Lorenz Goette and Egon Tripodi's

# "The Limits of Social Recognition: Experimental Evidence from Blood Donors"

Working paper, 2023

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# In a nutshell

**Research question**

- To what extent does social recognition motivate prosocial individuals?

**How**

- Field + survey experiments conducted jointly with Avis Toscana

**What I liked the most**

- WhatsApp Business API!

# Summary of results

- Social recognition does not motivate repeated blood donors more than a simple request to donate.
- **Intuition:** increasing the visibility of good actions can backfire when prosociality is perceived as image-seeking.
- The survey experiment supports the view that repeat donors are less concerned about signalling altruism than they are about not being perceived as image seeking.

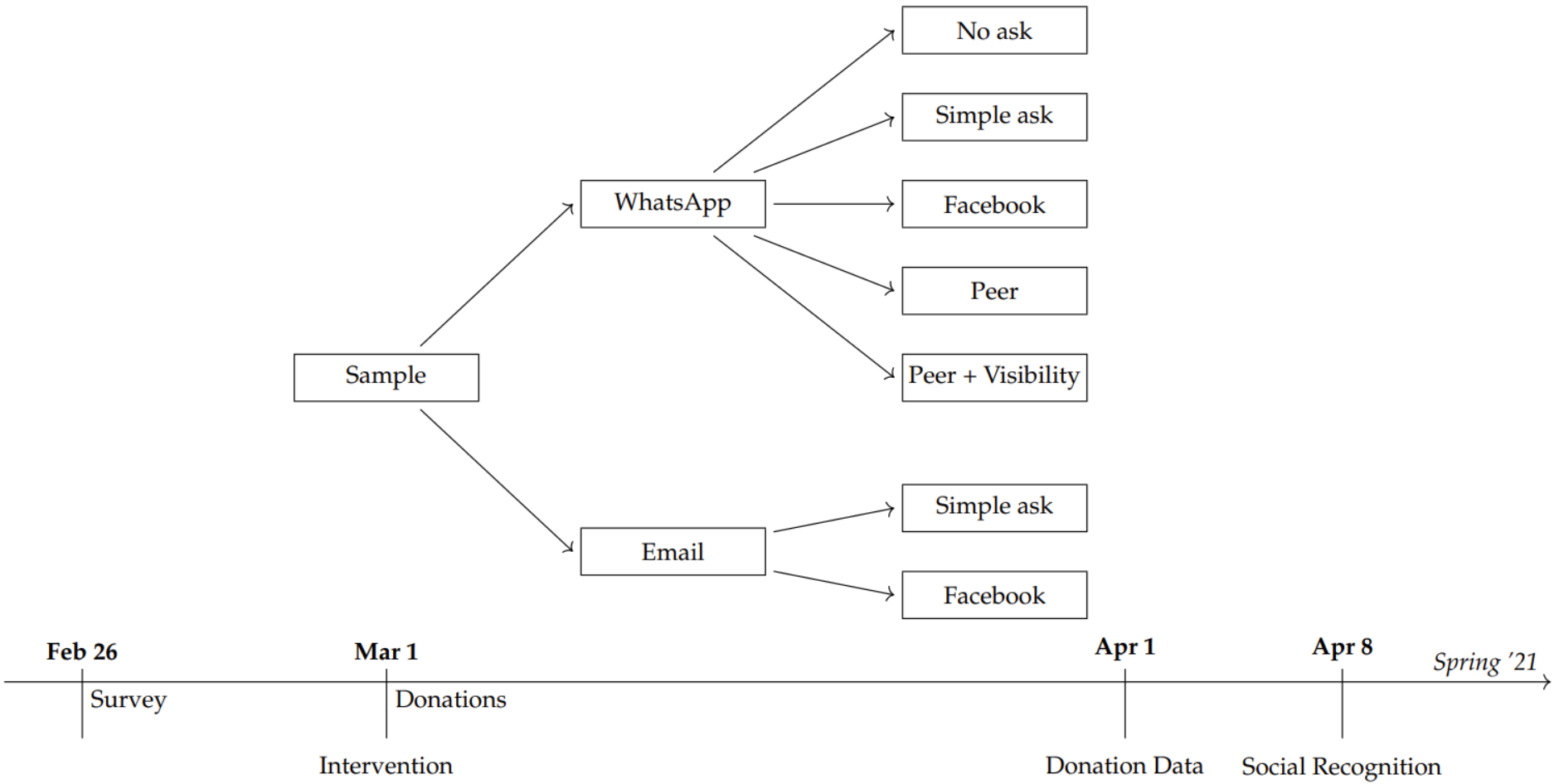
# Experiment 1

## Overview

- Donors were asked to donate blood or plasma in the month following the authors' experimental Email/WhatsApp communications.
- Primary outcome of interest: donations made during this month.
- Two approaches for providing social recognition:
  (1) Inform donors (a) at the beginning of the study period about their peers' recent engagement in civic activities (*Peer*), and (b) at endline about who donated during the study (*Peer + Visibility*).

  Experimental variation in the social proximity of peers: random groups of twenty close/distant donors with whom subjects can relate to.
  (2) Social media campaign that rewards participants who donate by listing their names on the Facebook pages of Avis Toscana (*Facebook*).
- Benchmarks: not being solicited to donate (*No ask*) and being solicited with a simple request (*Simple ask*).

# Experiment 1 (cont'd)



# Experiment 1: messages

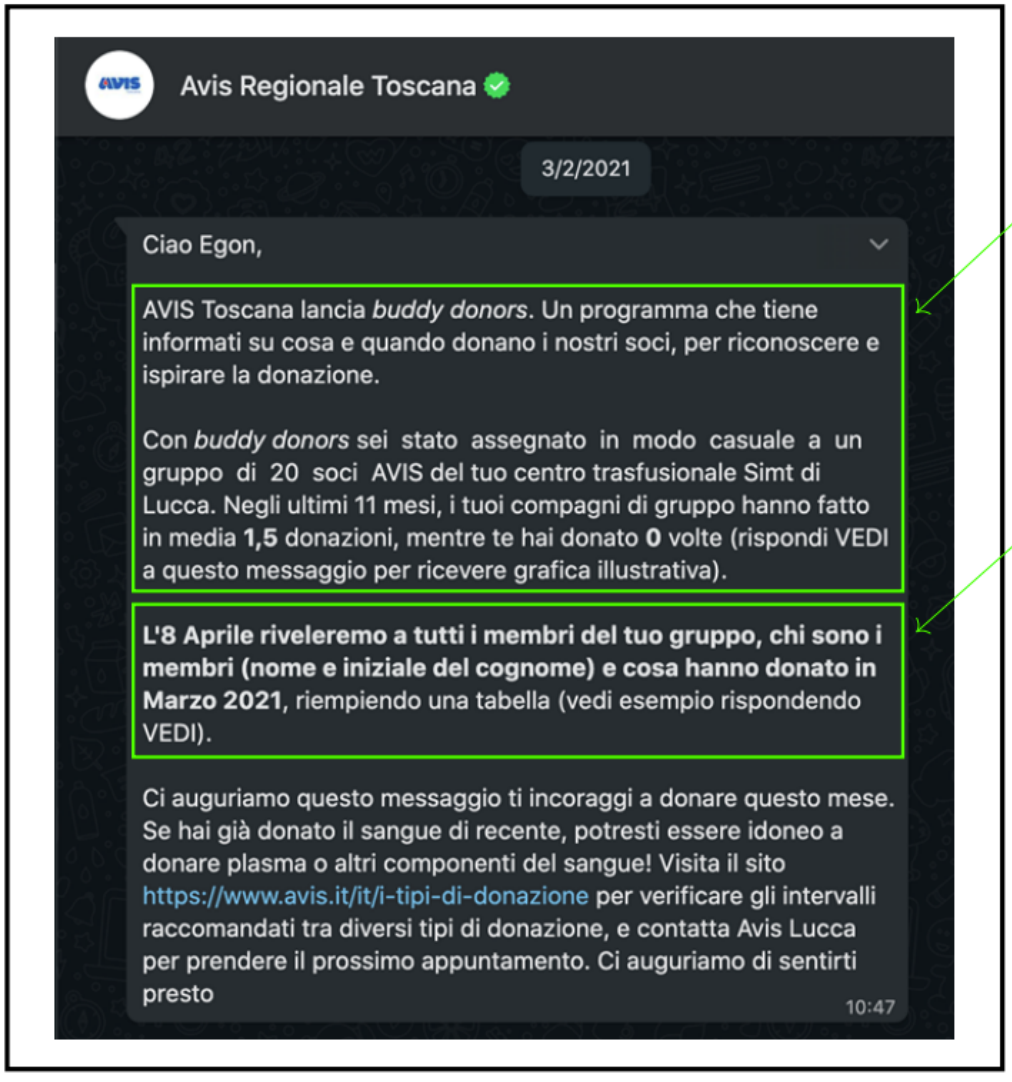
## Communication channels

- Avis' email
  - Email reading rate: 17%

vs.

- Avis' WhatsApp account (with the support of Twilio, a customer engagement platform. See `www.twilio.com`)
  - Message reading rate: $>$90%
  - Relatively cheap: 4.70 USD per 100 messages

# Experiment 1: messages (cont'd)




Peer comparison

Treatments:
Peer, Peer + Visibility

Visibility

Treatments:
Peer + Visibility

Example: *WhatsApp* / *Peer + Visibility* treatment

# Experiment 1 (WhatsApp messages)

| Simple ask | Facebook | Peer | Peer + Visibility |
|---|---|---|---|
| Hi $donor_name,<br><br>As in every month, we are in need of blood. In case you gave blood recently, you may still be eligible to donate plasma or other blood products! Visit https://www.avis.it/it/i-tipi-di-donazione to check the recommended intervals between different types of donations, and contact $Avis_center to schedule your next appointment. We look forward to hearing from you. | Hi $donor_name,<br><br>To encourage people to donate, on April 8 we are posting on the Facebook page of $Avis_center the donations made in March 2021 by the our members using a post similar to the example you receive if you reply SEE to this message. With your participation you'll be able to share your experience with your friends, inspire them, and tell them how important the donation is.<br><br>We hope this message encourages you to donate this month. In case you gave blood recently, you may still be eligible to donate plasma or other blood products! Visit https://www.avis.it/it/i-tipi-di-donazione to check the recommended intervals between different types of donations, and contact $Avis_center to schedule your next appointment. We look forward to hearing from you. | Hi $donor_name,<br><br>AVIS Toscana kicks-off *buddy donors*, our initiative to keep your informed about what and when our members donate, to recognize and inspire the donation.<br><br>With *buddy donors* you are randomly assigned to a group of 20 AVIS members of your donation center $donation_center $city. Over the past 11 months, your group mates made #.# donations on average, while you donated # times (reply 'SEE' to see this graphically).<br><br>We hope this message encourages you to donate this month. In case you gave blood recently, you may still be eligible to donate plasma or other blood products! Visit https://www.avis.it/it/i-tipi-di-donazione to check the recommended intervals between different types of donations, and contact $Avis_center to schedule your next appointment. We look forward to hearing from you. | Hi $donor_name,<br><br>AVIS Toscana kicks-off *buddy donors*, our initiative to keep your informed about what and when our members donate, to recognize and inspire the donation.<br><br>With *buddy donors* you are randomly assigned to a group of 20 AVIS members of your donation center $donation_center $city. Over the past 11 months, your group mates made #.# donations on average, while you donated # times (reply 'SEE' to see this graphically).<br><br>**On April 8, we are revealing to all members of this group, who the group members are (first name and initial of the last name) and what they donated in March 2021**, in a table (reply 'SEE' to see example).<br><br>We hope this message encourages you to donate this month. In case you gave blood recently, you may still be eligible to donate plasma or other blood products! Visit https://www.avis.it/it/i-tipi-di-donazione to check the recommended intervals between different types of donations, and contact $Avis_center to schedule your next appointment. We look forward to hearing from you. |

*Notes:* Text in orange applies to *Close* treatments. In *Distant* treatments, this is replaced with from all over Tuscany.

# Experiment 1 (donations disclosure)

| Nome | Donazioni sangue | Donazioni plasma |
|---|---|---|
| [redacted] | 1 | 0 |
| [redacted] | 1 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 1 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 1 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 1 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |
| [redacted] | 0 | 0 |


*Peer + Visibility* (left) and *Facebook* (right) treatments

# Experiment 1 (unit of randomization)

- Donors selected to participate in the study were randomly partitioned in groups of twenty. Treatment was assigned at this twenty-donors group level.
- Groups of 20 donors that constitute the unit of randomization were formed using one of two possible protocols:
  - **Close** groups randomly match people who typically donate at the same collection centre.
  - **Distant** groups randomly match people from all over Tuscany.
- This allowed GT to examine how social proximity causally moderates visibility concerns.

# Experiment 1 (unit of randomization, cont'd)

- Does the experimental variation in geographical proximity meaningfully affect social proximity perceived by subjects?
- A week after the intervention GT texted on WhatsApp a random sample of 1,384 donors from the *Peer + Visibility* treatment to ask how likely they thought it was that they knew at least one member of their group.
- Donors are almost twice as likely to believe that they know someone from their group if they are assigned to a Close group (p-value $< 0.001$).

# Experiment 1 (recruitment)

## Eligible participants

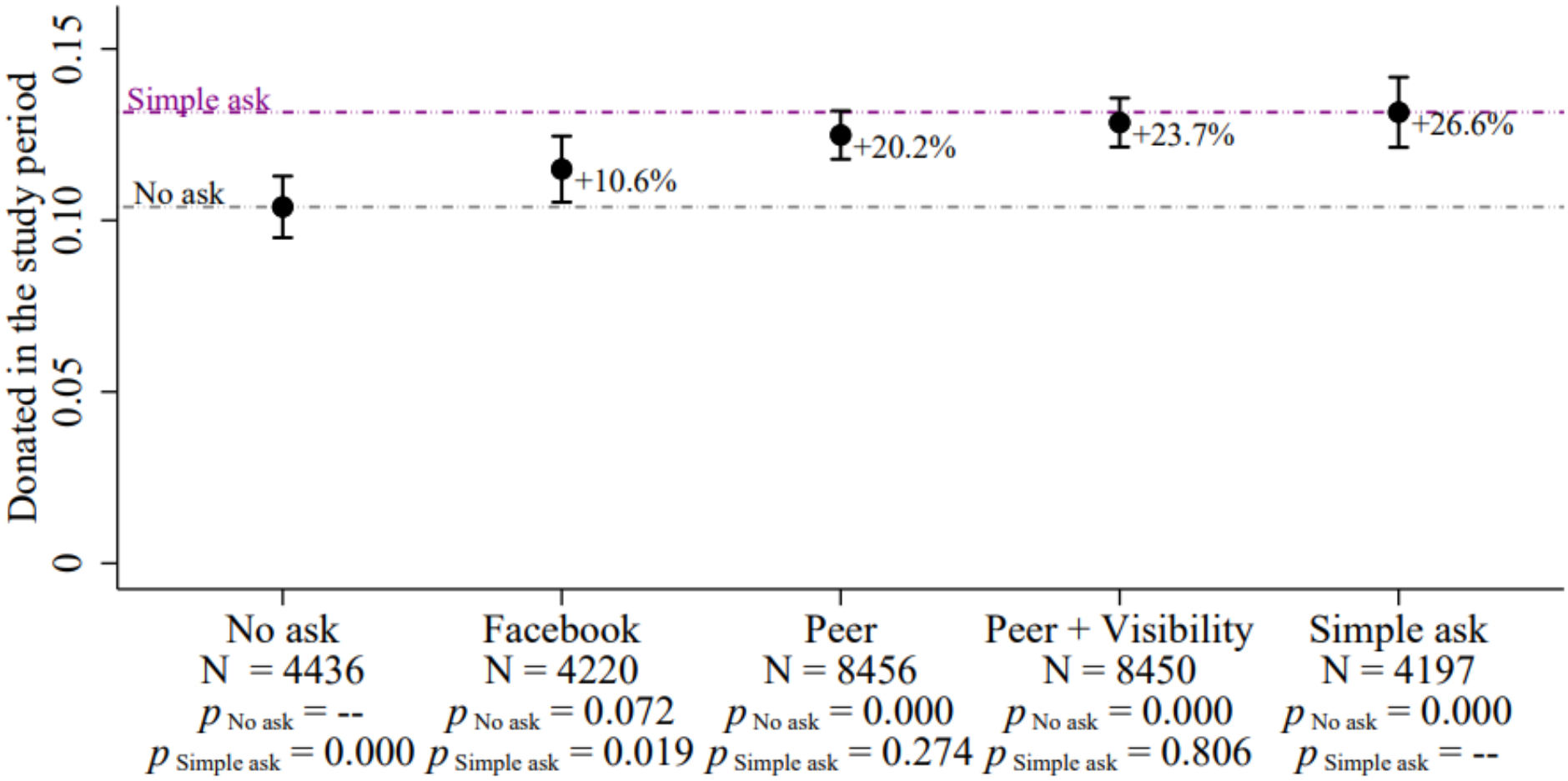
- Active donors registered at one of the 65 largest Avis Tuscan centers.
- A donor was considered 'active' if their last donation was done in the last 5 years and if the latest donation took place at a blood collection centre with at least 500 donors.
- Donors who did not provide a mobile phone number to Avis were excluded.
- This left GT with a pool of 43,247 donors (52% percent of active Avis Toscana donors).

# Experiment 1 (recruitment, cont'd)

## The sample

- Delivery receipts from a survey (unrelated to this study) conducted by Avis Toscana before the intervention were used to identify donors who use WhatsApp and exclude the rest. Donors were offered a simple procedure to opt-out by replying NORICERCA.
- After excluding donors who were not eligible to donate or did not receive the initial message (4,041), those who opted out prior to treatment (376), and those who opted out after treatment (69), GT's final sample included 38,761 donors.
  - 29,759 subjects were assigned to being contacted via WhatsApp
  - 9,002 subjects were assigned to being contacted via email
  - 4,436 received no further message (No ask)
- The sample is representative of the population of active Avis Toscana donors.

# Experiment 1: results



# Experiment 1: results (cont'd)

| | (1) | (2) | (3) ✉ '21 | (4) ✉ '21 | (5) 💬 '21 | (6) 💬 '21 |
|---|---|---|---|---|---|---|
| | | | *Baseline category: No ask* | | | |
| Simple ask | [illegible] | [illegible] | 0.016** | 0.014** | 0.028*** | 0.027*** |
| | [illegible] | [illegible] | (0.007) | (0.006) | (0.007) | (0.007) |
| Facebook | [illegible] | [illegible] | 0.009 | 0.010 | 0.012* | 0.012* |
| | [illegible] | [illegible] | (0.007) | (0.006) | (0.007) | (0.007) |
| Donors' observables | [illegible] | [illegible] | Yes | Yes | Yes | Yes |
| Local branch FE | [illegible] | [illegible] | No | Yes | No | Yes |
| Observations | [illegible] | [illegible] | 13438 | 13438 | 12853 | 12853 |
| Clusters | [illegible] | [illegible] | 681 | 681 | 677 | 677 |
| R2 | [illegible] | [illegible] | 0.050 | 0.056 | 0.055 | 0.064 |
| Opening rate | [illegible] | [illegible] | 17.21% | 17.21% | 90.63% | 90.63% |
| Facebook - Simple ask | [illegible] | [illegible] | -0.007 | -0.005 | -0.016 | -0.015 |
| ↪ $p$-value | [illegible] | [illegible] | 0.321 | 0.481 | 0.023 | 0.026 |

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

*Notes:* Treatment effects estimated using a linear probability model, where the dependent variable indicates whether the subject donated either blood or plasma in the study period—March 2021. *Simple ask* and *Facebook* are binary treatment indicators. Donors' observables include: age groups (18-38, 39-51, 52+), gender and past donations. Standard errors in parentheses are clustered at the level of the unit of randomization: for the 2019 Email experiment (columns 1 and 2) we cluster at the local branch level; for the 2021 experiments (columns 3-6) we cluster at the 20-donors group level. All columns estimate the model for all blood donors in treatments *No ask*, *Simple ask* and *Facebook*.

# Experiment 1: results (cont'd)

- There is asignificant crowding out effect of social recognition: $\hat{\beta}_{Facebook} - \hat{\beta}_{Simple\ ask} = -0.015$, $p - value = 0.026$.

- **Possible explanations:**

  (1) Donors may dislike the way social recognition was implemented via Facebook channels and stop donating to express their discontent.

  To test for this, a random sample of donors who took part in the study was surveyed at the end of donation window. Sentiment towards treatment communications is similarly favourable in the *Simple ask* and *Facebook* treatments.

  (2) People may shy away from activities that can make them appear image concerned.

  This hypothesis is consistent with the results of GT's survey experiment.

# Experiment 1: peer comparisons

| | All donors | | | Treated donors | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *Buddies'* history | -0.001 | | | -0.003 | | |
| | (0.008) | | | (0.008) | | |
| *Buddies'* history in the 1st quintile | | -0.013* | | | -0.013 | |
| | | (0.008) | | | (0.008) | |
| *Buddies'* history in the 2nd quintile | | -0.000 | | | 0.001 | |
| | | (0.008) | | | (0.008) | |
| *Buddies'* history in the 4th quintile | | -0.011 | | | -0.013 | |
| | | (0.008) | | | (0.009) | |
| *Buddies'* history in the 5th quintile | | -0.015* | | | -0.015* | |
| | | (0.008) | | | (0.009) | |
| Above median norm | | | -0.004 | | | -0.006 |
| | | | (0.005) | | | (0.005) |
| Donors' observables | Yes | Yes | Yes | Yes | Yes | Yes |
| Local branch FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 16906 | 16906 | 16906 | 15402 | 15402 | 15402 |
| Clusters | 911 | 911 | 911 | 911 | 911 | 911 |
| F-test | 0.921 | 0.147 | 0.466 | 0.724 | 0.116 | 0.268 |
| R2 | 0.057 | 0.058 | 0.056 | 0.056 | 0.056 | 0.055 |

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

*Notes:* Effects of social norm information on donation estimated using a linear probability model, where the dependent variable indicates whether the subject donated either blood or plasma in the study period—March 2021. In columns 1 and 4 we estimate the linear effect of social norm information. For columns 2 and 5 we split in quintiles the support of social norms that individual study participants observe and estimate the effect of exposure to each quintile. In columns 3 and 6 we estimate the linear effect of being exposed to a social norm above the median value. *Buddies'* history is the average number of donations made by the fellow group members in the past 11 months. The omitted category in columns 2 and 4 is *Buddies'* history in the 3rd quintile. Above median norm is a dummy variable taking value of one if the subject is exposed to a social norm above the median value. Columns 1 to 3 estimate the model for all blood donors in treatments *Peer* and *Peer + Visibility*. Columns 4 to 6 exclude participants that did not engage with the experimental materials (either did not open the email or did not read our WhatsApp text, depending on the channel through which the experiment was conducted). Standard errors in parentheses are clustered at the 20-donors group level. For each column, we report a test of joint significance of the reported treatment effects.

# Experiment 1: social proximity

| *Panel A* | (1) | *Panel B* | (2) | (3) |
|---|---|---|---|---|
| Close | -0.004 | Close | -0.006 | 0.004 |
| | (0.007) | | (0.021) | (0.013) |
| Peer + Visibility | 0.003 | *Buddies'* history | -0.006 | |
| | (0.007) | | (0.012) | |
| Peer + Visibility × Close | 0.005 | *Buddies'* history × Close | 0.004 | |
| | (0.010) | | (0.017 ) | |
| | | *Buddies'* history in Q1 | | -0.007 |
| | | | | (0.011) |
| | | *Buddies'* history in Q2 | | 0.004 |
| | | | | (0.011) |
| | | *Buddies'* history in Q4 | | -0.013 |
| | | | | (0.011) |
| | | *Buddies'* history in Q5 | | -0.012 |
| | | | | (0.012) |
| | | *Buddies'* history in Q1 × Close | | -0.012 |
| | | | | (0.017) |
| | | *Buddies'* history in Q2 × Close | | -0.006 |
| | | | | (0.017) |
| | | *Buddies'* history in Q4 × Close | | -0.000 |
| | | | | (0.017) |
| | | *Buddies'* history in Q5 × Close | | -0.007 |
| | | | | (0.017) |
| Donors' observables | Yes | Donors' observables | Yes | Yes |
| Local branch FE | Yes | Local branch FE | Yes | Yes |
| Observations | 15402 | Observations | 1540 2 | 15402 |
| Clusters | 911 | Clusters | 911 | 911 |
| R2 | 0.057 | R2 | 0.056 | 0.057 |

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

*Notes:* Effects of visibility and social norm information on donation estimated using a linear probability model, where the dependent variable indicates whether the subject donated in the study period—March 2021. These effects are estimated in models that interact the treatment variable with an indicator for whether the donor is randomly assigned to a *Close* or *Distant* 20-donors group. social proximity. In column 1 we estimate the effect of visibility (*Peer + Visibility* v. *Peer*). In column 2 we estimate the linear effect of social norm information. For column 3 we split in quintiles the support of social norms that individual study participants observe and estimate the effect of exposure to each quintile. *Buddies'* history is the average number of donations made by the fellow group members in the past 11 months. The omitted category in columns 2 and 3 is *Buddies'* history in the 3rd quintile. The estimation sample includes participants of the *Peer* and *Peer + Visibility* treatments excluding those who did not engage with experimental materials (because they did not read our WhatsApp text). Standard errors in parentheses are clustered at the 20-donors group level.

# Survey experiment

- A random sample of 20,000 blood donors from the initial experiment were invited to take part in the survey.
- 3,016 complete responses.
- This sample is representative of the initial experimental sample with respect to age and gender.
- **Main take homes:** The majority of respondents believe that advertising the identity of donors on social media can. . .
  (1) . . . motivate people who seek to be seen as prosocial.
  (2) . . . discourage people who worry that their donation may signal image concern.
- Both results are consistent with the effects estimated from the experimental intervention.

# Next meeting

- When: Oct 26 2023, 4PM
- Presenter: Austėja Kažemekaitytė
- Paper: TBD

**See you in two weeks! :)**