

Preferences for Power

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We focus on power as the ability to determine someone else's compensation.

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AND

- ▶ paying because they enjoy the resulting distribution, i.e. have social preferences

Experimental Design

- ▶ We introduce a new two-player game, *the Power Game*.
- ▶ The Power Game has two parts, Part I and Part II.
- ▶ At the beginning of Part I, subjects are randomly assigned a type, A or B .
- ▶ Types are fixed throughout both parts of the game.
- ▶ Each type A player is matched with a type B player.
- ▶ Only type A players make decisions that matter for pay.

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Part II: A chooses between two, fixed, payoff pairs: (x_A, x_B) vs. $(x_{A'}, x_{B'})$, where 10 of those rounds correspond to the 10 rounds from Part I:

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- ▶ Example: In Part I, $p = 1$ and A pays and gives 14 to B.
At some point in Part II, she faces: $(11.30, 14)$ vs. $(12.30, 12.30)$

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- ▶ **Example:** In Part I, $p = 1$ and A pays and gives 14 to B .
At some point in Part II, she faces: $(11.30, 14)$ vs. $(12.30, 12.30)$
- ▶ **Different power-payoff tradeoffs in Parts I and II:**
 - ▶ By giving up p in Part I, A increases her power over B .
 - ▶ By giving up p in Part II, A does not increase her power over B .

Implementation

- ▶ Our design has four sections:
 1. Lottery task, 5 rounds: Random draw from $[0, 16.30]$ or sure amount, $\{0, 3.10, 6.60, 12.30, 16.30\}$
 2. Part I of the Power Game
 3. Part II of the Power Game
 4. Part I again, we call it Part I*

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- ▶ 288 subjects in 16 sessions
- ▶ Strategy method: All subjects made decisions as if they were type A
- ▶ One round within one Part is paid at random
- ▶ Feedback at the end of the experiment: final payoff only

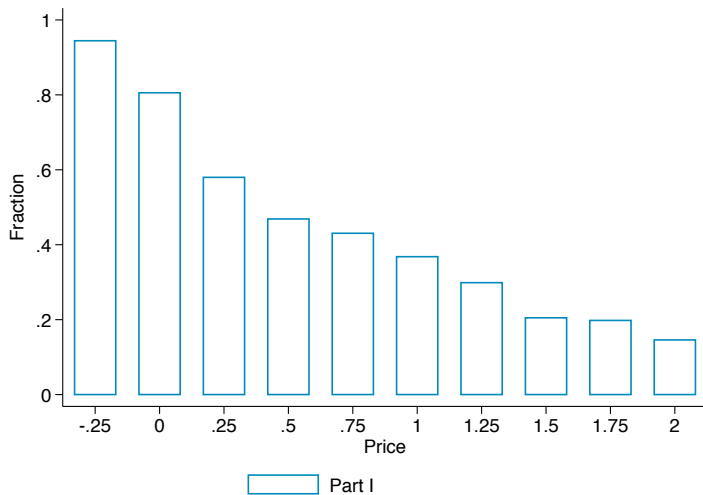
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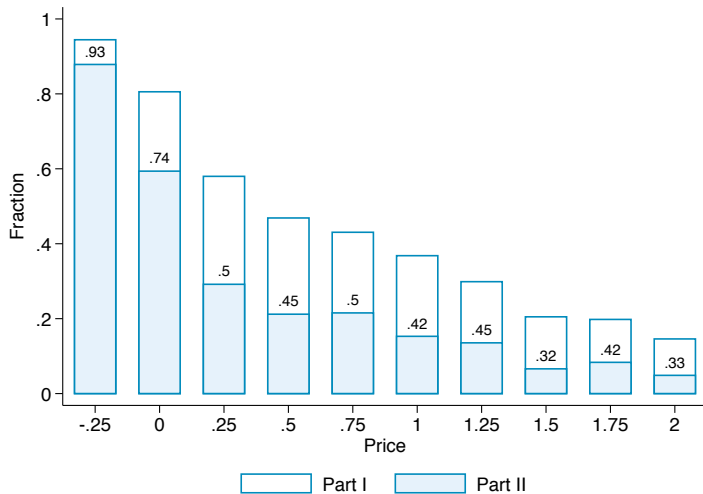
Design choices:

- ▶ Part I* allows us to assess the stability of preferences for power
- ▶ Lottery task obscures the connection between outcomes and intentions

Willingness to Pay for Power: Aggregate Level, Part I

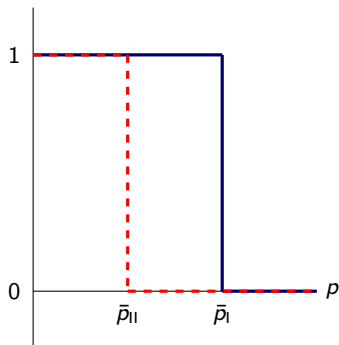


Willingness to Pay for Power: Aggregate Level, Part I vs. Part II



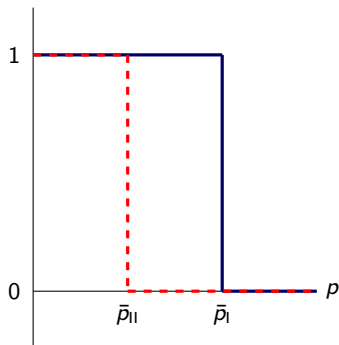
Willingness to Pay for Power at Individual Level: Restricted Sample

- ▶ Subjects with step-shaped demand functions in Parts I, II of the Power Game

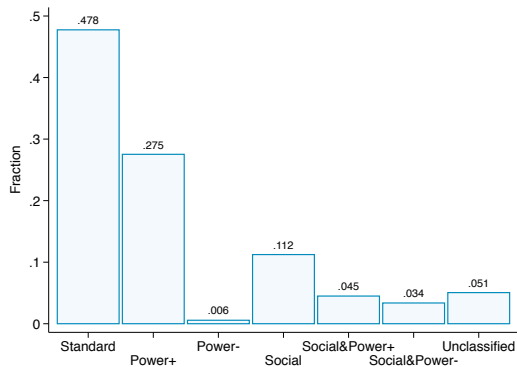


Willingness to Pay for Power at Individual Level: Restricted Sample

- ▶ Subjects with step-shaped demand functions in Parts I, II of the Power Game
- ▶ **178 subjects or 61.8% of our sample**
- ▶ 215 subjects (or 74.7%) make one price skip or less. For example, they pay all prices up to \$1.00, skip \$1.25, and pay \$1.50 in one of the Parts of the Power Game.



Willingness to Pay in Part I vs. Part II and Preference Classes



| Preference class | \bar{p}_I | \bar{p}_{II} |
|------------------|-----------------|----------------------------|
| Standard | 0 | 0 |
| Power + | $\bar{p}_I > 0$ | 0 |
| Power - | $\bar{p}_I < 0$ | 0 |
| Social | $\bar{p}_I > 0$ | $\bar{p}_{II} = \bar{p}_I$ |
| Social & Power + | $\bar{p}_I > 0$ | $\bar{p}_{II} < \bar{p}_I$ |
| Social & Power - | Any | $\bar{p}_{II} > \bar{p}_I$ |
| Unclassified | $\bar{p}_I < 0$ | $\bar{p}_{II} < \bar{p}_I$ |

Preference Classes and Behavior in Other Dimensions

- ▶ Our preference classification relies only on subjects' decisions to pay in Part I and II of the Power Game.

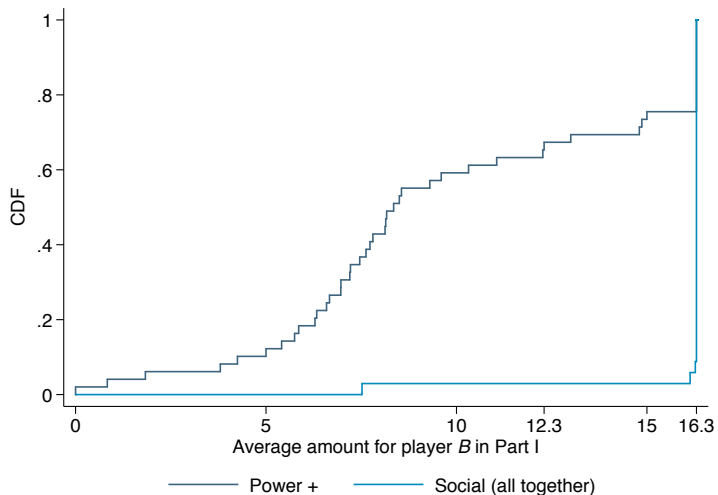
Preference Classes and Behavior in Other Dimensions

- ▶ Our preference classification relies only on subjects' decisions to pay in Part I and II of the Power Game.
- ▶ If our classification is meaningful, it should be predictive of:
 - ▶ what our subjects give to type B players;

Example: Subjects with social preferences should be more consistent in what they give to B in Part I compared with subjects with power preferences.

- ▶ If our classification is meaningful, preference classes should be stable across Parts I and I*.

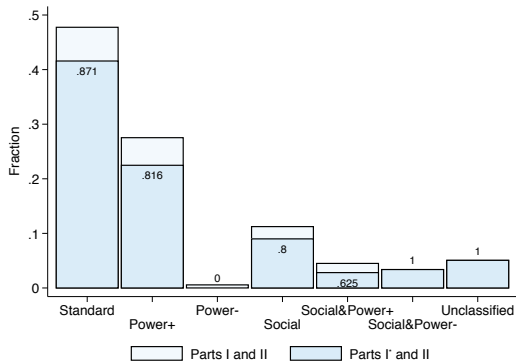
Average Payoff for Player B



Stability of Preference Classes: Part I vs. Part I*

- ▶ Last task is Part I*, the repetition of Part I of the Power Game.
- ▶ Re-classify subjects using their paying behavior in Parts I* and II.
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Stability of Preference Classes: Part I vs. Part I*



- ▶ Last task is Part I*, the repetition of Part I of the Power Game.
- ▶ Re-classify subjects using their paying behavior in Parts I* and II.
- ▶ Compare their preference classes with those obtained using Parts I and II
- ▶ 84.3%, retain their preference class between Parts I and I*.
- ▶ Fractions of subjects with stable preferences are statistically the same for *all* preference classes.

Additional Treatments

- ▶ **12.30 Treatment:** A can only choose between 0 and \$12.30 for B .
 - ▶ Does the size of the choice space matter?
 - ▶ If so, lower WTP for power and/or fewer Power+ subjects.

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- ▶ **Charity Treatment:** Students are paired with a charity and decide how much to give to the charity, between \$0 and \$16.30.
 - ▶ Is WTP due to “lure of choice” or due to an ability to determine an outcome of another *person*?
 - ▶ If latter, then Power+ subjects should disappear.

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- ▶ **Computer Treatment:** A can pay to let a computer randomly give to B , still between \$0 and \$16.30.
 - ▶ Do Power+ subjects simply desire random outcomes for B ?
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 - ▶ Do Power+ subjects simply desire random outcomes for B ?
 - ▶ If they like to be the ones choosing, Power+ subjects should disappear.
- ▶ **Vignette Studies:** subjects are given “scenarios” (involving power relations) to read - subjects associate having more choice to determine others’ outcomes with more power (see paper).

Power+ Subjects across Different Treatments

| | Main |
|--------------------------------------|-------|
| Total number of subjects | 288 |
| Percent of well-behaved | 61.81 |
| Percent of Power+ | 27.53 |
| WTP of Power+ in Part I, \bar{p}_I | 1.08 |

Power+ Subjects across Different Treatments

| | Main | 12.30 |
|--------------------------------------|-------|--------|
| Total number of subjects | 288 | 82 |
| Percent of well-behaved | 61.81 | 58.54 |
| Percent of Power+ | 27.53 | 20.83 |
| WTP of Power+ in Part I, \bar{p}_I | 1.08 | 0.60** |

12.30 Treatment:

- ▶ Flexibility and size of the choice space impacts the value of power.

Power+ Subjects across Different Treatments

| | Main | 12.30 | Charity |
|--------------------------------------|-------|--------|---------|
| Total number of subjects | 288 | 82 | 82 |
| Percent of well-behaved | 61.81 | 58.54 | 60.98 |
| Percent of Power+ | 27.53 | 20.83 | 4.00*** |
| WTP of Power+ in Part I, \bar{p}_I | 1.08 | 0.60** | 0.25* |

12.30 Treatment:

- ▶ Flexibility and size of the choice space impacts the value of power.

Charity Treatment:

- ▶ Power is different than just a preference for choice.
- ▶ Also, it is likely to be about the interaction with another person directly, not about an organization.

Power+ Subjects across Different Treatments

| | Main | 12.30 | Charity | Computer |
|--------------------------------------|-------|--------|---------|----------|
| Total number of subjects | 288 | 82 | 82 | 100 |
| Percent of well-behaved | 61.81 | 58.54 | 60.98 | 47.00 |
| Percent of Power+ | 27.53 | 20.83 | 4.00*** | 2.13*** |
| WTP of Power+ in Part I, \bar{p}_I | 1.08 | 0.60** | 0.25* | 0.75 |

12.30 Treatment:

- ▶ Flexibility and size of the choice space impacts the value of power.

Charity Treatment:

- ▶ Power is different than just a preference for choice.
- ▶ Also, it is likely to be about the interaction with another person directly, not about an organization.

Computer Treatment:

- ▶ Power is about choosing specifically, not about being able to influence.

Conclusion

- ▶ Preferences for power, mostly positive, exist.
- ▶ People are willing to pay substantial amounts to implement their preferences.
- ▶ These preferences are different than social preferences.
- ▶ Given how subjects who like power choose to exercise it, and that social welfare decreases, we argue that these are preferences that should be taken into account in the design of contracts and the study of institutions.