anyone know the saying about what happens when you assume?
 - ASSuME
- Vegetarians will think more people are vegetarians than will meat eaters.
- Liberals will perceive more support for liberal views than will conservatives.

Summary of the types of Research

Comparing Research Methods

Research Method	Basic Purpose	How Conducted	What is Manipulated	Weaknesses
Descriptive	To observe and record behavior	Perform case studies, surveys, or naturalistic observations	Nothing	No control of variables; single cases may be misleading
Correlational	To detect naturally occurring relationships; to assess how well one variable predicts another	Compute statistical association, sometimes among survey responses	Nothing	Does not specify cause-effect; one variable <u>predicts</u> another <u>but this</u> does not mean one <u>causes</u> the other
Experimental	To explore cause-effect	Manipulate one or more factors; randomly assign some to control group	The independent variable(s)	Sometimes not possible for practical or ethical reasons; results may not generalize to other contexts