

PPOL 650**Behavioral Economics and Development Policy**

Class meetings: Wednesdays, 12:30 pm – 3:00 pm, Reiss 152

Instructor: Andrew Zeitlin, andrew.zeitlin@georgetown.edu.

Contact details:

Office: Old North 301

Email: andrew.zeitlin@georgetown.edu

Office hours: Wednesdays, 3:30 - 5:10 pm, or by appointment.

Reserve regular office hour appointments (no email necessary): <http://goo.gl/f3AYI7>

Course description

How should policymakers in developing countries take account of the fact that people are not hyper-rational, individualistic utility-maximizing machines? In this class we will examine the tools of behavioral economics and its consequences for development policy. Each week, we will examine specific 'behavioral' departures from the neoclassical model, discussing how lab- and field-experiments provide ways of measuring this phenomenon, evidence of its importance, and implications for policymaking. Specific topics will include attitudes toward risk and uncertainty; learning; attention and bandwidth; present bias; trust and altruism. These will be applied to policy areas ranging from the adoption of agricultural technologies, to the management of health and income risks, the encouragement of savings, the motivation of public servants, and the provision of public goods. Students will acquire knowledge of the theory, methods, and development policy implications of behavioral economics.

Course requirements and grading

The grade will be made up as follows:

Participation: 10%

Policy memo 1 (due Oct 25): 30%

Policy memo 2 (due Dec 9): 30%

Group project: 30%

Class participation grades will be determined by the extent to which you (1) turn up, (2) have read in advance, and (3) actively and constructively contribute to seminar discussion. Each policy memo will require you to pick a topic from one half of the course (individual decision making, other-regarding preferences) and apply theory and evidence on this topic to a policy question of your choosing. The group project will require you to lead a lab exercise in class, and to explain its theoretical and empirical relevance. Further details of each assignment will be provided by Canvas. You will receive a letter grade for each component, and I will average these letter grades using a standard four-point scale and the weights above, to determine your final grade.

Come to class – win money

In this class, we'll be demonstrating the phenomena of behavioral economics and the empirical methods used to test these by running a series of laboratory-style experiments in the classroom. (And you yourselves will get to run one of these, as part of your Final Project.) The stakes will be real – sort of. In each of the lab experiments, you will have an opportunity to win points. Average winnings per lab session will be 10 points per student, and the expected number of laboratory sessions over the course of the semester is 10. So with 20 students in the class, there should be approximately 2,000 points in circulation by the end of the semester. Each point will be worth a share of a total of \$100 in Amazon gift cards, which implies that each point will be worth approximately 5 cents.

A bit of tradecraft

As we will discuss over the course of the semester, the extent to which decisions are made anonymously is a potentially important determinant of how they behave in lab-type settings. In our context, we are going to undertake a setup that ensures that every decision you make will be private to you: your classmates will not know what you have chosen, and in fact, I will not know what you personally have chosen, either. To accomplish this, at the first class, you will draw a piece of paper from an envelope. On this paper will be written two things: a numerical ID number, which we will ask you to remember, and a temporary, anonymous email address, provided by a host called mailinator.com. At this email address you will receive periodic updates about your winnings in the laboratory games, and, at the end of the semester, your monetary winnings will be sent to this email in the form of an Amazon gift card. Do not share your ID number or email address with other students in the class, or with us!

Should you need to communicate anonymously with me, we have set up an anonymous comment box. You can leave a comment for us here: <http://goo.gl/forms/ggx9VI5pJo>.

Topics and readings

Each week, we take on a specific challenge to standard economic theory. We examine both the evidence for this departure – in the lab and in the field – and its application to a specific policy problem.

There is no single textbook that is suitable for this class. We will draw on both book chapters and journal articles. Readings will sometimes be challenging, so I encourage you to read the key texts early and often. I also provide you with a wide range of readings, to provide diverse perspectives for seminar discussions, and to provide further directions for you to explore in your written assignments. Core/required readings are denoted with an asterisk (*).

One source we will use extensively is the handbook chapter by Kremer, Rao, and Schilbach, in the Handbook of Behavioral Economics, Vol. 2 (2019). This is referred to below as KRS, and is available in the root directory of the readings folder.

Introduction

1. Introduction (September 4)

The questions of behavioral economics

- * Rabin, EER 2002, “A perspective on psychology and economics”
- * Congdon, Kling, and Mullainathan, *Policy and Choice*, chapters 2-3
- Mullainathan, 2004. “Development economics through the lens of psychology”
- KRS, section 1

Empirical methods and controversies

- * Harrison and List, JEL 2004, “Field experiments”
- Levitt and List, JEP 2007, “What do laboratory experiments measuring social preferences reveal about the real world?”

Implications for welfare and development policy

- * WDR 2015, ch. 1, “Overview”
- * Sampath, “Teaching the poor to behave”, The Hindu, June 30 2015, Comment.
- Chetty, 2015, Behavioral economics and public policy: A pragmatic perspective. See also Chetty's Ely lecture at: <https://www.aeaweb.org/webcasts/2015/ely>
- KRS 9.1, 9.2

Part I: Judgment and choice in individual decision making

2. Risky choices (September 11)

- On the standard model, review Katz & Rosen, ch. 6, “Choice under uncertainty”
- * Rabin and Thaler, JEP 2001, “Anomalies: Risk aversion”
- * Kahneman, *Thinking fast and slow*, ch. 25: “Bernoulli's errors”
- Jakiela and Ozier, REStat 2019, "The impact of violence on individual risk preferences: Evidence from a natural experiment"
- Pam Jakiela SEEDec 2019 keynote ([slides](#), [video](#)), section on Risk Preferences in particular

Policy application: Managing risk in agriculture

- * Banerjee and Duflo, *Poor Economics*, ch. 6: “Barefoot hedge-fund managers”
- * Gine and Yang, JDE 2009, “Insurance, credit, and technology adoption”
- Binswanger, AJAE 1980, “Attitudes toward risk: Experimental measurement in rural India”
- Dercon, WBRO 2003, “Income risk, coping strategies, and safety nets”

- Cole et al., AEJ Applied 2013, “Barriers to household risk management: Evidence from India”
- Morduch. “Microinsurance: The next revolution?” in Dercon, ed., *Insurance against poverty*”
- KRS 2.0, 2.1 (more technical)

3. Ambiguity (September 18)

- *Camerer and Weber, JRJ 1992, “Recent developments in modelling preferences: Uncertainty and ambiguity”
- Camerer, “Individual decision making”, ch. 8 in Kagel and Roth, eds., *Handbook of experimental economics*. Part III.E on Subjective Expected Utility, pp. 644-649.

Policy application: Agricultural choices, revisited

- * Engle-Warnick, Escobar, and Laszlo, BEJ Ec Analysis & Policy, 2011, “Ambiguity aversion and portfolio choice in small-scale Peruvian farming”
- Bryan, 2014, “Ambiguity aversion decreases demand for partial insurance: Evidence from African farmers”
- Bryan et al., “There’s something about ambiguity” (lighter)

4. Prospect theory, reference dependence, and loss aversion (September 25)

- * Kahneman, *Thinking Fast and Slow*, ch. 26 “Prospect Theory” and ch 27 “The endowment effect”
- * Kahneman, Knetsch, and Thaler, JEP 1991, “The endowment effect, loss aversion, and status quo bias: Anomalies”
- Camerer, “Prospect Theory in the Wild: Evidence from the Field”, ch. 5 in Camerer, Loewenstein, and Rabin, eds., *Advances in Behavioral Economics*.
- Barberis, JEP 2013, “Thirty years of prospect theory in economics: A review and assessment”
- KRS 2.3

Policy application: Endowment effects and health technologies

- * Banerjee and Duflo, *Poor Economics*, ch. 3: “Low-hanging fruit for better (global) health?”
- * Cohen and Dupas, QJE 2010, “Free distribution or cost sharing? Evidence from a randomized malaria prevention experiment”
- Arkes and Blumer, *Organizational Behavior and Human Decision Processes* 1985, “The psychology of sunk cost”
- Ashraf, Berry, and Shapiro, AER 2010, “Can higher prices stimulate product use? Evidence from a field experiment in Zambia”

5. Judgment under uncertainty (October 2)

- * Kahneman, ch. 10 “Law of small numbers”; ch. 29-30 (“The Fourfold Pattern”; “Rare events”)
- * Angner, chs 4-5 (“Probability judgment; Judgment under risk and uncertainty”)

- Camerer, “Individual decision making”, ch. 8 in Kagel and Roth, *HEE*, pts I – II.
- Miller and Sanjurjo, JEP 2019, "A bridge from Monty Hall to the hot hand: The principle of restricted choice"

Policy application: Learning about risky technologies

- Conley and Udry, AER 2010, “Learning about a new technology: Pineapple in Ghana”
- Kremer and Miguel, QJE 2007, “The illusion of sustainability”
- Hanna, Mullainathan, Schwartzstein, QJE 2014, “Learning through noticing: Theory and evidence from a field experiment”
- Möbius, Niederle, Niehaus, and Rosenblat, 2014, “Managing self confidence”
- KRS 3.3, 3.4, 6.0, 6.1, 6.3

6. Time discounting (October 9)

- * Kahneman, *Thinking Fast and Slow*, ch. 35: “Two selves”
- * Frederick, Loewenstein, and O’Donoghue, “Time discounting and time preference: A critical review”. Ch. 5 in Camerer et al., eds., *Advances in Behavioral Economics*.
- Laibson, QJE 1997, “Golden eggs and hyperbolic discounting”
- O’Donoghue and Rabin, AER 1999, “Doing it now or later”
- Balakrishnan, Haushofer, and Jakiela, EE 2019, "How soon is now? Evidence of present bias from convex time budget constraints"
- KRS 2.2

Policy application: Encouraging savings

- * Ashraf, Karlan, and Yin, QJE 2006, “Tying Odysseus to the mast”
- * Kaur, Kremer, and Mullainathan, JPE 2014, “Self-control at work”
- Bryan, Karlan, and Nelson, Ann Rev Econ 2012, “Commitment devices”
- Duflo, Kremer, and Robinson, AER 2011, “Nudging farmers to use fertilizer: Theory and experimental evidence from Kenya”
- KRS 6.2

7. Attention (October 16)

- * Mullainathan and Shafir, *Scarcity*, chs 1-2, 5.
- *KRS 10.1-10.3
- * Mandi, Mullainathan, Shafir, Zhao, Science 2013, “Poverty impedes cognitive function”

Policy application: Savings, revisited

- * Karlan, McConnell, Mullainathan, and Zinman, Management Science 2014, “Getting to the top of the mind: How reminders increase saving”
- Haushofer, 2015, “The cost of keeping track”

Part II: Social preferences

Background to Part II:

- Camerer, *Behavioral Game Theory*, ch. 1

8. Altruism (October 23). **Guest appearance by Pamela Jakiela**

- * Camerer, *BGT*, ch. 2: “Dictator, Ultimatum, and Trust Games”, 2.1 – 2.6, 2.8
- Charness and Rabin, QJE 2002, “Understanding social preferences with simple tests”
- Rabin, AER 1993, “Incorporating fairness into game theory and economics”
- Fehr and Schmidt, QJE 1999, “A theory of fairness, competition, and cooperation”
- Andreoni and Miller, Econometrica 2002, “Giving according to GARP”
- Jakiela and Ozier, REStud 2016, "Does Africa need a rotten kin theorem? Experimental evidence from village economies"
- Pam Jakiela SEEDec 2019 keynote ([slides](#), [video](#)), section on "Stability of Distributional Preferences" in particular
- KRS 9.3

Policy application: social preferences in the workplace

- * Bandiera, Barankay, and Rasul, QJE 2005, “Social preferences and the response to incentives: Evidence from personnel data”
- * Ashraf, Bandiera, and Jack, J Pub Ec 2014, “No margin no mission”

9. Identity (October 30)

- * Akerlof and Kranton, ch. 2, ch. 3, ch. 5.
- Hoff and Pandey, AER 2006, “Discrimination, social identity, and durable inequalities”
- Rao, AER 2019, "Familiarity does not breed contempt: Generosity, discrimination, and diversity in delhi schools"
- Alesina, Miano, and Stantcheva, NBER 2019, "Immigration and redistribution"

Policy application: Identity and motivation at work

- * Reinikka and Svensson, JEEA 2010, “Working for God? Evidence from a change in financing of nonprofit health care providers in Uganda”

10. Trust and trustworthiness (November 6)

- * Camerer, *BGT*, ch. 2.7, “Trust games”
- Glaeser et al, QJE 2000, “Measuring trust”
- Knack and Keefer, QJE 1997, “Does social capital have an economic payoff? A cross-country investigation”

- Ashraf et al., EE 2006, “Decomposing trust and trustworthiness”
- Barr, EJ 2003, “Trust and expected trustworthiness: Experimental evidence from Zimbabwean villages”

Policy application: Trust and microfinance

- * Karlan, AER 2005, “Using experimental economics to measure social capital and predict financial decisions”
- * Dercon, Gunning, and Zeitlin, 2015, “The demand for insurance under limited trust”

11. Public goods and coordination problems (November 13)

- * Camerer, *BGT*, ch. 7: “Coordination”
- * Cardenas and Carpenter, JDS 2008, “Behavioral development economics: Lessons from the field in the developing world”
- Ledyard, “Public goods: A survey of experimental research”, ch. 2 in Kagel and Roth, *HEE*.

Policy application: public goods

- Habyarimana and Jack, J Pub Ec 2011, “Heckle and chide: Results of a randomized road safety intervention in Kenya”
- Habyarimana, Humphreys, Posner, and Weinstein, APRS 2007, “Why does ethnic diversity undermine public goods provision?”

12. Norm enforcement and costly punishment (November 20)

- * Heinrich et al., Science 2006, “Costly punishment across human societies”
- * Ostrom, JEP 2000, “Collective action and the evolution of social norms”
- Fehr and Gächter, JEP 2000, “Fairness and retaliation: The economics of reciprocity”
- KRS 9.3

Policy application: corruption

- * Avner Greif, AER 1993, “Contract enforceability and economic institutions in early trade: The Maghribi traders’ coalition”
- Barr and Serra, J Pub Ec 2010, “Corruption and culture: an experimental analysis”
- * Fisman and Miguel, JPE 2007, Corruption, norms, and legal enforcement: Evidence from diplomatic parking”

13. Aspirations and performance comparisons (December 4)

- *Ray (2006). “Aspirations, Poverty, and Economic Change.”
- *KRS 10.4
- Genicot and Ray, *Econometrica* 2017, “Aspirations and inequality”.

- Breza, Kaur, and Shamdasani, QJE 2018, "The morale effects of pay inequality"
- Niederle and Vesterlund, Ann Rev Econ 2011, "Gender and competition"
- Steele and Aronson, *Journal of Personality and Social Psychology* (1995), "Stereotype threat and the intellectual test performance of African Americans".
- But in re. stereotype threat see, e.g., Ganley et al., *Developmental Psychology* (2013), "An examination of stereotype threat effects on girls' mathematical performance."

Policy application: aspirations interventions

- *Beaman, L., E. Duflo, R. Pande, and P. Topalova, *Science Express* 2012, "Female leadership raises aspirations and educational attainment for girls: A policy experiment in India".
- Bernard, T., S. Dercon, K. Orkin, and A. Seyoum Taffesse, *World Bank Economic Review* 2015, "Will video kill the radio star? Assessing the potential of targeted exposure to role models through video".

Policies and resources

Laptops in the classroom

This class is a seminar. Active discussion and broad participation is central to making it a success. A growing body of evidence (see [this Brookings overview](#) of the evidence) suggests that laptops hinder learning both by the student using them, and by their peers. While students *will* need to use a phone, tablet, or laptop of their own to participate in laboratory games, and for their own presentations, all electronic devices are otherwise banned absent a clear and compelling personal reason.

I will provide copies of all lecture slides after each class, and students concerned with their ability to keep up with and record class discussion can request to record seminars.

Academic Resource Center/Disability Support

If you believe you have a disability, then you should contact the Academic Resource Center (arc@georgetown.edu) for further information. The Center is located in the Leavey Center, Suite 335 (202-687-8354). The Academic Resource Center is the campus office responsible for reviewing documentation provided by students with disabilities and for determining reasonable accommodations in accordance with the Americans with Disabilities Act (ASA) and University policies. For more information, go to <http://academicsupport.georgetown.edu/disability/>.

Important Academic Policies and Academic Integrity

McCourt School students are expected to uphold the academic policies set forth by Georgetown University and the Graduate School of Arts and Sciences. Students should therefore familiarize themselves with all the rules, regulations, and procedures relevant to their pursuit of a Graduate School degree. The policies are located at: <http://grad.georgetown.edu/academics/policies/>

In this class, you will have two types of formal assignments. One of these is a group project in which, obviously, you are expected to collaborate on the final output; beyond this, groups should ensure that each student has a role in the presentation of these results that gives them a chance to show their mastery of the subject matter. The second type of assignment is a policy memo, in which you will apply the literature on a particular behavioral phenomenon to a policy question of your own choosing. You are encouraged to discuss the theory and evidence for this assignment with your peers, but you should independently choose the application (with my prior approval), and the writeup and application must be your own. You are expected to give credit for ideas that are not your own – even, especially, when they are your classmates – and you won't be penalized for faithful sharing of credit where credit is due.

Course communications: Canvas, email, and office hours

The primary mode of communication for the course (outside of the classroom) will be via Canvas. This takes a few forms:

- All documents required for the course, including the up-to-date syllabus and copies of readings, will be made available through that site.
- We will communicate with the class as a whole through the Announcements feature of Canvas. In general, all such announcements will be sent out to all of you through your associated email addresses.
- I will hold regular office hours on Mondays, from 3:30 – 5:30 pm. I strongly encourage you to stop by at some point in the semester: you don't have to have a pressing concern. To help students coordinate and minimize wait times, I encourage you to sign up for a time in advance via my google calendar (<http://goo.gl/f3AYl7>) if you plan to attend. But this shouldn't stop you from just dropping by if you don't have a prior appointment. In addition, if this time does not work for you, please don't hesitate to contact me by email to schedule an alternative time.

Instructional continuity: Snow days and other interruptions

In the event of snow days or other interruptions to the class schedule, we will make every effort to stay on track. In particular:

1. As soon as an interruption is announced, I will communicate with you by Canvas to let you know where you can find the relevant resources.
2. Since this is a seminar course, and in-person interaction is central to the pedagogical approach, then whenever possible we will attempt to reschedule course meetings.
2. Failing this, I will provide substitute lectures on course material through Zoom, and will arrange for students to participate in lab games remotely.
3. If snow or other events require the cancellation of office hours, I will contact all students who have signed up to reschedule these individually. If need be, I will host these Zoom or other means.

Provost's Policy Accommodating Students' Religious Observances

Georgetown University promotes respect for all religions. Any student who is unable to attend classes or to participate in any examination, presentation, or assignment on a given day because of the observance of a major religious holiday (see below) or related travel shall be excused and provided with the opportunity to make up, without unreasonable burden, any work that has been missed for this reason and shall not in any other way be penalized for the absence or rescheduled work. Students will remain responsible for all assigned work. Students should notify professors in writing at the beginning of the semester of religious observances that conflict with their classes. The Office of the Provost, in consultation with Campus Ministry and the Registrar, will publish, before classes begin for a given term, a list of major religious holidays likely to affect Georgetown students. The Provost and the Main Campus Executive Faculty encourage faculty to accommodate students whose bona fide religious observances in other ways impede normal participation in a course. Students who cannot be accommodated should discuss the matter with an advising dean.

Statement on Sexual Misconduct

Please know that as a faculty member I am committed to supporting survivors of sexual misconduct, including relationship violence, sexual harassment and sexual assault. However, university policy also requires me to report any disclosures about sexual misconduct to the Title IX Coordinator, whose role is to coordinate the University's response to sexual misconduct.

Georgetown has a number of fully confidential professional resources who can provide support and assistance to survivors of sexual assault and other forms of sexual misconduct. These resources include:

Jen Schweer, MA, LPC

Associate Director of Health Education Services for Sexual Assault Response and Prevention

(202) 687-0323

jls242@georgetown.edu

Erica Shirley, Trauma Specialist

Counseling and Psychiatric Services (CAPS)

(202) 687-6985

els54@georgetown.edu

More information about campus resources and reporting sexual misconduct can be found at <http://sexualassault.georgetown.edu>.