

## Journal 11/8/18

- Why would you use a longitudinal study over a cross-sectional or retrospective? Explain
- What is an example of a potential longitudinal study that would not work as cross sectional or retrospective study?

# Unit 2: Research Methods

## Table of Contents

1. Unit 2 Table of Contents
2. Notes: Overview of Research Methods
3. Notes: Writing a Sociological Question
4. Research Project Part 1A
5. Research Project Part 1B
6. Notes: Writing the Purpose
7. Notes: Writing a Literature Review
8. Literature Review Prep
9. Notes: Peer Reviewed Journal
10. Notes: APA Formatting
11. Notes: Writing a Hypothesis
12. Methodology: Design Models Notes and Assignment
13. Methodology: Data Collection Notes

# Methodology

## Data Collection

# Case Study Research

- An investigator studies an individual or small group of individuals with an unusual condition or situation.
- Case studies are typically clinical in scope.
- Uses self-report measures to acquire quantifiable data on the subject.

## **Limitations**

- On the negative side, they tend to apply only to individuals with similar characteristics rather than to the general population.
- The high likelihood of the investigator's biases affecting subjects' responses limits the generalizability of this method.

# Research with Existing Data

- Using data that other social scientists have already collected.
- The use of publicly accessible information is known as **secondary analysis**
- Most common in situations in which collecting new data is impractical or unnecessary.
- Sociologists may obtain statistical data for analysis from businesses, academic institutions, and governmental agencies.

## Limitations

- You may not be able to find the exact data you are searching for

# Observational Research

- Direct observation of subjects' reactions, either in a laboratory (called **laboratory observation**) or in a natural setting (called **naturalistic observation**).
- Reduces the possibility that subjects will give dishonest accounts of the experiences, not take the study seriously, fail to remember, or feel embarrassed.

## Limitations

- Subject bias is common, because volunteer subjects may not be representative of the general public.
- Individuals who agree to observation and monitoring may function differently than those who do not.
- They may also function differently in a laboratory setting than they do in other settings.

# Participant Observation

- Become a member of the subjects' community.
- Observe what actually occurs within a community, and then consider that information within the political, economic, social, and religious systems of that community.
- Cross-cultural research demonstrates that Western cultural standards do not necessarily apply to other societies. What may be “normal” or acceptable for one group may be “abnormal” or unacceptable for another.

## **Limitations**

- You may not be welcome in the community
- You may cause behaviors to change based on your presence

# Survey

- Involves interviewing or administering **questionnaires**, or written surveys, to large numbers of people.
- The investigator analyzes the data obtained from surveys to learn about similarities, differences, and trends. He or she then makes predictions about the population being studied.
- Advantages include obtaining information from a large number of respondents, conducting personal interviews at a time convenient for respondents, and acquiring data as inexpensively as possible.



# Survey

## Limitations

- Disadvantages of survey research include **volunteer bias, interviewer bias, and distortion.**
- **Volunteer bias** occurs when a sample of volunteers is not representative of the general population. Subjects who are willing to talk about certain topics may answer surveys differently than those who are not willing to talk.
- **Interviewer bias** occurs when an interviewer's expectations or insignificant gestures (for example, frowning or smiling) inadvertently influence a subject's responses one way or the other.
- **Distortion** occurs when a subject does not respond to questions honestly.

# Survey - Interview

- More personal form of research than questionnaires. In the **personal interview**, the interviewer works directly with the respondent.
- Unlike with questionnaires, the interviewer has the opportunity to probe or ask follow-up questions.
- Generally easier for the respondent, especially if what is sought is opinions or impressions.
- Can be very time consuming and they are resource intensive.
- The interviewer is considered a part of the measurement instrument

# Survey - Questionnaire

- A list of pre-set questions to which the participants are asked to answer.
- Very structured with the participant having a few set answers to choose from (multiple choice)
- Data is quantitative so easy to analyze and compute
- Allow comparisons to be made with other sets of data

## **Limitations**

- May not be able to follow up questions

# Creating a Survey

- Determining the question content, scope and purpose
- Choosing the response format that you use for collecting information from the respondent
- Figuring out how to word the question to get at the issue of interest

# Dichotomous Questions

- When a question has two possible responses
- Surveys often use dichotomous questions that ask for a Yes/No, True/False or Agree/Disagree response. There are a variety of ways to lay these questions out on a questionnaire:

**Do you believe that the death penalty is ever justified?**

**Yes**

**No**

# Questions Based on Level Of Measurement

## **Nominal**

- Here, the number next to each response has no meaning except as a placeholder for that response. The choice of a "2" for a lawyer and a "1" for a truck driver is arbitrary -- from the numbering system used we can't infer that a lawyer is "twice" something that a truck driver is

### **Occupational Class:**

**1 = truck driver**

**2 = lawyer**

**3 = etc.**

# Questions Based on Level Of Measurement

## Ordinal

- We might ask respondents to rank order their preferences for presidential candidates using an ordinal question:
- We want the respondent to put a 1, 2, 3 or 4 next to the candidate, where 1 is the respondent's first choice.

**Rank the candidates in order of preference from best to worst...**

\_\_\_ Bob Dole  
\_\_\_ Bill Clinton  
\_\_\_ Newt Gingrich  
\_\_\_ Al Gore

# Questions Based on Level Of Measurement

## Interval

- We can also construct survey questions that attempt to measure on an interval level.
- One of the most common of these types is the traditional 1-to-5 rating.
- We see how we might ask an opinion question on a 1-to-5 bipolar scale:

**The death penalty is justifiable under some circumstances.**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>strongly disagree</b>	<b>disagree</b>	<b>neutral</b>	<b>agree</b>	<b>strongly agree</b>



# Questions Based on Level Of Measurement

## Semantic Differential

- An object is assessed by the respondent on a set of bipolar adjective pairs (using 5-point rating scale):

Please state your opinions on **national health insurance** on the scale below

	very much	some- what	neither	some- what	very much	
<i>interesting</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>boring</i>
<i>simple</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>complex</i>
<i>uncaring</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>caring</i>
<i>useful</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>useless</i>

*etc.*

# Questions Based on Level Of Measurement

## **Cumulative**

- The respondent checks each item with which they agree. The items themselves are constructed so that they are cumulative -- if you agree to one, you probably agree to all of the ones above it in the list:

**Please check each statement that you agree with:**

**\_\_\_ Are you willing to permit immigrants to live in your country?**

**\_\_\_ Are you willing to permit immigrants to live in your community?**

**\_\_\_ Are you willing to permit immigrants to live in your neighborhood?**

**\_\_\_ Would you be willing to have an immigrant live next door to you?**

**\_\_\_ Would you let your child marry an immigrant?**

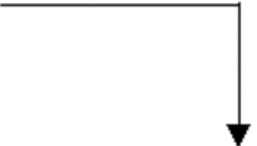
# Filter or Contingency Questions

- Ask one question in order to determine if they are qualified or experienced enough to answer a subsequent one.

Have you ever smoked marijuana?

Yes

No



If yes, about how many times have you smoked marijuana?

Once

2 to 5 times

6 to 10 times

11 to 20 times

more than 20 times

# Question Content

For each question in your survey, you should ask yourself how well it addresses the content you are trying to get at.

## **Is the Question Necessary/Useful?**

- Examine each question to see if you need to ask it at all and if you need to ask it at the level of detail you currently have.

## **Are Several Questions Needed?**

- This is the classic problem of the **double-barreled question**. You should think about splitting each of the following questions into two separate ones. You can often spot these kinds of problems by looking for the conjunction "and" in your question.

# Question Content

- Do Respondents Have the Needed Information?
- Does the Question Need to be More Specific?
- Is Question Sufficiently General?
- Will Respondent Answer Truthfully?
- Can the Question be Misunderstood?

# Question Content cont.

## Is Question Biased or Loaded?

- Does the question contain difficult or unclear terminology?
- Does the question make each alternative explicit?
- Is the wording objectionable?
- Is the wording loaded or slanted?

## Observation

## Questioning

### Pros

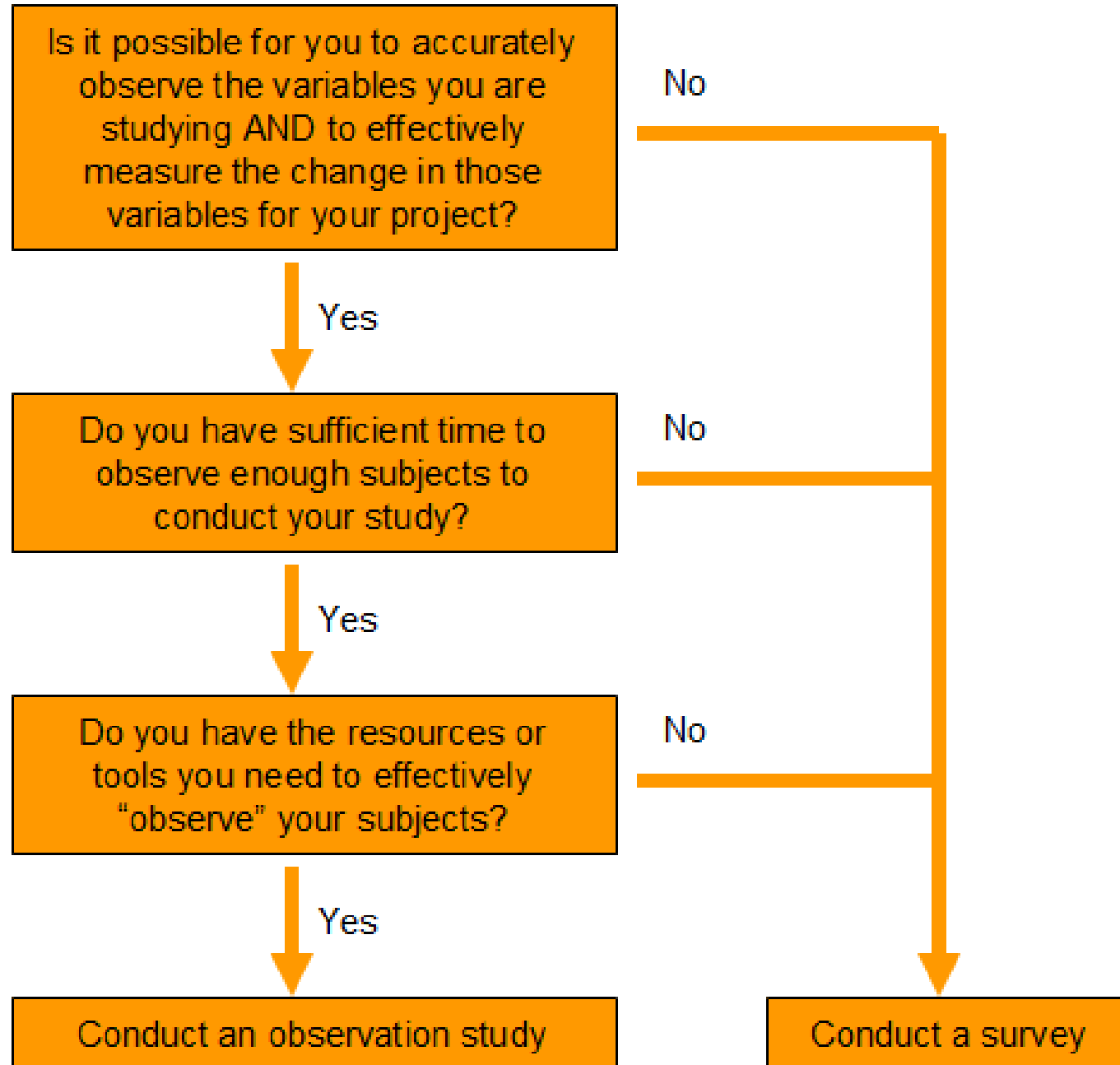
- Generally most effective means for studying young children who are unable to respond to questions
- More convenient and less intrusive for subject
- Captures an individual's genuine reactions

- Valuable for collecting information on unobservable variables such as feelings, motives, perceptions, attitudes, etc...
- Usually less time consuming method for capturing sufficient data

### Cons

- Limited to collecting data about visible characteristics or behavior
- More time consuming to capture sufficient data for conclusions

- The questions, or the mere fact of being questioned, may influence a subject's responses.





# On a separate sheet of paper: Data Collection

## **In your group**

- Create 10 questions with responses for a survey questionnaire to test your hypotheses.
- Limit of 2 Dichotomous Questions for this assignment

**Note:** If you are not doing a questionnaire for your project, create 10 questions you would ask.