

# CHAPTER 2



EXAMINING OUR SOCIAL WORLD

# Key Topics



- 2-1 Doing Sociology: What is Social Research?
- 2-2 Why is Sociological Research Important?
- 2-3 The Scientific Method
- 2-4 Research Process Basics
- 2-5 Some Major Data Collection Methods
- 2-5 Ethics and Social Research
  
- Lab
  - Recap of Google Drive, Docs and Sheets
  - Google Forms – Creating an online survey



# LEARNING OUTCOMES

- 1 Compare knowledge based on tradition, authority, and research**
- 2 Explain why sociological research is important in our everyday lives**
- 3 Describe the scientific method**
- 4 Describe the basic steps of the research process**
- 5 Compare and illustrate common sociological data collection methods, including their strengths and limitations**
- 6 Explain why ethics are important in scientific research**

# What is Social Research?



## Social research:

- Examines human behavior
- Is guided by rules and procedures
- Involves the objective gathering of data
  
- Knowledge / Awareness
- Attitudes / Beliefs
- Practice / Behavior
- Traits / Characteristics



# Bases of knowledge



- *Tradition*: We've always done it that way  
Mystical awareness
- *Authority*: an important source said so  
Naïve Awareness
- *Scientific method*: careful data collection and measurement, appropriate generalizations  
Critical Awareness

# Bases of knowledge



## [Gallup Poll: Americans' Views On Evolution, Creationism Little Changed](#) 06/01/2012 6:03 pm

- 46 percent of Americans believe God created humans in their present form within the last 10,000 years.
- 15 percent of Americans believed God played no part in human evolution, a process that had taken millions of years.
- 32 percent, choose the third option, saying they believed humans had evolved, but that God had guided the process, a belief called "theistic evolution."

# Why is Sociological Research Important in Our Everyday Lives?



- NPR [Texas Megachurch at Center of Measles Outbreak](#)



# Importance of Sociology—Application



Is it tradition, authority, or science?

- A good spanking always worked for my children.
- Nine out of 10 people who answered the survey said they were in favor of the change.
- Sam believes it's true because the Bible says so.

# Scientific Method



**Scientific method:** a research process that includes:

- careful data collection,
- exact measurement,
- accurate recording and
- analysis of findings,
- thoughtful interpretation of the results, and
- appropriate generalizations

# Scientific Method



- **Concept:** an abstract idea, mental image or general notion that represents some aspect of our lives
- **Variable:** a characteristic that can change in value or magnitude under different conditions
  - Examples: age, ethnicity, social class

# Scientific Method—Application



What are some variables that reflect each of these categories?

- Contraception

- Knowledge
- Attitudes
- Practices
- Traits

# Scientific Method



In a research study, scientists:

- **Ask a question**
  - How often do you hit your children?
  - It's OK to spank a child if they behave badly.
  - Children sometimes need to spanked to teach them right from wrong.
- **Test a hypothesis**
  - The less education an individual has, the more likely they are to use corporal punishment.

# Scientific Method



- **Hypothesis:** statement of a relationship between two or more variables that will be tested in a study
- **Independent variable:** determines or has an effect
- **Dependent variable:** the outcome

# Scientific Method—Application



Identify the independent and dependent variables in the hypotheses.

- The more you study, the more you know.
- Violence rates are higher among cohabiting couples than among married couples.
- Curfews reduce vandalism rates.

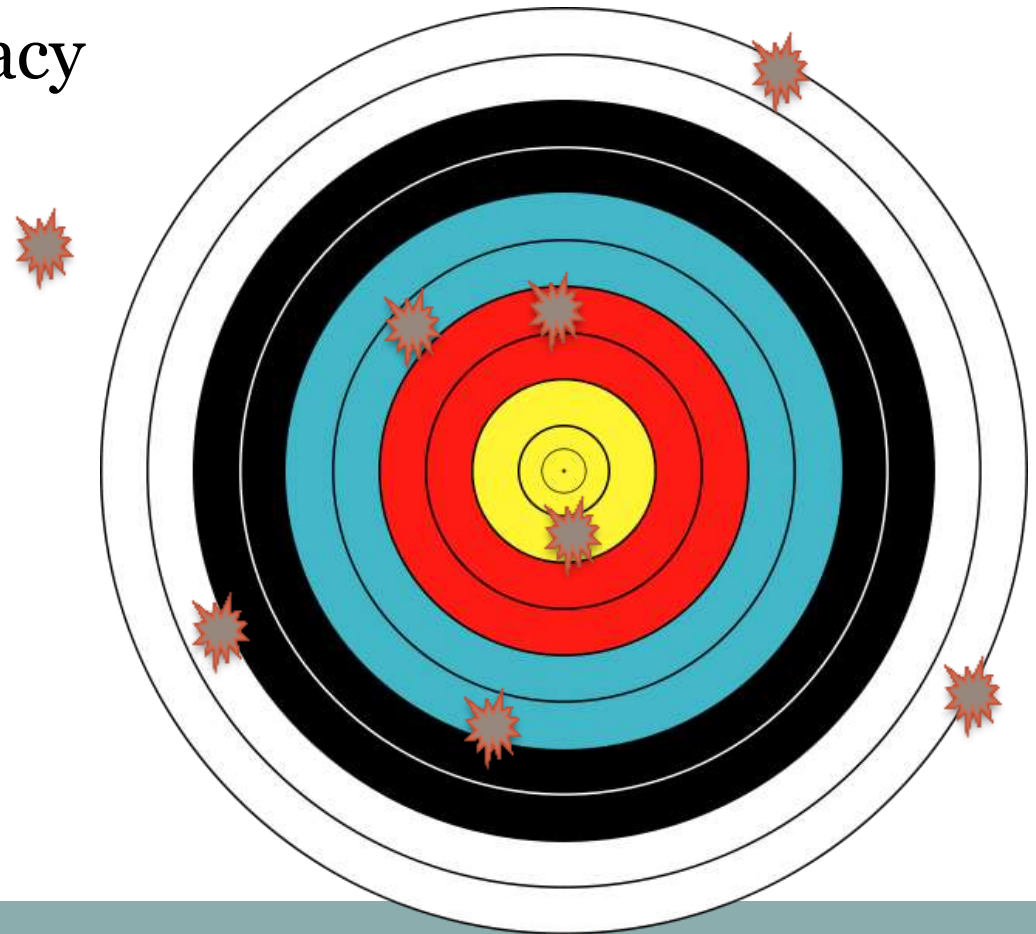
# Causality

- Theoretical relationship
- Chronology
- Covariance

The less education an individual has, the more likely they are to use corporal punishment with their children.

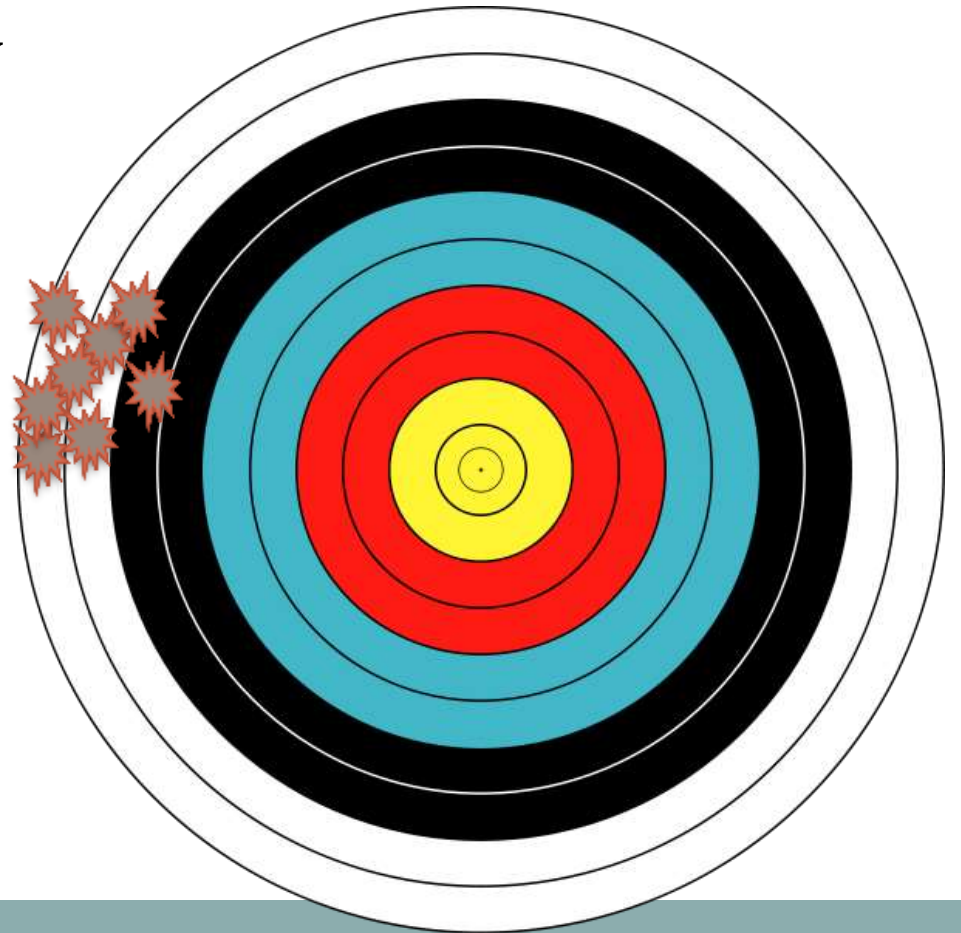
# Research results should have:

- **Reliability**—consistency
- **Validity**—accuracy



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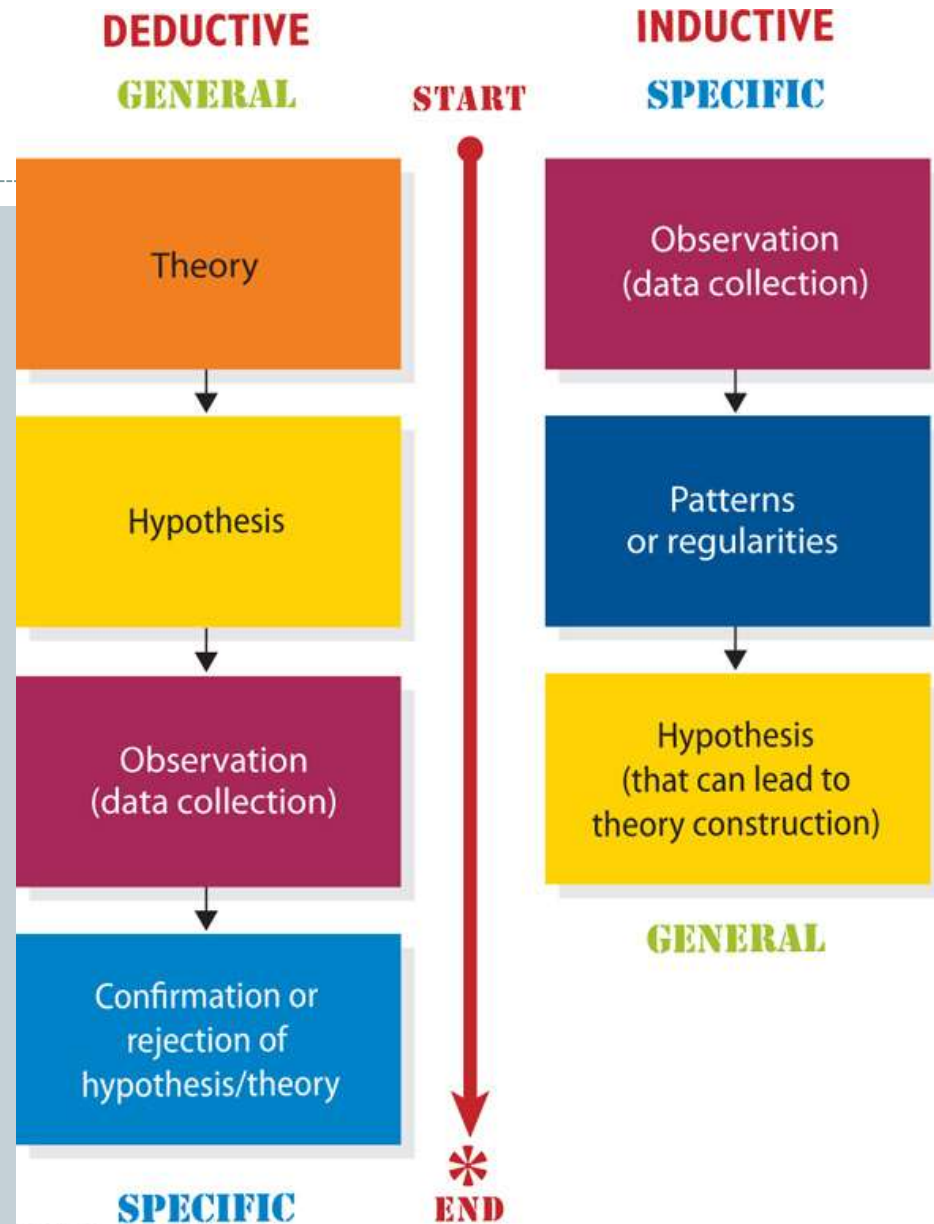
# Scientific Method



Research relies on:

- **Deductive reasoning:** moving from the general to the specific
- Theory → Hypothesis → Observation → Confirmation
- **Inductive reasoning:** moving from the specific to the general
- Observation → Pattern → Hypothesis → Theory

# Scientific Method



# Scientific Method



- **Qualitative research:** nonnumeric description
  - A researcher works in a meat-packing plant and describes his experiences
- **Quantitative research:** numerical analysis
  - Reported number of safety violations are analyzed in relationship to number of inspections.

# Scientific Method



- **Population:** well-defined group of people or things that is of interest
- **Sample:** that part of the population that is studied
- **Probability sample:** each person or thing has an equal chance of being selected
- **Nonprobability sample:** based on convenience or availability

# Scientific Method—Application



Is it a probability sample?

- Classes are selected randomly from a list of all classes at a university.
- Students leaving the student union are asked to fill out a survey.
- Readers voluntarily complete a survey found in a magazine.

# Scientific Method



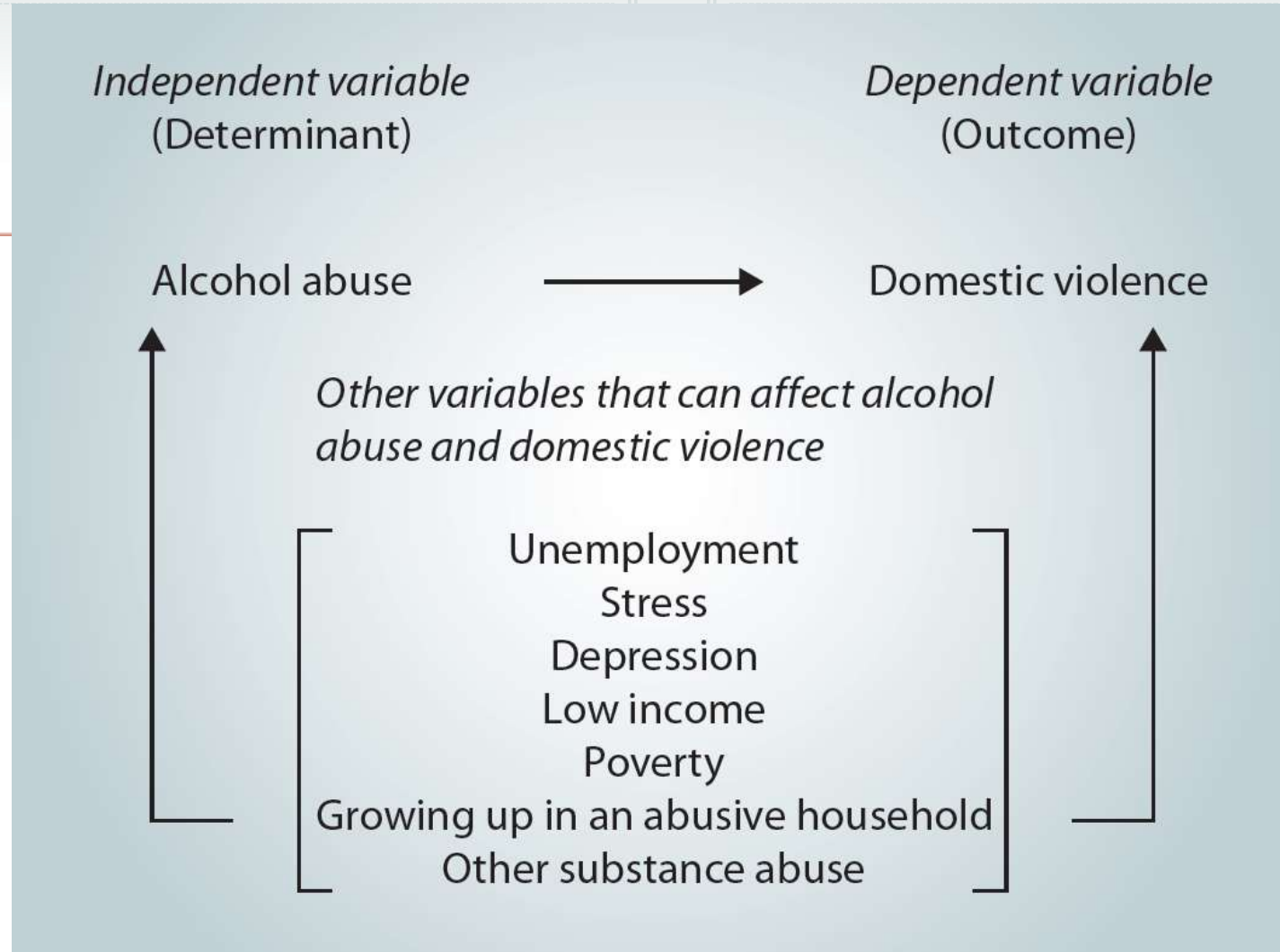
Sociologists usually talk about **correlation**—the relationship between variables—rather than **causation**.

Selection of method is based on:

- Benefits and limitations of the method
- Time and budget constraints

# Figure 2.3

## An Example of Correlation



# Steps in the Scientific Method



Choose a topic to study

Summarize the related research

Formulate a hypothesis or ask a research question

Describe the data collection methods

Collect the data

Present the findings

Analyze and explain the results

# Data Collection Methods



- Surveys
- Field research
- Content analysis
- Experiments
- Secondary analysis of existing data
- Evaluation research

# Data Collection



## **Surveys:**

- Questionnaires and interviews
- Advantages: inexpensive, easy to administer, fast turn-around rate, ease in acquiring sensitive information
- Disadvantages: low response rate, possibility of inaccurate information

**Table 2.2****Can I Trust These Numbers?****To determine a survey's credibility, ask:**

- Who sponsored the survey? A government agency, a political organization, a business, or a group that's lobbying for change?
- What's the purpose of the survey? To provide objective information, to promote an idea or a political candidate, or to get attention through sensationalism?
- How was the sample drawn? Randomly? Or was it a "self-selected opinion poll" (a SLOP, according to Tanur, 1994)?
- How were the questions worded? Were they clear and objective, or loaded and biased? If the survey questions are not provided, why not?
- How did the researchers report their findings? Were they objective, or did they make value judgments?



## Down East Sunrise Trail 2012 User Survey



In order to provide you with a high quality recreational experience, we are conducting a survey of trail users. Your cooperation in completing this survey will be greatly appreciated. One user per survey form please!



- 1: What is your zip code? \_\_\_\_\_
- 2: How often, on average, do you use the trail? (circle one response) Daily Between 3 and 5 times a week 1 or 2 times a week  
Once a week A couple of times a month Once a month A few times a year First time
- 3: Please identify your age group. (circle one response)  
15 and under 16 to 25 26-35 36-45 46-55 56-65 66 or older
- 4: Were any children under the age of 15 with you on your trail experience today? Yes No
- 5: What is your gender? (circle your response) Male Female
- 6: What is your primary activity on the trail? (circle all that apply) Walking/ Hiking Biking Jogging/Running  
Horseback Riding ATV XC skiing/Snowshoeing Snowmobile Other activity (specify) \_\_\_\_\_
- 7: Generally, when do you use the trail? (circle one response) Weekdays Weekends Both
- 8: How much time do you generally spend on the trail each visit? (circle one response)  
Less than 30 minutes 30 minutes to 1 hour 1 to 2 hours More than 2 hours
- 9: Would you consider your use of the trail to be for... (circle one response)  
Recreation Health and Exercise Commuting Fitness Training (marathon, triathlon) Other (specify) \_\_\_\_\_
- 10: During your trail visit did you (circle all that apply) Fish Paddle Swim Watch birds Watch wildlife Study flowers
- 11: How did you find out about the trail? (circle all that apply)  
Word of mouth Roadside signage Driving past Newspaper Parks Department Bike shop  
Convention and Visitors Bureau Information from Rails-to-Trails Conservancy Internet web site Other \_\_\_\_\_
- 12: Has your use of the trail influenced your purchase of: (circle all that apply)  
Bike Bike supplies Auto accessories Footwear ATV Snowmobile Clothing Nothing
- 13: Approximately how much did you spend on the items above in the past year? \$ \_\_\_\_\_
- 14: In conjunction with your most recent trip to the trail, did you purchase any of the following? (circle all that apply)  
Beverages Candy/Snack foods Sandwiches Ice cream Meals at a restaurant along the trail  
ATV rental Snowmobile rental Horse rental Other \_\_\_\_\_ None of these
- 15: Approximately how much did you spend, per person, on the items above on your most recent visit? \$ \_\_\_\_\_
- 16: Did your visit to the trail involve an overnight stay in one of the following types of accommodations? (circle one response)  
Motel/Hotel Bed and Breakfast Friend or Relatives Home Campground Other (please specify) \_\_\_\_\_
- 17: How many nights did you stay in conjunction with your visit to this trail? \_\_\_\_\_
- 18: Approximately how much did you spend on over night accommodations per night? \$ \_\_\_\_\_
- 19: In your opinion, the maintenance of the trail is (circle one) Excellent Good Fair Poor
- 20: In your opinion, the safety and security along the trail is (circle one) Excellent Good Fair Poor
- 21: In your opinion, the cleanliness of the Trail is (circle one) Excellent Good Fair Poor
- 22: Would you be willing to pay an annual usage fee to help maintain the trail? (circle one response) Yes No
- 23: What portion of the trail do you use most often? (circle all that apply)  
Ellsworth-Franklin Franklin-Sullivan Sullivan-Cherryfield  
Cherryfield-Machias Machias-Dennysville Dennysville-Ayers Junction
- 24: Which trail access points do you generally use when you visit the trail? \_\_\_\_\_



Additional comments \_\_\_\_\_

# Down East Sunrise Trail

[Home](#)

## Down East Sunrise Trail 2012 User Survey

In order to provide you with a high quality recreational experience, we are conducting a survey of trail users. Your cooperation in completing this survey will be greatly appreciated. One user per survey form please!

Be sure to complete the form in one sitting before submitting. The form cannot be submitted until you have answered the last question.

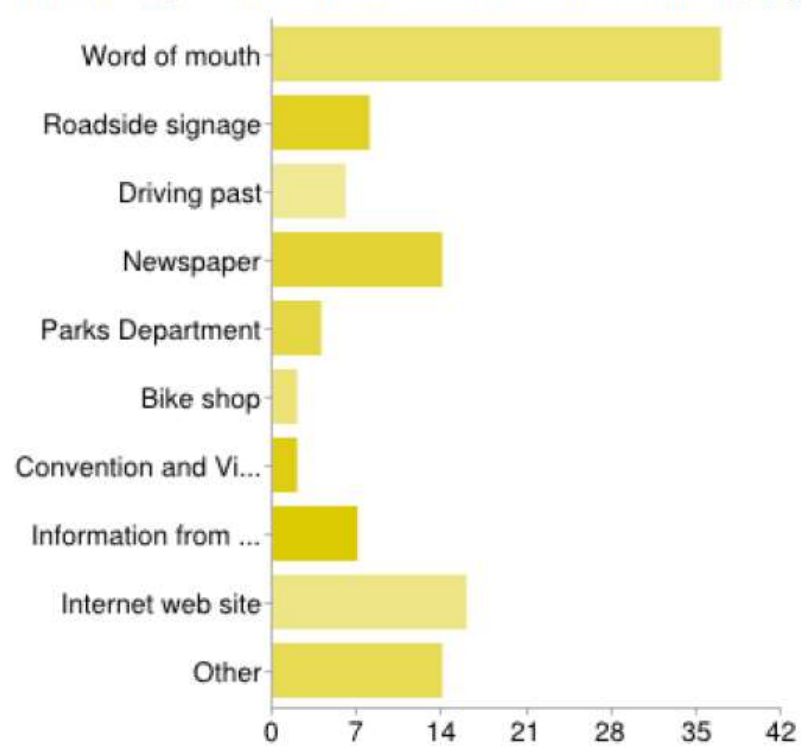
\* Required

**01) What is your home zip code?**

**02) How often, on average, do you use the Down East Sunrise Trail?**

- Daily
- Between 3 and 5 times a week
- 1 or 2 times a week
- Once a week
- A couple of times a month
- Once a month
- A few times a year
- First time
- Other:

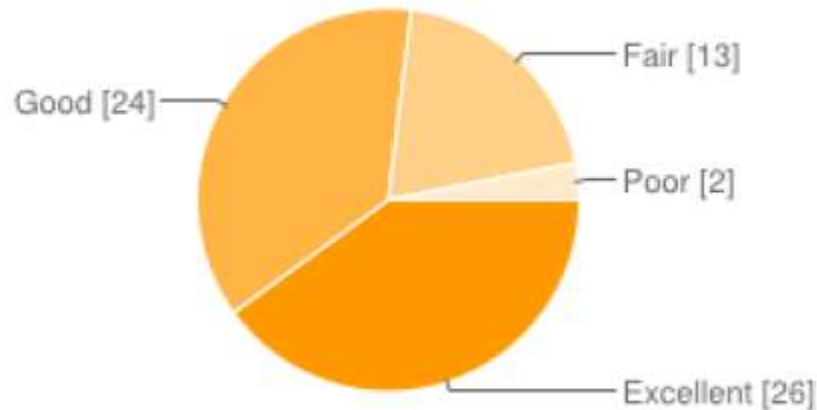
11) How did you find out about the trail? (check all that apply)



Word of mouth	37
Roadside signage	8
Driving past	6
Newspaper	14
Parks Department	4
Bike shop	2
Convention and Visitors Bureau	2
Information from Rails-to-Trails Conservancy	7
Internet web site	16
Other	14

People may select more than one checkbox, so percentages may add up to more than 100%.

19) In your opinion, the maintenance of the trail is ...



Excellent	26	39%
Good	24	36%
Fair	13	19%
Poor	2	3%

# Data Collection



## **Secondary Analysis:**

- Examines data that have been collected by someone else
- Includes historical materials, personal documents, public records, and official statistics
- Advantages: accessible, convenient, inexpensive
- Disadvantages: may not have the needed information

# Data Collection



## **Field Research**

- Observing people in their natural surroundings
- Includes participant observation
- Advantages: in-depth understanding, flexible, does not disrupt the subjects
- Disadvantages: sometimes expensive or dangerous, little control over the data

# Surveillance



# Data Collection



## **Content Analysis**

- Systematically examining some form of communication such as speeches, songs, emails
  - Develops categories to code material
  - Sorts and analyzes data
  - Draws conclusions about the results
- Advantages: inexpensive, less-time consuming; correct coding errors easily; unobtrusive; permits comparisons over time
- Disadvantages: labor intensive; subjective coding; possibility of class bias

# State of the Union



- How can we visualize a speech?
- Donald Trump 2017 State of the Union

<https://www.youtube.com/watch?v=-EEsAgy7lps>

[www.whitehouse.gov/the-press-office/2017/02/28/remarks-president-trump-joint-address-congress](http://www.whitehouse.gov/the-press-office/2017/02/28/remarks-president-trump-joint-address-congress)

- <https://www.wordclouds.com/>
- <http://www.wordle.net/create>









# Data Collection



## **Experiment**

- Carefully controlled artificial situation
- Experimental group exposed to the independent variable
- Control group not exposed
- Advantages: can test cause-effect
- Disadvantages: artificial, high attrition

# Data Collection

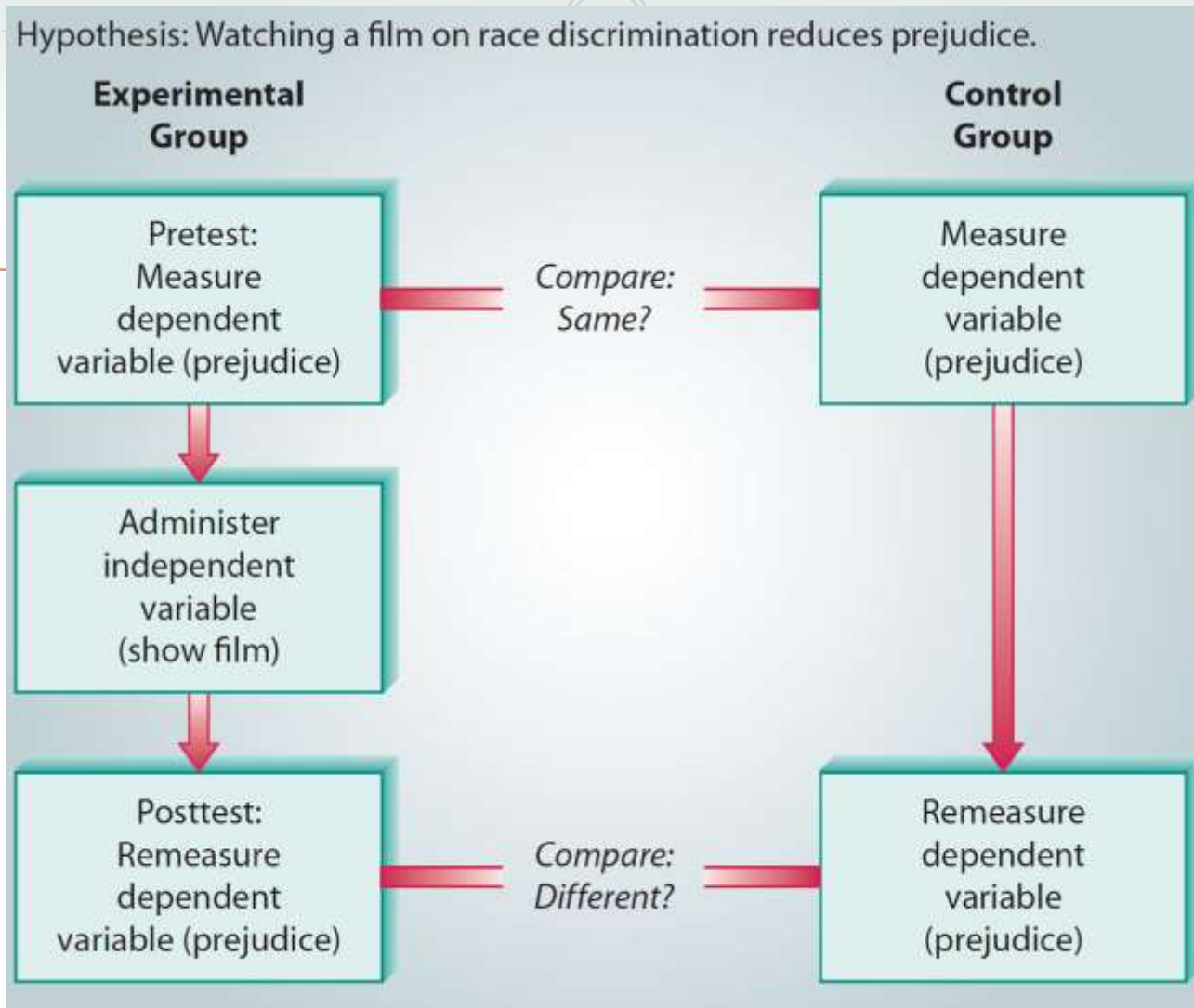


## **Evaluation Research**

- Assesses effectiveness of a social programs
- Uses any of the data collection techniques
- Advantages: examines actual efforts to deal with problems; can be valuable to program directors
- Disadvantages: not popular when it finds that existing programs are not effective

# Figure 2.6

## Basic Experimental Design



Source: Based on Babbie, 2013, Figure 5.1.

# Ethics, Politics, and Sociological Research



## An Experiment That Went Awry

In a well-known 1973 experiment, psychologist Philip Zimbardo created a mock prison, using 21 undergraduate volunteers as prisoners and guards. The experiment was stopped after 6 days because some of the participants experienced intense negative reactions, and the study raised several ethical questions. For more information about this study, go to Stanford Prison Experiment, at [www.prisonexp.org](http://www.prisonexp.org). We'll examine this study in more detail in Chapter 6.

# Ethics and Politics



## Basic Ethical Considerations:

- Do no harm.
- Get the subjects' informed consent.
- Protect subjects' confidentiality.

# Ethics and Politics



- Policy makers may refuse to fund controversial subjects.
- Policy makers might ignore or suppress research findings.
- Advocacy groups might ignore findings that could reduce funding or undermine traditional values.

# Chapter Review



1. Why is social research important?
2. What is the scientific method?
3. How do sociologists do research?
4. What is the research process?
5. Describe different data collection methods.
6. What are the ethical considerations of doing research?



## KEY TERMS

- Correlation
- Survey
- Questionnaire
- Interview
- Field research
- Content analysis
- Experiment
- Experimental group
- Control group
- Secondary analysis
- Evaluation research

# SUMMARY

- Research challenges overgeneralizations, exposes myths, explains cause of people's behavior, and influences social policies
- Scientific method involves:
  - *Careful data collection*
  - *Exact measurement*
  - *Accurate recording and analysis of the findings*
  - *Thoughtful interpretation of results*
  - *Generalization of the findings to a larger group*