Determinants of Prosocial Behavior: The Effects of Social Distance and Expectations in the Volunteer’s Dilemma

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Social Dilemmas

• Consider the classroom environment
  – The professor asks for a volunteer to summarize the readings before he begins his lecture for the class

• The individual is better off following his/her self-interest, but everyone is worst off if everyone followed their self-interests (Dawes, 1980)
Prosocial Behavior

• Prosocial behavior is robust across time and contexts
  – Prisoner’s Dilemma (Sally, 1995)
  – Trust Game (Johnson & Mislin, 2011)

• Prosocial behavior produces better outcomes than self-interested choices
  – e.g. Prisoner’s Dilemma
Social Distance

• “Social Distance” (Little, 1965; Rankin, 2006; Sally, 2000)
  – Familiarity, similarity, probability of repeated interactions

• As social distance increases, prosocial behavior decreases
  – Even in bees (Hamilton, 1964)

• What drives prosocial behavior?
  – “Fellow-feeling” (Murnighan, Kim, & Metzger, 1993; Smith, 1759)
  – Strategic altruism (Akerlof, 1997; Jones & Rachlin, 2009; Trivers, 1971)
  – Social Projection (Ross, Greene, & House, 1977)
Volunteer’s Dilemma (Diekmann, 1985)

<table>
<thead>
<tr>
<th>Player 1</th>
<th>Player 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volunteer</td>
</tr>
<tr>
<td>Volunteer</td>
<td>-1, -1</td>
</tr>
<tr>
<td>Abstain</td>
<td>0, -1</td>
</tr>
</tbody>
</table>

- Game-theoretic solution using mixed-strategies
  - Optimum point for personal benefit: $p = .5$
  - Optimum point for collective benefit: $p = .75$
Study 1

• $N = 160$
• 5 conditions, within subjects
  – 1, 25, 50, 75, 100

“Imagine you constructed a list of 100 individuals in your mind, where the person labeled ‘1’ is your dearest friend or relative, and where the person labeled ‘100’ is a mere acquaintance.”

(Jones & Rachlin, 2009)
Study 1

• Subjects’ decision to volunteer
Study 1

- Subjects’ expectation of partner’s volunteering
Determinants of Prosocial Behavior

Social Distance

Decision to Volunteer

Expectations of Partner’s Volunteering
Study 2

- ‘High Expectation’ (90%), $n = 75$, $M = 65.12$
- ‘Low Expectation’ (60%), $n = 77$, $M = 72.65$
- $r = -.76$
- $b = -.33$
Study 3

• $N = 296$

• Between-subjects:
  – ‘Self-maximizing’ ($n = 144$) and ‘Group-maximizing’ ($n = 152$)

• Within-subjects:
  – ‘High Expectation’ (80%) and ‘Low Expectation’ (20%)
  – Close Partner (distance 1) and Distant Partner (distance 100)

• No main effect and no interaction effects for ‘Self-/Group-maximizing’

• Main effects of social distance and expectations
Study 3

Probability of Volunteering (%)

Social Distance

- Close Partner
  - Expectation = 80%: 50.64
  - Expectation = 20%: 72.47

- Distant Partner
  - Expectation = 80%: 35.04
  - Expectation = 20%: 59.80
Study 4

• $N = 50$

• Within-subjects:
  – Target’s choice: Volunteer or Defect
  – Target’s expectation: Others would volunteer or Others would defect

• Dependent variables:
  – Morality (1 to 7 Likert scale)
  – Competence (1 to 7 Likert scale)
Study 4

![Graph showing Morality Competence comparison between Volunteer and Defector groups, with values: 5.71 for Volunteer, 4.83 for Competence, and 3.73 for Defector.](graph)
Study 4

• Competence Judgments

![Bar chart showing competence judgments for Volunteer and Defector groups. The chart indicates that volunteers are rated higher than defectors, with a mean score of 4.20 compared to 3.40 for volunteers and 3.85 compared to 3.12 for defectors.]
Study 4

- Morality Judgments

![Graph showing morality judgments for Volunteer and Defector (Expect Vol vs Expect Def)]
In Summary

- Subjects decisions to volunteer vary with social distance
- Over-volunteering remains a persistent phenomenon
- Subjects decisions to volunteer follow a reputation management strategy
Thank you!