## ECON 980EE: The Behavioral Economics of Poverty and Development

[Syllabus as of 2021/01/13] Spring 2021 Harvard University

Meetings: Thursday 12-2 pm (1/28-4/22, 2021)

Course website: https://canvas.harvard.edu/courses/84631

Please complete this google form by **Jan 19** if you would like to enroll in the class.

**Professor**: Gautam Rao grao@fas.harvard.edu

Office Hours: Tue 5-6 pm and Wed 1.30-2.30 pm and 5-6 pm or by appointment.

Sign up online here: https://raoofficehours.as.me/

**Teaching Fellow**: Awa Ambra Seck aseck@g.harvard.edu

Office Hours: Thursday 2.00-3.00pm

Sign up using this link.

## **Overview & Course Objectives**

This course will bring together two rapidly-growing fields in economics – behavioral economics and development economics. Behavioral economics brings insights from psychology into economics by studying the economic implications of factors like individuals having limited willpower or self-control; being concerned about fairness; being envious of others, or caring about their social image; having systematically biased beliefs, such as overconfidence; disliking losses more than enjoying same-sized gains, etc. Development economics broadly studies economic behaviors in poor countries, and specifically tries to understand why some societies are poor while others are rich, what types of market failures hold back growth, and what policies and institutions can reduce poverty and increase wellbeing.

Behavioral development economics brings behavioral economics to the study of development and poverty. Much of this work takes standard behavioral economics ideas and models and applies them to important questions in development, such as why many apparently attractive investments (e.g. vaccinations, fertilizers for crops, or education) do not get made. This can provide a quite different understanding of puzzles in development and suggest different policy solutions. Other research suggests that there may be something quite special about the psychology of poverty. Could it be that the deprivations associated with poverty might themselves have important consequences for cognitive function and behavior? In this course, we will discuss all these aspects of behavioral development economics research. We will particularly emphasize topics related to the **psychology of poverty, gender, social norms and behavioral preferences**.

The following is a partial list of course objectives:

- 1) Learn about research in behavioral development economics and applications of behavioral science to policy.
- 2) Present existing research papers and uncover related literature.
- 3) Learn to give a short presentation of a research proposal.
- 4) Write a research paper.

## **Course requirements**

# Research Paper

The main requirement for the class is a research paper of length 15-25 double-spaced pages. The paper must be in the field of behavioral development, defined quite broadly. There are many ways to write an excellent paper for the class, including but not limited to:

- 1. Writing a detailed design for an experiment, including the underlying theory motivating the experiment, how possible confounds and challenges will be solved, exactly how the experiment will be run, and power calculations to understand the necessary sample sizes.
- 2. Running an online experiment, typically on Amazon MTurk or a similar website. You could also check out the Harvard Digital Lab for the Social Sciences.
- 3. Running a small-scale field experiment right here in Cambridge or wherever you currently reside (but only if you can do so safely, given the pandemic discuss with me).
- 4. Using an existing dataset, such as one of the umpteen datasets you may find archived in the Harvard Dataverse or websites like the ICPSR, or mentioned in an existing paper on the topic you are interested in. The professor or TF may be able to help you with this search. IT CAN TAKE TIME TO GET ACCESS TO DATA START EARLY!
- 5. Creating your own dataset by pulling together data from a novel source, such as scraping data from the web. Of course, you still need an interesting question to ask.
- 6. Replicating and extending an existing paper, using the dataset posted by the authors (these are not always available, but can often be found on journal websites or on the authors' own websites).
- 7. A purely theoretical paper that develops an economic model on a topic in behavioral development economics.
- 8. (Rarely) Running an in-person lab experiment (e.g. at the Harvard Decision Science Lab or at the Computer Lab for Experimental Research at HBS).

## Useful Data Resources

- ICSPR
- IPUMS International
- World Bank Microdata Library
- UNHCR Microdata Library
- DHS

### Stata/R Resources

If your research project includes an empirical part and you feel that you could benefit from a STATA/R refresher, here are some resources that could be useful:

- 1. <u>Introduction to STATA for Economists</u>. This Canvas course contains material from very basic STATA and R concepts (missing values, delimiters, do-files) to more advanced one (re-shape, plots, regressions). It also contains sample do-files that are useful to produce tables and plots.
- 2. If you have coding related questions, Ambra will be happy to help. However, if you are stuck on a coding issue and need quick help, you can schedule an appointment, for the STATA OH organized by the Economics Department, using this link. These OH are held every day.

Any of these choices will require a great deal of work, and it is very important to start early and talk to Ambra or Gautam early and regularly. If you want to run an experiment, especially, come talk to me very soon, since you may need to raise funds for the experiment. Most likely, your research will NOT require ethical approval by the Committee on the Use of Human Subjects (what's often referred to as IRB approval), unless you intend to take the research forward towards a journal publication.

<u>Timeline</u>: By Feb 7th you will submit a one-page writeup briefly describing two potential research ideas that you would like to pursue for the class. Then, you will submit a 500-word research proposal by Feb 21st. You must meet me during the following week to discuss the proposal. A longer 5-7 pages double-spaced report outlining the topic, the underlying economic theory / behavioral economics model, and proposed data analysis strategy will be due on March 14th. On April 4th, you will submit a one-page memo outlining your progress. On April 8th and 22nd, you will provide a 15-minute presentation of your work during the class. Finally, the research paper is due on May 15th. On any given day, the assignments are due at 8 pm.

## **Weekly Readings**

You must read the starred papers each week before coming to class and be prepared to discuss the papers. Each week, by 8 pm on the day before the class, you **must** complete two assignments:

- 1. Submit a two-page double-spaced discussion of the assigned papers. You should discuss some of the following points: What are the main findings of the papers? What did you learn about the world and about human behavior from these papers? What, in your opinion, was most interesting about the papers?
- 2. What would you like to discuss with your classmates and the instructors about these papers? These will form the basis of the classroom discussion.

### **Presentations of Starred Readings**

Teams of students will be assigned to lead the presentation of each of the starred readings each week. The presentations should be structured as follows:

- 2 slides that summarize the paper
- 1 slide on a related working paper/recently published paper that you discovered and found interesting. This cannot be one of the unstarred readings in the syllabus.
- 1 slide of questions to discuss with the class

Each student will likely be assigned to present twice per semester, but we will finalize this based on class size. Teams for presentations will be randomly assigned by the instructors.

# **Assignment List**

- Weekly: 2-page response to readings
- Weekly: Discussion questions for class
- Presentations of Starred Readings (probably twice per student)
- Feb 7: 2-page describing two research ideas
- Feb 21: 500-word proposal
- March 14: 5-7 pages report that outlines the topic, the underlying theory and idea, and proposed empirical strategy
- April 4: 1-page progress report
- April 8/22: 15-minute presentation of project in class
- May 15: Research paper due (15-25 pages)

Note: All of the above assignments (save for the in-class presentations) should be uploaded to the course website by <u>8 pm on the due date</u>. All page limits mentioned above refer to double-spaced text.

## Grading

The course grade will be determined as follows:

- Class participation and weekly responses (15%)
- Presentations of starred readings (10%)
- 2-page write-up (5%)
- 500-word proposal (5%)
- 5-7 pages report (5%)
- 1-page progress report (5%)
- 15-minute presentation (15%)
- Final research paper (40%)

Note: There will be no exams.

# **Late Policy**

Students are expected to provide assignments on time (by 8 pm on the due dates). If assignments are turned in late, they will lose 20% of the numeric grade per 24 hours late. Exceptions are given in case of medical or personal emergencies, or if you have reached out to me and received permission. We will try to be understanding of any challenges you are facing in meeting the deadlines, but we do want to encourage you to stay on track.

## **Collaboration Policy and Citing Your Sources**

You are encouraged to discuss with your classmates the choice of paper topics, to share information about data sources, and to help each other understand the papers better. Indeed, the exchange of knowledge, and making connections between different ideas and tools is at the heart of most research. But you must ensure that any written work you submit is original and reflects your thoughts and understanding. You must follow standard academic citation practices, and properly cite your sources. Please familiarize yourself with the Harvard College Academic Integrity Policies, which will fully apply in this course: <a href="http://handbook.fas.harvard.edu/book/academic-integrity">http://handbook.fas.harvard.edu/book/academic-integrity</a>

# **Course outline (tentative)**

Date	Topic
1/28	An overview of Behavioral Development Economics
2/4	Crash courses in Behavioral Economics and Development
	Economics
2/11	Psychology of Poverty – I
2/18	Psychology of Poverty – II
2/25	Gender and Development - I
3/4	Gender and Development - II
3/11	Identity
3/18	Lunch with Gautam
3/25	Social Preferences – I
4/1	Social Preferences – II
4/8	Preferences and Cultural Variation
4/15	Wellness Day
4/22	In-Class Presentations

# **Section outline (tentative)**

The sections are complementary to the class material and will provide you with an overview of econometric methods. Attending section is not required but is strongly suggested.

Date	Topic
TBD	Experimental Methods
TBD	Quasi-experimental methods I: Diff-in-Diff and Fixed Effects
TBD	Quasi-experimental methods II: RDD and Instrumental variable
TBD	Collecting your own data: Qualtrics and MTurk

# **Course Readings**

There is no textbook for the class. However, some useful references and general readings are the following:

Kremer, Michael, Rao, Gautam and Schilbach, Frank. 2019. Behavioral Development Economics. Chapter in the Handbook of Behavioral Economics Vol 2 (Eds. Douglas Bernheim, David Laibson, Stefano DellaVigna).

The other chapters in this handbook are also a useful resource for those interested in behavioral economics.

World Bank. 2015. "World Development Report 2015: Mind, Society, and Behavior"

DellaVigna, Stefano. 2009. "Psychology and Economics: Evidence from the Field." *Journal of Economic Literature* 47(2): 315-372.

Banerjee, Abhijit V., and Esther Duflo. "The economic lives of the poor." *The Journal of Economic Perspectives* 21.1 (2007): 141-167.

\*Starred Readings are Required Readings. For each class meeting, the two-page discussion of the required readings must be uploaded to the course website by 8 pm the day before.

Grayed readings provide background on the economic theory of that topic. You may choose to read these if you are interested in the underlying economic models.

### An overview of Behavioral Development Economics (1/28)

\* Kremer, Michael, Rao, Gautam and Schilbach, Frank. 2019. "Behavioral Development Economics." Secs 1 + 2.1

Note: No student presentation on this day

### Crash Course in Behavioral Economics and Development Economics – I (2/4)

- \* Banerjee, Abhijit V., and Esther Duflo. "The economic lives of the poor." *The Journal of Economic Perspectives* 21.1 (2007): 141-167.
- \* Kremer, Michael, Rao, Gautam and Schilbach, Frank. 2019. "Behavioral Development Economics." Sec 2

Della Vigna, Stefano. 2009. "Psychology and Economics: Evidence from the Field." *Journal of Economic Literature* 47(2): 315-372.

This is a long review paper. It does deeper into some of the behavioral economics that the Kremer et al. starred reading for today touches upon. You can skip the details of the papers that DellaVigna describes but reading this is a great way to get a crash course on behavioral economics. This is less necessary if you have already taken a class in behavioral economics.

World Bank. 2015. "World Development Report 2015: Mind, Society, and Behavior"

Suggest you at least skim this. It may also be the source of some research ideas.

#### Psychology of Poverty – I (2/11)

- \* Kremer, Michael, Rao, Gautam and Schilbach, Frank. 2019. "Behavioral Development Economics." Sec 10.
- \*Mani, Anandi, Sendhil Mullainathan, Eldar Shafir, and Jiaying Zhao. 2013. "Poverty Impedes Cognitive Function." *Science* 341(6149): 976–980.

\*Fehr, D., Fink, G. and Jack, K., 2019. "Poverty, Seasonal Scarcity and Exchange Asymmetries" (No. w26357). National Bureau of Economic Research.

Carvalho, Leandro S., Stephan Meier, and Stephanie W. Wang. "Poverty and Economic Decision-Making: Evidence from Changes in Financial Resources at Payday." *American Economic Review* 2016.

Haushofer, Johannes and Ernst Fehr. 2014. "On the Psychology of Poverty." Science 344(6186): 862-867.

Kaur, Supreet, Sendhil Mullainathan, Suanna Oh, and Frank Schilbach. "Do Financial Concerns Make Workers Less Productive." Working Paper, 2020.

Mullainathan, Sendhil and Eldar Shafir. 2013. "Scarcity: Why Having Too Little Means So Much." Time Books, Henry Holt & Company LLC.

Shah, Anuj, Sendhil Mullainathan, Eldar Shafir. 2012. "Some Consequences of Having Too Little." *Science* 338(6107): 682-685.

### Psychology of Poverty – II (2/18)

- \* Bessone, Rao, Schilbach, Schofield and Toma (2020). "The Economic Consequences of Increasing Sleep Among the Urban Poor". Working Paper
- \* Dean, Joshua (2019). "Noise, Cognitive Function, and Worker Productivity"
- \* Ridley, Rao, Schilbach and Patel (2020). "Poverty, Depression and Anxiety: Causal Evidence and Mechanisms" *Science*. December 2020.

De Quidt, Jon, & Haushofer, Johannes. (2016). Depression for economists. National Bureau of Economic Research.

Schilbach, Frank, Heather Schofield, and Sendhil Mullainathan, 2016. "The Psychological Lives of the Poor." *The American Economic Review: Papers and Proceedings*.

Schofield, Heather, (2014). "The Economic Cost of Low Caloric Intake: Evidence from India."

### Gender - I (2/25)

\*Duflo, E., 2012. "Women's empowerment and economic development". *Journal of Economic Literature*, 50(4), pp.1051-79.

\*Jakiela, P. and Ozier, O., 2018. "Gendered language" (No. 8464). The World Bank.

\*Jayachandran, S., 2020. "Social norms as a barrier to women's employment in developing countries" (No. w27449). National Bureau of Economic Research.

\*Jensen, R. and Oster, E., 2009. "The power of TV: Cable television and women's status in India." *The Quarterly Journal of Economics*, 124(3), pp.1057-1094.

Alesina, A., Giuliano, P. and Nunn, N., 2013. "On the origins of gender roles: Women and the plough." *The Quarterly Journal of Economics*, 128(2), pp.469-530.

Beaman, L., Chattopadhyay, R., Duflo, E., Pande, R. and Topalova, P., 2009. "Powerful women: does exposure reduce bias?". *The Quarterly journal of economics*, 124(4), pp.1497-1540.

Dhar, D., Jain, T. and Jayachandran, S., 2018. "Reshaping Adolescents' Gender Attitudes: Evidence from a School-Based Experiment in India." NBER Working Paper

Duflo, E., 2003. "Grandmothers and granddaughters: old-age pensions and intrahousehold allocation in South Africa." *The World Bank Economic Review*, 17(1), pp.1-25.

Falk, A. and Hermle, J., 2018. "Relationship of gender differences in preferences to economic development and gender equality." *Science*, *362*(6412).

Gneezy, Uri, Kenneth L. Leonard and John A. List. 2009. "Gender Differences in Competition: Evidence from a Matrilineal and a Patrilineal Society," Econometrica, 77(5), 1637–166

### **Gender - II (3/4)**

\*Babcock, Linda, Maria P. Recalde, Lise Vesterlund, and Laurie Weingart. "Gender differences in accepting and receiving requests for tasks with low promotability." *American Economic Review* 107, no. 3 (2017): 714-47.

\* Bertrand, Marianne, Emir Kamenica, and Jessica Pan. 2015. "Gender Identity and Relative Income within Households." *Quarterly Journal of Economics* 130(2): 571-614.

\*Burzstyn, Leo, Gonzalez, Alessandra and David Yanagizawa-Drott. 2018. "Misperceived Social Norms: Female Labor Force Participation in Saudi Arabia". Working Paper.

Coffman, K.B., 2014. "Evidence on self-stereotyping and the contribution of ideas." *The Quarterly Journal of Economics*, 129(4), pp.1625-1660.

Lowes, S., 2020. "Matrilineal kinship and spousal cooperation: Evidence from the matrilineal belt." Working Paper

McKelway, M. (2020). "Women's Employment in India: Intra-Household and Intra-Personal Constraints." Working Paper.

# **Identity (3/11)**

\* Arthur Blouin and Sharun Mukand, "Erasing Ethnicity? Propaganda, Nation Building and Identity in Rwanda", Journal of Political Economy 127 (3) (2019)

\*Oh, Suanna, working paper. "Does Identity Affect Labor Supply?"

Akerlof, George and Rachel E. Kranton. 2000. "Economics and Identity." *Quarterly Journal of Economics* 115(3): 715-753.

Cassan, Guilhem. "Identity-based policies and identity manipulation: Evidence from colonial Punjab." *American Economic Journal: Economic Policy* 7.4 (2015): 103-131.

Hoff, Karla, Mayuresh Kshetramade, and Ernst Fehr. 2011. "Caste and Punishment: The Legacy of Caste Culture in Norm Enforcement," Economic Journal, 121 (556): F449–F475

Hoff, K. and Pandey, P., 2014. "Making up people—the effect of identity on performance in a modernizing society." *Journal of Development Economics*, 106, pp.118-131.

Mukherjee, Priya. 2015. "Social Identity and Aspirations: A Field Experiment in Rural India." Working Paper

Social Preferencees – Background Theory and Reading (3/24, 3/31)

Banerjee, Abhijit. 1990. "Envy." in *Economic Theory and Policy: Essays in Honour of Professor Dipak Banerjee*, Bhaskar, Dutta (ed.), Bombay and New York: Oxford University Press.

Bernheim, Douglas. 1994. "A Theory of Conformity." Journal of Political Economy 102(5): 841-877.

Charness, G. and Rabin, M., 2002. Understanding social preferences with simple tests. *Quarterly journal of Economics*, pp.817-869.

Levitt, S.D. and List, J.A., 2007. What do laboratory experiments measuring social preferences reveal about the real world?. *The journal of economic perspectives*, pp.153-174.

Imas, Alex and Uri Gneezy. 2015. Lab in the Field: Measuring Preferences in the Wild. (Prepared for the forthcoming Handbook of Field Experiments in Economics)

### Social Preferences I – Social Image, Norms and Pressure (3/18)

\*Breza, E., Kaur, S. and Krishnaswamy, N., 2019. "Propping Up the Wage Floor: Collective Labor Supply Without Unions" (No. w25880). National Bureau of Economic Research.

\*Burzstyn, Leo and Rob Jensen. 2015. "How Does Peer Pressure Affect Educational Investments?" *Quarterly Journal of Economics* 130(3): 1329-1367.

\*Bursztyn, L., Ferman, B., Fiorin, S., Kanz, M., Rao, G. "Status Goods: Experimental Evidence from Platinum Credit Cards." *Quarterly Journal of Economics*, 2018.

Della Vigna, Stefano, John A. List, Ulrike Malmendier, and Gautam Rao. "Voting to tell others". *Review of Economic Studies*, January 2017.

Della Vigna, Stefano, John A. List, and Ulrike Malmendier. "Testing for altruism and social pressure in charitable giving." *The Quarterly Journal of Economics* (2012).

You can skip the "structural estimation" part

Perez-Truglia, R. and Cruces, G., 2017. Partisan interactions: Evidence from a Field Experiment in the United States. *Journal of Political Economy*.

### Social Preferences – II – Altruism, Fairness, Envy, Reciprocity (3/25)

\*Rao, G., 2019. Familiarity does not breed contempt: Diversity, discrimination and generosity in Delhi schools. *American Economic Review*.

\* Hjort, J., 2014. Ethnic Divisions and Production in Firms. *The Quarterly Journal of Economics*, 129(4), pp.1899-1946.

\* Breza, E., Kaur, S. and Shamdasani, Y., 2017. "The Morale Effects of Pay Inequality". *The Quarterly Journal of Economics* 

Finan, F. and Schechter, L., 2012. Vote-Buying and Reciprocity. *Econometrica*, 80(2), pp.863-881.

### Preferences and Cultural Variation (4/1)

\* Kremer, Michael, Rao, Gautam and Schilbach, Frank. 2019. Behavioral Development Economics. Sec 9.

\* Falk, Armin, Anke Becker, Thomas J. Dohmen, Benjamin Enke, and David Huffman. 2018. "Global Evidence of Economic Preferences." *Quarterly Journal of Economics*.

Alesina, A., Giuliano, P. and Nunn, N., 2013. On the origins of gender roles: Women and the plough. *The Quarterly Journal of Economics*, 128(2), pp.469-530.

Becker, A., Enke, B. and Falk, A., 2020, May. Ancient origins of the global variation in economic preferences. *In AEA Papers and Proceedings* (Vol. 110, pp. 319-23).

Enke, Benjamin. 2019. "Kinship, Cooperation and the Evolution of Moral Systems". *The Quarterly Journal of Economics* 

Schulz, J.F., Bahrami-Rad, D., Beauchamp, J.P. and Henrich, J., 2019. The Church, intensive kinship, and global psychological variation. Science, 366(6466).