Supplementary Information

for

Toward a science of delivering aid with dignity: Experimental evidence and local forecasts from Kenya

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Detailed Materials and Methods

In this section, we provide a detailed description of the research strategies and materials used in the main text. First, we examine the prevalence of relevant themes among cash transfer program communications. Study 1 examines the effects of randomly assigned cash-transfer narratives on Kenyan recipients' psychological and behavioral outcomes. Study 2 examines different approaches for selecting interventions ex ante. Study 3 examines the effects of the same narratives on donation behavior among participants in the United States. We also provide an overview of the statistical strategies detailed in two pre-analysis plans that we pre-registered on the AEA's Social Science Registry.[1]

S1) Current aid communications

Methods

To generate a list of the 30 largest cash transfer programs in African countries, we examined recent systematic reviews of cash transfer programs in low- and middle-income countries. To check for any programs not listed in the systematic reviews, we also searched Google Scholar and Google search engine with the terms "cash transfer" and "Africa" as well as the names of the top funding and implementing partners of cash transfer programs, including "UN," "United Nations," "UNICEF," and "World Bank." We ranked the programs in terms of their size, as measured by the number of recipients they reached, using the lowest common unit reported (either individuals or households). Each program in our final list reached over 10,000 recipients.

Next, we searched for the stated objectives of each cash transfer program. We prioritized sources from the implementing organizations, including government agencies and non-profits. We extracted sentences that described the program "objectives", or if not available, the stated intentions, aims, expected outcomes, or target beneficiaries (prioritized in that order). We call these extracted phrases the program "mission statements."

These 30 mission statements were then read and coded by two independent coders for the presence of the following themes: "Poverty Alleviation", "Empowerment", and a subtheme of

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[1] Study 1 pre-registration: https://www.socialscienceregistry.org/trials/2388. Study 3 pre-registration: https://www.socialscienceregistry.org/trials/3679. Results of all pre-registered analysis are included in this document.

"Community"-specific Empowerment reflecting the language and orientation of the narratives presented to Kenyan participants in Study 1. The "Poverty Alleviation" theme included labeling of recipients as low status (e.g. "the (ultra/extreme) poor"), focusing on their scarcity ("basic needs", "debt", "starvation", "emergenc*", "struggl*", "hardship", "make ends meet", "food", "school fees") and highlighting their vulnerability and need for protection (e.g. "vulnerab*", "crisis/crises", "shocks", "safety net", "protect*", "alleviat*").

The "Empowerment" theme included the use of more inclusive language that mentioned the agentic capacities, aspirations, and potential of recipients (e.g. "resilience", "assets", "human capital", "capacit*", "wellbeing", "grow*") and the aim of supporting their agency (e.g. "empower*", "enabl*", "invest*", "build*", "creat*"). Those coded for the "Empowerment" theme were further searched for the sub-theme of Community Empowerment which included references to community-driven processes and community-level outcomes (e.g. "community assets", "community (driven) development", "community based"). These three themes ("Poverty Alleviation", "Empowerment", "Community Empowerment") were double coded by independent coders, and discrepancies were reconciled in discussion with author CT. Coded data can be found on our OSF page (https://osf.io/pg3cw/).

S2) Study 1: Experimental Impacts of Aid Narratives on Recipients

Summary

Study 1 is a randomized experiment that examines the effects of narratives accompanying cash transfers on recipients' psychological and economic outcomes. We provided one-time, unconditional cash transfers to residents of two informal settlements in Nairobi and randomly assigned participants to receive one of three messages from a giving organization emphasizing 1) Poverty Alleviation, 2) Individual Empowerment, or 3) Community Empowerment. We then collected self-reported measures of self-efficacy, stigma, and affect; behavioral measures of savings decisions; program support; recorded messages of support for the organization; forecasts of experimental results; measures of socioeconomic status and anticipated mobility; and sociodemographic information.

Sample and data collection

Data collection was conducted by the Busara Center for Behavioral Economics, a research organization in Nairobi, Kenya. We invited 565 low-income residents of two informal settlements in Nairobi (Kibera and Kawangware) to participate in our study. Participants were invited to one of several study locations to complete our survey on tablet computers. All

participants were required to own a working phone and M-Pesa (mobile-money) account in their name.

Experimental procedures

Recipients were told that they were going to be given 400 Kenyan Shillings (KES; $4 USD) by an aid organization after listening to a short message. Enumerators using a tablet computer randomly assigned recipients to receive one of three messages describing the cash transfer. Each message shared a similar structure, but we randomly varied the stated goals of each organization and rationale for providing aid, labels of the aid and of recipients, and expectations for the use of the transfer.

For the Poverty Alleviation message, the payment was described as a means to meet basic needs. For the Individual Empowerment message, the payment was described as a means for reaching individual goals and advancement. For the Community Empowerment message, the payment was described as a means towards advancing the goals of one's family and the community. Using the tablet computers, recipients listened to their randomly assigned message twice in their preferred language (English or Kiswahili) through pre-recorded audio clips via a tablet. The exact contents of the three treatment messages are listed below:

Poverty Alleviation message: *The goal of this Poverty Alleviation Organization is to alleviate poverty and reduce financial hardship among the poor. This organization believes that people living in poverty should be given income support to help them meet their basic needs. This organization aims to help promote a decent standard of living among the poor and help them deal with emergencies. Thus, the Poverty Alleviation Organization gives financial assistance to people like you, to help them make ends meet. For example, with the financial assistance, people might be able to struggle less to afford basic needs, like paying off debts, paying rent, and buying clothes and food. Now we are going to send you KES 400. Please note that this is a one-time transfer of financial assistance.*

Individual Empowerment message: *The goal of this Individual Empowerment Organization is to promote individuals' potential to create a better future for themselves. The organization believes that individuals are wise and know best how to help themselves become self-reliant if they have the financial resources to do so. This organization aims to empower individuals to pursue their personal interests and create their own path to independence. Thus, the Individual Empowerment Organization gives financial resources to individuals, like you, to enable them to invest in their personal goals. For example, people might use their unique*

talents to start a self-run business, invest in job training courses, or create art. Now we are going to send you KES 400. Please note that this is a one-time transfer of financial resources.

Community Empowerment message: *The goal of this Community Empowerment Organization is to enable people to help promote better futures for those they care about and want to support most. The organization believes that people know best how to support each other and grow together if they have financial resources to do so. This organization aims to empower people to improve their own lives and those of the people and communities they care about most. Thus, the Community Empowerment Organization gives financial resources to community members, like you, to enable them to contribute positively to the lives of people important to them. For example, when people can invest in themselves, they are better able to expand employment opportunities for others, provide valuable services to their community, or teach others, including children, useful skills and knowledge. Now Community Empowerment Organization is going to send you KES 400. Please note that this is a one-time transfer of financial resources.*

After hearing the message once, project staff sent KES 400 from a project M-Pesa account to the participant. Enumerators confirmed that the participant had received the payment. After confirmation, we played the message a second time, after which enumerators guided recipients through questions on how they view the transfer. Specifically, they were asked about their current needs (in the "Poverty Alleviation" condition) or goals (in the "Individual Empowerment" and "Community Empowerment" conditions), the name they would assign to these funds (for example "education fund"), how these funds would affect their relationship with others, and their perceived goal of the organization. The complete survey instrument can be found on our AEA registry page (https://www.socialscienceregistry.org/trials/2388) under *Supporting Documents and Materials.*

Outcomes

A more detailed description of the outcomes used in our empirical analysis can be found in the study codebook located on our OSF page (https://osf.io/pg3cw/).

Primary outcomes:

1. Video selection: This task asked recipients to make a choice about watching 3-4 minute video clips, as depicted below:

Mark Angel Comedy, feat. Emanuela Video ya Mark Angel iliyoigizwa na Emanuela MY DADDY (Mark Angel Comedy) (Episode 91), MarkAngelComedy, 10/28/16	**Football Highlights from around the world** Mambo muhimu ya kandandas kote ulimwenguni. PSL Goals of the Month – February 2017, SuperSport, 3/14/17
Trailer of Nigerian Film feat. Ramsey Noah. Onyesho la filamu ya nchi ya Nigeria iliyoigizwa na Ramsey Noah. Omotola J. Ekeinde Falls for RAMSEY NOAH's Love, AndyBest NollywoodTV – NOLLYWOOD MOVIES, 7/2/14	**Debt & equity for financing business expansion** Hisa na Mikopo ya Kuboresha upanuzi ya biashara. Debt & equity for financing business expansion, Noa Ubongo, 6/20/17
Math skills for business or CBO management. Ujuzi wa hesabu ya biashara au usimamizi wa shirika la kijamii. Math skills for business or CBO management, Noa Ubongo, 6/20/17	**Funny Naswa Prank Video** Filamu ya kuigiza na kufanyia watu mzaha ya Naswa. naswa kenyan-show funny prank video.mp4, gLUT, 1/16/12

Enumerators described the following six videos and the participant chose to watch two at the end of the survey. Participants could not select the same clip more than once. Video clips were played after the completion of the sociodemographic questionnaire.

We classified each clip as either leisure (soccer, comedy, movie trailer) or business skills (profit calculation, financing microenterprise) and assess the number of business skills videos (0, 1, or 2) chosen by the participant to watch at the end of the survey.

2. Savings choice: This task allowed recipients to invest a portion (either one-quarter or one-half of their initial endowment) in savings with an interest rate of 50%, to be paid out in two weeks. Enumerators reminded the participant that they received KES 400 KES and presented the participant with the following two choices.
   - If you send us 100 right now, after two weeks you will get back KES 150.
   - If you send us 200 right now, after two weeks you will get back KES 300.

3. Message recording: Recipients were reminded of the organization's goal by listening to the audio message treatment once more. They were then asked to evaluate the message and were asked whether they would want to show their support for the organization by recording the organization's message in their own voice for potential future recipients. The outcome is a dummy variable of willingness to record the organization's message.

Secondary outcomes:

1. Self-efficacy
   - In this moment, how much do you feel in control of your financial situation, such as your success in your business or employment, or other income generating activities?
   - In this moment, how much do you feel capable of making progress towards your goals?
   - In this moment, how much do you feel capable of making progress towards goals for your community, such as helping and empowering others you care about?
   - In this moment, how much do you feel confident that you can face most of the problems you have in your life?
   - In this moment, how much do you feel that life will get better?

2. Stigma:
   - People may negatively judge others for various reasons. How much do you feel that other people in Kenya make judgments about you based on your economic status? By economic status, I mean things like the place where you live, your job, or the amount of money you have.
   - How much would other people feel embarrassed if they received money from the [organization name].
   - If your neighbors found out that you received money from the [organization name], how upset or jealous would they be with you?
   - In this moment, how much do you feel like a good family member, whatever that means to you?

- In this moment, how much do you feel like a good community member, whatever that means to you?
3. Affect
   - In this moment, how bad or good do you feel?
   - In this moment, how embarrassed do you feel?
   - In this moment, how empowered do you feel?
   - In this moment, how much do you feel worried about your finances?
4. Evaluation of message
   - How empowering is this recorded message?
   - Overall, do you like or dislike the organization's message you heard?
5. MacArthur subjective social status ladder (now and in two years): Think of this ladder as representing where people stand in Kenya. At the top of the ladder are the people who are the best off -- those who have the most money, the most education and the most respected jobs. At the bottom of the ladder are the people who are the worst off -- those who have the least money, least education, and the least respected jobs or no job. The higher up you are on this ladder, the closer you are to the people at the very top in Kenya; the lower you are, the closer you are to people at the very bottom in Kenya.
   - On which rung do you feel that you are right now?
   - On which rung do you feel that you will be in 2 years?
6. Thoughts about saving: Enumerators asked recipients to list up to five 'queries' regarding saving choice (primary outcome 2), following (*1*). They were then asked to classify each query as either in favor of or against the money-saving choice. We collected data on both the content of the queries and their classification. We calculated for each participant a standardized median rank difference of aspect types to summarize the tendency to produce saving-favored queries before saving-opposed queries.

Indices of self-efficacy, stigma, and affect were constructed by averaging the constituent items.

Power calculations. To achieve power of 80% for an estimated effect size of 0.30 standard deviations at the 0.05 level, we calculated that the required sample size would be 525 participants, with 175 in each of the treatment arms.

S3) Study 3: Experimental Impacts of Aid Narratives on Donations

Summary

Study 3 explores donor responses to the same experimental messages used in Study 1. Participants recruited from the online platform Amazon Mechanical Turk were asked to read a short description of an aid organization. To each organization message from Study 1, we add some basic facts about the aid and its recipients (amount paid, sociodemographics) and randomly presented participants with one of the three aid organization descriptions. We then measure behavioral and survey measures of organization support.

Sample and data collection

Amazon Mechanical Turk is commonly used by researchers to conduct online experiments. We recruited 1,480 participants. We restricted our sample to Mechanical Turkers who: 1) had an approval rating above 95%, 2) had completed more than 50 tasks (to avoid careless workers), 3) had not taken a pilot survey with us previously, 4) lived inside the U.S., 5) committed to carefully reading about the nonprofit, 6) passed at least one of our basic comprehension questions, 7) did not have duplicate IP addresses, or 8) completed a response for the primary outcome. After applying these exclusions, we analyzed results for 1,367 participants. Participants were compensated $0.60 for the five-minute survey and were entered into a $100 lottery with chances 1 in 200, as stated in the survey.

Experimental procedures

Each participant was asked to read about a nonprofit organization operating in Nairobi, Kenya. We randomly assign the description of the nonprofit organization to match the treatment conditions in Study 1. For all treatments, we also stated:
"These program recipients are people who live on less than $2 per day, and half of recipients have no savings."

Outcomes

A more detailed description of the outcomes used in our empirical analysis can be found in the study codebook located on our OSF page (https://osf.io/pg3cw/).

Primary outcome:
1. Willingness to donate to charity: Amount that participant is willing to donate to the randomly assigned organization out of a possible lottery prize of $100 (relative to keeping it for themselves). We also explore a dichotomized version of this variable equal to one if the participant allocates any amount to the charity, and zero otherwise.

Secondary outcomes:

1. MacArthur subjective social status ladder (relative to the global community).
2. Likelihood of encouraging others to donate: To what extent would you be likely to encourage your friends to donate to the [organization name]?

Exploratory outcomes: A detailed description of the outcomes listed below can be found in the survey instrument (using the link above)

1. Recipient status
   - a. "Size" of self vs. others
   - b. "Size" of self vs. their friends
   - c. Attribution for poverty
2. Construal of recipient need
   - a. Extent to which $4 improves recipients' lives
   - b. Extent to which recipients need financial assistance

Each item was analyzed individually.

Power calculations. To achieve power of 80% for an estimated effect size of 0.20 SD at the 0.05 level for our primary analyses, we calculated a required sample size of 1,182 participants, with 394 in each of the treatment arms (after the application of exclusion criteria).

S4) Empirical analyses for Study 1 and Study 3

Balance checks. We test for balance across sociodemographic characteristics using Equation 1:

$$Y_i = \beta_0 + \beta_1 Ind_i + \beta_2 Com_i + \varepsilon_i$$

where Y_i refers to the sociodemographic variables for individual i measured at the end of the survey. Study 1 sociodemographics are: gender, education, age, and employment. Study 3 sociodemographics are: having donated to an international aid organization in the past, age, gender, annual household income, number of people in the household, education, race/ethnicity, political affiliation and religious identification, and religiosity. Ind_i is a dichotomous variable indicating assignment to the Individual Empowerment condition. Com_i indicates assignment to the Community Empowerment condition. The reference category in this model is the Poverty Alleviation condition. We use robust standard errors. Balance is presented in Table S3 (for Study 1) and S4 (for Study 3).

Treatment effects. We use the same reduced-form specification as in the balance checks (above) to estimate the causal treatment effect of different messages. In this case, Y_i refers to the outcome variables described in the Outcomes sections of Study 1 (Tables S5-6) and Study 3 (Tables S7-8), for individual i measured after the manipulation, and we again use robust standard errors.

Robustness check: Covariate adjustment. To improve precision on the estimated treatment effects above, we apply covariate adjustment with a vector of baseline indicators X_i (*2*). We estimate covariate-adjusted treatment effects by modifying Equation 1 (with the relevant study outcomes) to include the demeaned covariate vector $\dot{X}_i = X_i - \overline{X}$ as an additive term and as an interaction with the treatment indicator, as depicted in Equation 2:

$$Y_i = \beta_0 + \beta_1 Ind_i + \beta_2 Com_i + \gamma_0 \dot{X}'_i + \gamma_1 Ind_i \dot{X}'_i + \gamma_2 Com_i \dot{X}'_i + \varepsilon_i$$

The set of indicators partitions our sample so that our treatment effects remains unbiased for the average treatment effect. We estimate robust standard errors at the individual level, and estimate this model with and without control variables. Results are located in Tables S9-10 for Study 1 and Tables S11-12 for Study 3.

Experimental heterogeneity. We analyze the extent to which the aid messages produced heterogeneous treatment effects with Equation 3:

$$Y_i = \beta_0 + \beta_1 Ind_i + \beta_2 Com_i + \delta_0 x_i + \delta_1 Ind_i x_i + \delta_2 Com_i x_i + \varepsilon_i$$

where x_i is the binary dimension of heterogeneity, and δ_1 and δ_2 are the heterogeneous treatment effects of the Individual Empowerment and Community Empowerment messages relative to the Poverty Alleviation message. Our dimensions of heterogeneity for Study 1 are: 1) education level (completed standard 8) and 2) gender (F). Results are in Tables S13-16. Our dimensions of heterogeneity for Study 3 are: 1) gender (F), 2) social class (participant's parent has at least a college degree), 3) income (median split of reported annual household income/sqrt(number of people in the household), 4) previous donor (given to an international aid organization before), 5) religiosity (more than slightly religious), 6) party (affiliation is Democrat). Results are in Tables S17-28. Testing $\delta_1 = \delta_2$ identifies heterogeneous effects between the two messages. Because these variables were measured after treatment, we excluded any variable found to be significantly correlated with treatment.

Robustness check: Randomization inference. One potential concern is that inference might be invalidated by finite sample bias in estimates of the standard errors. To address this issue, we conduct randomization inference to test the Fisherian sharp null hypothesis of no treatment effect for every participant. We performed Monte Carlo approximations of the exact p-values using 10,000 permutations of the treatment assignment. We then estimated the treatment effect within each permutation and calculated the standard Wald statistics for each of our hypothesis tests, comparing the Wald statistics from the original sample with the distribution of permuted statistics to produce approximations of the exact p-values (*3*). We permuted the data and calculate the regressions for all outcomes within each draw. We conducted the permutation test for our standard treatment effects and our heterogeneous treatment effects equations described above.

Robustness check: Multiple inference adjustment. Given that we have a number of outcomes, we calculated sharpened q-values over our outcomes (with and without covariate adjustment) to control the false discovery rate (*4*). Rather than specifying a single q-value, we report the minimum q-value at which each hypothesis is rejected (*5*). In Study 1, we apply this correction over 1) primary outcomes, and 2) heterogeneous treatment effects. In Study 3, we only have one primary outcome. Therefore, we calculate sharpened q-values over 1) heterogeneous treatment effects, 2) secondary outcomes, and 3) exploratory outcomes.

S5) Study 2: Methodological Tools for Identifying Effective Interventions

After completing Study 1, participants were informed of the other conditions, and were asked to make incentive compatible forecasts of the experimental results for the video selection outcome. Specifically, they predicted the average number of respondents (out of 10) who would select a business video for their first choice. Respondents first provided forecasts for their own treatment condition:

"We want you to guess which types of videos you think that other people, who received the same message and KES 400, would select: Out of 10 people who were told the same message, how many do you guess picked one of the business videos, compared to the non-business videos, as the video they were most interested to watch? Remember that there were six different videos. There were two business videos and four other videos. Be sure to give the question your best guess. If you guess correctly, you will earn an extra KES 50 that will be sent to you in a few weeks. Note that KES 50 is the maximum total you will be able to get for guessing correctly across all questions."

They were then provided with the other two organizational messages, and were asked to predict their effects. More information on the survey questions can be found in the study codebook located on our OSF page (https://osf.io/pg3cw/).

S6) Empirical analyses for Study 2

Forecasts of experimental treatment effects. Near the end of Study 1 we asked participants to predict the results of one outcome, *how many out of 10 people would choose a business video as their first choice on average*, for each of the three messages (Poverty Alleviation, Individual Empowerment, and Community Empowerment). In Table S29, we examine the accuracy of these forecasts by regressing the forecast number of videos for each experimental condition on dummy variables for each forecast condition, as depicted in Equation 4:

$$\hat{Y}_i = \beta_0 + \beta_1 Forecast\ Ind_i + \beta_2 Forecast\ Com_i + \varepsilon_i$$

where $\hat{Y}_i$ is individual *i's* predicted effect, and $Forecast\ Ind_i$ and $Forecast\ Com_i$ are dummy variables taking a value of 1 if *i* is forecasting the Individual or Community Empowerment conditions respectively. Since each participant makes three forecasts, we cluster our standard errors at the participant level. As a robustness check we control for each forecaster's randomly assigned treatment condition. Our results indicate that participants forecasted that the two Empowerment conditions would outperform the Poverty Alleviation condition (see Table S29).

We also ran a simulation exercise to see how forecasts of experimental treatment effects compared to small pilots that are commonly used to explore potential interventions. To simulate pilots, we took 10,000 bootstrapped samples of size $N = 30, 31, …, 150$ from our full study data. Note that N refers to a random draw with replacement from our total sample of 565 participants, which are balanced (to the extent the full sample is balanced) across the three experimental groups in expectation, but may not be balanced in any single draw. For example, a sample of $N = 150$ *may or may not* contain 50 participants from each group. The bootstrapped forecasts, on the other hand, are always balanced--in the sense that participants always provided forecasts for all three conditions: A sample of 150 forecasters yields 450 total forecasts, 150 for each group.

We calculate simulated experimental effects from these "simulated pilots" of size N by regressing our video outcome on treatment dummy variables, as in Equation 1, for each draw. We conduct an identical exercise to estimate forecaster accuracy at $N = 30, 31, …, 150$ using Equation 4. For each bootstrapped sample we calculate the negative absolute error of the

estimated coefficient from Equation 1 (for simulated pilots) and Equation 4 (for forecasts) with respect to the full experimental results. Figure 2B (from the main text) depicts the average negative absolute error across the bootstrapped samples at a given sample size.

Why do forecasts perform better than simulated pilots at smaller sample sizes? Figure S2 depicts the distribution of coefficients from the 10,000 bootstrapped simulations described above at $N = 50$, 100, and 150, and the full-sample experimental results. From this we can observe that the accuracy of forecasts relative to simulated pilots results from a bias-variance tradeoff. At smaller sample sizes, the lower variance of the forecast effects makes up for the fact that forecasts are not centered around the true mean. The simulated pilots on the other hand have higher variance, but approach the observed experimental effect. As the sample size increases, both distributions converge to their full sample estimates. Together, these results suggest that the superior accuracy of forecasts relative to the simulated pilots at small and moderate sample sizes results both from the average forecast in the full sample yielding a reasonable approximation of the observed experimental effect, and from the smaller variance of the forecast estimates.
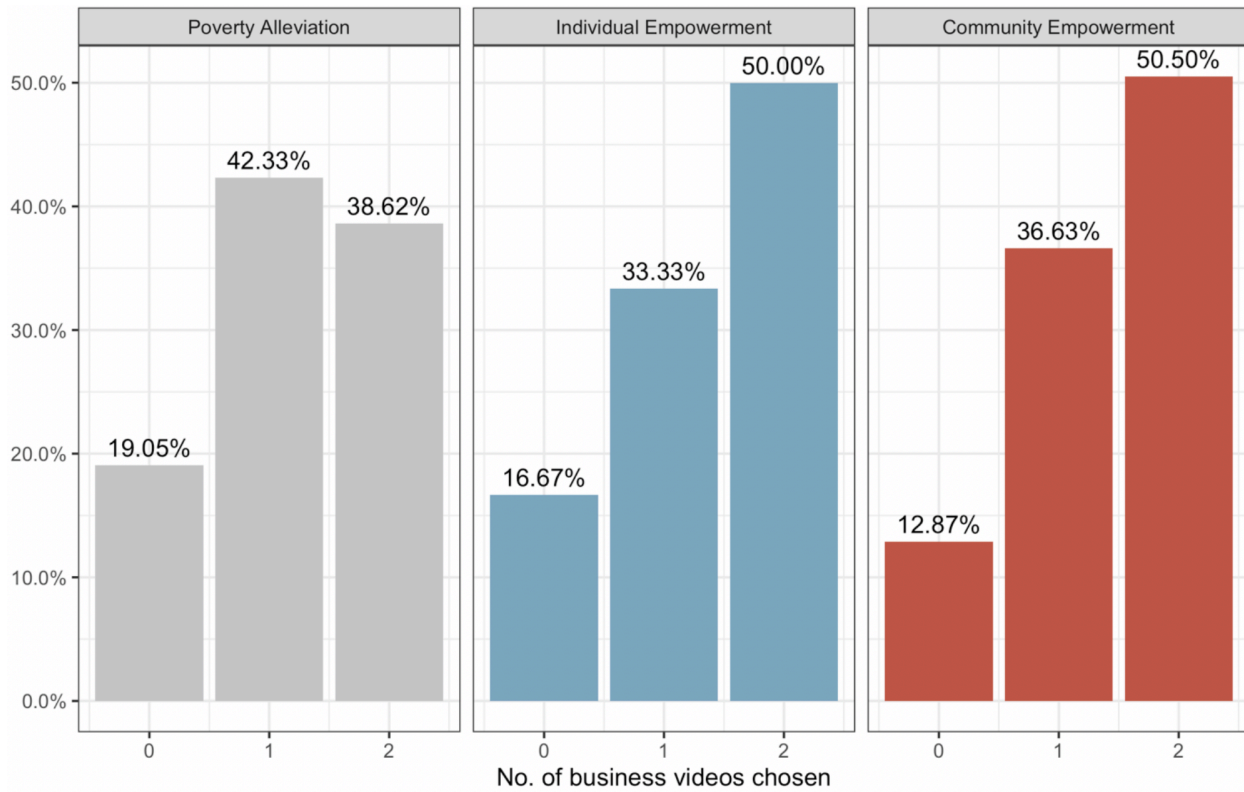
Fig S1. Distribution of video selection outcome

Distribution of video selection outcome (number of business skills (versus leisure) videos participants selected to watch, with a maximum of two) by experimental condition in Study 1 ($N = 565$).
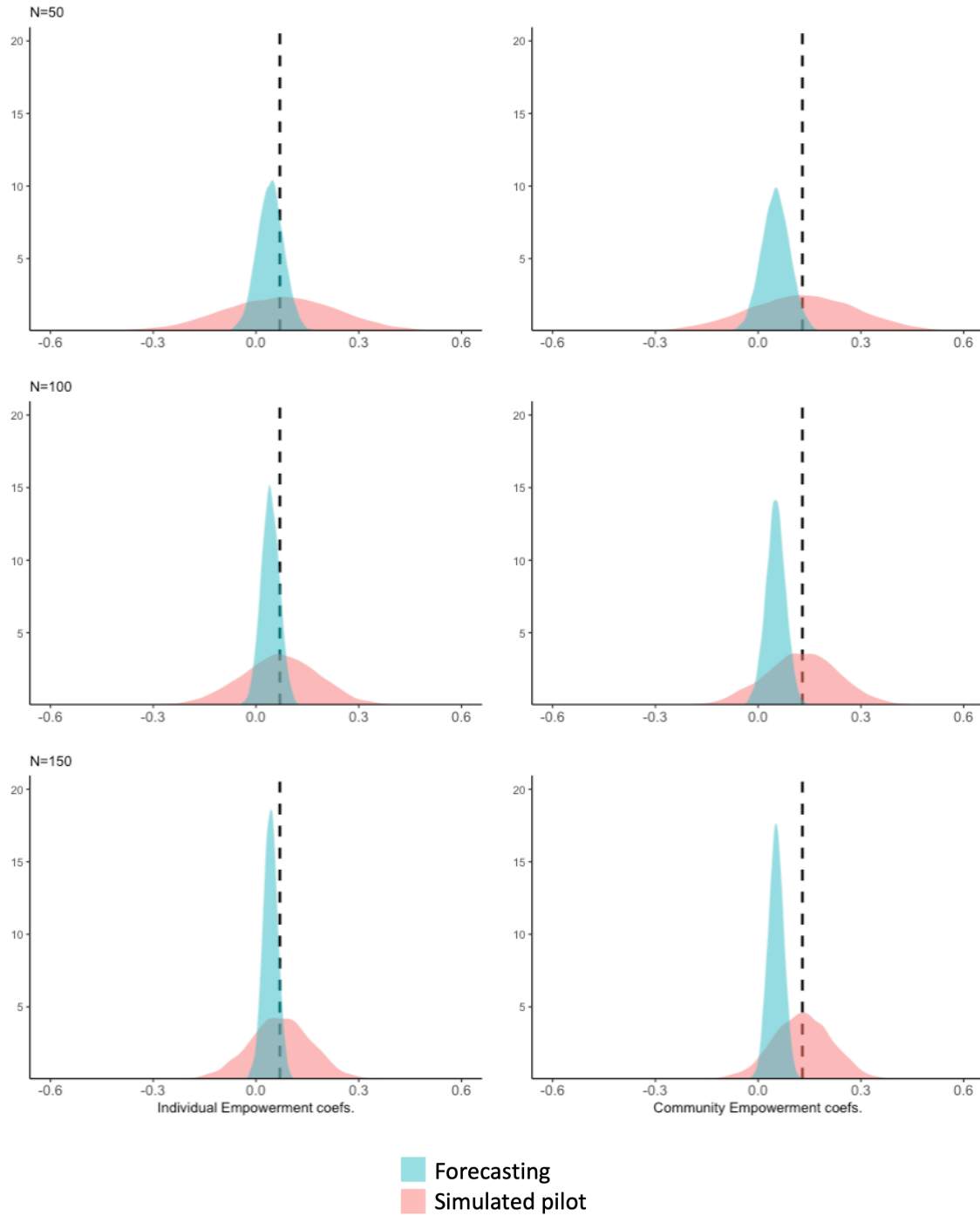
Fig. S2. Bootstrapped coefficient estimates from forecasts and simulated pilots

Density plots depict simulated estimates of coefficients for the Empowerment conditions (relative to the Poverty Alleviation condition) from 10,000 bootstrapped samples drawn from the full study sample ($N = 565$) at $N = 50$, 100, and 150. The x-axis displays the estimated coefficients. The red density plots depict coefficient estimates based on simulated experimental pilots from the bootstrapped samples, while the blue density plots depict coefficient estimates from forecasts of experimental effects. Vertical lines depict the observed experimental effects from the full study sample.
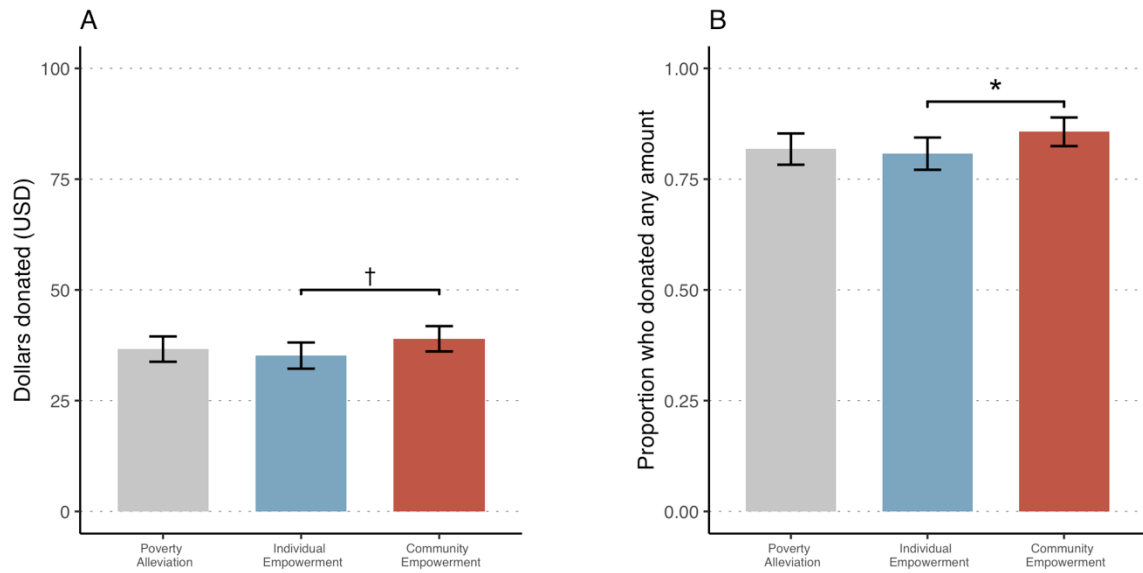
Fig. S3. Empowerment-framed aid has little impact on Westerners' donations
(A) Donation amount and (B) proportion who donated to the randomly assigned aid organization message (adapted from Study 1) in an online sample in the United States ($N = 1,367$). The figure presents conditional means with 95% confidence intervals. * denotes significance at the P=0.05 level and † at the 10 percent level.

Table S1.

Sociodemographic characteristics of Study 1 participants

Variable	Mean	Std. dev.	Median	Min.	Max.	Obs.
Female	0.633	0.482	1	0	1	564
Completed std. 8	0.867	0.340	1	0	1	565
Age	33.405	8.685	32	18	72	565
Unemployed	0.333	0.472	0	0	1	565
Holds any savings	0.538	0.499	1	0	1	565
Consumption (weekly, KES)	2,514.973	2,836.776	2,000	0	20,000	565
Income (Monthly, KES)	8,661.965	8,454.937	6,000	0	80,000	565

Note: "Female" is an indicator variable for identifying as a woman "Completed std. 8" is an indicator for having completed primary school. "Age" is the self-reported age of the respondent. "Unemployed" is an indicator for being unemployed. "Holds savings" is an indicator for having savings of at least KES 1,000. "Consumption" is a variable for consumption in the last seven days. "Income" is a variable for earned income in the past month.

Table S2.

Sociodemographic characteristics of Study 3 participants

Variable	Mean	Std. dev.	Median	Min.	Max.	Obs.
Prior donor	0.471	0.499	0	0	1	1,362
Age	39.049	12.659	36	18	82	1,362
Female	0.515	0.500	1	0	1	1,361
Annual income (USD)	57,318.15	36,685.38	50,000	10,000	150,000	1,361
HH size	2.657	1.476	2	1	14	1,354
College educated	0.545	0.498	1	0	1	1,361
Social class	0.461	0.499	0	0	1	1,361
Racial minority	0.259	0.438	0	0	1	1,361
Religiosity	2.242	1.303	2	1	5	1,361
Christian	0.517	0.500	1	0	1	1,361
Democrat	0.436	0.496	0	0	1	1,361

Note: "Prior donor" is an indicator variable for having made charitable contributions in the past. "Age" is the self-reported age of the respondent. "Female" is an indicator for identifying as a woman. "Annual income (USD)" is the self-reported annual income of the respondent. "HH size" is household size including the respondent. "College educated" is an indicator for having received a college education. "Social class" is an indicator for having at least one parent receive a college education. "Racial minority" is an indicator variable for identifying as Asian, Black, Hispanic, Native American, or Other. "Religiosity" measures strength of religious belief on a 5-point scale. "Christian" is an indicator for identifying as a Christian. "Democrat" is an indicator for affiliating with the Democratic Party.

Table S3.

Balance checks on subject demographic characteristics for Study 1

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Reference mean	Obs.
Individual - Poverty							
Female	-0.041	0.051	0.428	0.424	1.000	0.638	564
Completed std. 8	-0.010	0.034	0.777	0.798	1.000	0.889	565
Age	-0.149	0.912	0.871	0.871	1.000	33.143	565
Unemployed	-0.066	0.050	0.186	0.188	1.000	0.370	565
Community - Poverty							
Female	0.020	0.049	0.679	0.669	0.772	0.638	564
Completed std. 8	-0.052	0.035	0.133	0.129	0.772	0.889	565
Age	0.862	0.878	0.327	0.321	0.772	33.143	565
Unemployed	-0.049	0.048	0.314	0.314	0.772	0.370	565
Individual - Community							
Female	-0.061	0.050	0.226	0.232	0.539	0.658	564
Completed std. 8	0.043	0.036	0.236	0.232	0.539	0.837	565
Age	-1.011	0.901	0.262	0.261	0.539	34.005	565
Unemployed	-0.017	0.048	0.721	0.728	0.539	0.322	565

Note: Each panel corresponds to a single hypothesis for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. The reference mean column lists the mean of the Poverty Alleviation condition for the first two panels and the mean of the Community Empowerment condition for the third panel.

Table S4.

Balance checks on subject demographic characteristics for Study 3

Outcome	Coef.	Std. error	p-value	Exact p-value	Min. q-value	Reference mean	Obs.
Individual - Poverty							
Prior donor	-0.025	0.033	0.448	0.447	1.000	0.477	1,362
Age	1.650	0.853	0.053	0.057	0.243	38.139	1,362
Female	0.070	0.033	0.036	0.035	0.243	0.473	1,361
Annual income (USD)	4,986.927	2,445.085	0.042	0.043	0.243	54,164.859	1,361
HH size	0.031	0.097	0.747	0.752	1.000	2.638	1,354
College educated	0.009	0.033	0.783	0.788	1.000	0.544	1,361
Social class	-0.013	0.033	0.695	0.696	1.000	0.475	1,361
Racial minority	-0.008	0.029	0.787	0.782	1.000	0.267	1,361
Religiosity	0.054	0.086	0.535	0.532	1.000	2.234	1,361
Christian	0.006	0.033	0.864	0.866	1.000	0.503	1,361
Democrat	0.016	0.033	0.615	0.613	1.000	0.414	1,361
Community - Poverty							
Prior donor	0.005	0.033	0.878	0.878	1.000	0.477	1,362
Age	1.105	0.819	0.178	0.181	0.774	38.139	1,362
Female	0.058	0.033	0.079	0.083	0.774	0.473	1,361
Annual income (USD)	4,551.955	2,386.302	0.057	0.055	0.774	54,164.859	1,361
HH size	0.026	0.099	0.791	0.799	1.000	2.638	1,354
College educated	-0.007	0.033	0.836	0.837	1.000	0.544	1,361
Social class	-0.030	0.033	0.358	0.361	0.913	0.475	1,361
Racial minority	-0.017	0.029	0.562	0.569	1.000	0.267	1,361
Religiosity	-0.029	0.086	0.739	0.738	1.000	2.234	1,361
Christian	0.034	0.033	0.299	0.302	0.913	0.503	1,361
Democrat	0.050	0.033	0.126	0.124	0.774	0.414	1,361
Individual - Community							
Prior donor	-0.030	0.033	0.364	0.357	1.000	0.482	1,362
Age	0.545	0.848	0.520	0.526	1.000	39.243	1,362
Female	0.011	0.033	0.731	0.728	1.000	0.531	1,361
Annual income (USD)	434.972	2470.711	0.860	0.862	1.000	58716.814	1,361
HH size	0.005	0.099	0.958	0.957	1.000	2.664	1,354
College educated	0.016	0.033	0.631	0.635	1.000	0.538	1,361
Social class	0.017	0.033	0.601	0.604	1.000	0.445	1,361
Racial minority	0.009	0.029	0.759	0.762	1.000	0.250	1,361
Religiosity	0.082	0.088	0.348	0.349	1.000	2.206	1,361
Christian	-0.029	0.033	0.390	0.399	1.000	0.538	1,361
Democrat	-0.034	0.033	0.308	0.302	1.000	0.465	1,361

Note: Each panel corresponds to a single hypothesis for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. The reference mean column lists the mean of the Poverty Alleviation condition for the first two panels and the mean of the Community Empowerment condition for the third panel.

Table S5.

Treatment effects on primary outcomes for Study 1

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Reference mean	Obs.
Individual - Poverty							
No. of videos	0.138	0.078	0.078	0.076	0.306	1.196	565
Amount saved	6.623	8.843	0.454	0.451	0.833	96.825	565
Recorded message	-0.016	0.050	0.742	0.748	0.979	0.677	565
Community - Poverty							
No. of videos	0.180	0.073	0.014	0.015	0.043	1.196	565
Amount saved	9.610	8.493	0.258	0.259	0.349	96.825	565
Recorded message	-0.009	0.048	0.851	0.852	0.633	0.677	565
Individual - Community							
No. of videos	-0.043	0.075	0.569	0.568	1.000	1.376	565
Amount saved	-2.987	8.725	0.732	0.734	1.000	106.436	565
Recorded message	-0.007	0.049	0.880	0.884	1.000	0.668	565

Note: Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. The reference mean column lists the mean of the Poverty Alleviation condition for the first two panels and the mean of the Community Empowerment condition for the third panel. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S6.

Treatment effects on secondary outcomes for Study 1

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Reference mean	Obs.
Individual - Poverty							
Self-Efficacy (avg.)	0.162	0.074	0.028	0.030	0.050	3.201	565
Stigma (avg.)	-0.047	0.063	0.459	0.462	0.441	2.562	565
Affect (avg.)	0.050	0.058	0.391	0.394	0.441	3.896	565
Social status	0.392	0.149	0.009	0.008	0.027	3.286	565
Anticipated social mobility	0.591	0.195	0.003	0.002	0.019	5.577	564
Message support	-0.027	0.054	0.613	0.624	0.539	4.569	565
Query ordering	-0.075	0.101	0.454	0.459	0.441	-0.161	565
Community - Poverty							
Self-Efficacy (avg.)	0.183	0.071	0.010	0.012	0.045	3.201	565
Stigma (avg.)	-0.131	0.058	0.024	0.025	0.045	2.562	565
Affect (avg.)	0.052	0.060	0.390	0.387	0.306	3.896	565
Social status	0.318	0.141	0.024	0.024	0.045	3.286	565
Anticipated social mobility	0.423	0.179	0.018	0.018	0.045	5.577	564
Message support	-0.015	0.050	0.762	0.753	0.566	4.569	565
Query ordering	-0.019	0.097	0.843	0.846	0.566	-0.161	565
Individual - Community							
Self-Efficacy (avg.)	-0.021	0.071	0.768	0.775	1.000	3.384	565
Stigma (avg.)	0.084	0.062	0.173	0.164	1.000	2.431	565
Affect (avg.)	-0.002	0.057	0.974	0.974	1.000	3.948	565
Social status	0.074	0.152	0.626	0.634	1.000	3.604	565
Anticipated social mobility	0.168	0.184	0.363	0.365	1.000	6.000	564
Message support	-0.012	0.051	0.816	0.816	1.000	4.554	565
Query ordering	-0.056	0.098	0.569	0.569	1.000	-0.181	565

Note: Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. The reference mean column lists the mean of the Poverty Alleviation condition for the first two panels and the mean of the Community Empowerment condition for the third panel. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S7.

Treatment effects on primary outcome for Study 3

Outcome	Coefficient	Std. error	p-value	Exact p-value	Reference mean	Obs.
Individual - Poverty						
Donation amount (USD)	-1.467	2.095	0.484	0.491	36.638	1,367
Community - Poverty						
Donation amount (USD)	2.329	2.061	0.259	0.259	36.638	1,367
Individual - Community						
Donation amount (USD)	-3.797	2.097	0.070	0.071	38.967	1,367

Note: Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The reference mean column lists the mean of the Poverty Alleviation condition for the first two panels and the mean of the Community Empowerment condition for the third panel. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S8.

Treatment effects on secondary outcomes for Study 3

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Reference mean	Obs.
Individual - Poverty							
Made donation	-0.010	0.026	0.691	0.702	0.300	0.818	1,367
Encourage donation	-0.187	0.080	0.020	0.019	0.064	3.046	1,367
Donor status (ladder)	0.228	0.123	0.064	0.066	0.069	5.341	1,367
Community - Poverty							
Made donation	0.039	0.024	0.110	0.112	0.173	0.818	1,367
Encourage donation	-0.129	0.080	0.106	0.104	0.173	3.046	1,367
Donor status (ladder)	0.177	0.122	0.147	0.143	0.173	5.341	1,367
Individual - Community							
Made donation	-0.049	0.025	0.047	0.048	0.165	0.857	1,367
Encourage donation	-0.058	0.079	0.464	0.463	0.818	2.916	1,367
Donor status (ladder)	0.051	0.121	0.675	0.672	0.818	5.518	1,367

Note: Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. The reference mean column lists the mean of the Poverty Alleviation condition for the first two panels and the mean of the Community Empowerment condition for the third panel. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S9.

Treatment effects on primary outcomes for Study 1 with covariate adjustment

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Reference mean	Obs.
Individual - Poverty							
No. of videos	0.143	0.076	0.062	0.063	0.227	1.196	564
Amount saved	6.382	8.858	0.472	0.471	0.852	96.825	564
Recorded message	-0.020	0.050	0.690	0.684	0.852	0.677	564
Community - Poverty							
No. of videos	0.158	0.071	0.028	0.029	0.091	1.196	564
Amount saved	8.338	8.534	0.329	0.328	0.491	96.825	564
Recorded message	0.006	0.047	0.901	0.904	0.975	0.677	564
Individual - Community							
No. of videos	-0.015	0.074	0.840	0.839	1.000	1.376	564
Amount saved	-1.956	8.695	0.822	0.818	1.000	106.436	564
Recorded message	-0.026	0.049	0.597	0.593	1.000	0.668	564

Note: We include as control variables indicators for being female, for having completed primary schooling, above median age, and unemployment status. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. The reference mean column lists the mean of the Poverty Alleviation condition for the first two panels and the mean of the Community Empowerment condition for the third panel. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S10.

Treatment effects on secondary outcomes for Study 1 with covariate adjustment

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Reference mean	Obs.
Individual - Poverty							
Self-Efficacy (avg.)	0.147	0.075	0.053	0.053	0.097	3.201	564
Stigma (avg.)	-0.027	0.064	0.671	0.671	0.622	2.562	564
Affect (avg.)	0.051	0.058	0.382	0.386	0.470	3.896	564
Social status	0.385	0.147	0.009	0.008	0.028	3.286	564
Anticipated social mobility	0.619	0.194	0.002	0.002	0.011	5.577	563
Message support	-0.024	0.053	0.644	0.642	0.622	4.569	564
Query ordering	-0.085	0.101	0.399	0.409	0.470	-0.161	564
Community - Poverty							
Self-Efficacy (avg.)	0.190	0.072	0.009	0.010	0.026	3.201	564
Stigma (avg.)	-0.124	0.057	0.029	0.030	0.030	2.562	564
Affect (avg.)	0.063	0.060	0.298	0.296	0.218	3.896	564
Social status	0.350	0.137	0.011	0.011	0.026	3.286	564
Anticipated social mobility	0.477	0.177	0.007	0.008	0.026	5.577	563
Message support	-0.006	0.049	0.904	0.909	0.633	4.569	564
Query ordering	-0.016	0.098	0.868	0.866	0.633	-0.161	564
Individual - Community							
Self-Efficacy (avg.)	-0.043	0.071	0.543	0.548	1.000	3.384	564
Stigma (avg.)	0.097	0.062	0.116	0.116	1.000	2.431	564
Affect (avg.)	-0.012	0.057	0.834	0.832	1.000	3.948	564
Social status	0.035	0.152	0.817	0.823	1.000	3.604	564
Anticipated social mobility	0.142	0.184	0.441	0.438	1.000	6.000	563
Message support	-0.018	0.050	0.710	0.710	1.000	4.554	564
Query ordering	-0.069	0.099	0.484	0.482	1.000	-0.181	564

Note: We include as control variables indicators for being female, for having completed primary schooling, above median age, and unemployment status. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. The reference mean column lists the mean of the Poverty Alleviation condition for the first two panels and the mean of the Community Empowerment condition for the third panel. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S11.

Treatment effects on primary outcomes for Study 3 with covariate adjustment

Outcome	Coefficient	Std. error	p-value	Exact p-value	Reference mean	Obs.
Individual - Poverty						
Donation amount (USD)	-1.792	2.119	0.398	0.401	36.638	1,353
Community - Poverty						
Donation amount (USD)	1.623	2.057	0.430	0.429	36.638	1,353
Individual - Community						
Donation amount (USD)	-3.414	2.101	0.104	0.108	38.967	1,353

Note: We include as control variables indicators for being a prior donor, being female, high income, education level, being a racial minority, religious affiliation, religiosity, and political affiliation. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The reference mean column lists the mean of the Poverty Alleviation condition for the first two panels and the mean of the Community Empowerment condition for the third panel. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S12.

Treatment effects on secondary outcomes for Study 3 with covariate adjustment

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Reference mean	Obs.
Individual - Poverty							
Made donation	-0.013	0.026	0.609	0.614	0.255	0.818	1,353
Encourage donation	-0.214	0.078	0.006	0.006	0.019	3.046	1,353
Donor status (ladder)	0.195	0.112	0.081	0.078	0.089	5.341	1,353
Community - Poverty							
Made donation	0.034	0.024	0.163	0.161	0.184	0.818	1,353
Encourage donation	-0.171	0.077	0.027	0.026	0.087	3.046	1,353
Donor status (ladder)	0.134	0.112	0.233	0.237	0.184	5.341	1,353
Individual - Community							
Made donation	-0.047	0.025	0.060	0.065	0.220	0.857	1,353
Encourage donation	-0.043	0.077	0.579	0.584	0.633	2.916	1,353
Donor status (ladder)	0.061	0.111	0.581	0.577	0.633	5.518	1,353

Note: We include as control variables indicators for being a prior donor, being female, high income, education level, being a racial minority, religious affiliation, religiosity, and political affiliation. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. The reference mean column lists the mean of the Poverty Alleviation condition for the first two panels and the mean of the Community Empowerment condition for the third panel. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S13.

Study 1 heterogeneous treatment effects on primary outcomes by gender (female)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value
Individual - Poverty					
No. of videos	0.172	0.161	0.284	0.282	0.703
Amount saved	14.975	18.267	0.413	0.417	0.703
Recorded message	-0.112	0.101	0.270	0.282	0.703
Community - Poverty					
No. of videos	0.159	0.153	0.299	0.298	0.815
Amount saved	0.426	17.840	0.981	0.983	0.815
Recorded message	-0.106	0.098	0.282	0.278	0.815
Individual - Community					
No. of videos	0.013	0.155	0.932	0.933	1.000
Amount saved	14.549	17.980	0.419	0.419	1.000
Recorded message	-0.006	0.099	0.955	0.955	1.000

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S14.

Study 1 heterogeneous treatment effects on primary outcomes by completion of primary schooling

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value
Individual - Poverty					
No. of videos	0.101	0.207	0.628	0.636	1.000
Amount saved	-46.545	26.499	0.080	0.091	0.314
Recorded message	0.037	0.163	0.819	0.827	1.000
Community - Poverty					
No. of videos	0.061	0.191	0.749	0.754	1.000
Amount saved	15.038	24.508	0.540	0.540	1.000
Recorded message	0.083	0.149	0.577	0.585	1.000
Individual - Community					
No. of videos	0.039	0.206	0.848	0.846	1.000
Amount saved	-61.583	24.195	0.011	0.015	0.035
Recorded message	-0.045	0.149	0.761	0.765	1.000

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S15.

Study 1 heterogeneous treatment effects on secondary outcomes by gender (female)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value
Individual - Poverty					
Self-Efficacy (avg.)	-0.057	0.154	0.711	0.710	1.000
Stigma (avg.)	-0.131	0.126	0.296	0.294	1.000
Affect (avg.)	0.129	0.121	0.285	0.284	1.000
Social status	-0.203	0.295	0.491	0.498	1.000
Anticipated social mobility	-0.099	0.386	0.799	0.803	1.000
Message support	0.245	0.110	0.026	0.025	0.221
Query ordering	-0.065	0.208	0.754	0.747	1.000
Community - Poverty					
Self-Efficacy (avg.)	0.008	0.151	0.959	0.960	1.000
Stigma (avg.)	-0.062	0.114	0.586	0.589	0.883
Affect (avg.)	-0.187	0.126	0.137	0.143	0.689
Social status	-0.475	0.286	0.097	0.099	0.689
Anticipated social mobility	-0.203	0.373	0.585	0.591	0.883
Message support	0.136	0.100	0.175	0.180	0.689
Query ordering	0.071	0.204	0.727	0.734	0.941
Individual - Community					
Self-Efficacy (avg.)	-0.065	0.145	0.655	0.660	1.000
Stigma (avg.)	-0.069	0.123	0.575	0.576	1.000
Affect (avg.)	0.317	0.115	0.006	0.006	0.045
Social status	0.272	0.299	0.364	0.368	1.000
Anticipated social mobility	0.105	0.366	0.774	0.784	1.000
Message support	0.109	0.107	0.307	0.312	1.000
Query ordering	-0.136	0.204	0.505	0.507	1.000

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S16.

Study 1 heterogeneous treatment effects on secondary outcomes by completion of primary schooling

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value
Individual - Poverty					
Self-Efficacy (avg.)	0.227	0.246	0.357	0.368	0.997
Stigma (avg.)	0.012	0.206	0.953	0.955	0.997
Affect (avg.)	0.140	0.198	0.480	0.474	0.997
Social status	-0.571	0.471	0.226	0.239	0.997
Anticipated social mobility	-0.829	0.672	0.218	0.231	0.997
Message support	-0.194	0.180	0.283	0.317	0.997
Query ordering	0.293	0.306	0.339	0.354	0.997
Community - Poverty					
Self-Efficacy (avg.)	0.450	0.225	0.046	0.049	0.477
Stigma (avg.)	-0.223	0.172	0.196	0.206	1.000
Affect (avg.)	0.075	0.205	0.715	0.688	1.000
Social status	-0.241	0.392	0.539	0.540	1.000
Anticipated social mobility	-0.621	0.571	0.277	0.287	1.000
Message support	-0.046	0.172	0.788	0.715	1.000
Query ordering	-0.050	0.295	0.865	0.872	1.000
Individual - Community					
Self-Efficacy (avg.)	-0.223	0.185	0.229	0.239	1.000
Stigma (avg.)	0.235	0.196	0.231	0.233	1.000
Affect (avg.)	0.065	0.169	0.700	0.728	1.000
Social status	-0.330	0.473	0.486	0.488	1.000
Anticipated social mobility	-0.208	0.561	0.710	0.712	1.000
Message support	-0.147	0.178	0.409	0.494	1.000
Query ordering	0.343	0.274	0.211	0.218	1.000

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S17.

Study 3 heterogeneous treatment effects on donation amount by prior donor status (have made a prior donation)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Obs.
Individual - Poverty					
Donation amount (USD)	2.082	4.184	0.619	0.619	1,362
Community - Poverty					
Donation amount (USD)	0.776	4.101	0.850	0.853	1,362
Individual - Community					
Donation amount (USD)	1.306	4.196	0.756	0.754	1,362

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S18.

Study 3 heterogeneous treatment effects on donation amount by gender (female)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Obs.
Individual - Poverty					
Donation amount (USD)	0.401	4.205	0.924	0.920	1,361
Community - Poverty					
Donation amount (USD)	-2.312	4.146	0.577	0.579	1,361
Individual - Community					
Donation amount (USD)	2.713	4.227	0.521	0.528	1,361

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S19.

Study 3 heterogeneous treatment effects on donation amount by income (above \$31,305)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Obs.
Individual - Poverty					
Donation amount (USD)	-0.760	4.225	0.857	0.855	1,354
Community - Poverty					
Donation amount (USD)	7.302	4.129	0.077	0.080	1,354
Individual - Community					
Donation amount (USD)	-8.062	4.187	0.054	0.053	1,354

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S20.

Study 3 heterogeneous treatment effects on donation amount by social class
(parents are college-educated)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Obs.
Individual - Poverty					
Donation amount (USD)	7.481	4.213	0.076	0.074	1,361
Community - Poverty					
Donation amount (USD)	7.995	4.160	0.055	0.057	1,361
Individual - Community					
Donation amount (USD)	-0.513	4.250	0.904	0.904	1,361

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S21.

Study 3 heterogeneous treatment effects on donation amount by religiosity (some religiosity or greater)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Obs.
Individual - Poverty					
Donation amount (USD)	-10.066	4.314	0.020	0.022	1,361
Community - Poverty					
Donation amount (USD)	-11.744	4.294	0.006	0.006	1,361
Individual - Community					
Donation amount (USD)	1.679	4.237	0.692	0.700	1,361

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S22.

Study 3 heterogeneous treatment effects on donation amount by political affiliation (Democrat)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Obs.
Individual - Poverty					
Donation amount (USD)	-0.329	4.193	0.937	0.939	1,361
Community - Poverty					
Donation amount (USD)	-0.026	4.132	0.995	0.995	1,361
Individual - Community					
Donation amount (USD)	-0.303	4.207	0.943	0.947	1,361

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S23.

Study 3 heterogeneous treatment effects on secondary outcomes by prior donor status (have made a prior donation)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Obs.
Individual - Poverty						
Made donation	-0.091	0.051	0.072	0.068	0.122	1,362
Encourage donation	-0.080	0.159	0.614	0.613	0.258	1,362
Donor status (ladder)	0.450	0.241	0.062	0.059	0.122	1,362
Community - Poverty						
Made donation	-0.101	0.048	0.035	0.035	0.116	1,362
Encourage donation	0.000	0.158	0.999	0.999	1.000	1,362
Donor status (ladder)	0.017	0.243	0.945	0.948	1.000	1,362
Individual - Community						
Made donation	0.010	0.049	0.842	0.839	1.000	1,362
Encourage donation	-0.080	0.158	0.610	0.610	1.000	1,362
Donor status (ladder)	0.433	0.238	0.069	0.066	0.261	1,362

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S24.

Study 3 heterogeneous treatment effects on secondary outcomes by gender (female)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Obs.
Individual - Poverty						
Made donation	-0.011	0.052	0.829	0.834	1.000	1,361
Encourage donation	-0.139	0.160	0.386	0.376	1.000	1,361
Donor status (ladder)	-0.234	0.247	0.344	0.336	1.000	1,361
Community - Poverty						
Made donation	-0.080	0.049	0.099	0.103	0.424	1,361
Encourage donation	-0.097	0.159	0.541	0.548	0.615	1,361
Donor status (ladder)	-0.139	0.245	0.571	0.569	0.615	1,361
Individual - Community						
Made donation	0.069	0.050	0.171	0.174	1.000	1,361
Encourage donation	-0.041	0.158	0.794	0.791	1.000	1,361
Donor status (ladder)	-0.095	0.246	0.701	0.705	1.000	1,361

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S25.

Study 3 heterogeneous treatment effects on secondary outcomes by income (above \$31,305)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Obs.
Individual - Poverty						
Made donation	-0.060	0.052	0.251	0.248	1.000	1,354
Encourage donation	-0.045	0.161	0.779	0.778	1.000	1,354
Donor status (ladder)	-0.079	0.226	0.726	0.727	1.000	1,354
Community - Poverty						
Made donation	-0.015	0.049	0.753	0.756	1.000	1,354
Encourage donation	0.073	0.160	0.646	0.647	1.000	1,354
Donor status (ladder)	-0.104	0.224	0.644	0.650	1.000	1,354
Individual - Community						
Made donation	-0.044	0.050	0.377	0.383	1.000	1,354
Encourage donation	-0.119	0.159	0.456	0.453	1.000	1,354
Donor status (ladder)	0.025	0.225	0.913	0.912	1.000	1,354

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S26.

Study 3 heterogeneous treatment effects on secondary outcomes by social class
(parents are college-educated)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Obs.
Individual - Poverty						
Made donation	0.032	0.052	0.534	0.532	0.554	1,361
Encourage donation	-0.114	0.161	0.480	0.483	0.554	1,361
Donor status (ladder)	0.678	0.241	0.005	0.006	0.016	1,361
Community - Poverty						
Made donation	0.079	0.049	0.108	0.108	0.152	1,361
Encourage donation	0.131	0.161	0.416	0.413	0.195	1,361
Donor status (ladder)	0.490	0.243	0.044	0.045	0.152	1,361
Individual - Community						
Made donation	-0.046	0.050	0.354	0.354	0.604	1,361
Encourage donation	-0.244	0.159	0.125	0.121	0.604	1,361
Donor status (ladder)	0.188	0.236	0.427	0.422	0.604	1,361

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S27.

Study 3 heterogeneous treatment effects on secondary outcomes by religiosity
(some religiosity or greater)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Obs.
Individual - Poverty						
Made donation	-0.051	0.052	0.322	0.330	1.000	1,361
Encourage donation	-0.151	0.164	0.358	0.356	1.000	1,361
Donor status (ladder)	0.090	0.254	0.725	0.724	1.000	1,361
Community - Poverty						
Made donation	-0.050	0.049	0.306	0.316	0.257	1,361
Encourage donation	-0.317	0.165	0.055	0.055	0.199	1,361
Donor status (ladder)	0.320	0.252	0.204	0.202	0.257	1,361
Individual - Community						
Made donation	-0.001	0.050	0.981	0.980	1.000	1,361
Encourage donation	0.167	0.164	0.310	0.316	1.000	1,361
Donor status (ladder)	-0.231	0.249	0.354	0.354	1.000	1,361

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S28.

Study 3 heterogeneous treatment effects on secondary outcomes by political affiliation (Democrat)

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Obs.
Individual - Poverty						
Made donation	0.057	0.051	0.262	0.263	0.996	1,361
Encourage donation	-0.116	0.158	0.462	0.467	0.996	1,361
Donor status (ladder)	-0.168	0.249	0.499	0.498	0.996	1,361
Community - Poverty						
Made donation	0.003	0.049	0.945	0.947	1.000	1,361
Encourage donation	-0.142	0.157	0.366	0.364	1.000	1,361
Donor status (ladder)	-0.096	0.246	0.696	0.696	1.000	1,361
Individual - Community						
Made donation	0.054	0.049	0.270	0.278	1.000	1,361
Encourage donation	0.026	0.157	0.869	0.871	1.000	1,361
Donor status (ladder)	-0.072	0.246	0.769	0.768	1.000	1,361

Note: This table reports coefficient estimates on each experimental comparison interacted with a baseline variable. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S29.

Participant forecasts of business video selection

Hypothesis	Coefficient	Std. error	p-value	Reference mean	Obs.
Individual - Poverty	0.042	0.012	0.001	0.580	1,695
Community - Poverty	0.052	0.013	0.000	0.580	1,695
Individual - Community	-0.010	0.013	0.729	0.632	1,695
Controlling for own treatment assignment					
Individual - Poverty	0.041	0.012	0.001	0.580	1,695
Community - Poverty	0.052	0.013	0.000	0.580	1,695
Individual - Community	-0.010	0.013	0.696	0.632	1,695

Note: The dependent variable is the proportion selecting a business video for first video. Each of the 565 participants made three forecasts for a total of 565 x 3 = 1,695 observations. The first and second panels respectively exclude and include a dummy for own treatment assignment. The first column reports the mean difference between groups. The second column reports robust standard errors clustered at the individual level, and the third column reports corresponding p-values. The reference mean column lists the mean of the Poverty Alleviation condition for the first two hypotheses and the mean of the Community Empowerment condition for the third hypothesis. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

Table S30.

Equivalence tests on Study 1 primary outcomes

Outcome	Coefficient	Std. error	p-value	Exact p-value	Min. q-value	Reference mean	Obs.
Individual - Poverty							
No. of videos	-0.009	0.020	0.656	0.653	1.000	1.196	564
Amount saved	0.659	1.362	0.629	0.625	1.000	96.825	564
Recorded message	0.003	0.008	0.674	0.679	1.000	0.677	564
Community - Poverty							
No. of videos	0.018	0.019	0.344	0.346	0.525	1.196	564
Amount saved	1.395	1.296	0.282	0.276	0.525	96.825	564
Recorded message	-0.009	0.008	0.306	0.303	0.525	0.677	564
Individual - Community							
No. of videos	-0.027	0.020	0.170	0.170	0.342	1.376	564
Amount saved	-0.736	1.331	0.581	0.583	0.342	106.436	564
Recorded message	0.012	0.009	0.165	0.159	0.342	0.668	564

Note: This table computes predicted values of outcomes as a function of baseline covariates (gender, age, educational level, and unemployment status) and regresses the predictions on the treatment indicators. Each panel corresponds to a single hypothesis comparing the treatment conditions for the group of predicted outcome variables. The first column reports the mean difference between groups. The second column reports robust standard errors. The third column reports standard p-values. The fourth column reports exact p-values from randomization inference. The fifth column reports the minimum q-values. FDR correction is applied over all outcomes within a hypothesis. The reference mean column lists the mean of the poverty alleviation condition for the first two panels and the mean of the community empowerment condition for the third panel. For more information on how these outcomes were constructed, see the study codebook located on our OSF page (https://osf.io/pg3cw/).

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