

EC 885
Experimental Economics I
Fall 2012
Monday 4:30 – 7:10 pm, Enterprise Hall, room 275 (Fairfax)

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Office Hours: Monday, 1:30-2:45pm, Carrow Hall, or by appointment

Course Objectives: We will survey *some* of the recent literature in Experimental Economics. Research in this area is enormous, and we will not be able to cover everything. The goal of this course is to give you a flavor of some seminal research papers, as well as some of the currently active areas of research. The experimental research project that you develop in this class could become a chapter in your dissertation or the basis for a master's thesis. The background for the course is graduate-level microeconomic theory and game theory.

Texts: There are no required texts for the class, but the following two books are highly recommended.

Kagel, John and Alvin Roth, *The Handbook of Experimental Economics*, Princeton University Press, 1995 (HEE).

Camerer, Colin, *Behavioral Game Theory: Experiments in Strategic Interaction*, Princeton University Press, 2003 (BGT).

In-class Quizzes: Students are expected to read the assigned papers before each meeting and participate in discussion of the research. At the beginning of each class when there is not a student presentation, there will be a short quiz on the assigned readings for the day. Quizzes start Sept 10 and count for 20% of the course grade. I will drop your two worst quiz scores and determine your quiz grade from the remainder.

Project: There will be no exams for the course, but students will be required to submit two written course projects.

PROJECT 1: Write a paper that surveys the literature in one area of interest of any topic concerning experimental economics and suggest tests of unanswered questions. Topics may be different from those covered in the course, but should be approved by Professor Petrie. Maximum length of survey paper is 15 double-spaced pages.

PROJECT 2: Design an experiment and describe it in a paper. The design should include a statement of the research question, motivation for why the research is interesting, predictions/hypotheses based on economic theory, the experimental design (including the task the subjects will complete, a sketch of the protocol, including complete instructions for subjects and directions for experimenters, number of subjects per condition, etc.) and a description of how the data will be analyzed to test the prediction(s). Students are encouraged to work in pairs to design their studies. At the end of the semester, each team of designers must present their experimental idea to the class. Maximum length of the experimental design paper is 15 double-spaced pages (not including supplemental materials, i.e. subject instructions, experimental material that would be used in a field experiment, instructions to experimenters, etc.).

Grading: 20% in-class quizzes, 40% Project 1, 40% Project 2.

Blackboard: Class announcements, schedule of readings, and other important information will be posted on Blackboard.

Academic Integrity: I assume you know George Mason's Honor Code, <http://universitypolicy.gmu.edu>.

Disabilities If you are a student with a disability and you need academic accommodations please see me and contact the Office of Disability Services at (703) 993-2474. All academic accommodations must be arranged through that office. You must contact me within the first week of classes to make arrangements.

Course Outline

This is an outline. There will most likely be changes during the semester as we adjust for time to cover the topics listed below and student interest. Any changes will be announced in class and posted on Blackboard

1. Introduction (1 week)
2. Identifying Individual Preferences (2 weeks)
 - a. Risk
 - b. Time
 - c. Revealed Preference
3. Altruism, Fairness and Trust (2 weeks)
 - a. Bargaining
 - b. Dictator
 - c. Trust
 - d. Models of Fairness
4. Further Evidence on Nonstandard Preferences (2 weeks)
 - a. Altruism and Giving
 - b. Gift Exchange
 - c. Discrimination
5. Social Interactions – Groups (2 weeks)
 - a. Public Goods
 - b. Field experiments
6. Signaling and Reputation (< 1 week)
7. Learning, Bias, Reasoning (< 1 week)
8. Markets (2 weeks)
 - a. Asset Markets
 - b. Auctions
9. Student Presentations (2 weeks)

Reading List

Readings with an asterisk (*) are required. I will announce on Blackboard which additional papers we will cover.

1. Introduction

* Roth, Alvin, "Introduction to Experimental Economics," chpt 1 in HEE.

* Chpt 1 in BGT.

Smith, Vernon, 1982, "Microeconomic Systems as an Experimental Science," *American Economic Review*, 72:5, 923-955.

Smith, Vernon, 1976, "Experimental Economics: Induced Value Theory," *American Economic Review*, 66, 274-279.

2. Identifying Individual Preferences

* Camerer, Colin, "Individual Decision Making," chpt 8 in HEE.

Risk Preferences

Chew, S.H. and W.S. Waller, 1986, "Empirical Tests of Weighted Utility Theory," *Journal of Mathematical Psychology*, 30, 55-72.

Kahneman, D. and A. Tversky, 1979, "Prospect Theory: An Analysis of Decision Under Risk," *Econometrica*, 47:2, 263-291

Halevy, Yoram, 2008, "Strotz Meets Allais: Diminishing Impatience and the Certainty Effect," *American Economic Review*, 98:3, 1145-1162.

Harless, D.W. and Colin Camerer, 1994, "The Predictive Utility of Generalized Expected Utility Theories," *Econometrica*, 62:6, 1251-1289.

Grether, David and Charles Plott, 1979, "Economic Theory of Choice and the Preference Reversal Phenomenon," *American Economic Review*, 69:4, 623-638.

Loomes, Graham and Robert Sugden, 1983, "A Rationale for Preference Reversals," *American Economic Review*, 73:3, 428-432.

Butler, David and Graham Loomes, 2007, "Imprecision as an Account of the Preference Reversal Phenomenon," *American Economic Review*, 97:1, 277-297.

Holt, Charles and Susan Laury, 2002, "Risk Aversion and Incentive Effects," *American Economic Review*, 92:5, 1644-1655.

Binswanger, Hans, 1980, "Attitudes Towards Risk: Experimental Measurement in Rural India," *American Journal of Agricultural Economics*, 62:3, 395-407.

Dohmen, Thomas, Armin Falk, David Huffman, Uwe Sunde, Jurgen Schupp and Gert Wagner, 2011, "Individual Risk Attitudes: Measurement, Determinants and Behavioral Consequences," *Journal of the European Economic Association*, 9(3), 522-550.

Castillo, Marco, Ragan Petrie and Maximo Torero, 2010, "On the Preferences of Principals and Agents," *Economic Inquiry*, 48(2), 266-273.

Andreoni, James and Charles Sprenger, 2012, "Risk Preferences are not Time Preferences," forthcoming, *American Economic Review*.

Charness, Gary and Uri Gneezy, 2010, "Portfolio Choice and Risk Attitudes" *Economic Inquiry*, 48(1), 133-146.

Time Preferences

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

Harrison, Glenn, Morten Lau, Melonie Williams, 2002, "Estimating Individual Discount Rates in Denmark: A Field Experiment," *American Economic Review*, 92:5, 1606-17.

Anderson, Steffen, Glenn Harrison, Morten Lau and Elisabet Rustrom, 2008, "Eliciting Risk and Time Preferences," *Econometrica*, 76:3, 583-618.

Castillo, Marco, Paul Ferraro, Jeff Jordan and Ragan Petrie, 2011, "The Today and Tomorrow of Kids: Time Preferences and Educational Outcomes of Children," *Journal of Public Economics*, 95(11-12), 1377-1385.

Burks, Stephen, Jeffrey Carpenter, Lorenz Goette, Kristen Monaco, Aldo Rustichini and Kay Porter, 2007, "Using Behavioral Economic Field Experiments at a Large Motor Carrier: The Context and Design of the Truckers and Turnover Project," NBER Working Paper 12976.

Stephen Burks, Jeffrey Carpenter, Lorenz Goette and Aldo Rustichini, 2009, "Cognitive Skills Affect Economic Preferences, Strategic Behavior and Job Attachment," *Proceedings of the National Academy of Sciences*, May 12, 106:19, 7745-7750.

Benjamin, Daniel J., Sebastian A. Brown, and Jesse M. Shapiro, 2012, "Who is 'Behavioral'? Cognitive Ability and Anomalous Preferences," forthcoming, *Journal of the European Economic Association*.

Andreoni, James and Charles Sprenger, 2012, "Estimating Time Preferences from Convex Budgets," forthcoming, *American Economic Review*.

Dohmen, Thomas, Armin Falk, David Huffman, and Uwe Sunde, 2010, "Are Risk Aversion and Impatience Related to Cognitive Ability?" *American Economic Review*, 100(3), 1238-60.

Revealed Preference Approach

Andreoni, James and John Miller, 2002, "Giving According to GARP: An Experimental Test of the Consistency of Preferences for Altruism," *Econometrica*, 70:2, 737-753.

Andreoni, James and Lise Vesterlund, 2001, "Which is the Fair Sex? Gender Differences in Altruism," *Quarterly Journal of Economics*, 116, 293-312.

Fisman, Ray, Shachar Kariv and Daniel Markovits, 2007, "Individual Preferences for Giving," *American Economic Review*, 97:5, 1858-1876.

Castillo, Marco and Philip Cross, 2008, "Of Mice and Men: Within Gender Variation in Strategic Behavior," *Games and Economic Behavior*, 64, 421-432.

Anomalies and Critiques from the Field

Harrison, Glenn, John List and Charles Towe, 2007, "Naturally Occurring Preferences and Exogenous Laboratory Experiments: A Case Study of Risk Aversion," *Econometrica*, 75:2, 433-458.

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

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

Engelmann, Dirk, and Guillaume Hollard, 2010, "Reconsidering the Effect of Market Experience on the "Endowment Effect"," *Econometrica*, 78(6), 2005-2019.

Ariely, Dan, George Loewenstein and Drazen Prelec, 2003, "'Coherent Arbitrariness': Stable Demand Curves Without Stable Preferences," *Quarterly Journal of Economics*, 73-105.

3. Altruism, Fairness and Trust

Bargaining

* Roth, Alvin, "Bargaining Experiments," chpt 4 in HEE.

* Chpt 2 in BGT.

Guth, Werner, R. Schmittberger and B. Schwartz, 1982, "An Experimental Analysis of Ultimatum Bargaining," *Journal of Economic Behavior and Organization*, 3:4, 367-388.

Ochs, Jack and Alvin E. Roth, 1989, "An Experimental Study of Sequential Bargaining," *American Economic Review*, 79:3, 355-384.

Roth, Alvin E., V. Prasnikar, M. Okunofujiwara and S. Zamir, 1991, "Bargaining and Market Behavior in Jerusalem, Ljubljana, Pittsburgh, and Tokyo: An Experimental Study," *American Economic Review*, 81:5, 1068-1095.

Slonim, Robert and Alvin E. Roth, 1988, "Learning in High Stakes Ultimatum Games: An Experiment in the Slovak Republic," *Econometrica*, 66:3, 569-596.

Dictator games

* Chpt 2 in BGT.

Forsythe, Robert, Joel Horowitz, N.S. Savin and Martin Sefton, 1994, "Fairness in Simple Bargaining Experiments," *Games and Economic Behavior*, 6:3, 347-369.

Hoffman, E., K. McCabe, K. Shachat, and V. Smith, 1994, "Preferences, Property Rights and Anonymity in Bargaining Games," *Games and Economic Behavior*, 7:3, 346-380.

Hoffman, E., K. McCabe, and V. Smith, 1996, "Social Distance and Other-Regarding Behavior in Dictator Games," *American Economic Review*, 653-660.

Bohnet, Iris and Bruno S. Frey, 1999, "Social Distance and Other-Regarding Behavior in Dictator Games: Comment," *American Economic Review*, 89:1, 335-339.

Andreoni, James and B. Douglas Bernheim, 2009, "Social Image and the 50-50 Norm: A Theoretical and Experimental Analysis of Audience Effects," *Econometrica*, 77(5), 1605-36.

Trust

* Chpt 2 in BGT.

* Berg, Joyce, John Dickhaut and Kevin McCabe, 1995, "Trust, Reciprocity, and Social History," *Games and Economic Behavior*, 10:1, 122-142.

Van Huyck, John B.; Battalio, Raymond C.; Walters, Mary F., "Commitment versus Discretion in the Peasant-Dictator Game," *Games and Economic Behavior*, 1995, 10(1), 143-7

Cox, James C., 2004, "How to Identify Trust and Reciprocity," *Games and Economic Behavior*, 46:2, 260-281.

Glaeser, Edward L., et al., 2000, "Measuring Trust," *Quarterly Journal of Economics*, 115:3, 811-846.

Schechter, Laura, 2007, "Traditional Trust Measurement and the Risk Confound: An Experiment in Rural Paraguay," *Journal of Economic Behavior and Organization*, 62:2, 272-292.

Bohnet, Iris, Fiona Greig, Benedikt Herrmann and Richard Zeckhauser, 2008, "Betrayal Aversion: Evidence from Brazil, China, Oman, Switzerland, Turkey, and the United States," *American Economic Review*, 98:1, 294-310.

Eckel, Catherine and Ragan Petrie, 2011, "Face Value," *American Economic Review*, 101(4), 1497-1513

Karlan, Dean, 2005, "Using Experimental Economics to Measure Social Capital and Predict Real Financial Decisions," *American Economic Review*, 95:5, 1688-1699.

Karlan, Dean, Markus Mobius, Tanya Rosenblat and Adam Szeidl, 2009, "Trust and Social Collateral," *Quarterly Journal of Economics*, 124(3), 1307-61.

Models of Fairness

Fehr, Ernst and Klaus Schmidt, 1999, "Theory of Fairness, Competition, and Cooperation," *Quarterly Journal of Economics*, 114:3, 817-868.

Bolton, Gary E. and Axel Ockenfels, 2000, "ERC: A Theory of Equity, Reciprocity and Competition," *American Economic Review*, 90:1, 166-193.

Rabin, Matthew, 1993, "Incorporating Fairness into Game Theory and Economics," *American Economic Review*, 83:5, 1281-1302.

Charness, Gary and Matthew Rabin, 2002, "Understanding Social Preferences with Simple Tests," *Quarterly Journal of Economics*, 117:3, 817-869.

Cox, James, Daniel Friedman and Vjollca Sadriji, 2008, "Revealed Altruism," *Econometrica*, 76:1, 31-69.

4. Further Evidence on Nonstandard Preferences

Altruism and Giving

Andreoni, James, 1989, "Giving with Impure Altruism: Applications to Charity and Ricardian Equivalence," *Journal of Political Economy*, 97:6, 1447-58.

Andreoni, James, 1990, "Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving," *Economic Journal*, 100:401, 464-477.

Andreoni, James, Marco Castillo and Ragan Petrie, 2003, "What do Bargainers' Preferences Look Like? Experiments with a Convex Ultimatum Game," *American Economic Review*, 93:3, 672-685.

Andreoni, James, Marco Castillo and Ragan Petrie, 2009, "Revealing Preferences for Fairness in Ultimatum Bargaining," *Korean Economic Review*, 25(1), 35-63.

Abbinck Klaus, Bernd Irlenbusch, and Elke Renner, 2000, "The Moonlighting Game: An Empirical Study on Reciprocity and Retribution," *Journal of Economic Behavior and Organization*, 42, 265-77.

List, John A., 2007, "On the Interpretation of Giving in Dictator Games," *Journal of Political Economy*, 115:3, 482-494.

Bardsley, Nicholas, 2008, "Dictator Game Giving: Altruism or Artefact," *Experimental Economics*, 11, 122-133.

Harbaugh, William, Ulrich Mayr, Dan Burghart, 2007, "Neural Responses to Taxation and Voluntary Giving Reveal Motives for Charitable Donations," *Science*, June 15.

Norms, Status and Social Identity

Ball, Sheryl, Catherine C. Eckel, Philip J. Grossman and W. Zame, 2001, "Status in Markets," *Quarterly Journal of Economics*, 116:1, 161-181.

Chen, Yan and Xin Li, 2009, "Group Identity and Social Preference," *American Economic Review*, 99:1, 431-457.

Benjamin, Daniel, James Choi and Joshua Strickland, 2010, "Social Identity and Preference," *American Economic Review*, 100(4), 1913-1928.

Gift Exchange and Reciprocity

Fehr, Kirschleir, Reidl, “Does Fairness Prevent Market Clearing?” *Quarterly Journal of Economics*, 1993

Fehr, Ernst, Simon Gächter and Georg Kirchsteiger, 1997, “Reciprocity as a Contract Enforcement Device: Experimental Evidence,” *Econometrica*, 65:4, 833-860

Fehr, Ernst and L. Goette, 2007, “Do workers work more if wages are high? – Evidence from a Randomized Field Experiment,” *American Economic Review*, 97, 298-317.

Fehr, Ernst, M. Brown and A. Falk, 2004, “Relational Contracts and the Nature of Market Interactions,” *Econometrica*, 72, 747-780.

Gneezy, Uri, and John A. List, 2006, “Putting Behavioral Economics to Work: Testing for Gift Exchange in Labor Markets Using Field Experiments,” *Econometrica*, 74(5), 1365-1384.

Discrimination

List, John A., 2004, “The Nature and Extent of Discrimination in the Marketplace: Evidence from the Field,” *Quarterly Journal of Economics*, 119:1, 49-89.

Bertrand, M., Mullainathan, S., 2004, “Are Emily and Greg More Employable than Lakisha and Jamal: A Field Experiment on Labor Market Discrimination,” *American Economic Review*, 94, 991-1013.

Ayres, I., Siegelman, P., 1995, “Race and Gender Discrimination in Bargaining for a New Car,” *American Economic Review*, 85:3, 304–323.

Fisman, Raymond, Sheena Iyengar, Emir Kamenica and Itamar Simonson, “Gender Differences in Mate Selection: Evidence from a Speed Dating Experiment,” *Quarterly Journal of Economics*, 121:2, 673-697.

Schotter, Andrew and K. Weigelt, “Asymmetric Tournaments, Equal Opportunity Laws and Affirmative Action: Some Experimental Results,” *Quarterly Journal of Economics*, 1992.

Castillo, Marco and Ragan Petrie, 2010, “Discrimination in the Lab: Does Information Trump Appearance?” *Games and Economic Behavior*, 68(1), 50-59.

Gender and Beauty

Babcock, Linda, Michele Gelfand, Deborah Small and Heidi Stayn, 2006, “Gender Differences in the Propensity to Initiate Negotiations,” *Social Psychology and Economics*, 239-59.

Croson, Rachel and Uri Gneezy, 2009, “Gender Differences in Preferences,” *Journal of Economic Literature*, 47:2, 448-474.

Eckel, Catherine and Philip Grossman, 2008, “Differences in the Economic Decisions of Men and Women: Experimental Evidence,” in *Handbook of Experimental Results, Volume 1*, Charles Plott and Vernon Smith, eds, New York: North Holland Press.

Andreoni, James and Ragan Petrie, 2008, “Beauty, Gender and Stereotypes: Evidence from Laboratory Experiments,” *Journal of Economic Psychology*, 29, 73-93.

Mobius, Markus and Tanya Rosenblat, "Why Beauty Matters," *American Economic Review*, 96:1, 222-235.

Critiques from the Field

List, John A., 2006, "The Behavioralist Meets the Market: Measuring Social Preferences and Reputation Effects in Actual Transactions," *Journal of Political Economy*, 114:1, 1-37.

Levitt, Steven D. and John A. List, 2007, "What do Laboratory Experiments Measuring Social Preferences tell us about the Real World," *Journal of Economic Perspectives*, 21:2, 153-174

Harrison, Glenn and John A. List, 2004, "Field Experiments," *Journal of Economic Literature*, 42:4, 1009-1055.

5. Social Interactions – Groups

Public Goods, Cooperation

* Ledyard, John, "Public Goods: A Survey of Experimental Research," chpt 2 in HEE.

a. Linear Public Goods Games

Marwell, Gerald and Ruth Ames, 1981, "Economists Free Ride, Does Anyone Else? Experiments on the Provision of Public Goods, IV," *Journal of Public Economics*, 15(3), pp. 295-310.

Isaac, R. Mark and James Walker, 1988, "Group Size Effects in Public Goods Provision: The Voluntary Contributions Mechanism," *Quarterly Journal of Economics*, 103(1), pp. 179-199.

Isaac, R. Mark, James Walker and Arlington Williams, 1994, "Group Size and the Voluntary Provision of Public Goods: Experimental Evidence Utilizing Large Groups," *Journal of Public Economics*, 54(1), 1-36.

Andreoni, James, 1988, "Why Free Ride?: Strategies and Learning in Public Goods Experiments," *Journal of Public Economics*, 37(3), 291-304.

Andreoni, James, 1995, "Cooperation in Public Goods Experiments: Kindness or Confusion?" *American Economic Review*, 85(4), 891-904.

Andreoni, James, 1995, "Warm-Glows versus Cold Prickle: The Effects of Positive and Negative Framing in Public Goods Experiments," *Quarterly Journal of Economics*, 110(1), 1-21.

Palfrey, Thomas and Jeffrey Prisbrey, 1997, "Anomalous Behavior in Public Goods Experiments: How Much and Why?" *American Economic Review*, 87(5), 829-846.

Palfrey, Thomas and Jeffrey Prisbrey, 1996, "Altruism, Reputation, and Noise in Linear Public Goods Experiments," *Journal of Public Economics*, 61(3), 409-427.

Palfrey, Thomas and Howard Rosenthal, 1991, "Testing for Effects of Cheap Talk in a Public Goods Game with Private Information," *Games and Economic Behavior*, 3(2), 183-220.

Houser, Daniel and Robert Kurzban, 2002, "Revisiting Kindness and Confusion in Public Goods Experiments," *American Economic Review*, 92:4, 1062-1069.

Houser, Dan, Erte Xiao, Kevin McCabe and Vernon Smith, 2008, "When punishment fails: Research on sanctions, intentions and non-cooperation," *Games and Economic Behavior*. 62(2), 509-532.

Houser, Dan and Robert Kurzban, 2005, "Experiments investigating cooperative types in human groups: A complement to evolutionary theory and simulations," *Proceedings of the National Academy of Sciences of the United States of America*, 102(5), 1803-1807.

b. Provision Point

* Davis, Douglas and Charles Holt, 1993, *Experimental Economics*. Princeton: Princeton University Press, 338-343.

Dawes, Robin, John Orbell, R.T. Simmons and A.J.C. van de Kragt, 1986, "Organizing Groups for Collective Action," *American Political Science Review*, 80(4), 1171-85.

Bagnoli, Mark and Michael McKee, 1991, "Voluntary Contributions Games: Efficient Private Provision of Public Goods," *Economic Inquiry*, 29(2), 351-366.

Bagnoli, Mark, Shaul Ben-David and Michael McKee, 1994, "Voluntary Provision of Public Goods: The Multiple Unit Case," *Journal of Public Economics*, 47(1), 85-106.

Rondeau, Daniel, William D. Schulze and Gregory L. Poe, 1999, "Voluntary Revelation of the Demand for Public Goods Using a Provision Point Mechanism," *Journal of Public Economics*, 72(3), 455-470.

Rondeau, Daniel, Gregory L. Poe and William D. Schulze, 2005, "VCM or PPM? A comparison of the performance of two voluntary public goods mechanisms," *Journal of Public Economics*, 89(8), 1581-1592.

c. Mechanism Design

Sefton, Martin and Abdullah Yavas, 1996, "Abreu-Matsushima Mechanisms: Experimental Evidence," *Games and Economic Behavior*, 16(2), 280-302.

Chen, Yan and Charles Plott, 1996, "The Groves-Ledyard Mechanism: An Experimental Study of Institutional Design," *Journal of Public Economics*, 59(3), 335-364.

Chen, Yan and Fang-Fang Tang, 1998, "Learning and Incentive-Compatible Mechanisms for Public Goods Provision: An Experimental Study," *Journal of Political Economy*, 106(3), 633-662.

d. Fund-raising and Organic Mechanisms

Morgan, John, 2000, "Financing Public Goods by Means of Lotteries," *Review of Economic Studies*, 67(4), 761-784.

Morgan, John and Martin Sefton, 2000, "Funding Public Goods with Lotteries: Experimental Evidence," *Review of Economic Studies*, 67(4), 785-810.

Andreoni, James and Ragan Petrie, 2004, "Public Goods Experiments Without Confidentiality: A Glimpse Into Fund-Raising," *Journal of Public Economics*, 88(7-8), 1605-1623.

Vesterlund, Lise, Jan Potters and Martin Sefton, 2005, "After You--Endogenous Sequencing in Voluntary Contribution Games," *Journal of Public Economics*, 89(8), 1399-1419.

Duffy, John, Jack Ochs, and Lise Vesterlund, 2007, "Giving Little by Little: Dynamic Voluntary Contribution Games," *Journal of Public Economics*, 91, 1708-1730.

Duffy, John and Tatiana Kornienko, 2010, "Does Competition Affect Giving? An Experimental Study," *Journal of Economic Behavior and Organization*, 74, 82-103.

Eckel, Catherine C., Philip J. Grossman and Rachel M. Johnston, 2005, "An Experimental Test of the Crowding Out Hypothesis," *Journal of Public Economics*, 89(8), 1543-1560.

Goeree, Jacob, S. Onderstal, E. Maasland and J. Turner, 2005, "How (Not) to Raise Money," *Journal of Political Economy*, 113(4), 897-918.

e. Field Studies

List, John A. and David Lucking-Reiley, 2002, "The Effects of Seed Money and Refunds on Charitable Giving: Experimental Evidence from a University Capital Campaign," *Journal of Political Economy*, 110:1, 215-233.

Landry, Craig, Andreas Lange, John A. List, Michael K. Price and Nicholas G. Rupp, 2006, "Toward an Understanding of the Economics of Charity: Evidence from a Field Experiment," *Quarterly Journal of Economics*, 121: 2, 747-782.

Karlan, Dean and John List, "Does Price Matter in Charitable Giving? Evidence from a Large-Scale Natural Field Experiment," 2007, *American Economic Review*, 97(5), 1774-93.

Building Cooperation

Cooper, R., D. DeJong and R. Forsythe, 1996, "Cooperation Without Reputation: Experimental Evidence from Prisoner's Dilemma Games," *Games and Economic Behavior*, 12:2, 187-218.

Duffy, John and Jack Ochs, 2009, "Cooperative Behavior and the Frequency of Social Interaction," *Games and Economic Behavior*, 66:2, 785-812.

Dal Bo, P., 2005, "Cooperation under the Shadow of the Future: Experimental Evidence from Infinitely Repeated Games," *American Economic Review*, 95:5, 1591-1604.

Fehr, E. and S. Gächter, 2000, "Cooperation and Punishment in Public Goods Experiments," *American Economic Review*, 90:4, 980-994.

Andreoni, James, William H. Harbaugh and Lise Vesterlund, 2003 "The Carrot or the Stick: Rewards, Punishments and Cooperation," *American Economic Review*, 93:3, 893-902.

Masclet, David, Charles Noussair, Steven Tucker, and Marie-Claire Villeval, 2003, "Monetary and Non-Monetary Punishment in the Voluntary Contributions Mechanism," *American Economic Review*, 93:1, 366-380.

Peer Effects

Croson, Rachel and Jen Shang, 2009, "Field Experiments in Charitable Contribution: The Impact of Social Influence on the Voluntary Provision of Public Goods." *Economic Journal*, 119(540), 1422-39.

Chen, Yan, Maxwell Harper, Joseph Konstan and Sherry Xin Li, 2010, "Social Comparisons and Contributions to Online Communities: A Field Experiment at MovieLens," *American Economic Review*, 100(4): 1358-98.

Competition

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

Gneezy, U., M. Niederle, and A. Rustichini, 2003, "Performance in competitive environments: Gender differences," *Quarterly Journal of Economics*, 1049-1074.

Carpenter, Jeffrey, Peter Matthews and John Schrim, 2010, "Tournaments and Office Politics: Evidence from a real effort experiment," *American Economic Review*, 100(1), 504-17.

Gneezy, U, Leonard, K.L. and List, J.A., 2009, "Gender Differences in Competition: Evidence from a Matrilineal and a Patriarchal Society," *Econometrica*, 77(5), 1637-64.

Lying

Gneezy, U., 2005, "Deception: The role of consequences," *American Economic Review*, 384-394.

Duffy, John and N. Feltovich, 2006, "Words, Deeds, and Lies: Strategic Behaviour in Games with Multiple Signals," *Review of Economic Studies*, 73, 669-688.

Charness, Gary and Martin Dufwenberg, 2006, "Promises and Partnership" *Econometrica*, 74, 1579-1601.

Chen, Ying, Navin Kartik, Joel Sobel, 2008, "Selecting Cheap-Talk Equilibria," *Econometrica*, 76:1, 117-36.

Self-Serving Bias and Self-Signaling

Jason Dana, Roberto A. Weber and Jason Xi Kuang, 2007, "Exploiting 'moral wriggle room': Experiments demonstrating an illusory preference for fairness," *Economic Theory*, 33(1): 67-80.

Karlan, Dean, Nava Ashraf and Wesley Yin, 2006, "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines," *Quarterly Journal of Economics*, 121: 2, 673-697.

Grossman, Zachary, 2009, "Self-Signaling Versus Social-Signaling in Giving," Working Paper, University of California-Santa Barbara.

Tadelis, Steve, 2011, "The Power of Shame and the Rationality of Trust" Working Paper, University of California.

6. Signaling and Reputation

* Chpt 8 in BGT.

* Holt, Charlie and Lisa Anderson, 1997, "Information Cascades in the Laboratory," *American Economic Review*, 87:5, 847-862.

Camerer, Colin F., and K. Weigelt. 1988. "Experimental Tests of a Sequential Equilibrium Reputation Model." *Econometrica*, 56, 1-36.

Neral, John and Jack Ochs, 1992, "The Sequential Equilibrium Theory of Reputation Building: A Further Test," *Econometrica*, 60:5, 1151-69.

Grosskopf, Brit and Rajiv Sarin, 2010, "Is Reputation Good or Bad? An Experiment" *American Economic Review*, 100(5): 2187–2204.

7. Learning, Biases and Reasoning

Camerer, Colin, Tech Ho and Kuan Chong, "Self-tuning experience weighted attraction learning in games," *Journal of Economic Theory*, 133, 177-198.

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