

**CHASING THE (CAUSAL) DRAGON:  
INTERMEDIATE QUANTITATIVE DATA ANALYSIS FOR SOCIOLOGISTS  
(COVID-19 REMOTE EDITION)  
SOCY / QSS 54  
Fall Quarter 2020**

Synchronous Components: MWF, 10:20-11:25pm; x-period, Th 12:30-1:20pm [C Block]  
Location: *The Cloud*

*Professor:* Jason Houle

*Email:* Jason.Houle@Dartmouth.edu

*Office Hours:* Schedule an appointment @ [www.calendly.com/jnhoule](http://www.calendly.com/jnhoule)

\*\*\*Office hours are an open period in my schedule that I reserve for meeting with students in my courses. If you have any questions about the course material or assignments, or just want to chat, you should feel free to drop by my office hours anytime.

\*\*\*\*\*

**WE INTERRUPT THIS BROADCAST FOR AN IMPORTANT ANNOUNCEMENT:**

We are living through a once-in-a-century global pandemic. To say that our lives have changed in the past six months is a gross understatement. Even if we are beginning to get used to these changes, none of this is normal. Some of us have lost friends and loved ones, and we are all juggling new responsibilities as we navigate an uncertain world where the rulebook has been thrown out. All of us are managing the stress and anxiety of living through historically unprecedented times. Some of us have the resources necessary to help us cope with these strains, while some of us do not.

It is for these reasons that we cannot keep the same expectations we had before, and we cannot act as if these are normal times. We cannot make it through this without empathy, support, care, and grace. So, this course will look different than it usually does: We will not be meeting face to face. There are fewer and less demanding assignments. We will not cover as much material as we would in a normal year. The grading criteria is more forgiving. We will rely on group-based, rather than individual projects. You all have enough stress and uncertainty in your lives right now, and I do not want this class to add to that burden. And yet, I hope that we can retain the best elements of this class. Namely, that we have a space to talk about interesting research questions, how to best ask and answer these questions, build community, and learn from one another. I trust that we can do this. I am looking forward to getting to know you and talking through this material with you.

**AND NOW, BACK TO YOUR REGULARLY SCHEDULED PROGRAMMING.**

\*\*\*\*\*

**Course Description:**

Sociologists and other social scientists are often interested in understanding causal and dynamic social processes such as:

*“How do the places we live, work, and play get under the skin and affect health and well-being across the life course?”*

*“Does upward social class mobility change one’s political attitudes?”*

*“What social currents are responsible for changes in support for same-sex marriage across historical time?”*

*“Are long-standing racial inequalities declining, persisting, or increasing in recent years?”*

Many of these questions are methodologically difficult to answer with observational (non-experimental) data, and they require that we get a handle on the study of change, context, and causality. You likely have learned how to answer questions like these with standard OLS (linear) regression techniques and cross-sectional data, which remain useful tools in social scientists’ methodological toolbox. But these techniques are also quite limited, and impose strict assumptions that do not allow us to meet many of our goals, adequately answer our questions, or provide stringent tests of our theories and hypotheses.

In this course, we'll pick up where introductory statistics courses leave off, and get an introduction to more advanced statistical methods for observational data, including but not limited to: regression for categorical dependent variables, fixed and random effects models, and hierarchical linear modeling. This course will be a mix of seminar and lecture, where we will be focused on understanding how we can use these methods to better meet our goals and answer our research questions. Put differently, this course is less focused on going "under the hood" and more focused on "how to drive"—specifically, we will interrogate the assumptions and use of these statistical methods in the social sciences and learn how to implement these methods using stata. This will include: discussion of core methodological assumptions and limitations, how to apply these statistical methods in different settings, and learning when specific methods are appropriate tools and when they are not. We will explore these issues through student-led discussions, hands-on data analysis, and dissecting the application of these methods in academic journal articles. As part of this course, you will be exposed to (and critique) a wide range of sociological research published in our major disciplinary journals. The course will culminate in an independent research project where students will analyze data and use the one or more of the modeling techniques discussed during the term to answer a sociological research question of their choosing. **SOCY 10 or equivalent and a basic familiarity with stata is required for enrollment in this course.**

### **Course Readings**

#### *Required Texts*

Firebaugh, Glenn. 2008. *Seven Rules for Social Research*. Princeton: Princeton University Press (*note: this is a handy reference that we will use throughout the course, but it is not a statistics textbook*). This book is relatively inexpensive and [e-copies are available for less than \\$20](#). Dartmouth Library also has access to The Ronson book is cheap, and available used from online retailers for less than \$5. Dartmouth Library has access to an unlimited number of digital copies [here](#) (VPN needed to access). If you are not able to afford a copy of the book, please let me know as soon as possible.

\*We will primarily rely on academic journal articles in this course, available on CANVAS. The full citation of these readings are listed at the end of this syllabus.

#### *Optional Texts:*

##### Basic Statistics (resources for those looking for a refresher on introductory statistics)

Healey, Joseph. 2014. *Statistics: A Tool for Social Research, 10<sup>th</sup> edition*. Stamford, CT: Cengage.

Wheelan, Charles (Dartmouth '88). 2013. *Naked Statistics: Stripping the Dread from the Data*. New York: WW Norton.

Ziliak, Stephen T. and Deirdre N. McCloskey. 2008. *The Cult of Statistical Significance: How the Standard Error Costs Us Jobs, Justice, and Lives*. Ann Arbor: University of Michigan Press

##### STATA Guides (resources for those having trouble with STATA---see the section below for online resources)

Acock, Alan. 2012. *A Gentle Introduction to Stata* (Revised Third Edition). College Station, TX: Stata Press.

Long, J Scott, and Jeremy Freese. 2006. *Regression Models for Categorical Dependent Variables Using Stata, 2<sup>nd</sup> ed*. College Station: Stata Press.

##### A Deeper Dive (an elaboration of the methods discussed this term)

Allison, Paul. 2009. *Fixed Effects Regression Models*. Thousand Oaks: Sage

Angrist, Joshua and Jörn-Steffen Pischke. 2009. *Mostly Harmless Econometrics*. Princeton: Princeton University Press.

Raudenbush, Stephen and Anthony Bryk. 2002. *Hierarchical Linear Models: Applications and Data Analysis Methods*. Thousand Oaks: Sage.

Singer, Judith and John Willett. *Applied Longitudinal Data Analysis*. New York: Oxford University Press

\*Additional optional readings (academic journal articles) are available on CANVAS. The full citation of these readings are listed at the end of the syllabus.

For a good application of statistics to everyday life, I highly recommend that you add these blogs to your daily reading:

Family Inequality (Phil Cohen): <http://familyinequality.wordpress.com/>

Five Thirty Eight (Nate Silver et al.): <http://www.fivethirtyeight.com/>

Vox (Ezra Klein et al.) [www.vox.com](http://www.vox.com)

The Upshot (NYTimes) <http://www.nytimes.com/upshot/>

Wonkblog (WaPo): <http://www.washingtonpost.com/blogs/wonkblog/>

Statistical Modeling, Causal Inference, Social Science (Andy Gelman) <http://andrewgelman.com/>

### **Statistical Software and Electronics**

We will be using stata 15.1 for in-class demonstrations, problem sets, and the final project. stata is available for free on the Dartmouth Network (Mac/PC) and is also available on most public computers on campus. **If you are off campus, you can use [Dartmouth's Global Protect VPN](#) to access the keyserve.** For more information on stata resources and installing stata on your computer, see the following websites:

MAC: <https://services.dartmouth.edu/TDClient/1806/Portal/KB/ArticleDet?ID=64644>

PC: <https://services.dartmouth.edu/TDClient/1806/Portal/KB/ArticleDet?ID=64632>

For more information on using stata off campus, see:

<https://services.dartmouth.edu/TDClient/1806/Portal/KB/ArticleDet?ID=64133>

Please use these resources and the helpdesk for any installation questions.

In most classes, we will be using stata in order to demonstrate statistical techniques. this reason, you are encouraged to bring your laptop to class to every class period.

A brief note on stata: Becoming proficient in a programming language is **hard**. I will periodically provide stata refreshers during Xhours, and we will learn/practice new STATA commands during regular class periods. However, I highly recommend that you practice outside of class to hone your skills. Please see me during office hours with all stata related questions. In addition, here are some resources that will help you as you learn to code in stata:

#### *STATA Resources*

Jianjun Hua's research guides <http://researchguides.dartmouth.edu/content.php?pid=316205&sid=2587562>

#### UCLA Stata Resources

<https://stats.idre.ucla.edu/stata/modules/>

#### Princeton Stata Resources:

<http://data.princeton.edu/stata/>

<http://dss.princeton.edu/training/StataTutorial.pdf>

[http://dss.princeton.edu/online\\_help/stats\\_packages/stata/](http://dss.princeton.edu/online_help/stats_packages/stata/)

#### Stata Online Course and Cheat Sheets:

<http://geocenter.github.io/StataTraining/>

You may need a calculator to complete your assignments and exams, and to participate in in-class exercises. A basic and inexpensive calculator that has square-root and squaring functions is best for use in this class. The calculator that comes standard on your computer or phone is sufficient.

## **Course Structure in a COVID-19 context**

This class is officially listed as “asynchronous, with synchronous components.” In practice, this course will be a mix of asynchronous lectures, synchronous and asynchronous lab sessions, and asynchronous discussion/debugging/troubleshooting.

At the beginning of the term, I will assign you to a group of 4-5 students based on your responses to the introductory survey. This group will be your core peer support network in the course. Groups will work together to complete all class assignments. Representatives from the group can meet with Prof Houle at any time.

We will be using **Slack** for all of asynchronous virtual discussion this term. You will need to download Slack onto your machine, and join the **SOCY 54** workspace (click here for more information about [Slack](#)).

## **Evaluation and Grading**

*Group Mini-Conferences (15%)* On the last day of each unit, a student group will be responsible for presenting the findings of one of the optional readings from the unit (listed at the end of this syllabus) to the class for 10-15 minutes max. Students can select any of the optional readings **listed in bold** at the end of the syllabus for each respective unit. Alternatively, students are welcome to present on an alternative reading/study, provided that I approve it in advance. Your goal in this mini-conference is to present the main points of one of the optional readings to the class (which your classmates will not have read). As part of these mini conferences, groups should focus on: 1) communicating the main points of the reading to the audience (what is the author asking/arguing? Why is this important?); 2) reflecting on how this article builds on/complicates/challenges what we have learned so far in this unit (and perhaps other units); 3) discuss the strengths and limitations of the use of the statistical method; and 4) the implications for future research. When presenting, keep in mind that you are effectively teaching new material to your fellow classmates, who will not have read the piece you selected for the day. **Students are welcome to do this as part of the synchronous class discussion on the last day of the unit, or submit an asynchronous recording to Prof Houle (which will then be uploaded to Canvas for students to view).**

*Group Homework Assignments (20%):* There will be five homework assignments that cover Units 1-5 of the term\*. To get full credit for the homework assignment, you must complete **three out of the five homework assignments**. Each group will be responsible for turning in a single homework assignment. Group members are welcome to either a) complete assignments individually, and then meet to resolve any differences and submit a final draft or b) work together to complete an assignment in real time. Assignments will typically be due following the last class of each unit (with one exception). All completed assignments must include three elements: 1) a document that includes all written interpretation, fully-formatted tables, and figures; 2) an annotated DO file that shows you have estimated models and manipulated data correctly; 3) a log file that records the output from all analysis steps. Assignments will be posted on Canvas by Monday of the week before they are due (at the latest). Please feel free to troubleshoot the assignment with your classmates on Slack. *\*I will not assign homework assignments for Units 6-8, so that you can focus your time and energy on the final project.*

*Individual In-class activities and lab assignments (0%):* Nearly all synchronous class sessions will operate as a lab session, where we will work through problems/examples together in stata and/or dig into the assumptions of the methods that are being discussed that day. These activities are crucial to the success of the course, and therefore your participation in these activities is important. **I understand that it may be difficult for some students to regularly attend our synchronous sessions. For this reason, attendance to the synchronous sessions will not be required, and you will not be penalized if you are unable to attend. However, if you are unable to attend, I recommend completing these assignments asynchronously to ensure you do not fall behind.**

*Group Final Research Paper (65%)* For the final writing assignment, you will write a standard sociological research paper—modeled on the academic articles we read this term—on the topic or question of your choice. You will draw on secondary literature (at least five academic sociological research articles) to address your research questions. You will conduct an original data analysis using one or more of the methods discussed in this course to answer your research question. More detailed instructions will follow. This paper will be completed in a series of steps, and you will receive feedback and review from myself and your classmates at each stage:

- 1) *½ - 1 -page research proposal (5%)*: Your research proposal must include your research question, a testable hypothesis, and a description of the data and methods you plan to use to address/answer your research question. **Due Monday 10/5**
- 2) *Meeting with Prof Houle (5%)*: After receiving feedback on your proposal, you must schedule a meeting with Prof Houle by **Monday 10/12** to discuss your plan for your project moving forward. If possible, I would prefer to meet during X hours or office hours. Please bring any questions you might have, as well as any ideas about potential data sources and methods, to this meeting.
- 3) *Data Analysis I (10%)*: **Due Monday 10/26**
- 4) *Data Analysis II (10%)*: **Due Friday 11/6**
- 5) *Presentation of Research Project (10%)* (**This can be completed synchronously or asynchronously**)
- 6) *Final Draft (25%)* **Due Thurs 11/30 by 5pm (via email or Canvas)**

### COVID-19 Grading Procedures

Given the unique nature of the situation we are in, grading will be based the percent of assignments that you have completed:

|            |   |            |   |            |   |
|------------|---|------------|---|------------|---|
| 90%-100%:  | A | 80%-89.9%: | B | 70%-79.9%: | C |
| 50%-69.9%: | D | <50%:      | E |            |   |

For example, if you complete all of the assignments described above, and you hand them in on time, and include all of the required elements, you would get an A (100%) in the class. But: if you were to complete all of the student mini conference (15%), the homework (20%), and the final draft of the paper (25%), but you do not hand in any other individual assignments for the final paper, you would receive a D in the course (60%). Incomplete assignments will receive only partial credit. If you are not a full participant in your group work (based on my observations and the confidential group evaluations), you only receive partial credit.

I realize that it is highly unusual to receive grades based on completion at Dartmouth. But we are in a highly unusual situation. **Students who produce excellent work that I deem to be “A” quality based on the [Dartmouth Scholarship Ratings](#) will be awarded with a citation.**

### **Late Policy**

All students will receive one 24-hour extension on any class assignment of their choosing, no questions asked. Students should notify me via email if/when you plan to use their extension. After that, on any assignment, your (completion) grade will be reduced by 8 percentage points for each day late (e.g., 1 day late a grade of 100 would be reduced to a 92; 2 days, 84; and so on). **These are extraordinary times and I am willing to be**

**flexible with this policy, within reason. Please come talk to me if you are having difficulty keeping up with the coursework.**

### **Basic Needs**

Your safety and wellbeing are more important than anything going on in class. Please feel free to reach out to me if you need to talk. Any student who faces challenges securing their food or housing or personal safety is urged to contact the Dean of the College for support. Please notify me if you are comfortable in doing so. This will enable me to provide any resources that I can.

### **Disability Needs**

Students with disabilities who may need disability-related academic adjustments and services for this course are encouraged to see me privately as early in the term as possible. Students requiring disability-related academic adjustments and services must consult the Student Accessibility Services office (Carson Hall, Suite 125, 646-9900). Once SAS has authorized services, students must show the originally signed SAS Services and Consent Form and/or a letter on SAS letterhead to me. As a first step, if students have questions about whether they qualify to receive academic adjustments and services, they should contact the SAS office. All inquiries and discussions will remain confidential, but please note that the Student Disabilities Coordinator may be consulted to verify the disability. See <http://www.dartmouth.edu/~accessibility/> for more information.

### **Statement of Mental Health and Resources**

The academic environment at Dartmouth is challenging, our terms are intensive, and classes are not the only demanding part of your life. There are a number of resources available to you on campus to support your wellness, including your undergraduate dean (<http://www.dartmouth.edu/~upperde/>), Counseling and Human Development (<http://www.dartmouth.edu/~chd/>), and the Student Wellness Center (<http://www.dartmouth.edu/~healthcd/>).

### **Academic Integrity**

Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner and all members of the Dartmouth community are expected to act in accordance with this principle. Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the Dartmouth community and compromise the worth of work completed by others. As such, dishonesty of any kind will not be tolerated and students found in violation of the Dartmouth Academic Honor Principle will be notified and reported to the appropriate authorities (<http://student-affairs.dartmouth.edu/policy/academic-honor-principle>). Cheating and other forms of dishonesty (such as plagiarizing) often result when students feel too much pressure to perform and that they do not have the tools to achieve their goals. If you are falling behind or feeling overwhelmed, please come sit down and chat with me BEFORE you decide to cheat. For additional resources on the Academic Honor Code, plagiarizing, and proper citation of sources, please see the following link: <http://writing-speech.dartmouth.edu/learning/materials/sources-and-citations-dartmouth>

### **TENTATIVE COURSE SCHEDULE**

| <b>Class</b> | <b>Topic</b>                                      | <b>Readings</b>  | <b>Assignment Due Dates</b> |
|--------------|---|------------------|-----------------------------|
| M 9/14       | Course Introduction                               | Wheelan Ch 11-12 |                             |
| W 9/16       | <b>Unit 1: Regression: Review and Expansion I</b> | Firebaugh, Ch 1. |                             |
| F 9/18       | Stata Basics Review                               | Firebaugh, Ch 2. |                             |

|         |   |   |  |
|---------|---|---|--|
| M 9/21  | Regression: Review and Expansion II                                   | Barkan 2014   |  |
| W 9/23  | Regression: Review and Expansion III                                  | Firebaugh, Ch 3.  |  |
| F 9/25  | Regression: Review and Expansion IV                                   | Conley 2001   |  |
| M 9/28  | Regression: Review and Expansion V                                    | Warikoo et al. 2020   |  |
| W 9/30  | <b>Unit 2: Stata Workflow I</b>                                       |   | HW #1 Due                                  |
| F 10/2  | Stata Workflow II   | Firebaugh Ch 4  |  |
| M 10/5  | <b>Unit 3: Regression for Categorical DV's I</b>                      | Uggen and Manza 2002  | Research Proposal Due                      |
| W 10/7  | Regression for Categorical DV's II                                    | Mize 2019 (Skim);   |  |
| F 10/9  | Regression for Categorical DV's III                                   | Stokes and Ellison 2010   | HW #2 Due                                  |
| M 10/12 | Regression for Categorical DV's IV                                    | Percheski and Kimbro 2017   | Schedule Meeting with Prof Houle by today; |
| W 10/14 | <b>Unit 4: An Introduction to the Study of Change I</b>               | Firebaugh Ch. 6 (through p. 195); Ryder 1965 (SKIM)   | HW #3 Due                                  |
| F 10/16 | An Introduction to the Study of Change II                             | Rest of Firebaugh Ch. 6; Linear Decomp Handout  |  |
| M 10/19 | <b>***Open/Catchup Day***</b>   |   |  |
| W 10/21 | <b>Unit 5: Fixed and Random Effects I</b>                             | Johnson 1995; Firebaugh Ch 5 (through p. 146)   | HW #4 Due                                  |
| F 10/23 | Fixed and Random Effects II   | Sugie and Turney 2017   |  |
| M 10/26 | Fixed and Random Effects III  | Colen & Ramey 2014  | Data analysis I due                        |
| W 10/28 | Fixed and Random Effects IV   | Firebaugh Warner and Massoglia 2013 (I am primarily concerned with the discussion of the hybrid model on p. 118-120, but all of the reading is a good review. |  |
| F 10/30 | <b>Unit 6: Hierarchical Linear Modeling I</b>                         | Freeman 2017 <a href="http://mfviz.com/hierarchical-models/">http://mfviz.com/hierarchical-models/</a> ; Ross and Mirowsky 2001 (SKIM)                        | HW #5 Due                                  |
| M 11/2  | HLM II  | Denney 2015   |  |
| W 11/4  | HLM III   | Houle and Berger 2017   |  |
| F 11/6  | <b>Unit 7: Natural/Quasi Experiments and Instrumental Variables I</b> | Firebaugh Ch. 5 (p.152-end) ; Kirk 2009   | Data analysis II due                       |
| M 11/9  | Natural/Quasi Experiments and Instrumental Variables II               | Sharkey et al. 2017   |  |
| W 11/11 | <b>***Open/Catchup Day***</b>   | Firebaugh Ch 7  |  |
| F 11/13 | Final (Group) Presentations   |   |  |
| M 11/16 | Final (Group) Presentations   |   |  |

### **Required Chapters and Articles by Unit**

*In addition to the Firebaugh book (7 Rules), we will also be reading and discussing a range of academic articles and chapters, noted above in the tentative course schedule. These articles are available on CANVAS, and the full citations are below:*

#### **Unit 1: A Review and Expansion of Regression**

- Barkan Steven E. 2014. "Gender and Abortion Attitudes: Religiosity as a Suppressor Variable." *Public Opinion Quarterly* 78:940-950.
- Conley, Dalton. 2001. "Decomposing the Black-White Wealth Gap: The Role of Parental Resources, Inheritance, and Investment Dynamics." *Sociological Inquiry* 71:39-66.
- Warikoo, Natasha, Mark Chin, Nicole Zillmer, and Suniya Luthar. 2020. "The Influence of Parent Expectations and Parent-Child Relationships on Mental Health in Asian American and White American Families." *Sociological Forum* 35:275-296.
- Wheelan, Charles (Dartmouth '88). 2013. *Naked Statistics: Stripping the Dread from the Data*. New York: WW Norton. (Ch 11-12)

#### **Unit 3: Regression for Categorical DV's**

- Uggen, Christopher and Jeff Manza. 2002. "Democratic Contraction? Political Consequences of Felon Disenfranchisement in the United States." *American Sociological Review* 67:777-803.
- Stokes, Charles E and Christopher G Ellison. 2010. "Religion and Attitudes Toward Divorce Laws Among U.S. Adults." *Journal of Family Issues* 31:1279-1304.
- Mize, Trenton. 2019. "Best Practices for Estimating, Interpreting, and Presenting Nonlinear Interaction Effects." *Sociological Science* 6:81-117. (\*SKIM\*)
- Percheski, Christine, and Rachel Tolbert Kimbro. 2017. "Deciding to Wait: Partnership Status, Economic Conditions, and Pregnancy During the Great Recession." *Sociological Science* 4:176-195.

#### **Unit 4: An Introduction to the Study of Social Change**

- Ryder, Norman B. 1965. "The Cohort as a Concept in the Study of Social Change." *American Sociological Review* 6:843-861.

#### **Unit 5: Fixed and Random Effects**

- Colen, Cynthia and David Ramey. 2014. "Is Breast Truly Best? Estimating the Effects of Breastfeeding on Long-Term Child Health and Wellbeing in the United States By Using Sibling Comparisons." 109:55-65.
- Firebaugh, Glenn, Cody Warner, and Michael Massoglia. 2013. "Fixed Effects, Random Effects, and Hybrid Models for Causal Analysis." Pp. 113-132 in *Handbook of Causal Analysis for Social Research*, Stephen Morgan, ed. New York: Springer.
- Johnson, David. 1995. "Alternative Methods for the Quantitative Analysis of Panel Data in Family Research: Pooled Time-Series Models." *Journal of Marriage and Family* 57:1065-1077.
- Sugie, Naomi F and Kristin Turney. 2017. "Beyond Incarceration: Criminal Justice Contact and Mental Health." *American Sociological Review* 82:719-743.

#### **Unit 6: Hierarchical Linear Modeling (HLM)**

- Denney, Justin, Tim Wadsworth, Richard Rogers, and Fred Pampel. 2015. "Suicide in the City: Do Characteristics of Place Really Influence Risk?" *Social Science Quarterly* 96:313-329.

Freeman, Michael. 2017. "An Introduction to Hierarchical Modeling"

<http://mfviz.com/hierarchical-models/>

Houle, Jason and Lawrence Berger. 2017. "Children with Disabilities and Trajectories of Parents' Consumer Debt Across the Life Course." *Social Science Research* 64:184-196

Ross, Catherine E. and John Mirowsky. 2001. "Neighborhood Disadvantage, Disorder, and Health." *Journal of Health and Social Behavior* 42:258-276.

#### Unit 7: Natural Experiments and Instrumental Variables

Kirk, David S. 2009. "A Natural Experiment on Residential Change and Recidivism: Lessons from Hurricane Katrina." *American Sociological Review* 74:484-505.

Sharkey, Patrick, Gerard Torrats-Espinosa and Delaram Takyar. 2017. "Community and the Crime Decline: The Causal Effect of Local Nonprofits on Violent Crime." *American Sociological Review* 82:1214-1240.

### **OPTIONAL READINGS BY UNIT (readings in bold may be used for your mini conferences. The remaining readings are for your own edification)**

#### Unit 1: A Review and Expansion of Regression

Addo, Fenaba, Jason Houle and Daniel Simon. 2016. "Young, Black, and (Still) in the Red; Parental Wealth, Race, and Student Loan Debt." *Race and Social Problems* 8:64-76.

Anthony, Denise. 2005. "Cooperation in Microcredit Borrowing Groups: Identity, Sanctions, and Reciprocity in the Production of Collective Goods." *American Sociological Review* 70:496-515.

**Bodovski, Katerina and George Farkas. 2008. "Concerted Cultivation and Unequal Achievement in Elementary School." *Social Science Research* 37:903-919.**

**Burgard, Sarah A and Jennifer A Ailshire. 2012. "Gender and Time for Sleep Among U.S. Adults." *American Sociological Review* 78:51-69.**

**Downey, Liam and Marieke Van Willigen. 2005. "Environmental Stressors: The Mental Health Impacts of Living Near Industrial Activity" *Journal of Health and Social Behavior* 46:289-305.**

**Houle, Jason. 2014. "Disparities in Debt: Parents' Socioeconomic Resources and Young Adult Student Loan Debt." *Sociology of Education* (note: a bonus to whomever finds the error embedded in the results section of this paper)**

Kim, ChangHwan, Christopher Tamborini, and Arthur Sakamoto. 2019. "The Sources of Life Chances: Does Education, Class Category, Occupation, or Short-Term Earnings Predict 20-year Long-Term Earnings?" *Sociological Science* 5:206-233.

**Link, Bruce G and Jo Phelan. 2014. "Stigma Power." *Social Science and Medicine* 103:24-32.**

**Lively, Kathryn J., Lala Carr Steelman, and Brian Powell. 2010. "Equity, Emotion, and Household Division of Labor Response." *Social Psychology Quarterly* 73:358-379.**

Stack, Steven, and Jim Gundlach. 1992. "The Effect of Country Music on Suicide." *Social Forces* 71:211-218.

**Stults, Brian J and Eric P Baumer. 2007. "Racial Context and Police Force Size: Evaluating the Empirical Validity of the Minority Threat Perspective." *American Journal of Sociology* 113:507-546.**

**Turley, Ruth López and Matthew Desmond. 2011. "Contributions to College Costs by Married, Divorced, and Remarried Parents." *Journal of Family Issues* 32:760-790.**

**Unnever, James D and Frances T Cullen. 2007. "The Racial Divide in Support for the**

**Death Penalty: Does White Racism Matter?" *Social Forces* 85:1281-1301.**

Unit 3: Regression for Categorical DV's (Mini Conference 1)

- Barkan, Steven, Michael Roque and Jason Houle. 2013 "State and Regional Suicide Rates: A New Look at an Old Puzzle." *Sociological Perspectives* 56:287-297.
- Branigan, Amelia R. et al. 2013. "Skin Color, Sex, and Educational Attainment in the Post-Civil Rights Era." *Social Science Research* 42:1659-1674.**
- Breen, Richard, Kristian Bernt Karlson, and Anders Holm. 2018. "Interpreting and Understanding Logits, Probits, and Other Nonlinear Probability Models." *Annual Review of Sociology* 44:39-54.
- Brooks, Clem. 2000. "Civil Rights Liberalism and the Suppression of a Republican Political Realignment in the United States, 1972-1996." *American Sociological Review*. 65:483-505.
- Desmond, Matthew et al. 2013. "Evicting Children." *Social Forces* 92:303-327.**
- Dixon, Marc and Andrew Martin. 2012. "We Can't Win This On Our Own: Unions, Firms, and Mobilization of External Allies in Labor Disputes." *American Sociological Review* 77:946-969.**
- Dwyer, Rachel, Laura McCloud, and Randy Hodson. 2012. "Debt and Graduation from American Universities." *Social Forces* 90:1133-1155.**
- Fomby, Paula and Andrew Cherlin. 2007. "Family Instability and Child Well-Being." *American Sociological Review* 72:184-204.**
- Frisco, Michelle, Jason Houle, and Adam Lippert. 2013. "Weight Change and Depression Among US Young Women During the Transition to Adulthood." *American Journal of Epidemiology* 178:22-30.**
- Harris, David and Jeremiah Joseph Sim. 2002. "Who is Multiracial? Assessing the Complexity of Lived Race." *American Sociological Review* 67:614-627.
- Houle, Jason and Lawrence Berger. 2015. "Is Student Loan Debt Discouraging Home Buying Among Young Adults?" 89:589-621.**
- Kalleberg, Arne, Barbara Reskin, and Ken Hudson. 2000. "Bad Jobs in America: Standard and Nonstandard Employment Relations and Job Quality in the United States." *American Sociological Review* 65:256-278.**
- Kubrin, Charis, Tim Wadsworth, and Stephanie DiPietro. 2006. "Deindustrialization, Disadvantage and Suicide Among Young Black Males." *Social Forces* 84:1559-1579.**
- Link, Bruce G et al. 2017. "Disparities in Self-Rated Health Across Generations and Through the Life Course." *Social Science and Medicine* 174:17-25.**
- Maroto, Michelle. 2016. "Growing Farther Apart: Racial and Ethnic Inequality in Household Wealth Across the Distribution." *Sociological Science* 3:801-824.**
- McLaughlin, Heather, Chris Uggen, and Amy Blackstone. 2012. "Sexual Harassment, Workplace Authority, and the Paradox of Power." *American Sociological Review* 77:625-647.**
- Mood, Carina. 2009. "Logistic Regression: Why We Cannot Do What We Think We Can Do, And What We Can Do About it." *European Sociological Review* 26:67-82.
- Osgood, Wayne D. 2000. "Poisson-Based Regression Analysis of Aggregate Crime Rates." *Journal of Quantitative Criminology* 16:21:43.
- Pager, Devah. 2016. "Are Firms that Discriminate More Likely to Go Out of Business?" *Sociological Science* 3:849-859.**
- Pinedo, Miguel. 2020. "Deportation of Family Members of US-Citizen Latinos and Misuse of Prescription Drugs: United States, 2019." *American Journal of Public Health* 110:560-566.**
- Schnittker, Jason, Jeremy Freese, and Brian Powell. 2003. "Who Are Feminists and What do they Believe? The Role of Generations" *American Sociological Review* 68:607-622.**
- Smith, Brad and Malcolm Holmes. 2014. "Police Use of Excessive Force in Minority Communities: A Test of the Minority Threat, Place, and Community Accountability Hypotheses." *Social Problems* 61:83-104.**
- Wildeman, Christopher, Jason Schnittker, and Kristin Turney. 2012. "Despair by**

**Association? The Mental Health of Mothers with Children by Recently Incarcerated Fathers.”**  
*American Sociological Review* 77:216-243.

Unit 4: An Introduction to the Study of Social Change (Mini Conference 2)

- Amato, Paul R, David R Johnson, Alan Booth, and Stacy Rogers. 2003. “Continuity and Change in Marital Quality Between 1980 and 2000.”** *Journal of Marriage and Family* 65:1-22.
- Buchmann, Claudia and Thomas A DiPrete. 2006. “The Growing Female Advantage in College Completion: The Role of Family Background and Academic Achievement.”** *American Sociological Review* 71:515-541.
- Campbell, Colin and Jerry Johnson Sr. 2018. “Trends in the Association Between a College Education and Political Tolerance, 1976-2016.” *Socius* 4:1-3.
- Cascio, Elizabeth U. and Na-ama Shenhav. 2020. “A Century of the American Woman Voter: Sex Gaps in Political Participation, Preferences, and Partisanship since Women’s Enfranchisement.”** *Journal of Economic Perspectives* 34:24-48.
- England, Paula, Emma Mishel, and Mónica L. Caudillo. 2016. “Increase in Sex with Same-Sex Partners and Bisexual Identity Across Cohorts of Women (but not Men).** *Sociological Science* 3:951-970.
- Felson, Jacob, Amy Adamczyk, and Christopher Thomas. 2019. “How and Why Have Attitudes About Cannabis Legalization Changed So Much?”** *Social Science Research* 78:12-27.
- Firebaugh, Glenn and Kenneth Davis. 1988. “Trends in Antiblack Prejudice, 1972-1984: Region and Cohort Effects.”** *American Journal of Sociology* 94:251-272.
- Firebaugh, Glenn. 1989. “Methods for Estimating Cohort Replacement Effects.” *Sociological Methodology* 19:243-262.
- Firebaugh, Glenn and Brian Harley. 1991. “Trends in U.S. Church Attendance: Secularization and Revival, or Merely Lifecycle Effects? A Comment” *Journal for the Scientific Study of Religion* 30:487-500.
- Firebaugh, Glenn and Dana Haynie. 1997. “Using Repeated Surveys to Study Aging and Social Change.” Pp. 148-163 in *Studying Aging and Social Change: Conceptual and Methodological Issues*, Melissa Hardy, ed. Thousand Oaks:Sage. (skip section on multilevel modeling [p. 156-161])
- Firebaugh, Glenn. 1997. *Analyzing Repeated Surveys*. New York: Sage
- Goesling, Brian. 2007. “The Rising Significance of Education for Health?”** *Social Forces* 85:1621-1644.
- Haynie, Dana L. 1998. “The Gender Gap in Fear of Crime, 1973-1994: A Methodological Approach.”** *Criminal Justice Review* 23:29-50.
- Hunt, Matthew O. 2007. “African American, Hispanic, and White Beliefs about Black-White Inequality, 1977-2004.”** *American Sociological Review* 72:390-415.
- Kiley, Kevin and Stephen Vaisey. 2020. “Measuring Stability and Change in Personal Culture Using Panel Data.”** *American Sociological Review* 85:477-506.
- McCabe, Janice et al. 2011. “Gender in Twentieth-Century Children’s Books: Patterns of Disparity in Titles and Central Characters.”** *Gender and Society* 25:197-226
- Moberg, Sarah Patton, Maria Krysan, and Deanna Christianson. 2019. “Racial Attitudes in America.” *Public Opinion Quarterly* 83:450-471.
- Phelan, Jo, Bruce Link, Ann Stueve and Bernice Pescosolido. 2000. “Public Conceptions of Mental Illness in 1950 and 1996: What is Mental Illness and Is It to be Feared?”** *Journal of Health and Social Behavior* 41:188-207.
- Rosenfeld, Michael J. 2017. “Moving a Mountain: The Extraordinary Trajectory of Same-Sex Marriage in the United States.”** *Socius* 3:1-22.
- Schnittker, Jason. 2008. “An Uncertain Revolution: Why The Rise of a Genetic Model of**

**Mental Illness Has Not Increased Tolerance.” *Social Science and Medicine* 67:1370-1381.**  
Western, Bruce and Jake Rosenfeld. 2011. “Unions, Norms, and the Rise in U.S. Wage Inequality.” *American Sociological Review* 76:513-537.

Unit 5: Fixed and Random Effects (Mini Conference 4)

- Allison, Paul D. 2019. “Asymmetric Fixed-effects Models for Panel Data.” *Socius* 5:1-12 (for an example with code see: <https://statisticalhorizons.com/asymmetric-fixed-effects-models-for-panel-data>)
- Beckfield, Jason and Clare Bambra. 2016. “Shorter Lives in Stingier States: Social Policy Shortcomings Help Explain the US Mortality Disadvantage.” *Social Science and Medicine* 171:30-38.
- Berger, Lawrence, and Jason Houle. 2016. “Parental Debt and Child Well-Being.” *Pediatrics* 137:1-8.
- Bloome, Deirdre. 2015. “Income Inequality and Intergenerational Income Mobility in the United States.” *Social Forces* 93:1047-1080.
- Budig, Michelle J and Paula England. 2001. “The Wage Penalty for Motherhood.” *American Sociological Review* 66:204-225.
- Conley, Dalton and Neil G. Bennett. 2000. “Is Biology Destiny? Birth Weight and Life Chances.” *American Sociological Review* 65:458-467.
- Geller, Amanda, Irwin Garfinkel, and Bruce Western. 2011. “Paternal Incarceration and Support for Children in Fragile Families.” *Demography* 48:25-47.
- Hill, Terrence D et al. 2019. “Limitations of Fixed Effects Models for Panel Data.” *Sociological Perspectives*. Forthcoming (Online First).
- Hillman, Nick. 2018. “Using Difference-in-Differences in Higher Education Research” <https://web.education.wisc.edu/nwhillman/index.php/2018/07/10/using-difference-in-differences-in-higher-education-research/>
- Houle, Jason. 2014. “Mental Health in the Foreclosure Crisis.” *Social Science & Medicine* 118:1-8.
- Houle, Jason and Michael Light. 2014. “The Home Foreclosure Crisis and Rising Suicide Rates, 2005-2010.”
- Jacobs, David and Jonathan C. Dirlam. 2016. “Politics and Economic Stratification: Power Resources and Income Inequality in the United States.” *American Journal of Sociology* 122:469-500.
- Johnson, David. 2005. “Two-Wave Panel Analysis: Comparing Statistical Methods for Studying the Effects of Transitions.” *Journal of Marriage and Family* 67:1061-1075.
- Kail, Ben Lennox, Jill Quadagno, and Marc Dixon. 2009. “Can States Lead the Way to Universal Coverage? The Effect of Health-Care Reform on the Uninsured.” *Social Science Quarterly* 90:1341-1360.
- Leszczensky, Lars and Tobias Wolbring. 2019. “How to Deal with Reverse Causality Using Panel Data? Recommendations for Researchers based on a Simulation Study.” *Sociological Methods and Research*. Forthcoming (online first)
- MacLean, Alair. 2010. “The Things They Carry: Combat, Disability, and Unemployment Among U.S. Men.” *American Sociological Review* 75:563-585.
- Massoglia, Michael, Glenn Firebaugh, and Cody Warner. 2013. “Racial Variation in the Effect of Incarceration on Neighborhood Attainment.” *American Sociological Review* 78:142-165.
- Nomaguchi, Kei. 2009. “Change in Work-Family Conflict Among Employed Parents Between 1977-1997.” *Journal of Marriage and Family* 71:15-32.
- Rambotti, Simone. 2020. “Is There a Relationship Between Welfare-State Policies and Suicide Rates? Evidence from the U.S. States, 2000-2015. *Social Science & Medicine*. Forthcoming (online first).
- Schneider, Daniel. 2020. “Paid Sick Leave in Washington State: Evidence on Employee Outcomes, 2016-2018.” *American Journal of Public Health* 110:499-504.
- Tomasovic-Devey, Donald, Melvin Thomas, and Kecia Johnson. 2005. “Race and the

- Accumulation of Human Capital Across the Career: A Theoretical Model and Fixed-Effects Application.”** *American Journal of Sociology* 111:58-89.
- Vaisey, Stephen and Andrew Miles. 2017. “What you Can—and Can’t—Do with Three-Wave Panel Data.” *Sociological Methods & Research* 46:44-67.
- Veenstra, Gerry and Adam Vanzella-Yang. 2020. “Family Income and Self-Rated Health in Canada: Using Fixed Effects Models to Control for Unobserved Confounders and Investigate Causal Temporality.” *Social Science & Medicine* 250:1-4
- Western, Bruce. 2002. “The Impact of Incarceration on Wage Mobility and Inequality.” *American Sociological Review* 67:526-546.
- Wiertz, Dingeman and Toni Rodon. 2019. “Frozen or Malleable? Political Ideology in the Face of Job Loss and Unemployment.” *Socio-Economic Review*. Forthcoming (Online First).

Unit 6: HLM (Mini Conference 5)

- Cherlin, Andrew J., P. Lindsay Chase-Lansdale, and Christine McRae. 1998. “Effects of Parental Divorce on Mental Health Throughout the Life Course.” *American Sociological Review* 63:239-249.
- Condron, Dennis J. 2009. “Social Class, School and Non-School Environments, and Black-White Inequalities in Children’s Learning.” *American Sociological Review* 74:685-708.
- Downey, Douglas B., Paul T. von Hippel, and Beckett A Broh. 2004. “Are Schools the Great Equalizer? Cognitive Inequality During the Summer Months and School Year.” *American Sociological Review* 69:613-635.
- Fuller, Sylvia. 2008. “Job Mobility and Wage Trajectories for Men and Women in the United States.” *American Sociological Review* 73:158-183.
- Grodsky, Eric and Devah Pager. 2001. “The Structure of Disadvantage: Individual and Occupational Determinants of the Black-White Wage Gap.” *American Sociological Review* 66:542-567.
- Hook, Jennifer L. 2010. “Gender Inequality in the Welfare State: Sex Segregation in Housework, 1965-2003.” *American Journal of Sociology* 115:1480-1523.
- Lee, Valerie. 2000. “Using Hierarchical Linear Modeling to Study Social Contexts: The Case of School Effects.” *Educational Psychologist* 35:124-141.
- Lyons, Christopher J, and Becky Pettit. 2011. “Compounded Disadvantage: Race, Incarceration, and Wage Growth.” *Social Problems* 58:257-280.
- Musick, Kelly, Ann Meier, and Sarah Flood. 2016. “How Parents Fare: Mothers’ and Fathers’ Subjective Well-Being in Time With Children.” *American Sociological Review* 81:1069-1095.
- Osgood, D Wayne and Gail Smith. 1995. “Applying Hierarchical Linear Modeling to Extended Longitudinal Evaluations: The Boys Town Follow-Up Study.” *Evaluation Review* 19:3-38.
- Perry, Brea L. and Edward W. Morris. 2014. “Suspending Progress: Collateral Consequences of Exclusionary Punishment in Public Schools.” *American Sociological Review* 79:1067-1087.
- Perry, Samuel and Andrew Whitehead. 2020. “Do People in Conservative States Really Watch More Porn? A Hierarchical Analysis.” *Socius* 6:1-10.
- South, Scott J, Ying Huang, Amy Spring, and Kyle Crowder. 2016. “Neighborhood Attainment Over the Adult Life Course.” *American Sociological Review*, 81:1276-1304.
- Vuolo, Mike, Joy Kadowaki, and Brian Kelly. 2016. “A Multilevel Test of Constrained Choices Theory: The Case of Tobacco Clean Air Restrictions.” *Journal of Health and Social Behavior* 57:351-372.
- Walton, Emily. 2009. “Residential Segregation and Birth Weight Among Racial and Ethnic Minorities in the United States.” *Journal of Health and Social Behavior* 50:427-442.
- Walton, Emily. 2012. “Resurgent Ethnicity Among Asian Americans: Ethnic Neighborhood Context and Health.” *Journal of Health and Social Behavior* 53:378-394.
- Walton, Emily. 2015. “Making Sense of Asian American Ethnic Neighborhoods: A

**Typology and Application to Health.” *Sociological Perspectives* 58:490-515.**  
**Wheaton, Blair and Philippa Clarke. 2003. “Space Meets Time: Integrating Temporal and Contextual Influences on Mental Health in Early Adulthood.” *American Sociological Review* 68:680-706.**

Unit 7: Natural Experiments and Instrumental Variables (Mini Conference 7)

- Andersen, Signe Hald, and Christopher Wildeman. 2014. “The Effect of Paternal Incarceration on Children’s Risk of Foster Care Placement.” *Social Forces* 93:296-298.**
- Bollen, Kenneth. 2012. “Instrumental Variables in Sociology and the Social Sciences.” *Annual Review of Sociology*, 38:37-72.
- Costello, E. Jane, Scott Compton, and Gordon Keeler. 2003. “Relationships Between Poverty and Psychopathology: A Natural Experiment.” *Journal of the American Medical Association* 290:2023-2029.
- Firebaugh, Glenn and Kevin Chen. 1995. “Voter Turnout of Nineteenth Amendment Women: The Enduring Effect of Disenfranchisement.” *American Journal of Sociology* 4:972-996.
- Flashman, Jennifer. 2014. “Friend Effects and Racial Disparities in Academic Achievement.” *Sociological Science* 1:260-276.**
- Giuntella, Osea, Wei Han, and Fabrizio Mazzonna. 2017. “Circadian Rhythms, Sleep, and Cognitive Skills: Evidence from an Unsleeping Giant.” *Demography* 54:1715-1742.**
- Harding, David, Jeffrey D. Morenoff, Anh P. Nguyen, and Shawn D. Bushway. 2017. “Short- and Long-Term Effects of Imprisonment on Future Felony Convictions and Prison Admissions.” *PNAS* 114L11103-11108.**
- Heaney, Michael T and Fabio Rojas. 2014. “Hybrid Activism: Social Movement Mobilization in a Multimovement Environment.” *American Journal of Sociology* 119: 1047-1103.
- Houle, Jason, J. Michael Collins, and Max Schmeiser. 2015. “Flu and Finances: Influenza Outbreaks and Loan Defaults in U.S. Cities.” *American journal of Public Health* 105:e75-e80.
- Kelly, Erin L, Phillis Moen, and Eric Tranby. 2011. “Changing Workplaces to Reduce Work-Family Conflict: Schedule Control in a White-Collar Organization.” *American Sociological Review*, 76:265-290.**
- Kyriopoulos, Ilias, Kostas Athanasakis, and John Kyriopoulos. 2018. “Are Happy People Healthier? An Instrumental Variable Approach Using Data from Greece.” 72:1153-1161.**
- Legewie, Joscha. 2013. “Terrorist Events and Attitudes Toward Immigrants: A Natural Experiment.” *American Journal of Sociology*. 118:1199-1245.**
- Light, Michael T and John Iceland. 2016. “The Social Context of Racial Boundary Negotiations: Segregation, Hate Crime, and Hispanic Racial Identification in Metropolitan America.” *Sociological Science* 3:61-84.
- McInerney, Melissa, Jennifer Mellor, and Lauren Hersch Nicholas. 2013. “Recession Depression: Mental Health Effects of the 2008 Stock Market Crash.” *Journal of Health Economics* 32:1090-1104.**
- Rugh, Jacob S. and Douglas S. Massey. 2010. “Racial Segregation and the American Foreclosure Crisis.” *American Sociological Review* 75:629-651.**
- Song, Lijun and Wenhong Chen. 2014. “Does Receiving Unsolicited Support Help or Hurt? Receipt of Unsolicited Job Leads and Depression” *Journal of Health and Social Behavior* 55:144-160.
- Strully, Kate W., David H. Rehkopf, and Ziming Xuan. 2010. “Effects of Prenatal Poverty on Infant Health: State Earned Income Tax Credits and Birth Weight.” *American Sociological Review* 75:534-562.**
- Villarreal, Andrés and Stanley R Bailey. 2020. “The Endogeneity of Race: Black Racial Identification and Men’s Earnings in Mexico.” *Social Forces* 98:1744-1772.**