5th eeecon lecture
November 09, 2017

Group Identity and Public Goods Provision in the Field
Professor Yan Chen

Welcome address
Prof. Janette Walde

Opening address
Vice Rector Prof. Bernhard Fügenschuh

Introduction of the lecturer
Dean Prof. Markus Walzl

Lecture
Prof. Yan Chen
Group Identity and Public Good Provision in the Field

Yan Chen

School of Information, University of Michigan
Motivations: Public Goods Provision

• Public goods provision: solutions to the free-rider problem
• When there is a central authority to enforce taxes and subsidies
  – Dominant strategy: Vickrey-Clarke-Groves
  – Nash: Groves and Ledyard (1977)
  – Bayesian Nash: Ledyard and Palfrey (1994)
• No central authority: e.g., online communities
  – Voluntary participation
  – Voluntary contributions
Motivations: Identity

• Identity as a **behavioral mechanism** when monetary incentives are limited:

• **Social identity**: A person’s sense of self derived from group membership

• Can we create groups in organizations?
  – Causal inference: group membership and behavior
  – Computation: recommender system for teams
• Inducing identities
  – minimal group paradigm (MGP): Tajfel and Turner (1978, 1979)
  
  (1) random assignment to groups based on trivial tasks
  (2) no social interaction
  (3) anonymous group membership
  (4) no link between self interest and choices

  – MGP => Ingroup favoritism, outgroup discrimination

• Priming natural identities
  – Chatman et al. (1998)
  – Shih et al. (1999)
Identity and Economic Decision Making

• Identity and cooperation
  • Eckel and Grossman (2005)
  • Charness et al (2007)
  • Chen and Li (2009)

• Identity and coordination
  • Feri, Irlenbusch, and Sutter (2010)
  • Chen and Chen (2011)

• Identity and trust
  • Hargreaves Heap and Zizzo (2009)
  • Fehrler and Kosfeld (2013)

• Field: Team competition and pro-social behavior
  • Erev, Bornstein and Galili (1993)
Recommending Teams Promotes Pro-Social Lending: Evidence from Online Microfinance

Wei Ai¹, Roy Chen², Yan Chen¹, Qiaozhu Mei¹, Webb Phillips³

1. University of Michigan
2. National University of Singapore
3. Kiva.org
Empower people around the world with a $25 loan

- $25 or up per loan (zero interest)
- $850 million loaned in total
- 1.5 million borrowers from 84 countries,
- 1.4 million lenders across 208 countries
- Repayment rate > 98%
Kiva’s Challenge

- Lending Frequency
  - Few lenders made many loans;
  - Many lenders made few loans;
  - One-third of users never made a loan

How do we increase lender participation?
Kiva Lending Teams

• Why lending teams?
  – Premal Shah: make Kiva “as fun and compelling as possible”
  – Atheist team captain: “The whole idea of teams in the Kiva context implies there should be competition.”

• Lending teams created in August 2008
  – 37,000+ lending teams
  – Heterogeneity among teams
Teams as Social Groups

We loan because...
So little means so much. And because we are so fortunate to be able to lend with the luxury of not worrying about whether we ever see that money again, while the clients borrow with the hope and determination that they will be able to repay, and improve their lives along the way.

Check out fundraising loans already being supported by Team Canada: www.kiva.org/team/team_canada/loans?status=fundRaising

About us
We're Canadian, eh?

Location: Canada  Team website

Share a common statement: “We loan because …”
Intergroup competition: Kiva leaderboard
Communication: dedicated forum
Team Competition: Leaderboards

<table>
<thead>
<tr>
<th>Team Name</th>
<th>Amount Loaned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atheists, Agnostics, Skeptics,...</td>
<td>$15,686,525</td>
</tr>
<tr>
<td>Kiva Christians</td>
<td>$7,225,450</td>
</tr>
<tr>
<td>milepoint</td>
<td>$5,177,800</td>
</tr>
<tr>
<td>Guys holding fish</td>
<td>$6,771,550</td>
</tr>
<tr>
<td>HP</td>
<td>$5,483,100</td>
</tr>
<tr>
<td>Friends of Bob Harris</td>
<td>$5,308,225</td>
</tr>
<tr>
<td>Australia</td>
<td>$4,457,150</td>
</tr>
<tr>
<td>Team CANADA</td>
<td>$4,394,800</td>
</tr>
<tr>
<td>Nerdfighters</td>
<td>$4,355,775</td>
</tr>
<tr>
<td>Team Europe</td>
<td>$3,605,000</td>
</tr>
</tbody>
</table>
Kiva Lending Team: Atheists, Agnostics, Skeptics, Freethinkers, Secular Humanists and the Non-Religious

Location: Earth
Category: Common Interest
Team URL: http://www.kiva.org/team/atheists
We loan because: We care about the suffering of human beings.
About us: Those of us who know we are one human family.

**New to the team? Read this:** is.gd/51mxq

**FriendFeed:** friendfeed.com/rooms/aasfshnr

**Facebook Group:** is.gd/zVMJ

Check out: http://atheist-monkey.blogspot.com/
Team Since: Aug 28, 2008

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Kiva Lending Team: Kiva Christians

Location: Worldwide
Category: Friends
Team URL: http://www.kiva.org/team/christians
We loan because: Pure and undefiled religion before God the Father is this, to care for orphans and widows in their misfortune and to keep oneself unstained by the world. (Jam. 1:27)

Link to information regarding Christian partners www.gerv.net/info/christian-field-partners

About us: A group of believers in Jesus Christ, brought together through a common purpose: to help those in need around the world.

Check out: http://whoisjesus-really.com/
Team Since: Aug 31, 2008
Research Questions

Observation: many Kiva lending teams are identity-based teams

• Does joining a team increase lending?
  – Field experiment 1
  – *Proceedings of the National Academy of Science*, (December 2016)

• If so, why? What makes some teams effective?
  – Theoretical analysis
  – Field experiment 2
  – *GEB* (2017)
Does joining a team increase lending?
Hypotheses

• Lenders will be more likely to join teams if we make “good” recommendations

What’s a “good” recommendation?
– Location similarity: homophily (Kaggle competition)
– Loan history similarity: homophily
– Leaderboard positions: status

• Users will lend more after they join teams
  – 82% Kiva users do not belong to any team
Experiment Design: Sample Selection

• Field experiment: May 2014

• Sample selection criteria (from Kiva):
  – Haven’t joined any team
  – Have location information in their profile
  – Allow marketing email, set their pages public
  – Have made at least 2 loans in the past 6 months

• 69,845 users met these criteria
Experiment Design: 3 x 2 factorial

<table>
<thead>
<tr>
<th>Algorithm</th>
<th>Explanation</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Explanation, No Explanation</td>
<td>No Contact</td>
</tr>
<tr>
<td>Loan History</td>
<td>Location-Explanation, Location-NoExplanation</td>
<td>Teams Exist</td>
</tr>
<tr>
<td>Leaderboard</td>
<td>Leaderboard-Explanation, Leaderboard-NoExplanation</td>
<td></td>
</tr>
</tbody>
</table>

18
Hi Wei,

Since you’re such an awesome Kiva lender, we wanted to let you know about a fun feature of the Kiva experience: Kiva Lending Teams!

Lending Teams are self-organized groups around shared interests – location, alumni orgs, social causes, you name it. You can connect with other lenders, discover loans you might be interested in, and track your collective impact.

Check out some of the thousands of lending teams to find the right one for you.

Thanks for being a part of the Kiva community and making a difference around the world.

Best Wishes,
The Kiva Team
“Team Recommendation” Emails

- Other lenders who live near you enjoy being a part of these teams
- Based on your past lending, people who have made similar loans enjoy being a part of these teams
- Some of the most popular teams are
- Here are a few teams you may want to check out
# Team Recommendation Summary

<table>
<thead>
<tr>
<th>Experimental Conditions</th>
<th>Emails Sent</th>
<th>Emails Opened</th>
<th>Joined Team</th>
<th>Joined Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Contact</td>
<td>n/a</td>
<td>n/a</td>
<td>41</td>
<td>n/a</td>
</tr>
<tr>
<td>Team-Exist</td>
<td>8076</td>
<td>2977</td>
<td>63</td>
<td>n/a</td>
</tr>
<tr>
<td>Location-Exp</td>
<td>8037</td>
<td>2914</td>
<td>103</td>
<td>74</td>
</tr>
<tr>
<td>Location-NoExp</td>
<td>8028</td>
<td>2931</td>
<td>79</td>
<td>49</td>
</tr>
<tr>
<td>History-Exp</td>
<td>8070</td>
<td>2890</td>
<td>83</td>
<td>37</td>
</tr>
<tr>
<td>History-NoExp</td>
<td>8048</td>
<td>2930</td>
<td>77</td>
<td>29</td>
</tr>
<tr>
<td>Leaderboard-Exp</td>
<td>8036</td>
<td>2922</td>
<td>75</td>
<td>34</td>
</tr>
<tr>
<td>Leaderboard-NoExp</td>
<td>8072</td>
<td>2911</td>
<td>79</td>
<td>33</td>
</tr>
</tbody>
</table>

**Intent to treat** treated
Proportion Joining a Team

![Bar chart showing the proportion of lenders joining recommended or other teams based on different conditions.]
## Treatment Effect on Joining Teams (probit)

<table>
<thead>
<tr>
<th>Dependent Variable: Whether a user has joined a team or not (binary)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Users</td>
<td>All Users</td>
<td>Opened</td>
<td></td>
</tr>
<tr>
<td>Team-exist</td>
<td>0.0040*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location-Explanation</td>
<td>0.0118***</td>
<td>0.0060***</td>
<td>0.0177***</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Location-NoExplanation</td>
<td>0.0072***</td>
<td>0.0025</td>
<td>0.0072</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>History-Explanation</td>
<td>0.0082***</td>
<td>0.0032*</td>
<td>0.0112**</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>History-NoExplanation</td>
<td>0.0072***</td>
<td>0.0024</td>
<td>0.0038</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Leaderboard-Explanation</td>
<td>0.0068***</td>
<td>0.0022</td>
<td>0.0052</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Leaderboard-NoExplanation</td>
<td>0.0066***</td>
<td>0.0020</td>
<td>0.0074</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Receiving Email</td>
<td></td>
<td>0.0031**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>65,653</td>
<td>65,653</td>
<td>20,453</td>
</tr>
</tbody>
</table>

Significant at the: * 10%, ** 5%, and *** 1% levels.
Treatment Effect on Joining Teams

• Every treatment except “Teams-Exist” did significantly better than the control.
• Location with explanation has the largest effect.
• Among those who opened email, two treatments did significantly better than the team-exist treatment:
  – Location-explanation (survives MHT correction)
  – History-explanation (insignificant after MHT correction)
Effect of Team Membership on Lending Amount

Table 3. Difference-in-Differences Regressions of Average Daily Lending Amount (2SLS).

<table>
<thead>
<tr>
<th></th>
<th>IV 1st Stage (1)</th>
<th>IV 2nd Stage: Average Amount</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(2) 1-Day</td>
<td>(3) 7-Day</td>
<td>(4) 30-Day</td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td>0.0053***</td>
<td>298.5579***</td>
<td>55.9145***</td>
<td>10.2310</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(72.283)</td>
<td>(21.058)</td>
<td>(7.318)</td>
<td></td>
</tr>
<tr>
<td>Join Team</td>
<td>0.0045***</td>
<td>-2.6593***</td>
<td>-0.9359***</td>
<td>-0.2357***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.670)</td>
<td>(0.195)</td>
<td>(0.068)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>Observations</td>
<td>64,800</td>
<td>64,800</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>64,800</td>
<td>64,800</td>
<td>64,800</td>
</tr>
</tbody>
</table>

First stage: F-statistics=23.55; Second stage: exclusion restriction
Effect of Team Membership on Lending Amount

![Graph showing the effect of team membership on lending amount. The graph compares the amount contributed in a 1-Day Window, a 7-Day Window, and median lender lifetime contribution.](Graph.png)
Summary

• Team recommendation emails significantly increase the likelihood a lender joins a team compared to the control
  − Location + explanation has the largest effect
  − Homophily vs. status

• For those who joined a team, their average lending amount increased by
  − $299 in the one-day window
  − $392 in the 7-day window

• Support team membership as an effective mechanism for promoting pro-social behavior

• Methodology
  − Machine learning: recommender systems – predictive accuracy
  − Field experiments: causal inference
Research Questions

Observation: many Kiva lending teams are identity-based teams

• Does joining a team increase lending?
  – Field experiment 1

• If so, why? What makes some teams effective?
  – Theoretical analysis
  – Field experiment 2
Theoretical Framework

• Related to the dynamic contributions to public goods literature
  – Varian (1994)
  – Marx and Matthews (2000)
  – Andreoni (2006)
  – Andreoni, Serra-Garcia and Koessler (2015)

• Incorporating features of online microfinance into the model
Assumptions

• Lender i's search cost, $k_i$ (opportunity cost of time): an i.i.d. draw from a continuous distribution, $F$, with bounded support.

• Match quality: $\theta \in [0, 1]$.

• $c_i > 0$: lender i's opportunity cost of making a loan.

• $g_i$: i's loan amount.

• $J$: the set of lenders who loan to borrow j.

• Total loan amount to borrower j, $G_j = \sum_{i \in J} g_i$.

• Only one borrower is a lender’s best match.

• Utility function: separable between private and public goods.
If a lender does not belong to a team ...

Quasilinear: \( U(x_i, G^0, \theta) = \theta v(G^0) + \omega_i - cg^0 - k_i \)

Second stage: \( \max_{g^0} \theta v(G^0) + \omega_i - cg^0 - k_i \)

\[
G^0 = v^{-1} \left( \frac{c}{|J|} g^0 \right) = \frac{G^0}{|J|}.
\]

First stage: search if \( k_i \theta [v(G^0) - v(G^0_{-i})] - cg^0 \theta k_i \)
If a lender belongs to a team ...

Assume members within a team have identical preferences w.r.t. public goods, $\theta_i = \theta_j = \theta_t, \forall i, j \in T$

Example: $U(x_i, G^t, \theta_t) = \theta_t v(G^t) + \omega_i - c g^t - k_i + \gamma R(G^t)$

Second stage: $\max_{g^t} U(x_i, G^t, \theta_t)$

$G^t = v'^{-1} \left( \frac{c}{|J|} - \frac{\gamma}{\theta |J|} R'(G^t) \right) G^0$, $g^t = \frac{G^t}{|J|}$

First stage: search if

$k_i \cdot \theta [v(G^t) - v(G^t_{-i})] + \gamma [R(G^t) - R(G^t_{-i})] - cg^t \cdot k^t$
If a lender belongs to a team ...

When \( \gamma \theta \left[ \Delta v(G^0) - \Delta v(G^t) \right] + c(g^t - g^0) \),

a team member's search threshold is higher: \( k_i^t \neq k_i^0 \).

**Proposition 1 (Team Competition)** – When a lender cares sufficiently about the total amount of loans provided by her team, she is more likely to search and to make more loans than a lender who does not belong to any team.
Team Coordination

• **Proposition 2 (Team Coordination)** – A lender who belongs to a lending team where members recommend loans to each other will be more likely to make loans than a lender who does not belong to any team.

• **Note:**
  – Search stage: multiple asymmetric Nash equilibria, characterized by one lender conducting search
Kiva Data

• API: public Kiva data (2012)
  – Categorization: coders hired to code gender/group type, occupation, motivation for lending
  – Locations: country from API, city and state/province from free text
  – Used for empirical analysis

• Data dump (2013, 2015)
  – De-identified, no demographic information
  – Used for experimental analysis

• Aside: how to collaborate with an online community?
Why does joining a team lead to more lending?

- **Heterogeneity among teams**
- **Forums**: we explore various aspects of team forums and how they relate to lending
  - Coordination (URL pointers)
- **Leaderboard**: we explore whether teams whose rankings are threatened lend more
  - Competition
Field Experiment

• Randomly selected 2,000 open teams
• Drop teams with fewer than 5 members: 550 teams (final: 536 teams)
• Randomly assign these teams (stratified) to 4 treatments and 1 control
• At time of assignment, average team size in our sample was 46.7 members
• Total number of lenders in our experiment: n = 22,233
Experimental Design

• **2*2 Factorial: coordination vs. competition**

<table>
<thead>
<tr>
<th></th>
<th>No Link</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Goal</td>
<td>New member introduction (109 teams)</td>
<td>New Member Introduction + Link to a loan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(107 teams)</td>
</tr>
<tr>
<td>Goal</td>
<td>New member introduction + Goal (107 teams)</td>
<td>New Member Introduction + Link to a loan + Goal (108 teams)</td>
</tr>
</tbody>
</table>

• **Control:** No forum messages (109 teams)
New Lender Identities

• Create 50 new lender identities
  – Names: top 25 most popular male and female first names, top 50 most popular last names based on 1990 US census.
  – Location: capital city of each state
  – No occupation information or pictures
  – Randomly match names and locations

• Each lender joins 11 teams
• Each makes a loan assigned to each team
• Total amount loaned by experimenters: $13,725
• Protocol approved by Kiva in August 2012
Experimental Conditions

• **Control**: join team, make a $25 loan credited to the team.

• **NoGoal-NoLink**: control actions + an introductory forum message:
  “Hi, I am [LenderName], and I am new to the team. I just credited my first loan to the team.”

• **NoGoal-Link**: introduction + a link to a specific loan:
  “I loaned to [BorrowerName] from [BorrowerLocation]. [He/She] requested a loan of [LoanAmount] to [LoanReason]. Here is the url to [his/her] request: [url]”

• **Goal-NoLink**: introduction + a goal for the team:
  “If each of us make a $25 loan in the next month, we will improve our rank.”

• **Goal-Link**: combination of NoGoal-Link and Goal-NoLink messages.
Example: Goal-Link Treatment

• **Us (10/18):**
  “Hi, I am Paul, and I am new to the team. I just credited my first loan to the team. I loaned to Sandra from Colombia. Sandra is asking for a loan of $1,400 in order to buy decorative items and aromatherapy products. Here is the url to her request: [www.kiva.org/lend/483106](http://www.kiva.org/lend/483106). If each of us make a $25 loan in the next month, we will improve our rank.”

• **Lender 1 (10/19):** “Welcome Paul. I added $25 more to Sandra as well.”

• **Lender 2 (10/19):** “Good call Paul. Thanks for sending out the message. I’m in!”

• **Lender 3 (10/19):** “Another thanks for sending out the message. I'm in!”

• **Lender 4 (10/22):** “My 10-year old daughter and I just added some loans to the pool. Let's keep going!”

• **Lender 5 (10/23):** “I'm in for $25”
Combined Treatment Effects (Inactive Teams)

# of loans per lender per day

Control
Treatment

0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00

-4 -3 -2 -1 0 1 2 3
Diff-in-Diff Regression Results

Diff-in-Diff Regressions of Number of Loans on Treatments

(Lenders Not Exposed to Forum Messages in Past Year)

<table>
<thead>
<tr>
<th></th>
<th>1-Day</th>
<th>4-Day</th>
<th>7-Day</th>
<th>10-Day</th>
<th>30-Day</th>
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<tbody>
<tr>
<td>NoGoal-NoLink</td>
<td>0.0767</td>
<td>0.0229</td>
<td>0.0103</td>
<td>0.0129*</td>
<td>0.0048</td>
</tr>
<tr>
<td></td>
<td>(0.052)</td>
<td>(0.014)</td>
<td>(0.009)</td>
<td>(0.007)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>NoGoal-Link</td>
<td>0.0226</td>
<td>0.0185</td>
<td>0.0059</td>
<td>0.0119</td>
<td>0.0051</td>
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<tr>
<td></td>
<td>(0.058)</td>
<td>(0.017)</td>
<td>(0.010)</td>
<td>(0.008)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Goal-NoLink</td>
<td>0.0533</td>
<td>0.0329**</td>
<td>0.0161*</td>
<td>0.0149**</td>
<td>0.0080**</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
<td>(0.014)</td>
<td>(0.009)</td>
<td>(0.007)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Goal-Link</td>
<td>0.0303</td>
<td>0.0342**</td>
<td>0.0167</td>
<td>0.0182**</td>
<td>0.0091**</td>
</tr>
<tr>
<td></td>
<td>(0.059)</td>
<td>(0.017)</td>
<td>(0.011)</td>
<td>(0.008)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.0330</td>
<td>0.0219</td>
<td>0.0164</td>
<td>0.1051***</td>
<td>0.0190</td>
</tr>
<tr>
<td></td>
<td>(0.101)</td>
<td>(0.035)</td>
<td>(0.024)</td>
<td>(0.022)</td>
<td>(0.019)</td>
</tr>
<tr>
<td>Observations</td>
<td>8,378</td>
<td>33,512</td>
<td>58,646</td>
<td>83,780</td>
<td>251,340</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.502</td>
<td>0.150</td>
<td>0.091</td>
<td>0.067</td>
<td>0.040</td>
</tr>
</tbody>
</table>

Notes:
1) Significant at the: * 10%, ** 5%, and *** 1% levels.
2) Full set of day and lender dummies included.

Compared to the control, each lender in the Goal-NoLink treatment lends 0.03 more loans per day in the four-day window compared to the control.
Experimental Results

• Compared to the control, each lender in the “Goal” (Goal-NoLink and Goal-Link) treatments lends 0.03 more loans per day in the four-day window;
• Each lender makes on average 0.24 more loans in a 30 day window
• This effect is significant for lenders from inactive teams
• Given average team size (16.4 for inactive teams), this is about 4 more loans per “inactive” team per month
Our Messages vs. Naturally-Occurring Messages

• **Links**: in active teams, messages with links often include 1-2 paragraph biographies of the borrowers.

• **Goals**: in active teams, goal messages have competitive and are specific to the team. A member from Nerdfighters said,

  “Guuuuuyys! We've beat both the Trolltech Foundation AND The Church of the Flying Spaghetti Monster in the past weeks! We're now number 17 on the most lended list! Next up, India!”

• **Effect of our (neutral) messages**: lower bounds
Summary: Team Membership and Pro-Social Lending

• Does joining a team increase lending?
  – Yes, 1.2 loans per lender per month (API data)
  – Yes, $392 in a week (field experiment 1)

• Why?
  – Team forums:
    • Coordination: sharing borrower URLs
    • Competition: goal setting
  – Field experiment using forum messages
Ongoing Work on Wikipedia

• Does joining a WikiProject increase editing activities?
  – most active 9,134 registered WP editors

• Positive effect on an editors’ contributions
  – 80% increase in size of edits
  – 40% increase in number of edits

• Persist for at least 6 month
  – 140% increase in size of edits
  – 60% increase in number of edits

• Behavioral mechanism design
  – Using group identity as a design tool