

B2

Do Now

12-14-10

Soon you will be conducting some sociological research.

What do you think are some important things to think about when conducting sociological research?

Sociological Research: Terms and Techniques

12-14-10

Agenda

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1. Socy Research At a Glance
2. Conducting Socy Research
3. Case Study: At Slim's Place
4. The Research Process
5. Causation vs. Correlation
 1. Spurious Correlations
6. Basic Research Methods
7. Research Example: Technology Focus
8. Ethical Issues
9. Closing
10. Lab Time!



Objectives (3 min)

- Content (The objectives you'll master today)
- **SWBAT:**
 1. Define the ***scientific method***
 2. Explain the difference between ***correlation*** and ***causation***
 3. Describe ***participant observation research***
 4. Explain why sociologists use statistical analysis
 5. Explain some of the major ethical issues in Sociological Research
- Language (How you will master the objectives)
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Section 4 at a Glance

Conducting Sociological Research

- Sociologists employ a seven-step process when they conduct research.
- Research approaches available to sociologists include:
 - survey
 - analysis of existing documents
 - observation
 - experiment

Conducting Sociological Research

Main Idea

Sociologists use several approaches to conducting research. Regardless of the approaches they use, all sociologists follow a seven-step research process.

Reading Focus

- What are the seven steps in the research process?
 - How do sociologists uncover causation and correlation?
 - What basic research methods do sociologists employ?
 - How do ethical issues affect sociological research?
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**SOCIOLOGY
CLOSE UP**

**How do sociologists
conduct research?**

A Place at Slim's Table

Mitchell Duneier (standing)
talks to Slim (to the left of
Duneier) and his friends.



The Research Process

Sociologists use the **scientific method** to conduct their research.

Scientific Method

The scientific method is an **objective, logical, and systematic way of collecting and analyzing data.**

A **hypothesis** is a statement that predicts what the outcome of an experiment will be.

mentally (unbiased/neutral)

THE RESEARCH PROCESS

QUICK
FACTS

Sociologists follow a **seven-step** process when conducting empirical research.

Step 1 Define the Problem

The researcher selects a topic for study and develops operational definitions of key concepts.

Step 2 Review the Literature

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Step 3 Form a Hypothesis

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Step 7 Present Conclusions

The researcher presents the research findings to other sociologists.

Check for Understanding

Sequence

What are the seven steps
in the research process?

Answer: *define the problem, review the literature, form a hypothesis, choose a research design, collect the data, analyze the data, present conclusions*

Smoking \rightarrow Lung Cancer
 \rightarrow Polluting factory

Causation and Correlation

Correlation

- **Correlation is the first step in proving causation.**
- A correlation exists when a change in one variable is regularly associated with a change in another variable.
- **Some correlations are spurious: (two variables seem to be affecting each other, but in reality it is something else)**

Causation

- Every event has at least one cause.
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To prove causation, the two variables must be:

- regularly correlated
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Correlation:

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Spurious Correlation:

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Causation and Correlation

spurious: (two variables seem to be affecting each other, but in reality it is something else)

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Correlation or Spurious Correlation:

- Smoking is correlated with lung cancer
- Good grades and being in school band
- Old age and shoe size
- Hours of studying and good grades
- Being a teen and experimenting w/ drugs

Correlation or Spurious Correlation:

- Slamming your hand in the door and feeling pain
- Eating lots of fatty food and being overweight
- Seeing pictures of models in the media and developing an eating disorder
- Seeing cool kids wear ripped jeans, and wearing them yourself

Spurious Correlation



“A spurious correlation exists where variables appear to be related but actually are being affected by a third variable.”

Suppose that studies show that students who get good grades are also members of the school band. Does this mean that involvement in the school band causes students to get good grades? Not necessarily. There might be a third variable—such as a general desire to do well in school—that encourages both good grades and involvement in extracurricular activities such as the band. *Why is spurious correlation an important concept for researchers?*

Basic Research Methods

Here is a suggest note-taking format...you do not have to use this method 😊

Method	Definition	Advantages	Disadvantages
Survey			
Analysis of Existing Documents			
Observation			
Experiment			



Basic Research Methods

Survey

- **Survey** method is used for large numbers of people
- Researchers use questionnaires and interviews
- The data available in a short amount of time
- The answers may not be accurate
- Researchers use **samples**, or small groups

representative

Analysis of Existing Sources

- **Historical method** uses information from the past
- **Content analysis** counts uses of words or symbols



Observational Studies

- Researchers watch people in detached observation.
- Researchers become part of the group being studied in participant observation.
- A case study uses information gathered during observation.

(in depth view of a social phenomenon)

Experiments

- In an experiment, the data is gathered under controlled conditions.
- Researchers use a control group and an experimental group.
- Information gathered is somewhat limited because of the controlled conditions.

Statistical Analysis

- ~~Researchers use mathematical data.~~
- **Statistical analysis** is the analyzing of collected data to determine the kind of relationship between two or more variables.
- The *mode* is the most common number in the data.
- The *mean* is the average of the numbers in the data.
- The *median* is the number that divides the data into two equal parts.

Ethical Issues in Research

Ethics: (the sense of right and wrong)

- Specific rules set by the American Sociological Association
- Rules focus on: (ASA)
 - Confidentiality
 - Deception
 - Informed consent
- Must protect the rights of subjects

Dealers and Smugglers

Reading Check

Find the Main Idea

What ethical issues do
sociological researchers face?

Answer: *confidentiality, the possible use of deception,
and informed consent*

Closing (3 min)


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Lab: Applying What You've Learned

Who's at Your Table

How different does your life appear when you view it through the eyes of a sociologist?

1. Introduction

- In this lab, you will undertake observational research of social interactions at your lunch table.
 - Carefully observe the people at the table in an objective way.
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2. Conducting Your Observation

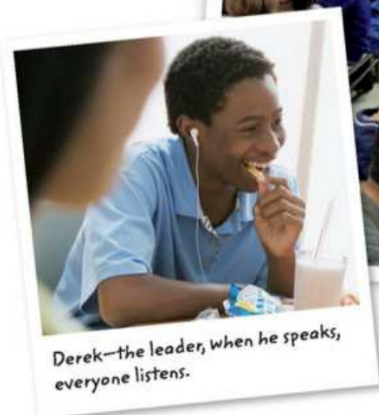


- Observe the people at your table in the school cafeteria.
- Study the dynamics of the situation.
- Write a brief essay describing the social interactions you observed.

Lab (cont.)

3. Discussion and Evaluation

- Hold a group discussion in which you describe your experience as an observer. Was it difficult to observe and not participate?
 - What kind of observations did you and your classmates make?
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 - What other groups would be interesting to observe?
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P5

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Soon you will be conducting some sociological research.

What do you think are some important things to think about when conducting sociological research?


- Sci method
- why?
- background

Sociological Research: Terms and Techniques

12-14-10

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Conducting Sociological Research

Main Idea

Sociologists use several approaches to conducting research. Regardless of the approaches they use, all sociologists follow a seven-step research process.

Reading Focus

- What are the seven steps in the research process?
 - How do sociologists uncover causation and correlation?
 - What basic research methods do sociologists employ?
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CLOSE UP**

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neutral / unbiased

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Sequence

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Answer: *define the problem, review the literature, form a hypothesis, choose a research design, collect the data, analyze the data, present conclusions*

Smoke cig → lung cancer
a strong relationship
between 2 variables

Causation and Correlation

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- Some correlations are **spurious**: (two variables seem to be affecting each other, but in reality it is something else)

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“A spurious correlation exists where variables appear to be related but actually are being affected by a third variable.”

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- Historical method uses information from the past
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(in depth view of a social phenomenon)

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Start

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Statistical Analysis

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(ASA)

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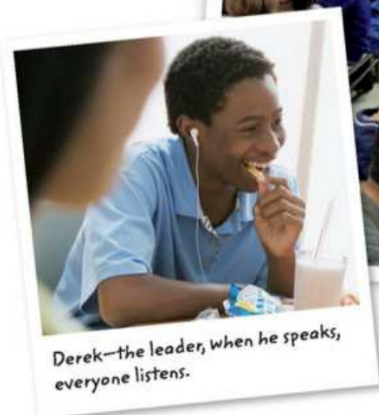


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TECHNOLOGY FOCUS

Mapping Social Networks

The social network, the web of relationships formed by the sum total of a person's interactions with others, is a topic of great interest in sociology. To explain social networks to others, sociologists often use graphics. These map-like images use points to show social actors and lines to show interaction among those actors.

Initially, network maps were hand-drawn and very simple. Over time, innovations added sophistication. The introduction of computing in the 1950s allowed researchers to use various forms of mathematical analyses on their data. This made mapping far more accurate. By the 1970s, computer programs had been developed that not only analyzed the data, but also produced printable images of the dots and lines. A further programming development in the 1980s enabled researchers to produce images on screen.

Perhaps the greatest revolution in network imaging came with the advent of the Web, because this added



This social network map shows friendship ties among a group of teenagers in Dublin, Ireland.

the viewer of the images to the mix. After accessing images on the Internet, the viewer can manipulate them—enlarging, shrinking, or rotating them, isolating particular aspects of the network, and so on. These capabilities make the analysis of the complicated concept of social interaction much easier.

Thinking Critically

Draw Conclusions Why are graphics so important to the analysis and understanding of social networks?

Reading Check

Summarize

What research approaches
might a case study employ?

Answer: *surveys, observation, analysis of existing sources, and experiments employing statistical analysis*

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