

**Evaluation of Evidence (Sociology 5)**  
*Fall 2017*

**Professor David Harding**

Office: Barrows Hall 462

Email: [dharding@berkeley.edu](mailto:dharding@berkeley.edu)

Class: Tuesday and Thursday 9:30-11am, Lewis 100

Section: Twice per week either M/W or T/Th

Office Hours: Mondays 11am-noon & Fridays 12:30-2:30pm (sign-up at <https://dharding.youcanbook.me>)

Course Website: <https://bcourses.berkeley.edu>

**Course Description**

People today are barraged by information - a torrent of facts, opinions, and analyses that appear in books, in newspapers and magazines, on radio stations, through television broadcasts, on computer screens, and on phones. The pressure to make sense of that information has never been greater. This course will introduce you to the major types of data and analysis used by sociologists, and seeks to make students better consumers of social scientific research reported by the media or used in political or policymaking debates. This course will give you an overview of the tools used by social scientists and a framework for understanding what distinguishes good research from bad. By the end of the semester, you will be able to assess the soundness of research by evaluating research designs and data-collection strategies in light of research questions and theory. You will develop this knowledge through evaluating existing research and doing some of your own.

**Enrolling in the Course**

Each student must be registered for the lecture course and one of the sections listed below (rooms subject to change):

DIS 101	TuTh 8:00A-8:59A	187 Dwinelle
DIS 102	TuTh 11:00A-11:59A	7 Evans
DIS 103	TuTh 12:00P-12:59P	179 Stanley
DIS 104	TuTh 1:00P-1:59P	45 Evans
DIS 105	TuTh 2:00P-2:59P	115 Kroeber
DIS 106	TuTh 3:00P-3:59P	104 Wheeler
DIS 107	MW 8:00A-8:59A	122 Latimer
DIS 108	MW 9:00A-9:59A	122 Latimer
DIS 109	MW 10:00A-10:59A	475 Barrows
DIS 110	MW 11:00A-11:59A	475 Barrows
DIS 111	MW 12:00P-12:59P	39 Evans
DIS 112	MW 1:00P-1:59P	31 Evans

Note: First section meetings will be Wednesday, Sept, 6 and Thursday, Sept 7.

**Waitlist:** There is a waitlist for the course. For those enrolled, you must attend lecture the first three classes to confirm your enrollment. I will take attendance. If you are on the waitlist, you must also attend the first three classes. *You have a better chance of getting into the class if you pick a section with a shorter waitlist.* Please direct enrollment questions to Carmen Brick ([carmenbrick@berkeley.edu](mailto:carmenbrick@berkeley.edu)).

If you would like to be in a different section than the one you are assigned to, email your current GSI and the GSI leading the section you want to switch into. The GSIs will work with you to try to accommodate your preference. But, there is no guarantee that it will be possible to switch.

### **Lectures and Active Learning**

The lectures will explore the philosophical underpinnings of research design and describe the many different ways of gathering and evaluating evidence. You are responsible for all material discussed in lectures, as well as any announcements made there.

Cognitive science research shows that listening to someone talk for 80 minutes is just about the worst way to learn. Learning requires active engagement with the material: thinking through examples, applying concepts to new circumstances, evaluating options and implementations, designing, problem-solving, doing. In this course we will use what has come to be known as “active learning” (or sometimes “flipping the classroom” – see the reading for the first lecture). We will spend a significant amount of time in lecture doing higher-order cognitive activities/exercises – often in small groups – rather than passively listening. Small group activities are an important context for peer instruction, learning from each other.

In order to facilitate feedback and communication during these activities, we will use clickers (see below). In order to free up time in lecture that is typically used to cover facts, definitions, and the like, students will be expected to come to lecture already having spent time studying these things. The readings and videos provide this background for you. We will have quizzes in almost every lecture (starting in the 4<sup>th</sup> lecture) to make sure that students come to class prepared for active learning (see more below on quizzes). Some readings will also cover the basics of examples we will use for active learning.

A final benefit of active learning is that it can teach students the basics of learning outside of the classroom – how to learn on your own effectively and efficiently. Modern careers require constant learning of new skills, tools, and ideas but provide few opportunities for formal learning in a classroom setting. Career success requires the modern worker to be able to learn on her or his own. You can employ the active learning strategies we use in this course to become a life-long learner.

### **Required Readings and Short Videos**

The readings offer you the chance to learn how working social scientists actually DO research, especially how they gather data. You are expected to do the assigned reading before class. To help focus your reading, the schedule of classes includes questions to consider for each set of readings. Think through these questions carefully, as they will inform the in-class quizzes, midterm, and final exam.

There is one *required textbook*: Carr et al. *Art and Science of Social Research* (1st Edition Preview) New York: WW Norton. ISBN: 978-0-393-64479-1.

The book is only available at the ASUC bookstore. It is a “preview edition,” meaning the publisher has not released it for general distribution, but we will have access to it at a low price (~\$35) in exchange for trying it out. I have put copies of the book on 2-hour reserve in Moffitt.

PDFs of the other readings are available on the bCourses site.

Links to short videos that go with (just about) every lecture are below. These videos are a supplement to, rather than a replacement for, the readings. The videos are designed to provide brief introductions to key concepts and ideas before lecture, so we can spend less time in lecture on definitions and facts, leaving more time for active learning and examples.

### **Course Assignments**

Students will be evaluated and graded based on two examinations, four research projects, in-class quizzes, and their participation and attendance at lecture and in discussion section. The table at the end of this section notes the due dates for each assignment and the percentage of the final grade that each assignment is worth.

### **Exams**

There will be two in-class closed-book examinations. The mid-term examination will be held on Tuesday, October 3 during the normal class time. Half of you will take the exam in our normal classroom and the other half will be in A1 Field Hearst Annex (we'll split up by last name as the date approaches). The final will be held on Wednesday, December 13, 11:30am-2:30pm (location TBD). The final will also cover material from lecture and readings. It will focus on the topics covered after the mid-term, but all course material is eligible for inclusion.

### **Research Projects**

A key part of understanding research methods is through learning-by-doing, that is, applying textbook or lecture knowledge to the real world. Your GSI will instruct you on whether to load projects to bCourses or submit them to your GSI's mailbox in 410 Barrows Hall. Late projects will be graded down a full letter grade for each day late (e.g., An A- becomes a B-). Note that if your GSI instructs you to hand assignments in at 410 Barrows, they will be due there by 4pm; anything submitted after then will be considered a day late (Note that the Sociology Office closes at 4pm). Detailed information on each project, including deadlines, is found after the schedule of readings.

In short, there are three individual assignments (assignments #1, #2, and #3) and one group assignment (assignment #4). You may not submit the group assignment individually. A lot of sociological research is coauthored; doing this final piece of work in a group gives you a sense of what it is like to work on a research team. It also allows you to learn from each other. Your GSI will assign you to your research project group for assignment #4 in section. For this last assignment, you will be graded on both your individual components and collectively on the group component.

### **Quizzes**

Starting with the fourth lecture, there will be a short multiple choice quiz in each lecture. We will use the Clickers to do the quiz. It is your responsibility to make sure your Clicker is working properly and has functioning batteries. We will drop the four lowest quiz scores. This provides some insurance against absences due to illness and to malfunctioning clickers.

### **Participation and Section**

Sections are an indispensable part of the course. They provide you with opportunities to ask questions about the readings or lectures, and otherwise engage the material actively, which is hard to carry off in a large lecture. Sections begin Wednesday, Sept. 6 (for M/W sections) or Thursday, Sept. 7 (for Tu/Th sections).

Sections are led by Graduate Student Instructors (GSIs). Section meetings and your GSI's office hours are your main points of contact. Each GSI has a mailbox in 410 Barrows.

The course GSIs are:

Carmen Brick	<a href="mailto:carmenbrick@berkeley.edu">carmenbrick@berkeley.edu</a>
Mario Castillo	<a href="mailto:mdcastillo@berkeley.edu">mdcastillo@berkeley.edu</a>
Isabel Garcia	<a href="mailto:isabel.garcia@berkeley.edu">isabel.garcia@berkeley.edu</a>
Andrew Jaeger	<a href="mailto:ajaeger@berkeley.edu">ajaeger@berkeley.edu</a>
Steve Lauterwasser	<a href="mailto:swlauterwasser@berkeley.edu">swlauterwasser@berkeley.edu</a>
Nallely Mejia	<a href="mailto:nmejia@berkeley.edu">nmejia@berkeley.edu</a>

In consultation with me, your GSI will assign 15% of your grade, based on your participation in section, lecture, and office hours. An obvious condition for effective participation is attendance. Participation involves attending section meetings, contributing to discussions, asking pertinent questions, and answering questions asked by GSIs. The quality of your contribution is far more important than the quantity.

### Assignments, Weights, and Due Dates

Assignment	% of Grade	Due Date
<b>Quizzes and Exams</b>		
Quizzes in lecture, drop lowest 4	12%	Take in class via Clickers
Mid-term Exam	15%	In-class Exam Oct. 3
Final Exam	15%	In-class Exam Dec. 13
<b>Research Projects</b>		
Project 1: Identifying Dependent & Independent	6%	September 19
Project 2: Data Analysis	12%	October 19
Project 3: Designing a Survey	12%	November 7
Project 4: Qualitative Interviewing	13%	November 30
<b>Participation and Attendance</b>	15%	Throughout semester

### Clickers

This course will use clickers in lecture starting with the 4<sup>th</sup> lecture. Clickers resemble remote controls and allow students to take quizzes, respond to polls, and provide feedback in real time. You can purchase clickers at the ASUC bookstore or online, new or used. You need an [iClicker+](#) but the more elaborate and expensive [iClicker 2](#) (has a small LCD screen) should also work if you already have one. The ["first generation" iClicker](#) should also work if you have one or can find one cheaply. After purchasing your clicker, you must register it in order for it to work, using the registration tool on our bCourses website.

If you are searching for iClicker online you may also come across something called "REEF Polling" (also known as "iClicker REEF") from the same company. This is an app or computer software that allows for the same functionality through a smartphone or laptop. Instead of purchasing the clicker, you pay for a subscription (sign-up in the app). The cost trade-off on this depends on whether you are likely to use the clicker again (multiple subscriptions can add up to more than the cost of a clicker, and you can sell the clicker once you are done with it). If you would like to try this, I would suggest that you wait until we are able to experiment with it in class.

We cannot know in advance if the Wi-Fi network serving our lecture classrooms will have the capacity for this to work well in a large class, so please do not purchase it yet. They offer a 14-day free trial, which you can activate right before we test the system in our second lecture.

We will use this technology for several reasons. It will be an integral part of our Active Learning in lecture. In addition, research by cognitive psychologists indicates that students should be graded frequently throughout the semester rather than at only a few points in time. Clickers make this possible in large classes. Clickers also make it possible for me to determine how well you grasp the material so I can spend less time on the concepts you understand well and more time on the challenging ones. This, in turn, leads to more interesting discussions. Finally, using clickers makes it easier for your reactions and opinions to serve as launching point for in-class discussion and debate. You will also take in-class quizzes using the clickers.

Each student needs his or her own clicker. Bring your clicker to class every day. The care and keeping of your clicker is your responsibility. If you forget it, if it runs out of batteries, if it fails to communicate with the receiver, or if it experiences any other kind of technical difficulty, you will get zero on that day's quiz. I will not change any quiz grade based on a report of a technical malfunction. I understand, however, that freak accidents happen and that even the most conscientious person can forget something once in a while. To allow for that possibility, I will drop your 4 lowest quiz scores.

## **Course Policies**

### **Readings and Lecture**

Students will be responsible for both material in the readings and material covered in lecture. I will post slides from lecture on the bCourses site. However, these slides are designed to be rhetorical aids and not comprehensive records of all that was said in class. Please do all of the readings and watch videos in a timely fashion. Each lecture date has one or two readings and at most a few short videos associated with it. It will be difficult to participate in active learning exercises in lecture if you have not done the readings and watched the videos. At some point during almost every lecture (starting with lecture 4) there will be a short quiz to test your preparation for lecture.

### **Accommodation**

I will provide accommodation to any student who provides me with a written letter from a DSP Specialist. If you require accommodation, the first step is to have DSP send me an official written accommodation letter. Once I receive this letter and if I have any questions, I will contact you by email. Please arrange for me to receive the letter as early in the semester as possible. I will also provide accommodation for observation of religious rituals. University policy is that such requests should be made by the second week of the semester. Please submit them by email, cc'ing your GSI. Arrangements for DSP Accommodations that require an alternative testing location or more time should be made with Mario Castillo (mdcastillo@berkeley.edu).

### **Late Work**

There are several written assignments for this course. The precise due dates and where the assignments should be handed in are noted above. Assignments turned in late will be penalized one letter grade for every day late (e.g. one day late makes a B a C). If you have a real emergency,

email the Professor and your GSI about it at least 24 hours before the deadline. Exams will be given on the posted dates. If you know now that you will have a conflict with the scheduled exam times, either do not take this course or speak with me as soon as possible so that we can work out an accommodation. If you have a true unforeseen emergency that prevents you from attending the exam, contact me and your GSI as soon as possible to discuss an accommodation.

### **Grading Policy**

If you wish to contest a grade, please first speak with your GSI and outline in writing (1) what assignment you are contesting, (2) the grade you received on the assignment, and (3) the reason(s) why you believe the grade you received is unfair. The GSI will consider your appeal and, in consultation with the Professor, may decide to re-grade your assignment. Please note, however, that a re-grade likely involves closer scrutiny of the work and so may result in an increase or a decrease in your grade. Whatever the outcome, the score from the re-grade will be final. The grade appeals process should be initiated within seven days of receiving the grade in question.

### **Academic Honesty<sup>1</sup>**

The UC Berkeley Honor Code states that, “As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others.” (<http://asuc.org/honorcode/index.php>). I expect that you will adhere to these principles in your conduct in the course. You may not copy specific text or ideas from others, whether from fellow students, from authors of our readings, or from authors of material you find on the internet, without specific attribution. To do otherwise is to plagiarize. You may not cheat on any of the exams by bringing in outside material, copying from fellow students, or engaging in other dishonest practices. You may of course discuss the lectures and readings with your fellow students. But, the assigned papers, in-class quizzes, and your written responses to exam questions must reflect your own independent work. Violations of these rules will result in a failing grade on the assignment and possibly on the course and may result in you being reported to University authorities. Using someone else’s clicker, even on non-quiz questions, is a violation of the Honor Code.

### **Email**

Email should not be used for substantive questions about the reading or course materials. Please ask such questions in class or sign-up for office hours. I will endeavor to respond to other email messages within 24 hours. Please wait 24 hours before emailing me a second time about the same issue.

### **Office Hours**

I very much encourage you to sign-up for office hours. You may also just “stop-by” my office during office hours and if I don’t have another student scheduled, I’ll be happy to talk with you. Office hours are a good time to just introduce yourself, to talk about ideas that you find particularly engaging or difficult, or to discuss problems that you may be having in the course. My office hours are held on Mondays 11am-noon & Fridays 12:30-2:30pm. You may sign up at <https://dharding.youcanbook.me>. Your GSI will also hold office hours.

### **Technology Policy**

You are encouraged to use a laptop during class for the purpose of note taking or consulting the readings. Please do not use your cell phone during class (except for attendance during the first

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<sup>1</sup> Text is adapted from the ASUC honor code guide.

three lectures). Please do not text, chat, surf the web, read the news, or watch videos during class! This behavior is distracting to other students sitting around you. I have asked the GSIs to (politely) ask students who are not engaged in class-related activities on their laptops to stop.

## Course Outline with Readings and Videos

### 1. Thursday, August 24: Overview of the Course & Logistics

*What are the goals of this course? What is Active Learning? What do I have to do to get a good grade? What should I do if I'm on the wait list?*

Reading: Brame, "Flipping the Classroom" (<https://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/>)

### 2. Tuesday, August 29: What is Science? What is Sociology?

*What is social science? What does science do?*

Reading: Textbook, Chapter 1. The Art and Science of Social Research: An Introduction  
Videos:

- Variables: <https://www.youtube.com/watch?v=beoGv6U0qaM>
- Unit of Analysis (first 3:30 minutes): <https://www.youtube.com/watch?v=hyfcs62JX6U>

### 3. Thursday, August 31: The Creation of Sociological Knowledge

*How is scientific knowledge organized? What are the elements of scientific theories? How does scientific knowledge evolve?*

Readings:

- Collins, Harry, and Trevor Pinch. 1993. "The Sex Life of the Whiptail Lizard." Chapter 6 in *The Golem: What Everyone Should Know about Science*. Cambridge: Cambridge University Press.

Textbook, Chapter 2: Research Foundations: Linking Sociological Theory to Research  
Videos:

- Normal Science: [https://www.youtube.com/watch?v=O\\_oDFvklkyY](https://www.youtube.com/watch?v=O_oDFvklkyY)
- Functionalism: <https://www.khanacademy.org/test-prep/mcat/society-and-culture/social-structures/v/functionalism>
- Conflict theory: <https://www.khanacademy.org/test-prep/mcat/society-and-culture/social-structures/v/conflict-theory>
- Symbolic interactionism: <https://www.khanacademy.org/test-prep/mcat/society-and-culture/social-structures/v/symbolic-interactionism>
- Rational choice (first 3:00 mins): <https://www.khanacademy.org/test-prep/mcat/society-and-culture/social-structures/v/rational-choice-exchange>

### 4. Tuesday, Sept 5: Research Design

*What are the main purposes of sociological research? How do we know that X causes Y? What kinds of entities should we study? People, informal groups, organizations, social artifacts? How should we time our observations of those entities?*

Reading: Review Textbook Chapter 2

Videos:

- Cross-sectional vs. Longitudinal Studies:  
<https://www.youtube.com/watch?v=vnjBXpoFSwY>

## GSI Office Hours Begin Tuesday, Sept 5

\*\*\* Wednesday Sept 6 and Thursday Sept 7: First Section Meetings \*\*\*

### 5. Thursday, Sept 7: Inductive Research: Generating Hypotheses

*How do sociologists come up with new ideas? How do they develop novel explanations from observing the social world? Why can we say that Becker's article takes an inductive sociological approach? What role does theory play in his argument? In what ways does he provide an example of pure inductive research, and in what way does he deviate from pure induction? How might you build on Becker's findings to study drug users today?*

Readings:

- Ian Dey. 1999. "Introduction." Chapter 1 in *Grounding Grounded Theory: Guidelines for Qualitative Inquiry* pp. 1-12. New York: Academic Press.
- Textbook, Chapter 16. Analysis of Qualitative Data (read from the start of the chapter through "Steps in Qualitative Data Analysis," pp. 535-560).
- Howard S. Becker. 1953. "Becoming a Marijuana User." *American Journal of Sociology* 59 (3): 235-242.

Video: Grounded Theory: <https://www.youtube.com/watch?v=QZ4mD5XM7Pc>

### 6. Tuesday, Sept 12: Deductive Research: Testing Hypotheses

*How do sociologists test predictions derived from theory? How do they relate empirical observations to theoretical concepts? How do we know that X causes Y?*

Reading:

- Arthur L. Stinchcombe. 1968. "Fundamental Forms of Scientific Inference." Chapter 2 in *Constructing Social Theories*. Chicago: University of Chicago Press.
- Crabb, Peter B. and Deb L. Marciano. 2011. "Representations of Material Culture and Gender in Award-Winning Children's Books: A 20-Year Follow-Up." *Journal of Research in Childhood Education* 25(4): 390-398.

Videos:

- Inductive vs. Deductive: [https://www.youtube.com/watch?v=QB41z6\\_mUxk](https://www.youtube.com/watch?v=QB41z6_mUxk)
- Correlation and Causality: <https://www.khanacademy.org/math/probability/scatterplots-a1/creating-interpreting-scatterplots/v/correlation-and-causality>
- Mediators, Moderators, Confounders: <https://www.youtube.com/watch?v=UHWuu-7Mrc0>

### 7. Thursday, Sept 14: Deductive Research: Testing Hypotheses

*How is Pager's article an example of a deductive sociological approach? Identify the theories she discusses and the related hypotheses. How does she test these hypotheses?*

Reading: Devah Pager. 2003. "The Mark of a Criminal Record." *American Journal of Sociology* 108: 937-975.

### 8. Tuesday, Sept 19: Measurement: Conceptualization

*How do we translate theoretical concepts into observable phenomena we can measure?*

Readings:

- Textbook Chapter 4. From Concepts to Models: Hypotheses, Operationalization, and Measurement

- Christopher Jencks. 2015. “The War on Poverty: Was It Lost?” *New York Review of Books*.

Videos:

- Levels of Measurement (after 3:30 minutes): <https://www.youtube.com/watch?v=hyfcs62JX6U>
- Conceptualization (minutes 13-21): <https://www.youtube.com/watch?v=uaqUzUFHgUg>
- Operationalization: [https://www.youtube.com/watch?v=6E2\\_Bqncdo4](https://www.youtube.com/watch?v=6E2_Bqncdo4)

**\*\*\* Tuesday, Sept 19: Research Project #1 (Identifying Variables) Due \*\*\***

### **9. Thursday, Sept 21: Measurement: Validity and Reliability**

*How do we know that our measures of theoretical concepts are valid and reliable? Why and when do sociologists use composite measures? What is an index? How do you construct one?*

Reading:

- Textbook, Chapter 5. Evaluating Research: Reliability and Validity
- Susan Mayer and Christopher Jencks. “Poverty and the Distribution of Material Hardship.” *Journal of Human Resources* 24(1): 88-114.

Videos:

- Reliability: [https://www.youtube.com/watch?v=D62Da6\\_5Bx4](https://www.youtube.com/watch?v=D62Da6_5Bx4)
- Validity: <https://www.youtube.com/watch?v=vcfQeQVLAfQ>
- Indexes and scales: <https://www.youtube.com/watch?v=7DXyo2MLq6g>

### **10. Tuesday, Sept 26: Data Analysis and Statistics (I)**

*What are the basic ways to summarize quantitative data? How sure can we be about the conclusions we draw from gathering and analyzing data? How should we read tables of quantitative data and interpret them? How should we construct data tables?*

Reading:

- Textbook, Chapter 14. Univariate and Bivariate Analysis of Quantitative Data
- Jane Miller. 2004. “Creating Effective Tables.” Chapter 6 in *The Chicago Guide to Writing about Numbers*. Chicago: University of Chicago Press.

Videos:

- Measures of central tendency: <https://www.khanacademy.org/math/statistics-probability/displaying-describing-data/mean-median-basics/v/statistics-intro-mean-median-and-mode>
- Measures of variation: <https://www.khanacademy.org/math/probability/data-distributions-a1/summarizing-spread-distributions/v/range-variance-and-standard-deviation-as-measures-of-dispersion>

### **11. Thursday, Sept 28: Mid-Term Review**

**\*\*\* Tuesday, Oct 3: In Class Mid-Term Exam \*\*\***

*Tuesday, Oct 3: No Tuesday Section*

*Wednesday, Oct 4: No Wednesday Section*

### **12. Thursday, Oct 5: Data Analysis and Sampling (II)**

*How do we quantify the relationship between two or more variables? How do we draw inferences*

*from our samples to the populations from which they are drawn?*

Readings:

- Textbook, Chapter 16. Multivariate and Advanced Quantitative Methods (focus on “Significance Testing,” pp. 498-507).

Videos:

- Descriptive vs. inferential statistics: <https://www.youtube.com/watch?v=g-1NkoiJWpA>
- Population vs. sample: <https://www.youtube.com/watch?v=viuSbrKlmZU>
- Correlation: <https://www.youtube.com/watch?v=Ypgo4qUBt5o>

### **13. Tuesday, Oct 10: Inferential Statistics (III)**

*Under what conditions are we able to make claims about larger groups of people based on samples? How do we quantify uncertainty in our estimates?*

Reading: Textbook, Chapter 16. Multivariate and Advanced Quantitative Methods (focus on “Significance Testing,” pp. 498-507)

Video:

- Statistical significance: [https://www.youtube.com/watch?v=W\\_bWzoFkGWc](https://www.youtube.com/watch?v=W_bWzoFkGWc)
- Law of large numbers: <https://www.khanacademy.org/math/statistics-probability/random-variables-stats-library/expected-value-lib/v/law-of-large-numbers>
- Central limit theorem: <https://www.khanacademy.org/math/statistics-probability/sampling-distributions-library/sample-means/v/central-limit-theorem>
- Standard error of the mean: <https://www.khanacademy.org/math/statistics-probability/sampling-distributions-library/sample-means/v/standard-error-of-the-mean>
- Sample size and margin of error: <https://www.youtube.com/watch?v=Mfia4nbh-zU>
- Sample size, margin of error, and confidence interval: <https://www.youtube.com/watch?v=E0hPhKMKLwY>

### **14. Thursday, Oct 12: Sampling (IV)**

*What should our unit of analysis be? How should we select units to observe? From what universe or population should we sample? How many observations should we take?*

Readings:

- Textbook, Chapter 6, Sampling Strategies
- Nancy Reichman, Julien Teitler, Irwin Garfinkel, and Sara McLanahan. 2001. “Fragile Families: Sample and Design.” *Children and Youth Services Review* 23(4-5): 303-326.

Videos:

- Target population, sampling frame, sample: <https://www.youtube.com/watch?v=IOBYsdgGhVw>
- Nonprobability sampling: <https://www.youtube.com/watch?v=-kwdXEXC7yE>
- <https://www.youtube.com/watch?v=04-WRLjxie>
- Probability Sampling: <https://www.youtube.com/watch?v=qO9SKUwvkgc>

### **15. Tuesday, Oct 17: Experiments (I)**

*What are the features of a good (laboratory or field) experiment? What are the strengths and weaknesses of this research design? What can we learn from this research design that we cannot learn from other research designs?*

Readings:

- Textbook, Chapter 16. Multivariate and Advanced Quantitative Methods (remainder of the chapter)

- Textbook. Chapter 8. Experimental Research.

Videos:

- Observational vs. Experimental Study: <https://www.youtube.com/watch?v=71CZQZSrOy0>
- Experimental research design: <https://www.khanacademy.org/math/ap-statistics/gathering-data-ap/statistics-experiments/v/introduction-to-experiment-design>
- External and Internal Validity: <https://www.youtube.com/watch?v=V3StgmV1LsM>

## **16. Thursday, Oct 19: Experiments (II)**

*What is Pedulla's research question? What is Pedulla's experimental manipulation? Why does Pedulla have to use an experiment to answer his research question?*

Reading: David Pedulla. 2016. "Penalized or Protected? Gender and the Consequences of Nonstandard and Mismatched Employment Histories." *American Sociological Review* 81(2): 262-289.

**\*\*\* Thursday, Oct 19: Research Project #2 (Data Analysis) Due \*\*\***

## **17. Tuesday, Oct 24: Surveys (I)**

*What does it take to design and construct a good survey? What are the strengths and weaknesses of this research design? What can we learn from this research design that we can't learn from other research designs?*

Readings:

- Textbook, Chapter 7. Survey Research.
- Howard Schuman. 2002. "Sense and Nonsense about Surveys." *Contexts* 1: 40-47.

Videos

- Survey in 10 steps: <https://www.youtube.com/watch?v=U1MYM35qUr8>
- Methods of collecting survey data (phone, mail, online, face-to-face): <https://www.youtube.com/watch?v=9cuOyAR-Y9I>
- Examples of bias in surveys (sampling): <https://www.khanacademy.org/math/ap-statistics/gathering-data-ap/sampling-observational-studies/v/examples-of-bias-in-surveys>
- 7 tips for good survey questions (best practices): [https://www.youtube.com/watch?v=Iq\\_fhTuY1hw](https://www.youtube.com/watch?v=Iq_fhTuY1hw)

## **18. Thursday, Oct 26: Surveys (II) – Guest Speaker: Professor Daniel Schneider**

*How do Schneider and Harknett obtain their sample? How does the sample depart from the standards of traditional probability samples? What concerns do you have with their methodology? What kinds of survey questions do they use?*

Reading: Daniel Schneider and Kristen Harknett. 2016. "Schedule Instability and Unpredictability and Worker and Family Health and Wellbeing." Working Paper

## **19. Tuesday, Oct 31: Natural Experiments**

*Why do researchers use "Natural Experiments"? What are some common strategies for doing this kind of analysis? What is Card and Krueger's "natural experiment"? What do they find?*

Readings:

- Thad Dunning. *Natural Experiments in the Social Sciences: A Design-Based Approach*. Cambridge University Press. Chapters 1 and 2. pp. 1-60.

- David Card and Alan Krueger. “Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania.” *The American Economic Review* 84(4): 772-793.
- Natural experiment: [https://www.youtube.com/watch?v=OUN6Gp\\_H3q4](https://www.youtube.com/watch?v=OUN6Gp_H3q4)
- Difference-in-differences: <https://www.youtube.com/watch?v=J7q2H8aB8bQ>

## 20. Thursday, Nov 2: In-depth Interviews

*What are structured interviews, and what is the best way to conduct them? What are the strengths and weaknesses of this research design? What can we learn from this research design that we can't learn from other research designs?*

Readings:

- Textbook, Chapter 11. In-Depth Interviewing
- Textbook, Chapter 16, Analysis of Qualitative Data (review “Steps in Qualitative Data Analysis” and read “Coding and Analysis” through the end of the chapter, pp. 547-578)
- Robert S. Weiss. 2004. “In their Own Words: Making the Most of Qualitative Interviews.” *Contexts* 3(4): 44-51.
- Joanna Reed et al. 2015. “Consistent and Inconsistent Contraception Among Young Women: Insights from Qualitative Interviews.” *Family Relations* 63: 244-258.
- Video: What is an in-depth interview: <https://www.youtube.com/watch?v=Pb3UlqAMwKA>

## 21. Tuesday, Nov 7: Ethnography and Direct Observation

*What is Reed et al's research question? What method do the authors employ? What do you think the authors learn from using in-depth interviews that they could not learn from a survey? How does in-depth interviewing differ from ethnographic methods? When might one approach be more appropriate than the other?*

Reading:

- Textbook, Chapter 10. Ethnography
- Patricia Adler and Peter Adler. 2003. “The Promise and Pitfalls of Going into the Field.” *Contexts* 2(2): 41-47.

Videos:

- What is ethnography: <https://www.youtube.com/watch?v=6Izz3DIEWQ>
- How to write effective field notes: <https://www.youtube.com/watch?v=mp2UQQt4Mdl>
- Ethnographic ethics, interviews, and field notes: <https://www.youtube.com/watch?v=xbpsCDnk1-8>

\*\*\* Tuesday, Nov 7: Research Project #3 (Survey Design) Due \*\*\*

## 22. Thursday, Nov 9: Ethnography: Sidewalk (FILM)

*What is Duneier's research question? In what way is his study inductive? In what way is it deductive? How did he gather data? Why did he choose that method? How did he summarize his data? How generalizable are his findings? What conclusions does he draw?*

Readings:

- Mitchell Duneier. 1999. *Sidewalk*. pp. 3-14, 43-80, 157-187.
- Mitchell Duneier. 1999. *Sidewalk*. “Methodological Appendix.” pp. 333-357.

## 23. Tuesday, Nov 13: Saying and Doing

*On what basis do Jerolmack and Khan criticize interview data? Identify a few specific critiques, and evaluate whether you agree. What is Vaisey's response, in defense of interview data? How should a researcher decide between observation and interviewing?*

Readings:

- Jerolmack, Colin and Shamus Khan. 2014. "Talk Is Cheap: Ethnography and the Attitudinal Fallacy." *Sociological Methods & Research* 43(2): 178-209.
- Vaisey, Stephen. 2014. "The "Attitudinal Fallacy" is a Fallacy: Why We Need Many Methods to Study Culture." *Sociological Methods & Research* 43(2): 227-231.

**24. Thursday, Nov 15: Comparing the Different Ways to Gather Data**

*What are the pros and cons of each way of gathering data? What kinds of research questions are best answered using which data-gathering method?*

**25. Tuesday, Nov 21: Ethics**

*How can we be sure to conduct research ethically? What special requirements for ethics must we fulfill if our research involves human subjects?*

Reading: Textbook. Chapter 3. Ethical Issues in Social Science Research

Video: Research ethics: <https://www.youtube.com/watch?v=Zbi7nIbAuMQ>

**No Sections Wednesday, Nov 21 or Thursday, Nov 22 (Thanksgiving break)**

**Thursday, Nov 22. No Lecture (Thanksgiving break)**

**26. Tuesday, Nov 28: Ethics + Summing Up**

*How can we be sure to conduct research ethically? What special requirements for ethics must we fulfill if our research involves human subjects?*

**27. Thursday, Nov 30: Review for Final Exam**

**\*\*\* Thursday, Nov 30: Research Project #4 (Interviewing) Due \*\*\***

**\*\*\* Wednesday, Dec. 13: Final Exam 11:30am - 2:30pm Location TBD \*\*\***

## Research Projects

### Project 1: Identifying Independent and Dependent Variables

*Due Tuesday, Sept 19. 6% of Final Grade. Individual Project*

Go to bCourses and download this research article: Alvarado, Steven. 2016. "Delayed Dis-advantage: Neighborhood Context and Child Development" *Social Forces* 94(4) 1847-1877.

Begin by telling us what kind of data the author analyzes using the language for describing data that we learned about in lecture. Then, identify 1 dependent variable and 1 independent variable. Make sure that these 2 variables are predicted to be related to each other. Copy and paste (or type) into a word document one or more short passages from the article to justify your choices of variables. Explain, in your own words, (1) why the author expects that this independent and dependent variable are related and (2) how the independent variable is actually related to the dependent variable. This project should be 2 pages maximum.

### Project 2: Constructing and Analyzing Data Tables

*Due Thursday, Oct 19. 12% of Final Grade. Individual Project*

The Beatles famously argued that "money can't buy you love" and grandparents are known to reassure us that "money can't buy you happiness." Are John, Paul, George, Ringo, and your gramps right? Or can money buy you love and happiness? If money matters at all, then is it better at buying love or happiness?

To find out, you will download 2 files from bCourses: "GSS data.xlsx" and "GSS data codebook.pdf." The spreadsheet (the file ending with .xlsx) contains data from the General Social Survey, downloaded from <http://gss.norc.org/get-the-data/stata>. The spreadsheet contains the data you are to analyze - a subset of variables on 1,158 observations of married respondents taken from the 2014 survey. The codebook lists the variables in the data and explains what each means and how each is coded (that is how each numeric value corresponds to a substantive response). You'll need to look through the codebook to locate the variables of interest. Note: In the GSS, some numeric values indicate valid responses and some numeric values indicate various kinds of missing data. You must carefully cross-reference the code book and the data to make sure your tables don't include observations with missing values on either variable.

- Create a table to display the distributions of 3 variables: INCOME06, HAPPY, and HAPMAR. Since INCOME06 has a large number of categories (25, plus missing values), you should recode this variable into a smaller number of categories – I'd suggest 5-6 at most. Choose wisely – you will be graded on the reasonableness of your categorization scheme.
- Create a second table (a cross tab) to show the bivariate association between INCOME06 and HAPPY and then create a third table (another cross-tab) to show the bivariate association between INCOME06 and HAPMAR. Again, you should recode INCOME06 into a smaller number of categories (a maximum of 5-6).

- In your report, describe the level of measurement for each variable.
- In your report, describe the central tendency of each variable. Be sure to use measures that are appropriate for each variable, given its level of measurement.
- In your report, describe the association you observe between INCOME06 and each of the two other variables (the direction and your assessment of its strength).
- Conclude with an assessment of whether money (INCOME06) matters for happiness (HAPPY) and love (HAPMAR) and whether it matters more for one than the other

This project should be 3-4 pages long - 4 pages maximum.

### **Project 3: Designing a Survey**

*Due Tuesday, Nov 7. 12% of Final Grade. Individual Project.*

You will design a questionnaire that might be used in a survey to assess people's attitudes toward governmental policy to reduce poverty. The survey should try to capture general attitudes about the role of government in reducing poverty rather than their positive or negative views of specific social welfare programs. Your questionnaire should obtain the following from each respondent:

- Their age, gender, race/ethnicity, and occupation
- Whether or not they voted in the last election and, if so, whether they voted for Clinton, Trump, or someone else (a 2-part contingency question)
- Their attitudes toward governmental policy to reduce poverty in the form of a matrix question, using Likert-type responses to five statements.

This project should be 3-4 pages long. The first page should be the questionnaire laid out in the format you would use if you were actually conducting the survey. Make sure that the format will be easy to read and will not be difficult for respondents to answer. Be sure to provide appropriate spaces for respondents to check or write-in their answers.

Question wording should be simple and straightforward: avoid double-barreled questions, loaded terms, and negations. Justify your choice of open or closed-ended question. For closed-ended questions, response categories should be exhaustive and mutually exclusive. Matrix questions using Likert-type responses should have a consistent scale.

In the following 2-3 pages, discuss these issues:

- Question wording: For each question, why are you asking this question? What concept or aspect of a concept do you hope to measure? Why did you word it this way? Why did you measure as an open- or closed-ended question?
- Question type: For each closed-ended question, state the concept or dimension of a concept tapped by each question; also identify the level of measurement and explain why it is appropriate.
- Question order: Why did you put the questions in this order?

#### **Project 4: Doing an In-Depth Interview Study**

*Due Thursday, Nov 30. 13% of Final Grade. Group Project.*

Social mobility refers to one's social position (typically class/occupation or income) relative to that of one's parents. A longstanding concern in sociology is the determinants of social mobility, both upward and downward. For example, education is thought to be a key driver of social mobility in industrialized countries. This assignment asks you to explore some of the causes or either upward or downward social mobility.

You will work in groups of three or four. Your GSIs will help you to form groups within your discussion section. Your group will collectively write a short interview protocol (questionnaire). Each student will do one in-depth interview with someone who is *not* a UC Berkeley student (this person must be at least 18 years old). The interview should be no more than 30 minutes in length. You should record the interview using your smartphone or laptop and transcribe it (be sure to ask the respondent's permission to record and to explain to the purpose of the interview and who it will be shared with). Then, as a group, you will code and analyze the transcripts and write a brief report of your findings. Your GSIs will discuss the details of this in section, and some section time will be devoted to group work.

In drafting your protocol, select questions that elicit information regarding (a) the respondent's economic status, (b) the economic status of the respondent's parents, and (c) how the economic status of the respondent has changed over his or her life. You will also want to consider the way that the economic mobility of the respondent may have been affected by race and ethnicity, gender, citizenship and immigration status, geographic location, macroeconomic change, and family structure. The interview questionnaire should include at least 9-12 questions plus probes.

Your interview will be semi-structured, that is, it is guided by a questionnaire, but carried out like a conversation through "prompting." You will need to write up the questionnaire in the form you would use during the interview. This includes probes that you might use during the interview to encourage your respondent to tell you about his or her experiences with examples and anecdotes, rather than yes/no survey-style answers.

Type up a written transcript of the whole interview (and translate to English if necessary). Transcribe everything that is said, by the respondent and you, including partial sentences, small digressions, grammatical mistakes, etc. Include non-verbal information (e.g. respondent pounds the table, laughs, cries, etc.). At the top of the transcript, include a short paragraph about the interview: where it took place, how you found the respondent, whether it went well, etc. NOTE: It usually takes 3-5 hours to type up one hour of audio recording. It is easier to transcribe an interview immediately after its conclusion when your memory can aid in your transcription.

Each member of the group should write a brief memo for the other members of the group about the key findings from the interview, then the group should discuss these memos and decide collectively on a set of codes (5-7) that will capture the key insights across all interviews. Each student will code his or her own transcript and then you will collectively analyze the set of transcripts (details will be discussed in section).

Finally, working with the other members of your group, write a short report (5 pages maximum) discussing your research methodology (think about what is important to describe, based on what you have learned in the course), your main findings, and how you developed those findings. What

do your data tell us about the determinants of upward or downward mobility? As appendices to your report, you should submit your initial individual memos, your coding scheme, and your coded transcripts.