An Introduction to Behavioral Economics: How I Behave when my Actions effect Others.

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Motivations Behind Behavioral Economics

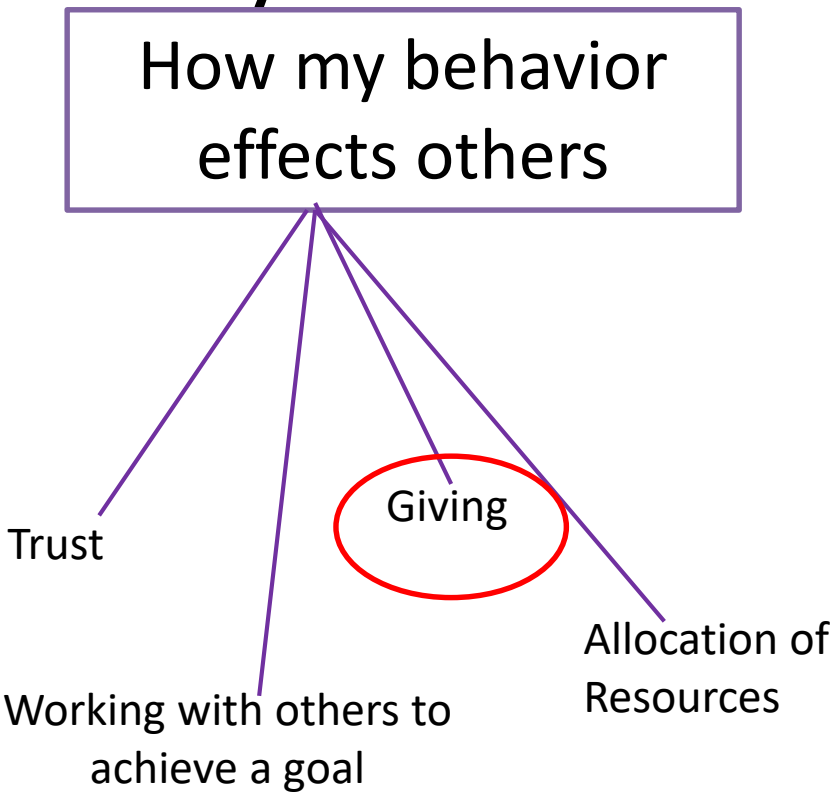
- Basic Economic Principle: People are inherently rational and focus on their own interests.
  - Gregory Mankiw: (Principles of Economcs 5e, page 6-7)
    - 3rd Principal of Economics- Rational Peop ;in
    - 4th Principal of Economics- People Respo
  - Dirk Mateer and Lee Coppock: (Principles of Micro
    - 5 Foundations of Economics include: mar incentives
  - "Homo econominus" – rational and self-interested

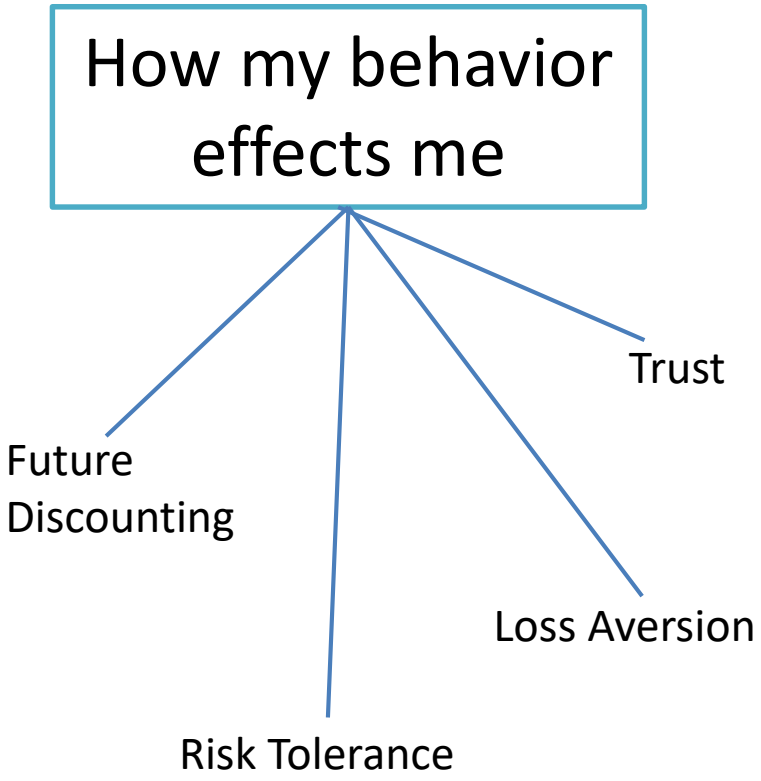
- Proven accurate in some instances such as the Invisible Hand and Market Equilibrium
  - Eg Vernon Smith, "An Experimental Study of Competitive Market Behavior," Journal of Political Economy, 70, (1962), 111-137.

Motivations Behind Behavioral Economics

- Some observed behavior not consistent with theory:
  - Giving to charity
    - In 2015: 23% of Texans volunteered in some capacity for over 566.19 million hours of service valuing at $12.7 billion of services. 46.4% of Texans donated more than $25 to charity. (Corporation for National and Community Service – State of Texas data)
    - more than "Warm Glow" (Andreoni, J. "Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving." The Economic Journal, June 1990, 100 (401), 464-477.)
  - Inconsistent Preferences
  - Many more…
- Goal behind Behavioral Economics
  - Explain motivations behind such behavior

Many Subsets of Behavioral Economics





Giving to Others

Interaction in Markets

Community Planning

Financial Planning

Preparation for Natural Disasters

Health Care Decisions

Experimental Economics

- Test and study motivations behind people's actions and decisions
- Different types of experiments: markets, interaction, individual choice
- Could be varying locations: lab vs field experiments
- 4 main components differentiate it from psychology experiments:
  - Pay for participation is determined by decisions made while participating in the study (incentivize)
  - Avoid framing (except if that is what is being tested)
  - No deceiving the subjects
  - Focus on the ability for results to be replicated

Levin, Jonathan. “Experimental Evidence”. May 2006. Unpublished Manuscript.

Ultimatum Game

Wants the most he can have, but has to give enough for other to accept

Bob

Some, None, Or **All**

Joe

The proposed split occurs

Both get nothing

Theory- Bob knows Joe should accept any offer where he gets > 0 and therefore should offer a split like $99 to Bob and $1 to Joe

Practice- Bob needs to give Joe enough so Joe doesn’t reject. Offers are on average 40% of the total payment.

Theory- Joe should accept any offer where he gets > 0.

Practice- Joe will punish Bob for being “unfair” by giving up the proposed $1 to stop Bob from getting so much “unfairly”. Offers are rejected about 10-15% of the time

Camerer, Colin F. 2003. Behavioral Game Theory: Experiments in Strategic Interaction. Princeton, NJ: Princeton Univ. Press.

Dictator Game

Bob

Some, None, Or **All**

Theory- Bob shouldn't give any money (or very little) to Joe. Joe has to accept the split.

Practice- Studies find about 60% of Bobs (dictators) give to Joes (receivers). And give on average 20% of the payment amount.

Joe

Theory & Practice- Nothing Joe can do.

Ultimatum/Dictator Games

- Why did Joe reject offer in Ultimatum Game? Why did Bob give money to Joe in Dictator Game?
  - Fairness/equity (Bolton,G., Ockenfels, A. "ERC: A Theory of Equity Reciprocity and Competition." American Economic Review, March 2000, 90 (1), 166-193.)
  - Social Norms (Akerlof, G. "A Theory of Social Custom, of Which Unemployment May be One Consequence." The Quarterly Journal of Economics, June 1980, 94 (4), 749-775.)
  - Self-Image (Ariely, D., Bracha, A., Meier, S. "Doing good or doing well? Image motivation and monetary incentives in behaving prosocially." IZA working paper 2968, 2007, 207.)
- Understanding these incentives can influence behavior toward an intended goal
  - Charitable Giving

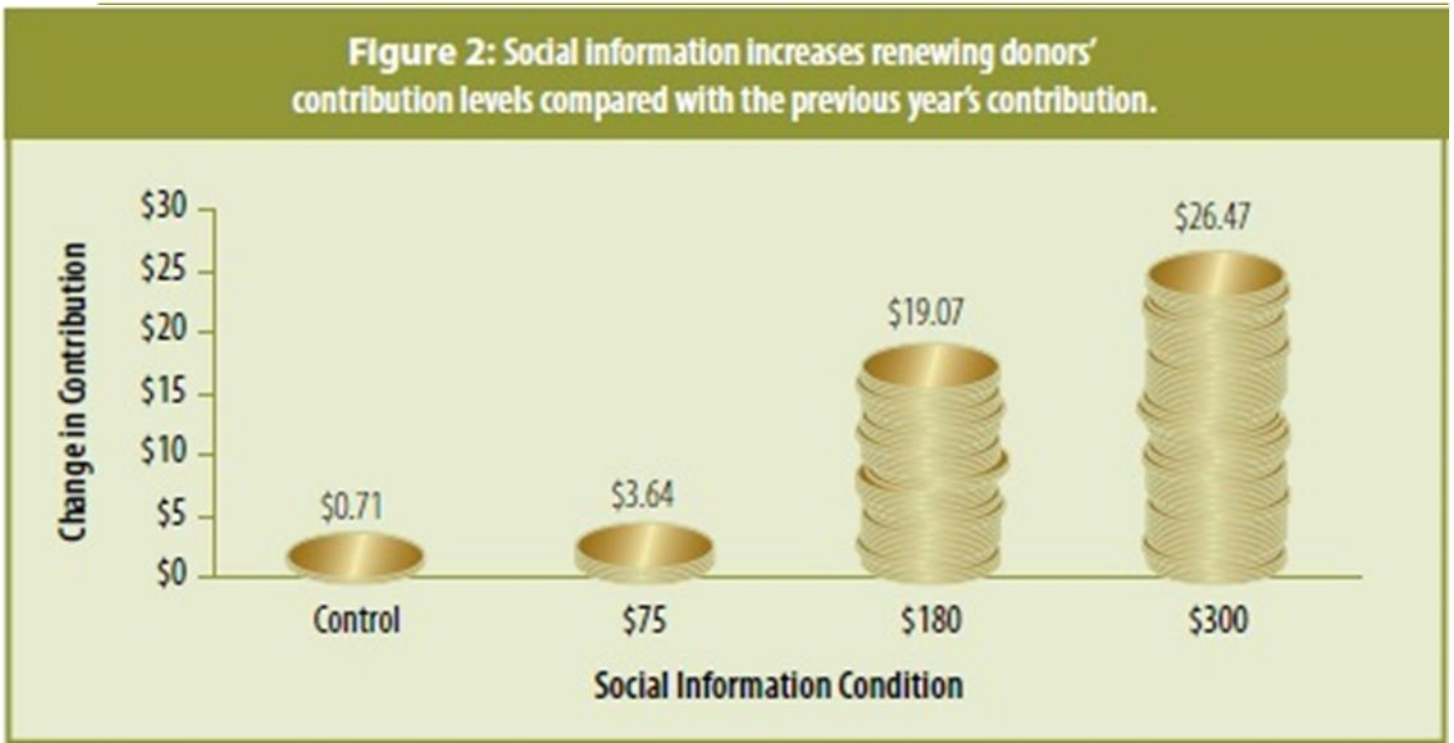
Charitable giving

1. Perceptions of Social Norms effect giving-

   Study for fund raising for a Public Radio Station

   "A Field Experiment in Charitable Contribution: The Impact of Social Information on the Voluntary Provision of Public Goods." (with Jen Shang). *The Economic Journal,* Vol 119, 2009, pp. 1422-1439.

   – "We had another donor who gave X dollars. How much would you like to give today?"



Charitable giving

2. Type of donation strategy can effect donations

- Matching vs rebate
- Theoretically should be same for donator
- But it isn't

- Higher levels of giving under match vs. rebate ($10.53 vs $5.44 respectively from $20 endowment).
  - Eckel, Catherine C. and Grossman, Philip J., Subsidizing Charitable Giving with Rebates or Matching: Further Laboratory Evidence (April 1, 2006). Southern Economic Journal, Vol. 72, No. 4, pp. 794-807, 2006.
- Confirmed results in the field
  - Eckel, Catherine C. and Grossman, Philip J., Do Donors Care About Subsidy Type: An Experimental Study (February 11, 2006). R. Mark Isaac and Douglas D. Davis, eds., Experiments Investigating Fundraising and Charitable Contributors. Research in Experimental Economics, Volume 11, pp. 157-176. Elsevier, 2006.
- Little crowding out
  - Eckel, Catherine C., Philip J. Grossman, and M. Johnston. "An Experimental Test of the Crowding Out Hypothesis." Journal of Public Economics 89(8): 1543-1560. August 2005.

Ultimatum/Dictator Games

- What factors can be changed so people act economically consistent to theory?
- Non-transparency of ones actions
  - Strategic Ignorance- "even if learning is free and causes no delay in consumption, the individual may decide in equilibrium to not acquire all available information" (Carrillo, J., Mariotti, T. "Strategic Ignorance as a Self-Disciplining Device." The Review of Economic Studies, July 2000, 67 (3), 529-544.)
    - Money to Homeless
    - Watching Telethons/commercials
    - "I just don't want to know…."
    - Etc.

Strategic Ignorance in Lab - Baseline

- You get to decide your and another random person's payment for participation in a study.
- The payments will be according to the following game being played

Game 1

X: your payment

Y: the other person's payment

Player X's choices

A	Y: 1 X: 6
B	Y: 5 X: 5

23% of the time Option A is chosen

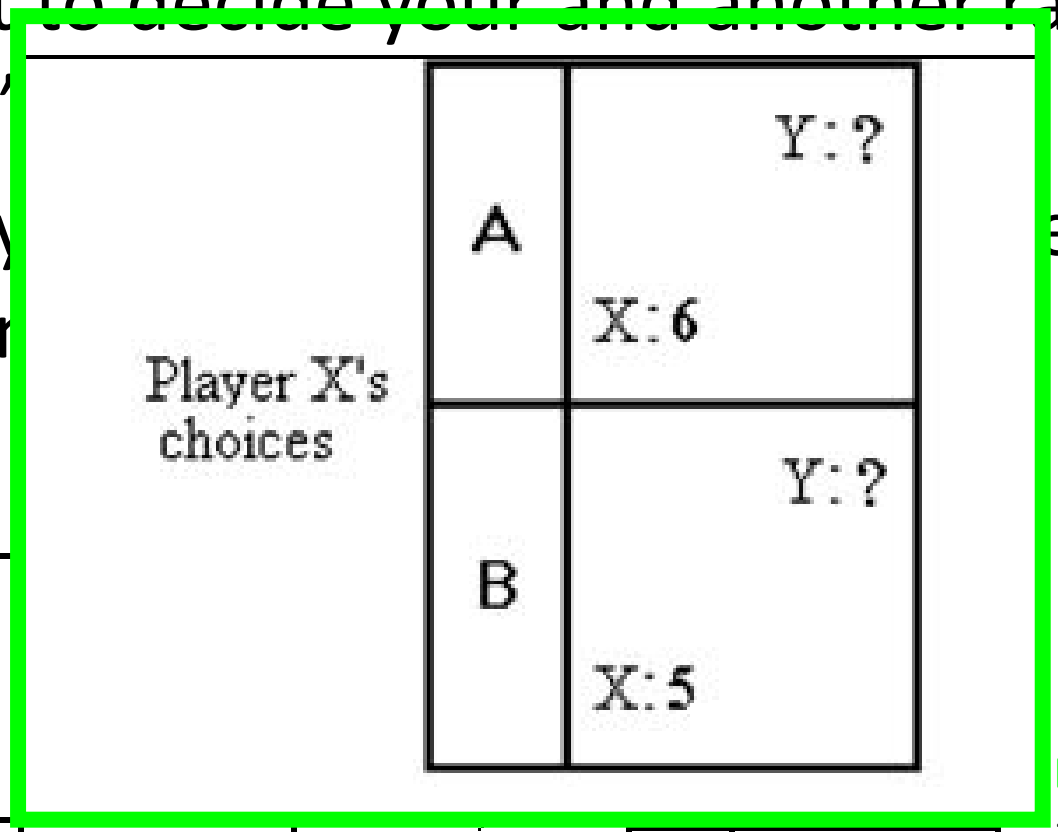
77% of the time Option B is Chosen

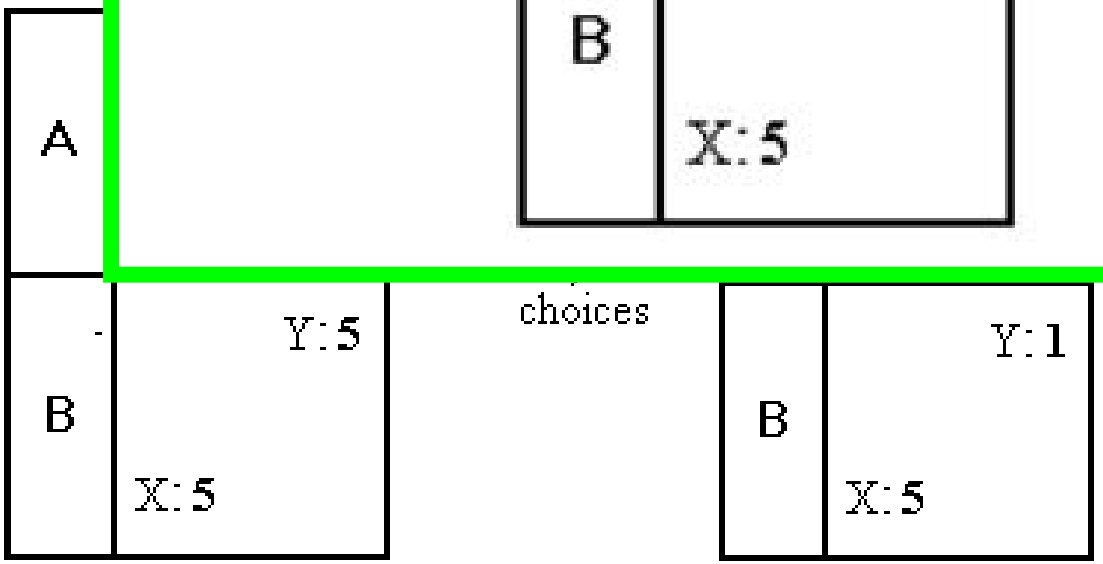
Strategic Ignorance in Lab – Non-Transparent Treatment

- You get to decide your and another random person' a study.
- The pay e following

X: your payment

Y: the other person's payment





Do you want to know if Game 1 or Game 2 is being played?

Reveal – could be under same social/self pressure as baseline.

Do Not Reveal – allows you to make decision under veil of ignorance – no pressures on payment selection.

Results: Strategic Ignorance in Lab

Game 1

Player X's choices

A	Y: 1 X: 6
B	Y: 5 X: 5

Game 2

Player X's choices

A	Y: 5 X: 6
B	Y: 1 X: 5

Do Not Reveal Game

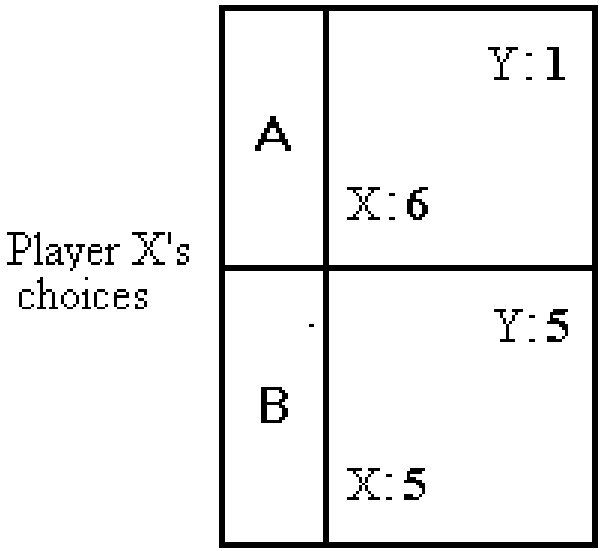
Player X's choices

A	Y: ? X: 6
B	Y: ? X: 5

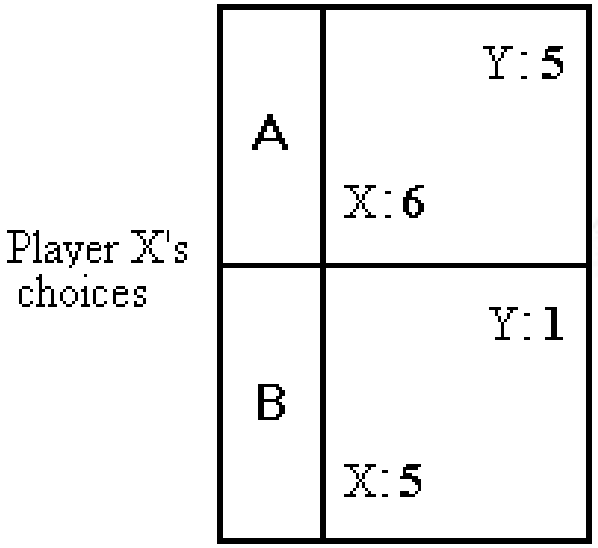
Result #1 – A majority of subjects chose to remain strategically ignorant (53%).

Results: Strategic Ignorance in Lab

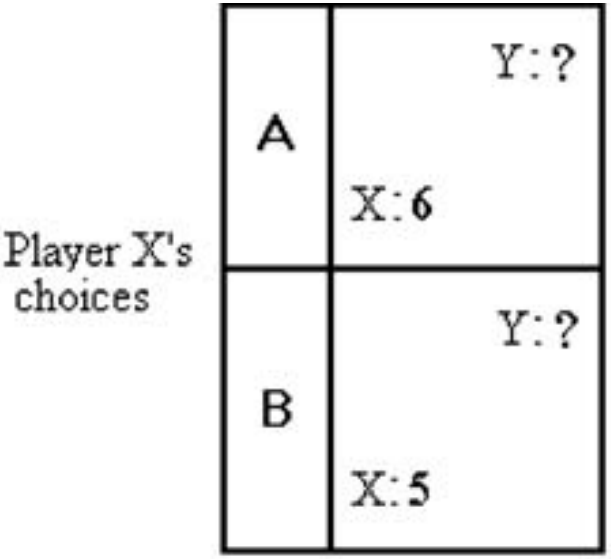
Game 1



Game 2



Do Not Reveal Game



Result #2 – All those who remained strategically ignorant chose Option A.

Results: Strategic Ignorance in Lab

Baseline - 23% of the time Option A is chosen

Game 1

Player X's choices

A	Y: 1 X: 6
B	Y: 5 X: 5

Game 2

Player X's choices

A	Y: 5 X: 6
B	Y: 1 X: 5

Do Not Reveal Game

Player X's choices

A	Y: ? X: 6
B	Y: ? X: 5

Result #3 – Statistically significant different amount chose Option A when given the option of ignorance.

Ignorance Treatment – 89.5% of the time Option A is chosen

Results Analyzed

- Find people are inherently more interested in themselves and there own well being
- **BUT**- they feel a moral pull to “do the right thing”
  - Own Image
  - How other’s think of them
  - Societal norms
- **BUT**- if they have a way to make their actions non-transparent, hide under a veil of ignorance
  - Can pick what is best for them and not worry about results on others
  - It is left up to chance for the other player

Conclusion

- Behavioral Economics studies incentives of individuals to make decisions that differ from homo-economus.
- Explored expansions of Ultimatum and Dictator Games
  - Incentives behind giving to charity
  - Strategic Ignorance
- Provides answers and guidance for variety of professionals: academics, policy makers, teachers, doctors, insurance agents, etc.