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Working Paper

Does online fundraising increase charitable giving? A nationwide field experiment on Facebook

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–For Online Publication–

Appendix to "Does online fundraising increase charitable giving?

A nationwide field experiment on Facebook"

Maja Adena (WZB) and Anselm Hager (HU Berlin)

Appendix A. Additional tables and figures

Table A1. Results of Randomization

| | Donation potential (1) | Facebook reach (in mill.) (2) | Popu- lation (in mill.) (3) | GDP (in mill.) (4) | Share green party votes (5) | Share Catholics (6) | Share Protes- tants (7) | Share native Ger- mans (8) | City status (9) | Share em- ployed (10) | Share couples (11) | Share children (12) | Share single parents (13) |
|--------------------------------------|------------------------------|---|---|-----------------------------|---|---------------------------|----------------------------------|--|-----------------------|--------------------------------|--------------------------|---------------------------|------------------------------------|
| Control group | | | | | | | | | | | | | |
| mean | 0.130 | 3.351 | 10.131 | 13.971 | 0.033 | 0.345 | 0.302 | 0.883 | 0.173 | 0.001 | 0.507 | 0.245 | 0.035 |
| std. dev. | 0.082 | 4.395 | 8.635 | 27.135 | 0.029 | 0.286 | 0.202 | 0.072 | 0.378 | 0.000 | 0.031 | 0.031 | 0.004 |
| <i>N</i> | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,558 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 |
| Treatment group | | | | | | | | | | | | | |
| mean | 0.132 | 3.289 | 10.152 | 14.123 | 0.034 | 0.338 | 0.307 | 0.881 | 0.168 | 0.001 | 0.508 | 0.245 | 0.035 |
| std. dev. | 0.084 | 4.301 | 8.865 | 27.196 | 0.036 | 0.281 | 0.204 | 0.072 | 0.374 | 0.000 | 0.031 | 0.031 | 0.004 |
| <i>N</i> | 5,124 | 5,124 | 5,124 | 5,124 | 5,124 | 5,124 | 5,124 | 5,121 | 5,124 | 5,124 | 5,124 | 5,124 | 5,124 |
| T-test <i>p</i> -value | 0.311 | 0.559 | 0.923 | 0.818 | 0.183 | 0.363 | 0.255 | 0.382 | 0.592 | 0.500 | 0.417 | 0.803 | 0.880 |
| Treatment: Effectiveness video | | | | | | | | | | | | | |
| mean | 0.133 | 3.268 | 10.015 | 14.269 | 0.034 | 0.347 | 0.303 | 0.881 | 0.165 | 0.001 | 0.508 | 0.246 | 0.035 |
| std. dev. | 0.084 | 4.269 | 8.643 | 27.491 | 0.032 | 0.281 | 0.204 | 0.073 | 0.372 | 0.000 | 0.031 | 0.031 | 0.004 |
| <i>N</i> | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 |
| Treatment: Empathy video | | | | | | | | | | | | | |
| mean | 0.131 | 3.310 | 10.288 | 13.976 | 0.035 | 0.330 | 0.311 | 0.882 | 0.170 | 0.001 | 0.508 | 0.244 | 0.035 |
| std. dev. | 0.084 | 4.335 | 9.081 | 26.903 | 0.040 | 0.281 | 0.204 | 0.072 | 0.376 | 0.000 | 0.032 | 0.031 | 0.004 |
| <i>N</i> | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,559 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 |
| T-test <i>p</i> -value | 0.605 | 0.726 | 0.271 | 0.700 | 0.394 | 0.026 | 0.178 | 0.737 | 0.681 | 0.750 | 0.813 | 0.078 | 0.132 |
| Treatment: Free allocation | | | | | | | | | | | | | |
| mean | 0.132 | 3.291 | 10.125 | 14.407 | 0.034 | 0.336 | 0.307 | 0.881 | 0.173 | 0.001 | 0.508 | 0.245 | 0.035 |
| std. dev. | 0.084 | 4.342 | 8.831 | 27.211 | 0.030 | 0.281 | 0.204 | 0.074 | 0.378 | 0.000 | 0.032 | 0.031 | 0.004 |
| <i>N</i> | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,561 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 |
| Treatment: Fixed postal-code budgets | | | | | | | | | | | | | |
| mean | 0.132 | 3.287 | 10.178 | 23.838 | 0.034 | 0.341 | 0.307 | 0.882 | 0.163 | 0.001 | 0.508 | 0.246 | 0.035 |
| std. dev. | 0.084 | 4.262 | 8.900 | 27.183 | 0.040 | 0.282 | 0.204 | 0.070 | 0.369 | 0.000 | 0.031 | 0.031 | 0.004 |
| <i>N</i> | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 | 2,560 | 2,562 | 2,562 | 2,562 | 2,562 | 2,562 |
| T-test <i>p</i> -value | 0.831 | 0.974 | 0.829 | 0.454 | 0.197 | 0.566 | 0.990 | 0.756 | 0.350 | 0.211 | 0.691 | 0.294 | 0.691 |

Table A2. Descriptive Statistics

| Period (1) | Control group | | | Treatment group | | |
|---|---------------|------------------|-----------------|-----------------|------------------|-----------------|
| | mean (2) | std. dev. (3) | <i>N</i> (4) | mean (5) | std. dev. (6) | <i>N</i> (7) |
| Panel A: Save the Children | | | | | | |
| Donation value per million inhabitants per day | | | | | | |
| Before | 77.450 | 650.178 | 2,562 | 66.188 | 335.322 | 5,124 |
| During | 99.866 | 455.830 | 2,562 | 114.832 | 566.359 | 5,124 |
| After | 136.944 | 386.772 | 2,562 | 147.414 | 478.166 | 5,124 |
| Donation frequency per million inhabitants per day | | | | | | |
| Before | 1.115 | 2.769 | 2,562 | 1.175 | 2.994 | 5,124 |
| During | 1.457 | 4.777 | 2,562 | 1.801 | 5.857 | 5,124 |
| After | 1.843 | 3.272 | 2,562 | 1.998 | 3.591 | 5,124 |
| Panel B: 23 other charities with similar activities | | | | | | |
| Donation value per million inhabitants per day | | | | | | |
| Before | 265.243 | 724.209 | 2,562 | 301.666 | 786.528 | 5,124 |
| During | 740.456 | 2,225.778 | 2,562 | 685.778 | 1,854.187 | 5,124 |
| After | 698.960 | 1,598.148 | 2,562 | 687.945 | 1,305.768 | 5,124 |
| Donation frequency per million inhabitants per day | | | | | | |
| Before | 2.378 | 4.473 | 2,562 | 2.570 | 4.655 | 5,124 |
| During | 6.520 | 6.520 | 2,562 | 5.543 | 9.633 | 5,124 |
| After | 4.644 | 6.909 | 2,562 | 4.918 | 6.223 | 5,124 |
| Panel C: betterplace.org | | | | | | |
| Donation value per million inhabitants per day | | | | | | |
| Before | 245.208 | 1,236.365 | 2,562 | 246.809 | 1095.192 | 5,124 |
| During | 225.762 | 1,000.812 | 2,562 | 238.178 | 1,068.282 | 5,124 |
| After | 797.321 | 1,825.782 | 2,562 | 862.301 | 2,651.882 | 5,124 |
| Donation frequency per million inhabitants per day | | | | | | |
| Before | 3.742 | 11.211 | 2,562 | 4.159 | 14.610 | 5,124 |
| During | 4.595 | 23.775 | 2,562 | 4.439 | 13.385 | 5,124 |
| After | 14.244 | 20.754 | 2,562 | 14.401 | 21.940 | 5,124 |

Table A3. Effects of Video Fundraising on Donation Level and Frequency

| Panel A: Short term | | |
|---------------------|----------------------------------|------------------------------------|
| Dependent variable: | Per million inhabitants per day | |
| | Δ donation revenue (1) | Δ donation frequency (2) |
| Video fundraising | 26.228 (18.083) | 0.284** (0.135) |
| Observations | 7,686 | 7,686 |
| R^2 | 0.000 | 0.001 |
| Panel B: Long term | | |
| Dependent variable: | Per million inhabitants per day | |
| | Δ donation revenue (1) | Δ donation frequency (2) |
| Video fundraising | 27.232* (16.461) | 0.159* (0.086) |
| Observations | 7,686 | 7,686 |
| R^2 | 0.000 | 0.000 |

Notes. See notes to Table 2 and Table 3.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A4. Pre-treatment Differences

| Panel A: Donations to 23 Similar Charities | | | | |
|--|---------------------------------|----------------------|--------------------|-------------------|
| Dependent variable: | Per million inhabitants per day | | | |
| | Donation revenue | | Donation frequency | |
| | (1) | (2) | (3) | (4) |
| Video fundraising | 36.422** (18.040) | 35.788** (17.833) | 0.192* (0.110) | 0.207* (0.107) |
| Controls | | yes | | yes |
| Randomization blocks FEs | | yes | | yes |
| Observations | 7,686 | 7,686 | 7,686 | 7,686 |
| R^2 | 0.001 | 0.186 | 0.000 | 0.197 |
| Panel B: Donations to Betterplace (all projects) | | | | |
| Dependent variable: | Per million inhabitants per day | | | |
| | Donation revenue | | Donation frequency | |
| | (1) | (2) | (3) | (4) |
| Video fundraising | 1.601 (28.821) | 3.934 (28.535) | 0.417 (0.301) | 0.450 (0.306) |
| Controls | | yes | | yes |
| Randomization blocks FEs | | yes | | yes |
| Observations | 7,686 | 7,686 | 7,686 | 7,686 |
| R^2 | 0.000 | 0.184 | 0.000 | 0.190 |
| Panel C: Donations to Betterplace (children-related projects) | | | | |
| Dependent variable: | Per million inhabitants per day | | | |
| | Donation revenue | | Donation frequency | |
| | (1) | (2) | (3) | (4) |
| Video fundraising | -8.723 (19.025) | -7.403 (19.072) | 0.122 (0.189) | 0.142 (0.193) |
| Controls | | yes | | yes |
| Randomization blocks FEs | | yes | | yes |
| Observations | 7,686 | 7,686 | 7,686 | 7,686 |
| R^2 | 0.000 | 0.172 | 0.000 | 0.174 |
| Panel D: Donations to Betterplace (projects not related to children) | | | | |
| Dependent variable: | Per million inhabitants per day | | | |
| | Donation revenue | | Donation frequency | |
| | (1) | (2) | (3) | (4) |
| Video fundraising | 10.324 (15.759) | 11.337 (15.698) | 0.294 (0.185) | 0.308 (0.189) |
| Controls | | yes | | yes |
| Randomization blocks FEs | | yes | | yes |
| Observations | 7,686 | 7,686 | 7,686 | 7,686 |
| R^2 | 0.000 | 0.181 | 0.000 | 0.190 |

Notes. See notes to Table 1.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A5. Effect of the Save the Children Campaign on Donations to Projects on betterplace.org

| Dependent variable: | Short term | | Long term | |
|--|---------------------------------|---------------------------|-------------------------|---------------------------|
| | Per million inhabitants per day | | | |
| | Donation revenue (1) | Donation frequency (2) | Donation revenue (3) | Donation frequency (4) |
| Video fundraising | 27.332* (16.397) | 0.024 (0.251) | 56.706*** (20.733) | 0.633*** (0.237) |
| Video fundraising x children related projects | -43.849*** (15.353) | -0.620*** (0.185) | -64.184*** (20.334) | -1.609*** (0.207) |
| Children related projects | -35.227*** (8.642) | -1.324*** (0.120) | -51.833*** (10.359) | -1.667*** (0.109) |
| Postal code FEs | yes | yes | yes | yes |
| Period FEs | yes | yes | yes | yes |
| Project types | 2 | 2 | 2 | 2 |
| Periods | 2 | 2 | 2 | 2 |
| Observations | 30,744 | 30,744 | 30,744 | 30,744 |
| R ² | 0.404 | 0.471 | 0.442 | 0.504 |

Notes. See notes to Table 2.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A6. Clicks and Impressions by Treatments: Summary Statistics

| Treatment: | Video type | | Impression allocation strategy | |
|---|------------|---------------|--------------------------------|---------------------------------|
| | Empathy | Effectiveness | Free allo- cation | Fixed postal-code budgets |
| | (1) | (2) | (3) | (4) |
| Total population in millions | 26.357 | 25.659 | 25.940 | 26.077 |
| Total reach (number of users) in millions | 1.009 | 0.890 | 1.002 | 0.896 |
| Total spent in € | 17,439.51 | 16,264.83 | 17,500 | 16,204.34 |
| Spent per million inhabitants | 661.67 | 633.88 | 674.63 | 621.40 |
| Spent per million users | 17,288.43 | 18,281.09 | 17,465.7 | 18,075.46 |
| Total impressions | 1,189,211 | 1,074,772 | 1,170,818 | 1,093,165 |
| Impressions per €1 spent | 68.19 | 66.08 | 66.90 | 67.46 |
| Total video views of at least 3 seconds | 276,876 | 229,722 | 256,888 | 249,710 |
| Total video clicks | 8,541 | 7,132 | 8,715 | 6,958 |
| Total forwarding button clicks | 839 | 698 | 811 | 726 |

Notes. Based on semi-aggregated data. For the treatment with fixed postal-code budgets (Column (4)), data are available at the PLZ-day level. For the free allocation treatment (Column (3)), data are available at the daily level for the empathy and effectiveness groups separately, that is, the data are aggregated for all postal codes in the respective group.

Table A7. Interaction Effects Between Treatments

| Dependent variable: | Short term | | Long term | |
|---|---------------------------------|------------------------------|--------------------------|------------------------------|
| | Per million inhabitants per day | | | |
| | Donation value (1) | Donation frequency (2) | Donation value (3) | Donation frequency (4) |
| Free allocation x effectiveness video | 7.988 (16.089) | 0.351* (0.200) | 25.530* (13.981) | 0.283** (0.113) |
| Free allocation x empathy video | 37.496* (21.962) | 0.506*** (0.192) | 11.657 (13.941) | 0.212** (0.105) |
| Fixed postal-code budgets x effectiveness video | -0.112 (15.227) | 0.133 (0.174) | 15.932 (15.229) | 0.110 (0.101) |
| Fixed postal-code budgets x empathy video | 17.481 (18.887) | 0.334* (0.180) | 17.486 (14.886) | 0.237** (0.107) |
| Controls | yes | yes | yes | yes |
| Randomization blocks FEs | yes | yes | yes | yes |
| Observations | 7,686 | 7,686 | 7,686 | 7,686 |
| R ² | 0.177 | 0.189 | 0.205 | 0.283 |

Notes. See notes to Table 2.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A8. Clicks and Impressions by Treatments (2x2)

| Impression allocation strategy: Video type: | Free allocation | | Fixed postal-code budgets | |
|---|-----------------|---------------|---------------------------|---------------|
| | Empathy | Effectiveness | Empathy | Effectiveness |
| | (1) | (2) | (3) | (4) |
| Panel A: Summary statistics | | | | |
| Total population in millions | 13,116 | 12,824 | 13,242 | 12,835 |
| Total reach (number of users) | 518,216 | 483,748 | 490,523 | 405,960 |
| Total spent in € | 8,750 | 8,750 | 8,689.51 | 7,514.83 |
| Spent per million inhabitants | 667.12 | 682.31 | 656.21 | 585.50 |
| Spent per million users | 16,884.85 | 18,087.93 | 17,714.79 | 18,511.26 |
| Total impressions | 592,957 | 577,861 | 596,254 | 496,911 |
| Impressions per €1 spent | 67.767 | 66.041 | 68.618 | 66.124 |
| Total video views of at least 3 seconds | 134,844 | 122,044 | 142,032 | 107,678 |
| Total video clicks | 4,593 | 4,122 | 3,948 | 3,010 |
| Total forwarding button clicks | 427 | 384 | 412 | 314 |
| Panel B: Intermediate outcomes | | | | |
| Number of seconds video viewed ^a | 4.504 | 3.578 | 3.923 | 3.6323 |
| Video clicks per million impressions | 7,745.9 | 7,133.2 | 6,621.3 | 6,057.4 |
| Forwarding button clicks per million impressions | 720.1 | 664.5 | 691 | 631.9 |
| Video views of at least 3 seconds per million impressions | 227,409.4 | 211,199.6 | 238,207.2 | 216,694.7 |
| Video clicks per €100 spent | 52.491 | 47.109 | 45.434 | 40.054 |
| Forwarding button clicks per €100 spent | 4.88 | 4.389 | 4.741 | 4.178 |

Notes. Based on semi-aggregated data. For the treatment with fixed postal-code budgets (Columns (3) and (4)), data are available at the PLZ-day level. For the free allocation treatment (Columns (1) and (2)), data are available at the daily level for the empathy and effectiveness groups separately, that is, the data are aggregated for all postal codes in the respective group. ^aData weighted by impressions at each level of disaggregation in order to arrive at the correct averages.

Table A9. Decomposition of the Long-Term Treatment Effect into its Constituent Additive Parts

| Panel A: Donation source | | | | | |
|--------------------------|---------------------------------|---------------------|--------------------------------|------------------|------------------|
| | Direct market- ing (1) | Other web (2) | Unsolicited TV (3) (4) | | Other (5) |
| Video fundraising | 0.064* (0.038) | 0.061 (0.041) | 0.041 (0.032) | 0.011 (0.016) | 0.033 (0.025) |
| Controls | yes | yes | yes | yes | yes |
| Randomization blocks FEs | yes | yes | yes | yes | yes |
| Observations | 7,686 | 7,686 | 7,686 | 7,686 | 7,686 |
| R^2 | 0.188 | 0.200 | 0.304 | 0.168 | 0.179 |
| Panel B: Donation type | | | | | |
| | Money (1) | Pledge (2) | In-kind (3) | | |
| Video fundraising | 0.114** (0.050) | 0.072 (0.048) | 0.024 (0.017) | | |
| Controls | yes | yes | yes | | |
| Randomization blocks FEs | yes | yes | yes | | |
| Observations | 7,686 | 7,686 | 7,686 | | |
| R^2 | 0.278 | 0.209 | 0.175 | | |

Notes. See notes to Table 2.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A10. Summary Statistics for Table 8

| | mean | std. dev. | min | max | count |
|---|-------|--------------|-------|-------|-------|
| | (1) | (2) | (3) | (4) | (5) |
| Share of postal codes up to 30 km receiving treatment | 0.667 | 0.060 | 0.308 | 1 | 7,673 |
| Urban x share of postal codes up to 30 km receiving treatment and being urban | 0.052 | 0.132 | 0 | 0.588 | 7,673 |
| Rural x share of postal codes up to 30 km receiving treatment and being urban | 0.067 | 0.106 | 0 | 0.578 | 7,673 |
| Urban x share of postal codes up to 30 km receiving treatment and being rural | 0.062 | 0.153 | 0 | 0.750 | 7,673 |
| Rural x share of postal codes up to 30 km receiving treatment and being rural | 0.488 | 0.248 | 0 | 1 | 7,673 |
| Observations | 7,673 | | | | |

Table A11. New and Repeated Donor Retention Rates

| Source | Link | New donors retention rate | Repeat donor retention rate | Data for |
|-------------------------------|--|------------------------------------|-----------------------------|----------|
| (1) | (2) | (3) | (4) | (5) |
| Bloomerang | www.bloomerang.co/retention | 25—32% | 62—64% | 2013—17 |
| Nonprofits Source | www.nonprofitssource.com/online-giving-statistics/ | 38% for online donors, 25% overall | 60% | 2016—17 |
| M+R Bench-mark Study | www.mrbenchmarks.com/assets/files/uploads/2019_Benchmarks_Study.pdf | 37% for online donors | 59% | 2018 |
| Donating to Charitable Causes | www.nptuk.org/philanthropic-resources/uk-charitable-giving-statistics/ | - | 60% | 2018 |

Notes. Sources viewed on August 21, 2019.

Figure A1. Geographical Distribution of Treatments: All Postal Codes with Video Fundraising

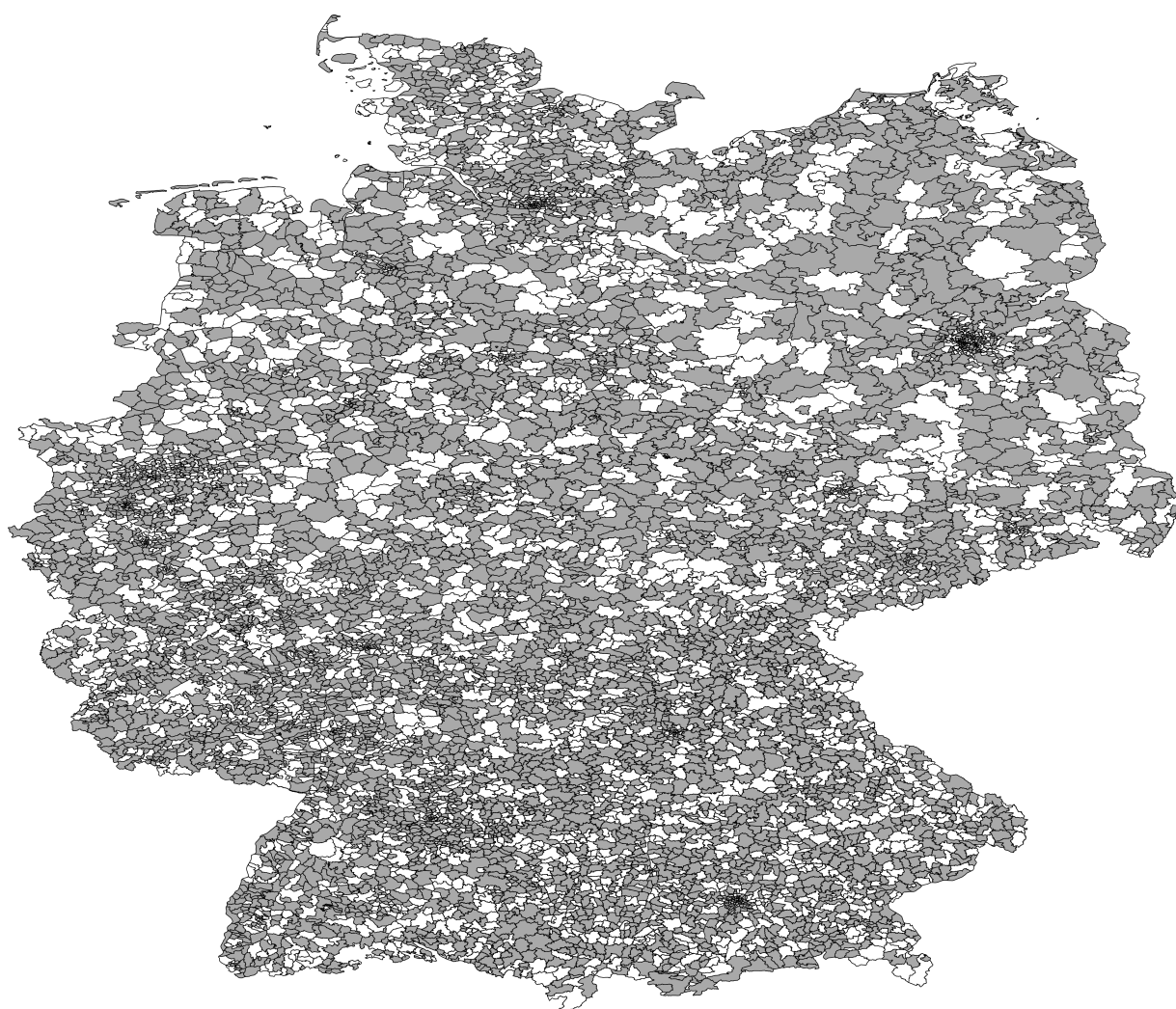
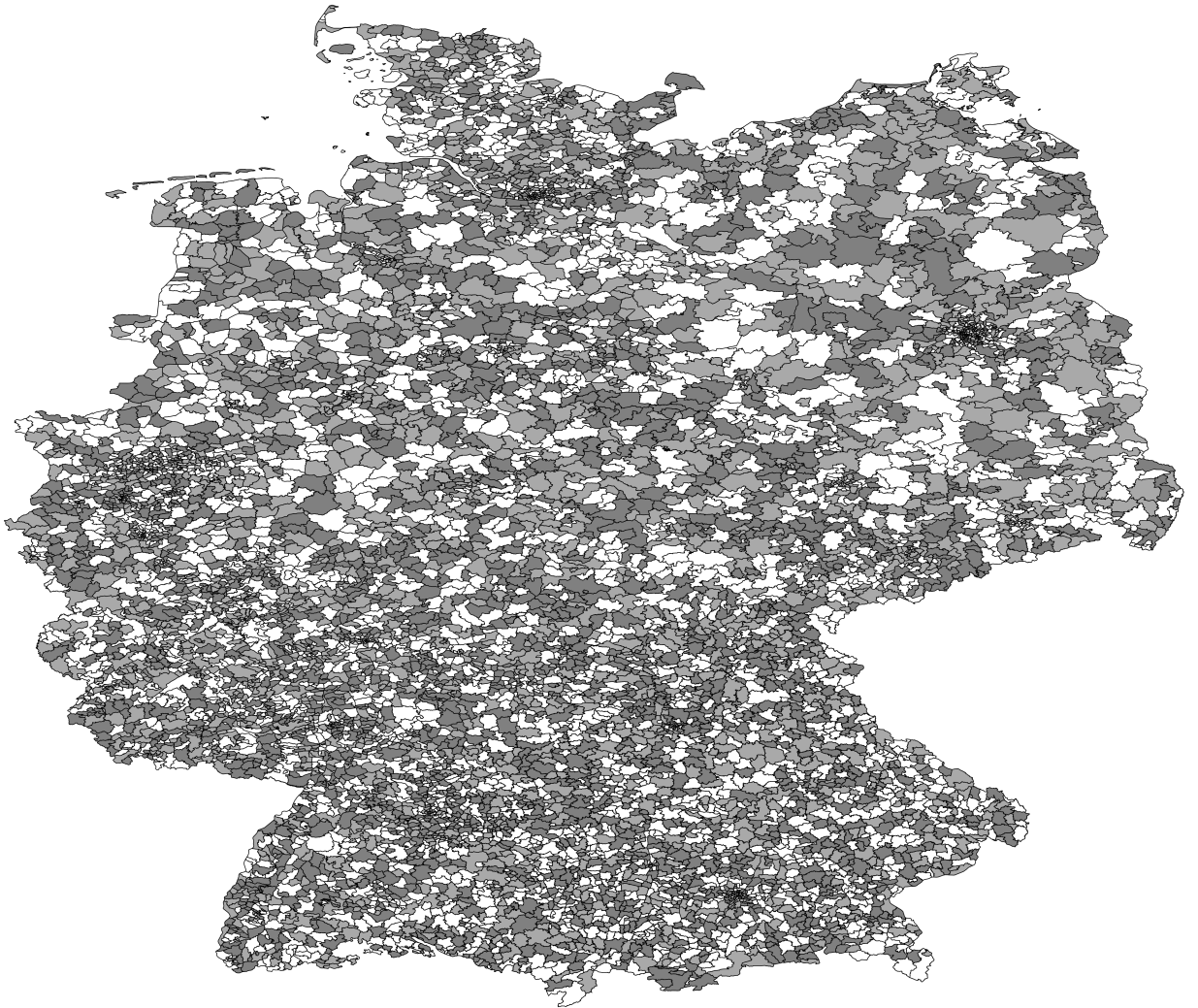
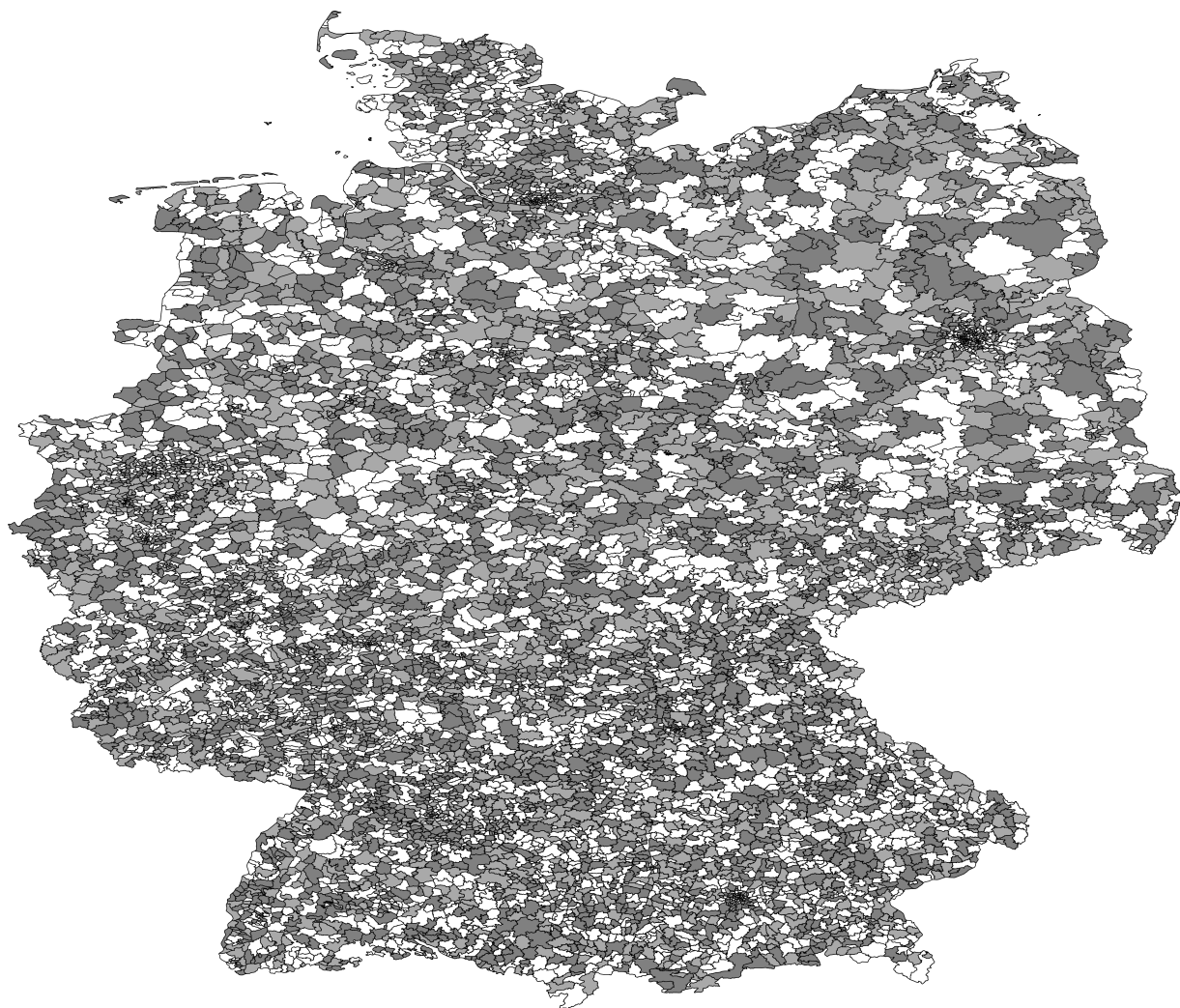


Figure A2. Geographical Distribution of Treatments by Video Type



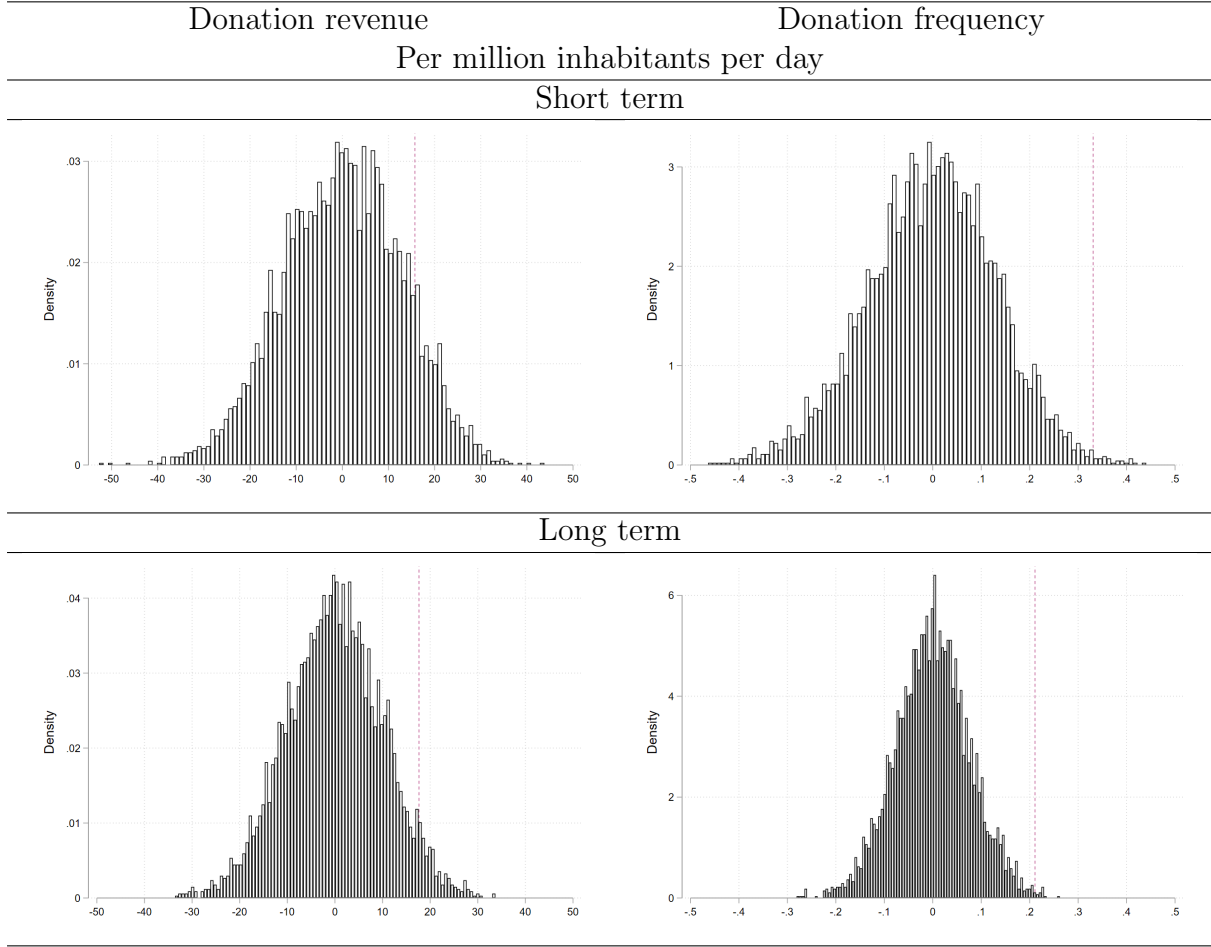
Notes. Light grey: empathy treatment; dark grey: effectiveness video.

Figure A3. Geographical Distribution of Treatments by Impression Allocation Strategy



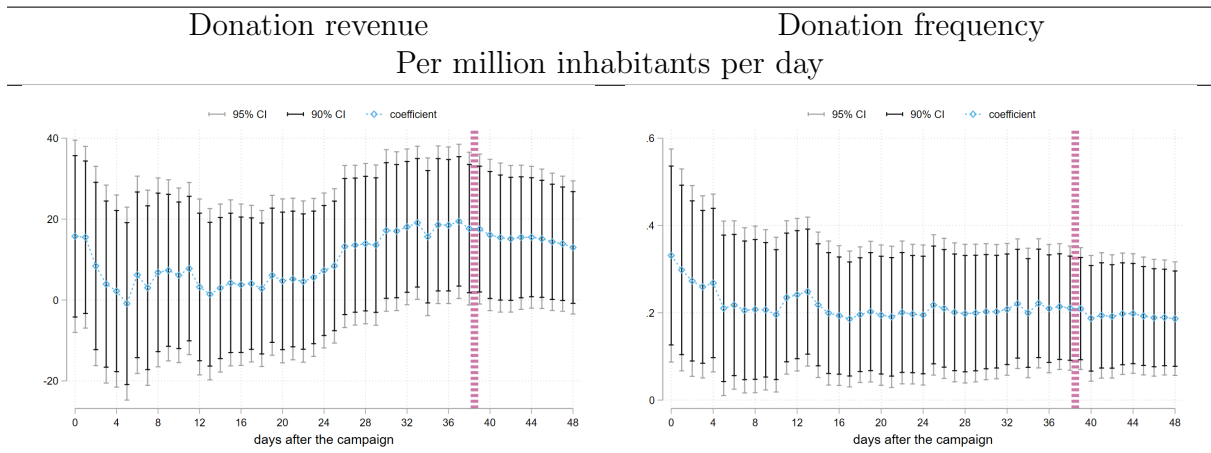
Notes. Light grey: free allocation; dark grey: fixed postal-code budgets.

Figure A4. Randomization Inference



Notes. Coefficient distribution from a randomization inference test with 5,000 iterations. The vertical dotted lines mark the estimated coefficients in the main regressions. Short term: effect during the fundraising campaign; long term: combined effect during the fundraising campaign and the posttreatment period.

Figure A5. Effect on the Coefficient on Video Fundraising when Including Days After the Campaign



Notes. The vertical dotted line marks the end of the year and the end of the post-treatment period included in the main analysis. The first coefficient of each panel corresponds to the short-term estimate from Table 2, Panel A, Columns (2) and (4). The last coefficient before the vertical line corresponds to the respective long-term estimate in Panel B. See notes to Table 2.

Appendix B. Video content

A long-standing strand of research in psychology has established that empathy leads to altruistic behavior (Davis, 2018). For example, Batson et al. (1981) studied the relation between empathy and altruism and suggested that empathic emotions produce an altruistic motivation. In economics, a related argument was used by Andreoni et al. (2017) to motivate ask avoidance: “Verbal requests engage empathy but... people take steps to avoid thinking about what others would request if given a chance.” Andreoni et al. (2018) concluded that empathic individuals are significantly more likely to donate.

Regarding the *effectiveness* video, the key assumption in economics is that individuals value quality. In the nonprofit market, there are numerous platforms, such as Charity Navigator, that compare charity metrics and make recommendations. Yet evidence on the causal influence of quality metrics on individuals’ decisions is mixed. While some studies show that donors dislike overheads (Gneezy et al., 2014), value quality certifications (Adena et al., 2019; Yörük, 2016), and prefer to know what their money will be spent on (Gangadharan et al., 2018), others show that individuals are reluctant to pay for quality information on charities (Fong and Oberholzer-Gee, 2011; Null, 2011; Metzger and Günther, 2019) or might even reduce their giving, using imperfect quality as an excuse to not give (Exley, 2018; Karlan and Wood, 2017).

When implementing the empathy concept practically, we chose a video that presents a story of a small child suffering from malnutrition and facing a risk of dying. When implementing the effectiveness concept, we chose a highly informative video that presents numerous instances in which the organization has been active and lists various victims whom the organization has been able to help. Implicitly, this implementation created a link to another important strand of research, namely the identifiable-victim versus statistical-lives literature. These terms refer to the personified suffering of one

explicitly named person or small group versus number-filled enumerations of fatalities, injuries, and destruction (Schelling, 1968). Using mainly laboratory experiments, researchers have found large differences in willingness to donate depending on whether an identifiable victim is highlighted (see, for example, Jenni and Loewenstein, 1997; Small and Loewenstein, 2003; Small et al., 2007).¹

Our video content was somewhat similar to the content used in the laboratory study of Small et al. (2007). In their study, the researchers asked student participants to distribute their experimental endowment between participants' own account and a donation to Save the Children—the same charity as in our experiment. In the identifiable victim treatment, the researchers provided a description of a small girl who faced a threat of severe hunger or even starvation—a similar story to that in our empathy treatment. In the statistical victim treatment, the researchers provided a text containing several large numbers relating to children being poor and suffering in many countries. This treatment was similar to our effectiveness video, with the difference being that our video also referred to the number of people helped by the organization. In the experiment by Small et al. (2007), the average donation in the identifiable victim treatment was more than double that of the statistical victim treatment.

Table B1 explains in more detail how both videos incorporated the concept of empathy versus effectiveness as well as the identifiable victim versus statistical lives concepts. Below, we also publish complete transcripts of the videos.

¹This led us to preregister the hypothesis that the empathy video would outperform the effectiveness video.

Table B1. Relationship Between Video Content and Concepts in the Literature

| Video 1: Empathy | Video 2: Effectiveness |
|--|---|
| <i>Empathy</i> : The video starts by showing a dying one-year-old girl. It shows her grandmother afraid of losing her. Supported by music, appropriately paced narration, and an array of visual material, the video prompts a feeling of empathy. | <i>Effectiveness</i> : The video points to Save the Children’s experience, in terms of its duration (“Save the Children has been providing emergency aid in crises for more than 90 years”), geographical reach (various countries and regions are named: Russia, Pakistan, Africa, Syria, Nepal, Europe), extensive logistical support (“We have a whole logistics team that is desperately searching out different routes to get aid into countries, so we are trying over land as well as flying in”), and determination (“No matter where. No matter how. We are there”). |
| <i>Identifiable victim</i> : The video starts with the story of one dying girl and how the organization helps her. | <i>Statistical lives</i> : The video shows numerous victims of different wars and natural catastrophes and provides many numbers: “more than 90 years,” “10 million people are being affected by the worst drought for more than 15 years,” “above 12,000 now.” |

Transcript of the videos

1. *Empathy treatment*:² Save the Children—Wir helfen Kindern in Not [00:00] [video: extreme close-up. zooming in on the moving hand of a child lying on a piece of green fabric.] [music: soft melancholic piano in background] Male Speaker: [softly] **Children. So fragile**—[00:04] [video: extreme close-up. zooming in on the moving hand of a child that is close to the partly visible hand and face of an adult.] Male Speaker: [without pause, slightly wistful]—**and delicate. And yet full of potential.** [00:08] [video: zooming in on Bishara’s face with a nasal feeding tube that is being held in place by a patch] Male Speaker: **Like the one-year old Bishara.** [00:10-00:24] [sound: heart beat in background] Male Speaker: **Completely debilitated by fever and diarrhea,**—[00:13] [animated picture: Bishara is in the center of the frame. Malnourished Bishara is held by woman on the left. Another woman on the right administers formula to the child through nasal feeding tube.] Male Speaker: [without pause, slightly wistful]—**the little one fought for her life.** [00:16] [video: face of grandmother fills greater part of frame; her face is aged and thin.] Male Speaker: **Her grandmother was afraid of losing her.** [00:19] [video: close up. Bishara with feeding tube looks into camera and leans head against torso of woman.] Male Speaker: **She took the little girl to a nutrition center.** [00:22] [video: close-up. Bishara in the arms of a female adult. on Bishara’s hand is an infusion catheter. the bandage around the catheter is partly bloodied.] Male Speaker: [getting insistent] **And someone like you donated. Someone like you saved Bishara.** [00:28] [animated picture: close-up of two faces. recovered Bishara next to her slightly smiling grandmother.] [music: is becoming more uplifting and is picking up some speed] Male Speaker: **After only 6 weeks**—[00:30] [animated picture: full frame. grandmother and Bishara in center. huts and desert in background. grandmother and Bishara are sitting on the ground. grandmother looks down to Bishara and smiles.

²The empathy video can be accessed here: <https://www.youtube.com/watch?v=vNIKofWG6iE>.

Bishara sits in front of grandmother and smiles to the side.] Male Speaker: [without pause, slightly joyful]—**she was healthy again.** [00:32] [animated picture: close-up frame taken from above. zooming in on full-on smiling older Bishara.] Male Speaker: **And 5 years later, Bishara smiles—** [00:34] [animated picture: Bishara in center. Bishara holds a large plane toy above her head and smiles. green grass and trees in background.] Male Speaker: [without pause]—**and plays joyfully.** [00:36] [video: close-up. in center frame is a measuring tape that is wrapped around a child’s upper arm. the measuring tape shows that the child’s arm is about 14 cm in diameter. next to the number is a red area that indicates that the child’s measurement is far below average.] Male Speaker: [serious] **But today other children are suffering from starvation—**[00:36] [video: same picture as before now in wider frame. crying child in center. woman holds the child and looks worried. behind the child are two other women and to the left is a male doctor who is measuring the child’s arm.] Male Speaker: [without pause]—**who now need your help.** [00:41] [video: wide frame from above. figure walks through pond that lies exposed due to receding waters.] Male Speaker: [slightly wistful] **East Africa is currently experiencing one of the worst droughts in decades.** [00:46] [animated picture: child in center. child looks in camera. child’s upper arm is measured. the measuring instrument places the child’s measurement in the red zone.] Male Speaker: **Thousands of children are in mortal danger.** [00:48] [video: woman sits on hospital bed and strokes the head of Abdi, who is in her lap. Abdi’s eyes are downcast and barely open.] Male Speaker: **One-year-old Abdi is so weakened—**[00:51] [picture: slowly zooming in on frame. Abdi and woman who are in same position now shown from another angle. female doctor feeds Abdi liquid from a metal cup. Abdi’s eyes are closed.] Male Speaker: [without pause]—**that he can hardly stand on his legs. Our teams are working hard—**[00:56] [video: woman sits on hospital bed. her arms are wrapped around a child and she holds the child close to her. female nurse to the left prepares the child’s infusion catheter for administering medicine.] Male Speaker: [without pause]—**to care for as many children as possible.** [00:59] [picture: close-up frame. zooming in on adult hand holding a child’s hand. adult hand is slightly covered in dirt.] Male Speaker: **But our resources are not yet sufficient.** [01:03] [animated picture: male doctor and woman sit next to each other and look at the child, who is in woman’s lap. child looks in camera with wide open eyes. male doctor slightly leans towards child and examines the child’s heart with stethoscope.] Male Speaker: **Back then, someone like you helped save Bishara’s life.** [01:08] [picture: close-up of Abdi being fed liquid from metal cup.] [music: rhythmic timpani drums are added] Male Speaker: **Now you can help to save children’s lives like Abdi’s across the world. Your €9 each month,—**[01:14] [picture: zooming in on malnourished child who touches man’s cheek. man is on eye-level with child and looks at child while child’s eyes are closed. man’s hand seems to reach towards child.] Male Speaker: [without pause]—**for example, ensure that children are provided with essential nourishment.** [01:20] [text: appears in bottom right corner. text says “Please donate €9 each month” in black capital lettering, except “€9” which is in red. under the text is the logo of ‘Save the Children Deutschland’.] Male Speaker: **Please donate now.** [01:22] [music: fades into silence] Male Speaker: **Thank you.** [01:27]

[END]

2. *Effectiveness treatment*:³ Save the Children – Wir helfen Kindern in Not. Seit 1919 [00:00-00:03] [video: old black-and-white shot. overall scene shows several children who sit on both sides of 2 long tables and wear identical clothes. it is highly suggested that this footage is taken in canteen of an orphanage. close-up is on 4 malnourished children who eat porridge. two of them have shaved heads.] [text: underlines video. appears in bottom left corner. says “starvation in Russia, 1921” in black bold capital lettering, except the word “starvation” which is in red.] [music: deep and melodious instrumental piece. soft volume. slightly melancholic.] [00:04-00:05] [video: old black-and-white shot. 2 malnourished children eat at table. child in the center of the frame has his face stuck deep in his plate and appears to salvage every bit of his meal. child to the left looks exhausted and weak.] [00:06-00:09] [text: black background around the text, but text itself is on white background. text is at center of frame and says “Save the Children has been providing emergency aid in crises for more than 90 years” in black capital lettering, except the words “90 years,” which are in red.] [music: picks up speed. slightly more energetic and brisk.] [00:09-00:10] [video: old black-and-white shot. men load big bags of grain into train cart.] [00:10-00:11] [video: old black-and-white shot. women pour grain into big cooking pot.] [00:11-00:13] [video: old black-and-white shot. 3 big posters with vintage “Save the Children” logo. 3 eating children in winter-appropriate gear in forefront.] [00:13-00:14] [video: old black-and-white shot. girl puts on gasmask.] [00:13-00:15] [video: old black-and-white shot. houses burning in inferno.] [text: underlines video. appears in bottom left corner. says “Second World War” in black capital lettering. the word “second” is in black. the words “world war” are in red.] [00:15-00:16] [video: old black-and-white shot. right part of frame very dark. on left part of frame the outline of a firefighter can be made out. the firefighter holds a water hose in the general direction of burning houses.] [noise: bomb explodes.] [00:17-00:19] [video: low-quality color shot. plane drops bombs. bombs explode on the ground and cause a high wall of flames.] [text: underlines video. appears in bottom left corner. says “Vietnam” in black capital lettering.] [noise: bombs explode.] [00:19-00:20] [video: low-quality color shot. close-up frame on child who cries out in anguish and covers ears.] [00:20-00:21] [video: low-quality color shot. several make-shift houses and group of people.] [00:21-00:22] [video: low-quality color shot. sad looking child gets vaccinated by female doctor.] [00:21-00:24] [video: color shot. big waves as high as trees. small houses are mostly under water and mud.] [text: underlines video. appears in bottom left corner. says “Tsunami in Asia” in capital lettering. the word “Tsunami” is in red. the words “in Asia” are in black.] [noise: big waves break. people cry out in astonishment off-camera.] [00:24-00:25] [video: color shot. pick-up truck with “Save the Children” logo on the side drives into cargo area of a plane.] [00:25-00:26] [video: color shot. truck with “Save the Children” logo on the back drives on road in Vietnam.] [00:26-00:27] [video: color shot. dozens of small houses on hillside are covered by mudslide. some appear to be severely damaged.] [text: underlines video. appears in bottom left corner. says “Haiti” in black capital lettering.] [00:27-00:28] [video: color shot. in center of frame a child lies on a stretcher. child

³The effectiveness video can be accessed here: www.youtube.com/watch?v=KFSQjLATgnU.

is surrounded by 3 adults. 1 woman holds child's outstretched arm. child's arm is bandaged and a tube follows its length.] [00:28-00:29] [video: color shot. close-up frame on a child with a medical mask on her face.] [text: underlines video. appears in bottom left corner. says "Japan" in black capital lettering.] Male Correspondent 1:—**the humanitarian**—[00:29-00:30] [video: color shot. recording of a news segment on humanitarian crisis in north Pakistan. male news caster reads the news. in the background of news room picture shows man carrying bags of his salvageable belongings through knee-high water.] Male Correspondent 1: [without pause]—**disaster in northern**—[00:30-00:31] [video: color shot. rapid flowing river.] [text: underlines video. appears in top left corner. says "Pakistan" in black capital lettering.] Male Correspondent 1: [without pause]—**Pakistan today.** [00:31-00:33] [video: color shot. woman carries a child through drought-struck landscape. another child walks to her right.] [text: underlines video. appears in top left corner. says "East Africa" in black capital lettering.] [music: picks up intensity. becomes more energetic.] Male Correspondent 2: **Across the whole of Africa up to**—[00:33-00:34] [video: color shot. several people are in a hospital room with two beds. on the bed to the back sits a woman with a child in her lap. on the bed to the front lies another child. this child is malnourished and asleep.] Male Correspondent 2: [without pause]—**10 million people are being affected**—[00:35-00:36] [video: color shot. same hospital room. the child on the bed has the circumference of his arm measured. the measure instrument shows that the child's measurements are in the red area.] Male Correspondent 2: [without pause]—**by the worst drought for more than**—[00:36-00:37] [video: color shot. close-up frame of child's upper body.] [text: underlines video. appears in top left corner. says "Ethiopia" in black capital lettering.] Male Correspondent 2: [without pause]—**15 years.** [00:37-00:41] [video: color shot. close-up frame of children huddling close around a small fire to keep warm.] [text: underlines video. appears in top right corner. says "Syria" in black capital lettering.] Male Correspondent 3: **Save the Children has lounged an emergency fund to help children who are victims**—[00:41-00:45] [video: color shot. amateur video footage. big explosion far away that colors the sky red.] Male Correspondent 3: [without pause]—**of this.** [00:43-00:43] [music: stops for a moment] [noise: bomb explodes. person cries out in anguish off camera.] [music: picks up again. becomes riveting.] Female Correspondent 1: **Save the Children says many**—[00:45-00:46] [video: color shot. amateur video footage. bombed out street. houses are completely destroyed. car and street are covered in wreckage and thick sheet of ashes.] Female Correspondent 1: [without pause]—**youngsters trapped inside Syria**—[00:46-00:47] [video: color shot. close-up frame of a child's unwashed face. the child looks thoughtfully into the camera.] Female Correspondent 1: [without pause]—**are facing**—[00:48-00:49] [video: color shot. close-up frame of a child's face.] Female Correspondent 1: [without pause]—**malnutrition, diseases**—[00:49-00:50] [video: color shot. close-up frame of a child with a self-made spider-man t-shirt standing in a dark room. the child's line of sight is downcast.] Female Correspondent 1: [without pause]—**and trauma.** [00:50-00:51] [video: color shot. big truck with "Save the Children" logo on the front is welcomed by a crowd of people. man waves a white flag with the "Save the Children" logo on it.] [00:51-00:53] [text: black background around the text, but text itself is on

white background. text is at center of frame and says “We know the faster we act” in black capital lettering, except the words “the faster,” which are in red.] [00:53-00:55] [video: color shot. 4 people are putting on protection gear.] [text: underlines video. appears in bottom left corner. says “Ebola epidemic in West Africa” in capital lettering. the words “Ebola epidemic” are in red. the words “in West Africa” are in black.] [00:55-00:56] [video: color shot. recording of a live stream with expert on BBC global news.] Male Expert 1: **It is going to be a Hercules task**—[00:56-00:57] [video: color shot. several destroyed houses.] [text: underlines video. appears in top left corner. says “Nepal” in black capital lettering.] Male Expert 1: [without pause]—**to deliver care**—[00:57-00:58] [video: color shot. a few first responders in small alley. they are surrounded by destroyed houses.] [text: underlines video. appears in top left corner. says “Nepal” in black capital lettering.] Male Expert 1: [without pause]—**to all the people**—[00:58-00:59] [video: color shot. first responders dig through debris.] [text: underlines video. appears in top left corner. says ‘Nepal’ in black capital lettering.] Male Expert 1: [without pause]—**in need in Nepal.** [01:00-01:01] [video: color shot. large crowd of people pushes into bus.] [text: underlines video. appears in top left corner. says “refugee crisis in Europe” in capital lettering. the words “refugee crisis” are in red. the words “in Europe” are in black.] Male Correspondent 4: **This is the largest**—[01:01-01:02] [video: color shot. large crowd stands on the platform while an empty train arrives.] [text: underlines video. appears in top left corner. says “refugee crisis in Europe” in capital lettering. the words “refugee crisis” are in red. the words “in Europe” are in black.] Male Correspondent 4: [without pause]—**movement of people since**—[01:02-01:03] [video: color shot. adult wearing a “Save the Children” t-shirt beckons a small boat of refugees in his direction.] Male Correspondent 4: [without pause]—**the Second World War.** [01:03-01:05] [video: color shot. a human chain of volunteers stands in and next to river in order to help refugees to cross it.] Female Correspondent 2: **The number of unaccompanied children**—[01:05-01:07] [video: color shot. recording of a live stream with a news correspondent on BBC global news.] Female Correspondent 2: [without pause]—**has risen to above 12,000 now.** [01:07-01:08] [text: black background around the text, but text itself is on white background. text is at center of frame and says “the more lives we can save” in black capital lettering, except the word “save” which is in red.] [music: continues at slightly lower volume.] [01:09-01:10] [video: color shot. open water with 3 small boats and 1 big boat.] [01:10-01:11] [video: color shot. volunteer on big boat throws a rope down into awaiting hands.] [01:11-01:12] [video: color shot. volunteer lifts child from refugee boat to rescue boat.] [01:12-01:13] [video: color shot. volunteers in “Save the Children” t-shirt unload truck full of boxes with provision.] Female Representative 1: [insistent and slightly hurried] **We have a whole logistics**—[01:13-01:14] [video: color shot. adult stacks provisions with “Save the Children” logo on them into pile.] Female Representative 1: [without pause]—**team that are desperately**—[01:15-01:17] [video: color shot. recording of a broadcast on Good Morning Britain. female representative from “Save the Children” is speaking.] Female Representative 1: [without pause]—**searching out different routes to get aid into the countries, so**—[01:18-01:19] [video: color shot. car slowly drives on narrow hillside path.] Female Representative 1: [without pause]—**we are trying over**

land—[01:19-01:20] [video: color shot. helicopter flies away.] Female Representative 1: [without pause]—**as well as flying in.** [01:20-01:21] [video: color shot. people carry boxes uphill on a sandy path.] [01:21-01:22] [video: color shot. volunteer in “Save the Children” t-shirt distributes supplies.] [01:22-01:23] [video: color shot. 2 doctors operate on child.] [back-to-back-talk] Male Correspondent 5: **Save the Children.** Male Correspondent 6: **Save the Children.** [01:24-01:26] [text: black background around the text, but text itself is on white background. text is at center of frame and says “we save children” in black capital lettering, except the word “save,” which is in red.] [back-to-back-talk] Female Correspondent 3: **Save the Children.** Female Correspondent 4: **Save the Children.** Female Correspondent 5: **Save the Children.** [01:26-01:28] [video: color shot. woman and child fall into each other’s arms. the child hangs onto his mother. the mother is ecstatic.] [noise: mother’s ecstatic outcry.] [01:29-01:30] [text: black background around the text, but text itself is on white background. text is at center of frame and says “no matter where” in black capital lettering, except the word “where,” which is in red.] [01:30-01:32] [video: color shot. a mudslide damaged a bridge. volunteer in “Save the Children” t-shirt inspects the damage.] [01:32-01:34] [text: black background around the text, but text itself is on white background. text is at center of frame and says “no matter how” in black capital lettering, except the word “how,” which is in red.] [01:34-01:35] [video: color shot. a helicopter lands in a forest clearing.] [01:36-01:37] [video: color shot. a truck with a “Save the Children” banner on the front drives on dusty road.] [01:37-01:38] [text: black background around the text, but text itself is on white background. text is at center of frame and says “we are there” in black capital lettering, except the word “there,” which is in red.] [01:38-01:41] [video: color shot. child runs into the open arms of a volunteer in a “Save the Children” t-shirt. the volunteer picks the child up and lifts him high above his head. the child smiles. the video stills on the last frame.] [music: ending on big symphonic finale.] [01:41-01:46] [picture: last frame of previous video. child smiles into camera.] [text: appears in top right corner. text says “Please donate €9 each month” in black capital lettering, except “€9,” which is in red. under the text is the logo of “Save the Children.”] [music: no music plays.] [01:46] [END]

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