Evaluation of Evidence
(Sociology 5)
Spring 2020

Professor Daniel Schneider
Office: Barrows Hall 480
Email: djschneider@berkeley.edu
Class: Tuesday and Thursday 11AM - 12:30PM, Hearst Field Annex A1
Section: Twice per week either M/W or T/Th
Office Hours: Tues 1:30-3:30PM (Sign-up)
Course Website: https://bcourses.berkeley.edu/courses/1489260

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 sense of 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.

Enrolling in the Course
Each student must be registered for the lecture course and one of the sections listed below.

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<tr>
<th>Section</th>
<th>Time</th>
<th>Room</th>
<th>GSI</th>
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<tr>
<td>DIS 101</td>
<td>Tu/Th</td>
<td>8:00A-8:59AM</td>
<td>106 Wheeler  First Last  <a href="mailto:email@berkeley.edu">email@berkeley.edu</a></td>
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<tr>
<td>DIS 102</td>
<td>Tu/Th</td>
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<td>250 Dwinelle First Last  <a href="mailto:email@berkeley.edu">email@berkeley.edu</a></td>
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<td>DIS 103</td>
<td>Tu/Th</td>
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<td>DIS 105</td>
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Note: First section meetings will be Monday, February 3rd/ Tuesday February 4th.

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 roll! 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.**

You may prefer a different section than the one you are assigned to. In general, we will not be able to accommodate section changes. However, if you have an irreconcilable conflict - another class, practice, work, or care responsibilities - we may be able to help. We will have a formal process for requesting a section change. We will circulate a “section-change” request form in the first week of class. This will be the only method of communicating your need to change sections. We will let you know if we have been able to accommodate your request by Monday, February 3rd. There is no guarantee that it will be possible to switch.

**Required Readings**

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 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 quizzes, midterm, and final exam.

The reader is available from Copy Central on Telegraph. I have also posted PDFs of each of these readings on the bCourses site.


**Lecture**

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.

**Course Assignments**

Students will be evaluated and graded based on two examinations, four research projects, five online 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 Thursday, February 27th during the normal class time (11AM - 12:30PM) in our normal classroom. The final will be held on Thursday, May 14th from 8-11AM (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 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 3pm; anything submitted after then will be considered a day late. Detailed information on each project, including deadlines, is found after the schedule of readings.

There are four individual assignments (assignments #1, #2, and #3, and #4). The first will ask you to read an article and identify independent and dependent variables. The second will ask you to draw on material in the week on surveys to design a survey. The third, following our unit on data analysis, will have you use a spreadsheet or statistical program (of your choice) to create basic tabulations from data. For the fourth project, you will propose an experiment to test ideas from one of the original research articles we read in the course.

Quizzes
I will post 5 quizzes to bCourses over the semester. Your best 4 scores will be counted. Each quiz is worth about 2% of your final grade for a total of 8%. Quizzes will be available for 24 hours starting at 6pm Thursday on days I specify in lecture and via email. They will ask 5-10 multiple choice or short answer questions based on lecture and readings. My aim is to keep you on track with course material. Quizzes are open-book and can be done in discussion with a study group. BUT if I think someone is taking quizzes for you - for example, if your quiz scores are very different from the rest of your performance - I will quiz you myself.

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 Mon. 3 Feb. (for M/W sections) or Tues. 4 Feb. (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:
In consultation with me, your GSI will assign 10% of your grade, based on your participation in section, lecture, and office hours. 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.

### Key Assignments, Weights, and Due Dates

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<tr>
<th>Assignment</th>
<th>% of Grade</th>
<th>Due Date</th>
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<tbody>
<tr>
<td><strong>Quizzes and Exams</strong></td>
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<td></td>
</tr>
<tr>
<td>Quizzes on-line, best 4 of 5</td>
<td>8%</td>
<td>Take online</td>
</tr>
<tr>
<td>Mid-term Exam</td>
<td>18%</td>
<td>In-class Exam February 27th</td>
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<tr>
<td>Final Exam</td>
<td>18%</td>
<td>In-Class Exam May 14th</td>
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<tr>
<td><strong>Research Projects</strong></td>
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<tr>
<td>Project 1: Identifying Dependent &amp; Independent Variables</td>
<td>7%</td>
<td>February 12th</td>
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<tr>
<td>Project 2: Designing a Survey</td>
<td>13%</td>
<td>March 20th</td>
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<tr>
<td>Project 3: Data Analysis</td>
<td>13%</td>
<td>April 15th</td>
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<tr>
<td>Project 4: Designing an Experiment</td>
<td>13%</td>
<td>April 29th</td>
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<tr>
<td><strong>Participation</strong></td>
<td>10%</td>
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### 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 in a timely fashion. Each lecture date has a few readings associated with it. You will get the most out of lecture if you do these readings before the class for which they are assigned.

#### Accommodation

I will provide accommodation to any student who provides me with a written letter from a DSP Specialist. We must make arrangements for DSP proctoring for the exams far in advance. So, please arrange for DSP to send this letter as early in the semester as possible. If we receive your letter at the last minute, we may not be able to arrange for proctoring. 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.
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 Professor Schneider and your GSI about it at least 24 hours before the deadline. Exams will be given on the posted dates (February 27th and May 14th). 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 Professor Schneider 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 for the course 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 Professor Schneider, may decide to re-grade your assignment. Please note, 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
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 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.

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.

1Text is adapted from the ASUC honor code guide.
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 Tuesdays from 1:30-3:30PM in Barrows 480. You may sign up at https://www.wejoinin.com/sheets/lepza/. Please sign-up for a single 15 minute block at a time. Your GSI will also hold office hours.

Technology Policy
You are permitted 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. 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. If you do choose to use a laptop, please sit in the back of the classroom so that your use of this technology will not distract others.
Course Outline and Weekly Readings

What are the goals of this course? What do I have to do to get a good grade? What should I do if I’m on the wait list?

What is social science? What does science do?

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

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?

Mon Feb 3rd and Tues Feb 4th: First Section Meetings

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?
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?


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


Feb 12: Research Project #1 (Identifying Variables) Due

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


Feb 17th and 18th: No Section - Presidents’ Day

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?


[10] Feb 20: Sampling
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?


Feb 26 and 27 No Section

[12] Feb 27: In Class Mid-Term

Mar 2 and 3 No Section

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?


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?


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?


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? Come prepared with one piece of feedback on how to improve the survey!

22. Take the Survey! (will be posted to bCourses).

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?


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?


Mar 20: Research Project #2 (Survey Design) Due

Mar 24 and Mar 26 Spring Break


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?


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?


[21] Apr 7: Ethnography and Direct Observation

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? How does in-depth interviewing differ from ethnographic methods?

[22] Apr 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?

[23] Apr 14: 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? 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?
35. Robert S. Weiss. 2004. “In their Own Words: Making the Most of Qualitative Inter-
views.” Contexts 3(4): 44-51.
36. Joanna Reed et al. 2015. “Consistent and Inconsistent Contraception Among Young
Women: Insights from Qualitative Interviews.” Family Relations 63: 244-258.

Apr 15: Research Project #3 (Data Analysis) Due

[24] Apr 16: Analyzing Qualitative Data
Once you’ve directly observed behavior and/or interviewed people, how do you make sense of
what you saw and heard? How do you know what you observe is representative, rather than
exceptional? How do you summarize the patterns you observe to report them in research?
37. Carr et al. Chapter 16. Analysis of Qualitative Data

On what basis do Jerolmack and Khan criticize interview data? Identify a few specific cri-
tiques, and evaluate whether you agree. What is Vaisey’s response, in defense of (survey-
based) interview data? How should a researcher decide between observation and interviewing?
39. Vaisey, Stephen. 2014. “The “Attitudinal Fallacy” is a Fallacy: Why We Need Many

[26] Apr 23: 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?
Apr 28: Ethics

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

40. Carr et al. Chapter 3. Ethical Issues in Social Science Research

April 29: Research Project #4 (Experiment Proposal) Due

Apr 30: 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?

April 29 and 30 Final Sections

May 7: Review for Final Exam

May 14: Final Exam (Group 13)

8AM - 11AM. Location TBD
Research Projects

**Project 1: Identifying Independent and Dependent Variables**
*Due Wednesday, 12 February. 7% of Final Grade.*

Go to bCourses and download this research article:

Begin by telling us what kind of data the author analyzes using the language for describing data that we learned about in lecture on Jan 30th (on “Research Design”). 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: Designing a Survey**
*Due Friday, 20 March. 13% of Final Grade.*

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 demographic characteristics and socio-economic status
- If they plan to vote in the 2020 presidential election and who they would like to vote for (include Trump and current Democratic candidates for nomination) (a 2-part contingency question)
- The issues that are most likely to affect their vote choice 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:

- Which measures operationalize "demographic characteristics"? Which operationalize socio-economic status?
- What concepts were you operationalizing with your questions in the issue matrix?
• Identify the level of measurement for each item and the rationale for using a close-end or open-ended question

• You have obviously given considerable thought and care to the wording of your questions in order to avoid the common problems noted above and discussed in lecture/readings. Now, gives us 2-3 examples of alternative wording that would be problematic and tell us why.

• Explain why you asked the questions in this order. Did this ordering allow you to avoid some sort of bias? Help increase engagement?

• Put it all together for us. State one hypothesis that you could test by analyzing the data the you collect with this instrument. Refer to specific variables and the concepts that they are designed to capture.

Project 3: Constructing and Analyzing Data Tables

Due Wednesday. 15 April. 13% of Final Grade.

The Beatles famously (well, famously for people of a certain age...) 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 998 observations of married respondents taken from the 2018 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 three tables to display the distributions of 3 variables (one for each variable): INCOME, HAPPY, and HAPMAR. Since INCOME has a large number of categories (26, 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 another table (a cross tab) to show the bivariate association between INCOME AND HAPPY and then create yet another table (another cross-tab) to show the bivariate association between INCOME and HAPMAR. Again, you should recode income06 into a smaller number of categories (a maximum of 5-6). Carefully consider which way you should “percentage” the table!
• 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 INCOME and each of the two other variables (the direction and your qualitative assessment of its strength).

• Conclude with an assessment of whether money (INCOME) matters for happiness (HAPPY) and love (HAPMAR) and whether it appears to matter more for one than the other.

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

Project 4: Designing an Experiment
Due Wednesday, 29 April, 13%

A hallmark of sociological research is the close interplay between inductive and deductive research. Findings that surface through inductive, often qualitative, methods of research can then be tested directly using deductive approaches that are hypothesis driven. For this assignment, you will propose an experiment that tests one or more of the findings in the article that we read for the lecture on in-depth interviews: “Consistent and Inconsistent Contraception Among Young Women: Insights from Qualitative Interviews,” by Joanna Reed and colleagues.

Begin by re-reading the article. Then, using the findings, propose a new experimental study designed to test one or more specific strategies for promoting consistent use of contraception. This strategy should be inspired by Reed et al.’s findings. You should state the test in the form of a directional hypothesis (i.e. “Doing this thing from the article will increase consistent use of contraception.”). You must then state the key variables that will be operationalized and measured in this experiment. You will describe how you will measure them (a survey question? medical records? observation?) and what the attributes of the variables will be. You will then describe your experiment. This can take one of many forms - it might be a survey experiment, it could be a field experiment, or perhaps you even have an idea for a “natural experiment”? Whatever approach you choose, you must clearly describe the research design, articulate the treatment and control conditions, explain how subjects will be assigned to condition, describe how you will measure assignment and results and construct data, and explain how you will asses and test your hypothesis with the resulting data. You need not be constrained by concerns about cost or data access. You will write all of this up in the form a 3-5 page proposal.