Low-income individual facing a decision

Smaller Sooner Option

Larger Later Option

Haushofer & Fehr, 2014; Lawrance, 1991; Mani, Mullainathan, Shafir, & Zhao, 2013; Shah, Mullainathan, & Shafir, 2012; Yesuf & Bluffstone, 2008
Low-income individual facing a decision

Smaller Sooner Option

Larger Later Option

Haushofer & Fehr, 2014; Lawrance, 1991; Mani, Mullainathan, Shafir, & Zhao, 2013; Shah, Mullainathan, & Shafir, 2012; Yesuf & Bluffstone, 2008
Low-income individual facing a decision

Lower Mental Resources avail.

Smaller Sooner Option

Larger Later Option

Mani et al., 2013; Shah et al., 2012
Low-income individual facing a decision

Lower Mental Resources avail.

Smaller Sooner Option

Larger Later Option

Interventions

Blattman et al., 2013; Daminger et al., 2015; Mani et al., 2013; Shah et al., 2012
The Role of Generalized Trust in Temporal Discounting

Political sciences literature defines ‘generalized trust’ as “a set of moral values in such a way as to create regular expectations of regular and honest behavior.” (Fukuyama, 1995, p. 153)

Higher levels of generalized trust related to higher patience & vice versa (Falk, 2015, Kidd et al., 2013, Michaelson et al., 2013).

Low-income individuals more likely to have lower generalized trust (Dohmen et al., 2015; Rothstein & Uslaner 2005).

Higher temporal discounting:
• Not failure to take long-term into account?
• But: adaptation to reality of environment (see also Gabaix & Laibson, working paper)
Low-income individual facing a decision

- Lower Generalized Trust
- Lower Mental Resources avail.

Interventions?

Smaller Sooner Option

Larger Later Option
Is generalized trust over-generalized?

Generalized trust can be thought of as a belief (Falk et al., 2015) → can emerge on the basis of small number of observations or experiences (Evans, 2001).

Nature of generalized trust is that it generalizes – from domains where negative trust experiences were made into domains where negative trust experiences were not yet made necessarily (e.g. Uslaner, 2008).

Thus, an individual who has had negative experiences with one institution may have lower trust for other institutions, even when those institutions are unrelated.
Community vs. Generalized Trust

“Community trust”: expectations of regular and honest behavior from the local community. The local community has an important role:
• Profoundly influences everyday life (e.g. Putnam, 2000)
• Resource of social support (Cobb, 1976)
• Low-income individuals rely on community (Piff et al., 2012)

Lower generalized trust may spill over to community domain.
• Low-income individuals with lower generalized trust particularly benefit from higher community trust
• Community trust as a buffer against deleterious effects of uncertainty, cf buffering hypothesis (Cohen & Wills, 1985).
Low-income individual facing a decision

- Lower Generalized Trust
- Lower Mental Resources avail.
- Higher Community Trust

Smaller Sooner Option
Larger Later Option
A Better Tomorrow: Community Trust Can Protect Low-Income Individuals From Myopic Decisions

Overview of Predictions

Hyp 1: Relationship between low-income and higher temporal discounting partially mediated by lower levels of generalized trust.

Hyp 2: Low-Income individuals with higher levels of community trust more likely to discount future less heavily.
Outline of Studies

**Study 1:** WVS Survey Data

**Study 2:** online survey of US participants

**Study 3:** field survey in rural Bangladesh

**Study 4:** experimental study

**Dependent Variable throughout studies:** temporal discounting
Measures (n=111; 37 females, mean age = 38.3, SD = 11.1):

- 12 unions (Upazila) in 3 districts (Habiganj, Kishoreganj, Bagerhat).
- Participants had about Tk. 1600 per month per household member (SD = 712.43), which equals ~$0.68 per day.
- Adapted 12-item measure of community trust, back-translated and locally pre-validated (α = .69), e.g. “Daily life in my village makes me hopeful about the future of my child(ren)” and “There is a strong sense of “community” and “trust” among the inhabitants of my village”.
- Assessed temporal discounting factors using titration measure (Green, Fry, & Myerson, 1994; see next slide)

1000 Tk. = 12.87 USD (22-Nov 2015)
Measuring temporal discounting using titration

**Study 3**

**Time Preference**

Listed below are several financial payout options ranging from an instant payment of Tk. 500 to several different incremental payout options available in 3 months time. Please indicate your payout preference from each row.

<table>
<thead>
<tr>
<th>Option A: Instant payout (Taka)</th>
<th>Option A</th>
<th>Option B</th>
<th>Option B: Payout in 3 months (Taka)</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td></td>
<td></td>
<td>515</td>
</tr>
<tr>
<td>500</td>
<td></td>
<td></td>
<td>550</td>
</tr>
<tr>
<td>500</td>
<td></td>
<td></td>
<td>600</td>
</tr>
<tr>
<td>500</td>
<td></td>
<td></td>
<td>700</td>
</tr>
<tr>
<td>500</td>
<td></td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td>500</td>
<td></td>
<td></td>
<td>1500</td>
</tr>
<tr>
<td>500</td>
<td></td>
<td></td>
<td>2500</td>
</tr>
</tbody>
</table>
# Community Trust Scale

**Answer Options ranging from 1 (not at all) to 5 (completely)**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I would like my child(ren) to be raised in the village I currently live in.</td>
</tr>
<tr>
<td>2</td>
<td>Daily life in my village makes me hopeful about the future of my child(ren)</td>
</tr>
<tr>
<td>3</td>
<td>Living where I live guarantees me and my family a secure future.</td>
</tr>
<tr>
<td>4</td>
<td>I consider daily life in my village to be very safe</td>
</tr>
<tr>
<td>5</td>
<td>I am quite active in my community</td>
</tr>
<tr>
<td>6</td>
<td>I feel safe leaving my wife and/or child(ren) at home when I go out to work</td>
</tr>
<tr>
<td>7</td>
<td>I have faith in the local justice system</td>
</tr>
<tr>
<td>8</td>
<td>Schools are quite accessible to the children from my village</td>
</tr>
<tr>
<td>9</td>
<td>Government/social services are easily accessible in my village</td>
</tr>
<tr>
<td>10</td>
<td>There is a strong sense of “community” and “trust” among the inhabitants of my village</td>
</tr>
<tr>
<td>11</td>
<td>There are sufficient health service facilities (hospitals, clinics) present near my village</td>
</tr>
<tr>
<td>12</td>
<td>There are advantages to living in my village.</td>
</tr>
</tbody>
</table>
Higher community trust leads to less temporal discounting for very low-income individuals

On average, the indifference point was at about Tk. 1500 ($M = 1488.43, SD = 941$). Lower levels of community trust related to higher indifference point ($\beta = .158, SE = .037, p < 0.001$).
Study 4: Experimental Evidence

Measures (n=120; 54 females, mean age = 32.9, SD = 10.23):

- Each participant allocated to one cell in 2-by-2 design:
  - Levels of felt income low/high (based on Shah et al., 2012), 4 scenarios, e.g.: “The economy is going through difficult times; supposed your employer needs to make substantial budget cuts. Imagine a scenario in which you received a 5% (15%) cut in your salary. Given your situation, would you be able to maintain roughly your same lifestyle under those new circumstances?”.
  - Levels of community trust low/high: increasing salience of construct by forced response listing of either 2 (low) or 10 (high) examples where community trust was present.

- Dependent Variable: Temporal Discounting (DEEP, Toubia et al., 2013)
- Manipulation Check: MacArthur Ladder (measure of SES) and 14-item scale of community trust
Measuring temporal discounting using DEEP

Study 4

Survey

Please consider the two options below. Which of these two options do you find more attractive?

**Option A**
- Receive $95 today

**Option B**
- Receive $250 in 3 months

Choose A  
Choose B

SECTION #2 OUT OF 2

Questions Completed

1/8

Toubia, Johnson, Evgeniou, & Delanquié, 2013
Manipulation Checks

Study 4

- Individuals in low felt income cells more likely to report lower ladder ($t(119) = 24.95, p < .001$)

- Individuals in low community trust cells more likely to report lower levels of community trust ($t(119) = 2.038, p < .05$)
Low-income individuals with higher community trust have lower temporal discounting

Study 4

* \( p < .05 \)
Why do poor people make poor decisions?

- Poverty impedes cognitive function: “When getting through the end of the week is difficult, planning the next month or next year is nearly impossible.” (Daminger et al., 2015, p. 20)

- Poor people may also make poor decisions due to lower levels of generalized trust. Investing in long-term implicitly assumes long-term pay-off will occur.

- Highlighting the role of the community may compensate for lower generalized trust and lead to better economic decisions – and ultimately help escape the vicious cycle of poverty.
Next Steps: Teasing out causality

1. Income Manipulation in Brooklyn Housing Projects (in collaboration with NYC-YCD)
   - 2-month design: measuring temporal discounting either before or after receipt of income/benefits
   - 2 groups: measure temporal discounting either before/after income, or after/before income

2. Community Trust Intervention in Bangladesh (in collaboration with BRAC)
   - RCT with 1-year manipulation with 20+ villages
   - Relatively stable levels of income
   - Continuation of Study 3 (baseline measure)
Thank you!

Salah Chafik (Columbia Business School)
Jaideep Prabhu (University of Cambridge)
Sabeth Munrat (BRAC)
Elke U. Weber (Columbia Business School)
Study 1: Role of Trust in the relationship income <> long-term decisions

Measures:

• Income, ranging from 1 (lowest income group) to 10 (highest)
• Generalized trust, “Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?”
• Community trust, “How much you trust people from your neighborhood?”
• Outcome variables reflective of long-term decisions: Education, Health, Happiness
Higher Income Related to Higher Generalized Trust

Study 1

general trust by income

income

percent

0
25
50
75
100

Need to be very careful
Most people can be trusted

general trust level

Columbia Business School
AT THE VERY CENTER OF BUSINESS
Study 2: Correlational evidence from US participants

Measures (n=670; 330 females, mean age = 35.13, SD = 10.68):

- Income (annual income, divided by number of household members)
- 14-item measure of community trust (α = .872) adapted from Ramos et al. (2013), example items include “Living where I live guarantees me a secure future.” and “I am frequently present to violent situations in the community I live in.” (reversed)
- Assessed temporal discounting factors using DEEP (Dynamic Experiments for Estimating Preferences; Toubia et al., 2013)
Low-income individuals with higher levels of community trust have lower temporal discounting

ANOVA with levels of income and levels of community trust as IVs, and temporal discounting factor as DV reveals significant interaction ($F_{(2,664)} = 4.393, p = 0.013, \eta^2 = 0.013$). Planned contrasts show only individuals with low-income and low levels of community trust differ significantly from all other groups.