14.160: Behavioral Economics Syllabus – Fall 2020 Tuesdays 4 pm to 7 pm

Zoom Meeting Room (https://mit.zoom.us/j/96930602272)

Instructors:

Frank Schilbach, E52-560 Email: fschilb@mit.edu

Office hours: Sign up at http://economics.mit.edu/faculty/fschilb/office

Dmitry Taubinsky

Email: dmitry.taubinsky@berkeley.edu

Office hours: Sign up at https://taubinsky_oh.youcanbook.me/

Graduate Teaching Assistant:

Pierre-Luc Vautrey

Email: vautrey@mit.edu

Recitation: Fridays 11 am to noon EST

Office hours: Thursdays 11 am to noon EST, by appointment on Canvas at least 12 hours in

advance

Zoom Details for Lectures, Recitations and Pierre-Luc's Office Hours:

Zoom room for all meetings: https://mit.zoom.us/j/96930602272

Course overview:

This class covers recent topics in behavioral economics, with an emphasis on applications to other fields of economics. Topics include deviations from the standard neoclassical model in terms of (i) preferences (time and risk preferences, reference dependence, and social preferences), (ii) beliefs and learning (overconfidence, projection bias, and attribution bias), and (iii) decision-making (cognition, attention, framing, and persuasion), as well as (iv) market reactions to such deviations. Applications will cover a wide range of fields, including labor and public economics, industrial organization, health economics, finance, and development economics.

The main course objectives are as follows:

- 1) Obtain exposure to the frontier of theoretical and empirical research in behavioral economics
- 2) Learn how to critically assess a rapidly evolving literature and how to develop novel ideas that contribute to it
- 3) Learn how to test (behavioral) economic theory using field experiments and nonexperimental data
- 4) Develop and present a research proposal, as well as give feedback to others

The course is designed for first- and second-year **PhD students in economics**. It is meant to help launch students into conducting research in behavioral economics, or to incorporate behavioral economics into their research in other fields. It is complementary to 14.137 (Psychology and

Economics) taught by Prof. Drazen Prelec. 14.137 focuses on the underlying psychology of many of the topics discussed in 14.160, and it covers recent advances in neuroeconomics. PhD students in the economics department may combine 14.137 and 14.160 as a minor.

We particularly welcome and encourage students working in applied fields such as labor, public, development, IO, health, etc. to take this class if they are interested in incorporating ideas and tools from behavioral economics into their research. However, we believe that the class is also well suited for theory-oriented students who are interested in learning about the wonders of applied behavioral economics.

Prerequisites for this class are 14.121 and 14.122, though MIT graduate students should be able to and are in fact encouraged to take this course in their first year. If you have not taken these courses and are *not* an MIT economics PhD student, please contact the instructors regarding your participation in this course (and/or come to the first class to see whether the class is appropriate for you).

We encourage students to attend Matthew Rabin's excellent (theory-oriented) <u>PhD course at Harvard (offered in the spring)</u>, which is for the most part complementary to 14.160. Students are also strongly encouraged to attend the MIT Behavioral Lunch on Thursdays and the <u>Harvard Behavioral and Experimental Economics Workshop</u>.

Course requirements and grading:

Grades will be determined based on (i) weekly short memos discussing starred readings (20%), (ii) problem sets (30%), (iii) written research proposal (20%), (iv) presentation of research proposal (15%), and (v) feedback on two other students' research proposals (15%). There will be no exams.

(i) Required Readings (20%)

The evening before each class (8 pm on Mondays), students are required to submit a short summary at most 1 page) of the required readings for that day (marked with ***). Other important papers are marked with one star (*). No written responses are required for those papers. Late submissions will not be accepted. No such summary is required in the first week of class. The summaries should cover the following: (i) Why is the paper important (or why not)? (ii) An overview of the core contributions of the paper. (iii) What you liked – or did not like – about the paper. (iv) Any questions you have about the paper (optional). (v) Any additional ideas that you might want to pursue on this topic (optional).

The summaries should cover the following: (i) Why is the paper important (or why not)? (ii) An overview of the core contributions of the paper (iii) Any questions you have about the paper (optional). (iv) Any additional ideas that you might want to pursue on this topic (optional).

(ii) Problem Sets (30%)

There will be up to four (bi-weekly) problems sets. The problem sets are designed, in part, to help you flex your research muscles.

(iii) Written Research Proposal (20%)

Students will write a short research proposal on a topic related to the themes of the class. By then, and ideally earlier, you must have met one of the instructors in office hours to discuss your idea for the research proposal. We can help you choose between ideas if necessary.

(iv) Presentation (15%)

During the last lecture date (or possibly during the past two lectures dates, depending on how large the class is), students will present their proposal on Zoom for about 20 minutes each. We will grade both the quality of the presentation and the content of the proposal.

(v) Feedback on Other Students' Research Proposals (15%):

You will write 1-2 page written feedback to the proposal and presentation of two different students. Please write 1-2 pages of feedback to the proposal/ presentation, with focus on suggestions for improvements. Please also include brief summary what you found would be the main contributions of the project, as well as the proposals' limitations. Please note that the substance of comments will be more important than the length. For proposal and presentation, please make brief comments on how they could have written/presented more effectively. Your feedback to the proposal and presentation will each count for 7.5% of the grade.

Timeline:

- (1) Talk to either Dmitry or Frank at least once about your proposal before spring break.
- (2) Submit your proposal by November 3rd
- (3) Submit your feedback responses by November 17th
- (4) Present on December 1st or 8th

Collapsed (tentative) course outline:

Date	#	Who	Topic
		teaches?	•
09/01	1	Frank	Intro + Default Effects
09/08	2	Frank	Time Preferences I
09/15	3	Frank	Time Preferences II
09/22	4	Dmitry	Risk Preferences
09/29	5	Dmitry	Heuristics
10/06	6	Frank	Social Preferences
10/13			NO CLASS
10/20	7	Frank	Gender & Mental Health
10/27	8	Dmitry	Attention
11/3	9	Dmitry	Behavioral Public
11/10	10	Dmitry	Behavioral Public
11/17	11	Dmitry	Behavioral IO
11/24			NO CLASS (Thanksgiving)
12/01	12		Presentations (or TBD)
12/08	13		Presentations (or TBD)

COURSE READINGS

Below is a tentative reading list for this course. We will almost certainly make some changes to this list, but they broad structure and the majority of papers will remain fairly similar to the below list.

There is no textbook for the course. Starred readings (***) are required, and you are required to read these papers <u>before</u> class and submit a brief write-up on each starred reading as described above.

General readings:

Overview articles

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

Rabin, Matthew. 1998. "Psychology and Economics." *Journal of Economic Literature* 36(1): 11-46.

Rabin, Matthew. 2002. "A Perspective on Psychology and Economics." *European Economic Review* 46 (2002): 657-685.

Rabin, Matthew. 2013. "Incorporating Limited Rationality into Economics." *Journal of Economic Literature* 51(2): 528-543.

Mullainathan, Sendhil and Richard H. Thaler. 2000. "Behavioral Economics." *National Bureau of Economic Research* Working Paper 7948.

Thaler, R.H., 2016. Behavioral economics: Past, present, and future. *American Economic Review*, 106(7), pp.1577-1600.

Books (not compulsory)

Kahneman, Daniel, Paul Slovic, and Amos Tversky (eds.). 1982. *Judgment Under Uncertainty: Heuristics and Biases*, Cambridge University Press.

Kahneman, Daniel and Amos Tversky (eds.). 2000. *Choices, Values and Frames*, New York: Russell Sage Foundation: Cambridge University Press.

Ross, Lee and Richard E. Nisbett. 1991. *The Person and the Situation: Perspectives of Social Psychology*, Philadelphia: Temple University Press.

Cialdini, Robert B. 1993. *Influence, the Psychology of Persuasion*, New York: William Morrow Publishing Co.

Kahneman, Daniel. 2011. Thinking, Fast and Slow, New York: Farrar, Straus and Giroux.

Bazerman, Max and Don Moore. 2012. *Judgment in Managerial Decision Making* (8th Edition), John Wiley & Sons.

Lecture 1: Introduction and Default Effects

(No write-ups due on starred readings this week)

*** Rabin, Matthew. 2002. "A Perspective on Psychology and Economics." *European Economic Review* 46 (2002): 657-685.

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

Madrian, Brigitte C., and Dennis F. Shea. 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." *Quarterly Journal of Economics* 116(4): 1149-1187.

Carroll, Gabriel D., James J. Choi, David Laibson, Brigitte C. Madrian, and Andrew Metrick. 2009. "Optimal Defaults and Active Decisions." *Quarterly Journal of Economics* 124(4): 1639-1674.

Chetty, Raj, John N. Friedman, Soren Leth-Petersen, Torben Heien Nielsen, and Tore Olsen. 2014. "Active vs. Passive Decisions and Crowd-Out in Retirement Savings Accounts." *Quarterly Journal of Economics* 129(3): 1141-1219.

Thaler, Richard H. and Shlomo Benartzi. 2004. "Save More TomorrowTM: Using Behavioral Economics to Increase Employee Saving." *Journal of Political Economy* 112(S1): S164-187.

Brown, Jeffrey and Alessandro Previtero. 2014. "Procrastination, Present-Biased Preferences, and Financial Behaviors." Mimeo.

Handel, Benjamin R. 2013. "Adverse Selection and Inertia in Health Insurance Markets: When Nudging Hurts." *American Economic Review*, 103(7): 2643-2682.

***Blumenstock, Joshua, Michael Callen, and Tarek Ghani. 2018. "Why Do Defaults Affect Behavior? Experiment Evidence from Afghanistan." *American Economic Review*, 108(10): 2868-2901.

Meredith Fowlie, Catherine Wolfram, C. Anna Spurlock, Annika Todd, Patrick Baylis, Peter Cappers. 2017. "Default Effects and Follow-On Behavior: Evidence from an Electricity Pricing Program". *National Bureau of Economic Research* Working Paper 23553.

Lecture 2: Time preferences I: Theory and Measurement

Recitation:

Laibson, David. 1997. "Golden Eggs and Hyperbolic Discounting." *Quarterly Journal of Economics* 112(2): 443-478.

O'Donoghue, Ted and Matthew Rabin. 1999. "Doing It Now or Later." *American Economic Review* 89(1): 103-124.

O'Donoghue, Ted and Matthew Rabin. 2001. "Choice and Procrastination." *Quarterly Journal of Economics* 116(1): 121-160.

Lecture:

Andreoni, James, Michael A. Kuhn, and Charles Sprenger. 2015. "Measuring Time Preferences: A Comparison of Experimental Methods." *Journal of Economic Behavior and Organization* 116: 451-464.

Cohen, J., Ericson, K.M., Laibson, D. and White, J.M., 2020. Measuring time preferences. *Journal of Economic Literature*, 58(2), pp.299-347.

Frederick, Shane, George Loewenstein, and Ted O'Donoghue. 2002. "Time Discounting and Time Preference: A Critical Review." *Journal of Economic Literature* 40(2): 351-401.

Akerlof, George A. 1991. "Procrastination and Obedience." *American Economic Review, Papers and Proceedings* 81(2): 1-19.

Ariely, Dan and Klaus Wertenbroch. 2002. "Procrastination, Deadlines, and Performance: Self-Control by Precommitment." *Psychological Science* 13(3): 219-224.

Ashraf, Nava, Dean Karlan, and Wesley Yin. 2006. "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines." *Quarterly Journal of Economics* 121(2): 635-672.

Kaur, Supreet, Michael Kremer, and Sendhil Mullainathan. 2015. "Self-Control at Work." *Journal of Political Economy* 123(6): 1227-1277.

Andreoni, James and Charles Sprenger. 2012. "Estimating Time Preferences from Convex Budgets." *American Economic Review* 102(7): 3333-3356.

***Augenblick, Ned, Muriel Niederle, and Charles Sprenger. 2015. "Working over Time: Dynamic Inconsistency in Real Effort Tasks." *Quarterly Journal of Economics* 130(3): 1067-1115.

Della Vigna, Stefano and Ulrike Malmendier. 2006. "Paying Not To Go To the Gym." *American Economic Review* 96(3): 694-719.

Della Vigna, Stefano and Ulrike Malmendier. 2004. "Contract Design and Self-Control: Theory and Evidence." *Quarterly Journal of Economics* 119(2): 353-402.

Eliaz, Kfir and Ran Spiegler. 2006. "Contracting with Diversely Naïve Agents." *Review of Economic Studies* 73(3): 689-714.

Ericson, K.M. and Laibson, D., 2019. Intertemporal choice. In *Handbook of Behavioral Economics: Applications and Foundations 1* (Vol. 2, pp. 1-67). North-Holland.

Gruber, Jonathan, and Botond Koszegi. 2001. "Is Addiction 'Rational'? Theory and Evidence." *Quarterly Journal of Economics* 116(4): 1261-1303.

Milkman, Katherine L., Julia A. Minson, and Kevin G.M. Volpp. 2014. "Holding the Hunger Games Hostage at the Gym: An Evaluation of Temptation Bundling." *Management Science* 60(2): 283-299.

Amador, Manuel, Ivan Werning, and George-Marios Angeletos. 2006. "Commitment vs. Flexibility." *Econometrica* 74(2): 365-396.

Lectures 3: Time Preferences II: Applications and Open Research Questions

Recitation:

Fudenberg, Drew, and David K. Levine. 2006. "A Dual-Self Model of Impulse Control." *American Economic Review* 96 (5): 1449–76.

*Gul, Faruk and Wolfgang Pesendorfer. 2001. "Temptation and Self-Control." *Econometrica* 69(6): 1403-1435.

*Toussaert, S., 2018. Eliciting Temptation and Self-Control Through Menu Choices: A Lab Experiment. *Econometrica*, 86(3), pp.859-889.

Lecture:

Time Preferences:

Augenblick, N. and Rabin, M., 2019. An experiment on time preference and misprediction in unpleasant tasks. *Review of Economic Studies*, 86(3), pp.941-975.

Bai, Liang, Benjamin Handel, Edward Miguel and Gautam Rao. 2017. "Self-Control and Preventive Health: Evidence from Hypertension in India." Mimeo.

Beshears, J., Choi, J.J., Laibson, D., Madrian, B.C. and Skimmyhorn, W.L., 2019. *Borrowing to save? The impact of automatic enrollment on debt* (No. w25876). National Bureau of Economic Research.

*Ericson KM, Laibson D. Intertemporal Choice. In: Bernheim D, Laibson D, DellaVigna S, Handbook of Behavioral Economics - Foundations and Applications 2. Elsevier; 2019

Meier, Stephan and Charles Sprenger. 2015. "Temporal Stability of Time Preferences." *Review of Economics and Statistics* 97(2): 273-286.

Laibson, David. 2015. "Why Don't Present-Biased Agents Make Commitments?" *American Economic Review*, 105(5): 267-272.

***Schilbach, Frank. 2019 "Alcohol and Self-Control: A Field Experiment in India." *American Economic Review*, 109(4): 1290-1322

Sadoff, S., Samek, A. and Sprenger, C., 2019. Dynamic Inconsistency in Food Choice: Experimental Evidence from Two Food Deserts. *The Review of Economic Studies*.

Beshears, John, James Choi, Christopher Clayton, Christopher Harris, David Laibson, and Brigitte Madrian. 2019. "Optimal Illiquidity." Mimeo.

Hershfield, Hal. 2011. "Future Self-continuity: How Conceptions of the Future Self Transform Intertemporal Choice." *Annals of the New York Academy of Sciences* 1234: 30-43.

Andreoni, J., Callen, M., Khan, Y., Jaffar, K. and Sprenger, C., 2016. "Using preference estimates to customize incentives: An application to polio vaccination drives in Pakistan." *National Bureau of Economic Research* Working Paper 22019.

Lecture 4: Risk Preferences

***Kahneman, D. and A. Tversky. 1979. "Prospect Theory: An Analysis of Decision Under Risk," *Econometrica*

*Kahneman, D., J. Knetsch, and R. Thaler. 1992. "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias," *Journal of Economic Perspectives*.

*Koszegi, B. and M. Rabin. 2006. "A Model of Reference-Dependent Preferences," *Quarterly Journal of Economics*.

*Rabin, M. 2000. "Risk Aversion and Expected-Utility Theory: A Calibration Theorem," *Econometrica*.

Koszegi, B. and M. Rabin. 2007. "Reference-Dependent Risk Attitudes," *American Economic Review*.

Benartzi, S. and R. Thaler. 1995. "Myopic Loss Aversion and the Equity Premium Puzzle," *Quarterly Journal of Economics*.

Genesove, D. and C. Mayer. 2001. "Loss Aversion and Seller Behavior: Evidence from the Housing Market," *Quarterly Journal of Economics*.

Camerer, C., L. Babcock, G. Loewenstein, and R. Thaler. 1997. "Labor Supply of New York City Cabdrivers: One Day at a Time," *Quarterly Journal of Economics*, 112:2, 407-441.

List, J. 2003. "Does Market Experience Eliminate Market Anomalies?" *Quarterly Journal of Economics*, 118:1, 41-71.

Koszegi, B. and M. Rabin. 2009. "Reference-Dependent Consumption Plans," *American Economic Review*, 99:3, 909-936.

Koszegi, B. 2010. "Utility from Anticipation and Personal Equilibrium," *Economic Theory*.

Chetty, R. 2006. "A New Method of Estimating Risk Aversion." *American Economic Review*, 96:1821-1834.

Prelec, D. 1998. "The Probability Weighting Function." *Econometrica*, 66:497-527.

Plott, CR and K. Zeiler. 2005. "The Willingness to Pay – Willingness to Accept Gap, the "Endowment Effect", Subject Misconceptions, and Experimental Procedures for Eliciting Valuations." *American Economic Review*, 95:530-545.

Plott, CR and K. Zeiler. 2007. "Exchange Asymmetries Incorrectly Interpreted as Evidence of Endowment Effect Theory and Prospect Theory." *American Economic Review*, 97(4):1449-1466.

DellaVigna, S., A. Lindner, B. Reizer, and J. F. Schmieder. 2015. "Reference-Dependent Job Search: Evidence from Hungary."

Pagel, M. 2018. "A News-Utility Theory of Inattention and Delegation in Portfolio Chice." *Econometrica*, 86(2): 491-522.

Pagel, M. 2017. "Expectations-Based Reference-Dependent Life-Cycle Consumption." *Review of Economic Studies*, 84:885-934.

Pagel, M. 2015. "Expectations-Based Reference-Dependent Preferences and Asset Pricing." *Journal of the European Economic Association*, 99(3):909-936.

Lecture 5: Heuristic Thinking

***Rabin, M. and G. Weizsacker. 2009. "Narrow Bracketing and Dominated Choices." *American Economic Review*, 99(4):1508-1543.

*Kahneman, D. and A. Tversky. 1974. "Judgment Under Uncertainty: Heuristics and Biases," *Science*, 185(4157):1124-1131.

*Thaler, R. 1999. "Mental Accounting Matters," *Journal of Economic Decision Making*, 12:183-206.

*Rees-Jones, A. and D. Taubinsky. 2020. "Measuring 'Schmeduling'" *Review of Economic Studies*, 87(5):2399-2438.

Liebman, J. and R. Zeckhauser. 2004. "Schmeduling"

Ariely, D., G. Loewenstein, and D. Prelec. 2003. "Coherent Arbitrariness: Stable Demand Curves Without Stable Preferences," *Quarterly Journal of Economics*, 118(1):73-106.

Read, D., G. Loewenstein, and M. Rabin. 1999. "Choice Bracketing," *Journal of Risk and Uncertainty*, 19:1-3:171-197.

Tversky, A., and I. Simonson. 1993. "Context-Dependent Preferences," *Management Science*, 39(10):1179-1189.

Iyengar, S. and M. Lepper. 2000. "When Choice Is Demotivating: Can One Desire Too Much of a Good Thing?" *Journal of Personality and Social Psychology*, 79(6):995-1006.

Kamenica, E. 2008. "Contextual Inference in Markets: On the Informational Content of Product Lines." *American Economic Review*, 98(5):2127-2149.

Ito, K. 2014. "Do Consumers Respond to Marginal and Average Price? Evidence from Nonlinear Electricity Pricing." *American Economic Review*, 104(2):537-563.

Lecture 6: Social Preferences

Lowe, M., 2020. "Types of contact: A field experiment on collaborative and adversarial caste integration." Working Paper.

*** Rao, G., 2019. Familiarity does not breed contempt: Generosity, discrimination, and diversity in Delhi schools. *American Economic Review*, 109(3), pp.774-809.

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

Levy Palluck, Elizabeth and Seth Green and Donald Green, 2018. "The Contact Hypothesis Re-Evaluated," *Behavioral Public Policy*, 3:2, 129-158.

*Bursztyn, Leonardo and Robert Jensen. 2015. "How Does Peer Pressure Affect Educational Investments?" *Quarterly Journal of Economics*, 130(3): 1329-1367.

*Bursztyn, L., Egorov, G. and Jensen, R., 2019. Cool to be smart or smart to be cool? Understanding peer pressure in education. *The Review of Economic Studies*, 86(4), pp.1487-1526.

Austen-Smith, David and Roland G. Fryer, Jr. 2005. "An Economic Analysis of 'Acting-White'," *Quarterly Journal of Economics*, 120(2): 551-583.

Fryer Jr., Roland G. and Paul Torelli. 2010. "An Empirical Analysis of 'Acting White'," *Journal of Public Economics*, 94(5-6): 380-396.

*Bursztyn, Leonardo, Georgy Egorov, and Stefano Fiorin. 2019. "From Extreme to Mainstream: The Erosion of Social Norms," Working Paper.

Bursztyn, Leonardo, Alessandra González, and David Yanagizawa-Drott. 2018. "Misperceived Social Norms: Female Labor Force Participation in Saudi Arabia," *National Bureau of Economic Research* Working Paper 24736.

Bursztyn, Leonardo and Robert Jensen. Forthcoming, 2017. "Social Image and Economic Behavior in the Field: Identifying, Understanding, and Shaping Social Pressure," *Annual Review of Economics*.

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

Della Vigna, Stefano, John A. List, and Ulrike Malmendier. 2012. "Testing for Altruism and Social Pressure in Charitable Giving." *Quarterly Journal of Economics* 127(1): 1-56.

*DellaVigna, Stefano, John A. List, Ulrike Malmendier, and Gautam Rao. 2017. "Voting to Tell Others." *Review of Economic Studies* 84(1): 143-181.

Dubé, Jean-Pierre, Xueming Luo, Zheng Fang. 2015. "Self-Signaling and Prosocial Behavior: a Cause Marketing Mobile Field Experiment" *National Bureau of Economic Research*. Working Paper 21475.

Perez-Truglia, R. and Cruces, G. 2017. "Partisan Interactions: Evidence from a Field Experiment in the United States." *Journal of Political Economy* 125(4): 1208-1243.

Lecture 7: Gender and Mental Health

***Bursztyn, Leonardo, Thomas Fujiwara, and Amanda Pallais. 2017. "'Acting Wife': Marriage Market Incentives and Labor Market Investments," *American Economic Review*, 107(11): 3288-3319.

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

Jensen, Robert and Emily Oster. 2009. "The Power of TV: Cable Television and Women's Status in India," *Quarterly Journal of Economics*, 124(3): 1057-1094.

Alesina, Alberto, Paola Giuliano, and Nathan Nunn. 2013. "On the Origins of Gender Roles: Women and the Plough," *Quarterly Journal of Economics*, 128(2): 469-530.

Babcock, Linda, Maria P. Recalde, Lise Vesterlund, and Laurie Weingart. 2017. "Gender Differences in Accepting and Receiving Requests for Tasks with Low Promotability." *American Economic Review*, 107(3): 714-47.

Beaman, Lori, Esther Duflo, Rohini Pande, and Petia Topalova. 2012. "Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India." *Science* 335 (February): 582-586.

Niederle, Muriel and Lise Vesterlund. 2007. "Do Women Shy Away From Competition? Do Men Compete Too Much?" *Quarterly Journal of Economics* 122(3): 1067-1101.

Bursztyn, Leonardo, and Robert Jensen. 2017. "Social Image and Economic Behavior in the Field: Identifying, Understanding and Shaping Social Pressure." *Annual Review of Economics*, 9:131-153.

*Gotlib, I.H. and Joormann, J. 2010. Cognition and depression: current status and future directions. *Annual Review of Clinical Psychology*, 6:285-312.

Biasi, Barbara and Dahl, Michael Slavensky and Moser, Petra. 2019. "Career Effects of Mental Health"

Kahneman, D. and Deaton, A., 2010. High income improves evaluation of life but not emotional well-being. *Proceedings of the national academy of sciences*, 107(38):16489-16493.

Epley, N., & Schroeder, J. 2014. "Mistakenly seeking solitude." *Journal of experimental psychology. General*, 143(5):1980-99.

Kumar, A., & Epley, N. 2018. Undervaluing Gratitude: Expressers Misunderstand the Consequences of Showing Appreciation. *Psychological Science*, 29(9), 1423–1435.

Bessone, P., Rao, G., Schilbach, F., Schofield, H. and Toma, M., 2020. "The Economic Consequences of Increasing Sleep Among the Urban Poor". *National Bureau of Economic Research* Working Paper 26746.

Ridley, M., Rao, G., Vikram, P. and Schilbach, F., 2019. "Poverty and Mental Illness: Causal Evidence." Mimeo.

De Quidt, J. and Haushofer, J. 2016. "Depression for economists." *National Bureau of Economic Research* Working Paper 22973.

Lecture 8: Limited attention, salience, and focusing

***Gabaix, X. 2017. "Behavioral Inattention," *Handbook of Behavioral Economics*, Vol 1, edited by Berhneim, DellaVigna, Laibson.

*Koszegi, B. and A. Szeidl. 2013. "A Model of Focusing in Economic Choice," Quarterly

Journal of Economics, 128(1):53-104.

Bordalo, P., N. Gennaioli, and A. Shleifer. 2014. "Salience and Consumer Choice," *Journal of Political Economy*, 121(5).

Bushong, B., M. Rabin, and J. Schwartzstein. 2015. "A Model of Relative Thinking."

Morrison and Taubinsky. 2019 "Rules of Thumb and Attention Elasticities: Evidence from Under- and Overreaction to Taxes." *National Bureau of Economic Research* Working Paper 26180.

Sims, C. 2003. "Implications of Rational Inattention," Caplin, Andrew, and Mark Dean. "Revealed Preference, Rational Inattention, and Costly Information Acquisition." *Journal of Monetary Economics*, 50(3):665-690.

Gabaix, X. 2014. "A Sparsity-Based Model of Bounded Rationality," *Quarterly Journal of Economics*, 129(4):1661-1710.

Hanna, R., S. Mullainathan, and J. Schwartzstein. 2014. "Learning Through Noticing: Theory and Experimental Evidence in Farming," *Quarterly Journal of Economics*, 129(3):1311-1353.

Bordalo, P., N. Gennaioli, and A. Shleifer. 2012. "Salience Theory of Choice Under Risk," *Quarterly Journal of Economics*, 127(3):1243-1285.

Mani, Anandi, Mullainathan, Sendhil, Shafir, Eldar, and Jiaying Zhao. 2009 "Poverty Impedes Cognitive Function." *Science*, 341(6149):976-980.

Lectures 9 and 10: Behavioral Public Economics

***Allcott, H., and D. Taubinsky. 2015. "Evaluating Behaviorally-Motivated Policy: Experimental Evidence From the Lightbulb Market," *American Economic Review*, 105(8):2501-2538.

*** Bernheim, B.D. and D. Taubinsky. "Behavioral Public Economics." Handbook of Behavioral Economics, Vol 1, edited by Bernheim, DellaVigna, Laibson. (read sections 1, 3, 5; skim sections 2 and 4)

*Rees-Jones, A. and D. Taubinsky. 2017. "Taxing Humans: Pitfalls of the Mechanism Design Approach and Potential Resolutions." *Tax Policy and the Economy*, 32:107-133.

*Chetty, R., A. Looney, and K. Kroft. 2009. "Salience and Taxation: Theory and Evidence," *American Economic Review*, 99(4):1145-1177.

*Taubinsky, D. and A. Rees-Jones. 2018. "Attention Variation and Welfare: Theory and Evidence from a Tax Salience Experiment," *Review of Economic Studies*, 85(4):2462-2496.

*Allcott, H., B.B. Lockwood and D. Taubinsky. 2019. "Regressive Sin Taxes, with Applications to the Optimal Soda Tax." *Quarterly Journal of Economics*, 134(3):1557-1626.

Bernheim, B.D., A. Fradkin, and I. Popov. 2015. "The Welfare Economics of Default Options in 401(k) Plans." *American Economic Review*, 105(9):2798-2837.

Chetty, R. 2015. "Behavioral Economics and Public Policy: A Pragmatic Perspective" *American Economic Review*, 105(5):1-33.

O'Donoghue, T. and M. Rabin. 2006. "Optimal Sin Taxes," *Journal of Public Economics*, 90(10-11):1825-1849.

Gruber, J. and B. Koszegi. 2004. "Tax Incidence when Individuals are Time-Inconsistent: The Case of Cigarette Excise Taxes," *Journal of Public Economics*, 88(9-10):1959-1987.

Bernheim, D. and A. Rangel. 2009. "Beyond Revealed Preference: Choice-Theoretic Foundations for Behavioral Welfare Economics," *Quarterly Journal of Economics*, 124(1):51-104.

Chetty, R. 2009. "Sufficient Statistics for Welfare Analysis: A Bridge Between Structural and Reduced-Form Methods," *Annual Review of Economics*, 1:451-488.

Ambuehl S., D. Bernheim, and A. Lusardi. 2015. "Financial Education, Financial Competence, and Consumer Welfare," working paper.

Mullainathan, S., J. Schwartzstein, and W. Congdon. 2012. "A Reduced Form Approach to Behavioral Public Finance," *Annual Review of Economics*, 4:511-540.

Allcott, H., S. Mullainathan, and D. Taubinsky. 2014. "Energy Policy with Externalities and Internalities," *Journal of Public Economics*, 112:72-88.

Farhi, E., and X. Gabaix. 2020. "Optimal Taxation with Behavioral Agents." *American Economic Review*, 110(1):298-336.

Goldin, Jacob and Tatiana Homonoff. 2013. "Smoke Gets in Your Eyes: Cigarette Tax Salience and Regressivity." *American Economic Journal: Economic Policy*, 5(1):302-336.

Hoopes, Jeffrey, and Daniel Reck and Joel Slemrod. 2015. "Taxpayer search for information: Implications for rational inattention," *American Economic Journal: Economic Policy*, 7(3):177-208.

Goldin, Jacob and Daniel Reck. 2014. "Preference identification under inconsistent choice," *Journal of Political Economy*.

Handel, B., J. T. Kolstad, and J. Spinnewijn. 2015. "Information Frictions and Adverse Selection: Policy Interventions in Health Insurance Markets." *National Bureau of Economic Research* Working Paper 21759.

Baicker, K., S. Mullainathan, and J. Schwartzstein. 2015. "Behavioral Hazard in Health Insurance," *Quarterly Journal of Economics*, 130(4):1623-1667.

Chetty, R. 2012. "Bounds on Elasticities with Optimization Frictions: A Synthesis of Micro and Macro Evidence on Labor Supply," *Econometrica*, 80(3):969-1018.

Allcott, H., C. Knittel, and D. Taubinsky. 2015. "Tagging and Targeting of Energy-Efficiency Subsides," *American Economic Review*, 105(5):187-191.

Lecture 11: Behavioral IO and Mechanism Design

***Gabaix, X. and D. Laibson. 2006. "Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets," *Quarterly Journal of Economics*, 121(2):505-540.

*Heidhues P. and B. Koszegi. "Behavioral Industrial Organization." Handbook of Behavioral Economics, Vol 1, edited by Berhneim, DellaVigna, Laibson.

*DellaVigna, S. and U. Malmendier. 2004. "Contract Design and Self-Control: Theory and Evidence," *Quarterly Journal of Economics*, 119(2):353-402.

*Heidhues, P., B. Koszegi, Murooka T. 2014. "Inferior Products and Profitable Deception," *Review of Economic Studies*, 84:323-356.

*DellaVigna, S. and U. Malmendier. 2006. "Paying not to go to the Gym," *American Economic Review*, 96(3):694-719.

Bordalo, P., N. Gennaioli, and A. Shleifer. 2015. "Competition for Attention," *Review of Economic Studies*, 83(2):481-513.

Heidhues, P. and B. Koszegi. 2010. "Exploiting Naivete about Self-Control in the Credit Market." *American Economic Review*, 100(5):2279-2303.

Mullainathan, S. and A. Shleifer. 2005. "The Market for News," *American Economic Review*, 95(4):1031-1053.

Heidhues, P., B. Koszegi, Murooka T. 2014. "Exploitative Innovation," *American Economic Journal: Microeconomics*, 8(1):1-23.

Heidhues, P. and B. Koszegi. 2017. "Naivete Based Discrimination," *Quarterly Journal of Economics*, 132(2):1019-1054.

Eliaz and Spiegler. 2006. "Contracting with Diversely Naïve Agents," *Review of Economic Studies*, 73(3):689-714.

Eliaz and Spiegler. 2008. "Consumer Optimism and Price Discrimination," *Theoretical Economics*, 459-497.

Amador, Werning, Angeletos. 2006. "Commitment vs. Flexibility," *Econometrica*, 74(2):365-396.

Beshears, Choi, Clayton, Harris, Laibson, Madrian. 2019. "Optimal Illiquidity," working paper.

Lectures 12 to 13: In-Class Presentations of Research Proposals

Other MIT resources

The Department of Economics values an inclusive environment. If you need a disability accommodation to access this course, please communicate with us early in the semester. If you have your accommodation letter, please meet with the faculty so that we can understand your needs and implement your approved accommodations. If you have not yet been approved for accommodations, please contact Student Disability Services at uaap-sds@mit.edu to learn about their procedures. We encourage you to do so early in the term to allow sufficient time for implementation of services/accommodations that you may need.

The WCC at MIT (Writing and Communication Center) offers free one-on-one professional advice from communication experts. The WCC is staffed completely by MIT lecturers. All have advanced degrees. All are experienced college classroom teachers of communication. All are all are published scholars and writers. Not counting the WCC's director's years (he started the WCC in 1982), the WCC lecturers have a combined 133 years' worth of teaching here at MIT (ranging from 4 to 24 years). The WCC works with undergraduate, graduate students, post-docs, faculty, staff, alums, and spouses. The WCC helps you strategize about all types of academic and professional writing as well as about all aspects of oral presentations (including practicing classroom presentations & conference talks as well as designing slides). No matter what department or discipline you are in, the WCC helps you think your way more deeply into your topic, helps you see new implications in your data, research, and ideas. The WCC also helps with all English as Second Language issues, from writing and grammar to pronunciation and conversation practice. The WCC is located in E18-233, 50 Ames Street). To guarantee yourself a time, make an appointment. To register with our online scheduler and to make appointments, go to https://mit.mywconline.com/. To access the WCC's many pages of advice about writing and oral presentations, go to http://cmsw.mit.edu/writing-and-communication-center/. Check the online scheduler for up-to-date hours and available appointments.