



## Supplementary Information for

No Evidence that Economic Inequality Moderates the Effect of Income on Generosity

Stefan C. Schmukle, Martin Korndörfer, Boris Egloff

Corresponding author: Stefan C. Schmukle

Email: [schmukle@uni-leipzig.de](mailto:schmukle@uni-leipzig.de)

### **This PDF file includes:**

Supplementary text

Tables S1 to S14

References for SI reference citations

## Supplementary Information Text

### Details about the samples and measures used in our studies

**Study 1.** In Study 1, we used American Consumer Expenditure Survey (CEX) data (1). In this survey, a reference person provides information about his or her yearly household income and expenditures (including donations) from the last 3 months in quarterly interviews. Households are followed for a whole year. We summed the donations reported in the four quarterly interviews to obtain the yearly amount of donations. If one or two interviews were missed, we extrapolated the yearly amount of donations from the other two or three interviews. We used the yearly after-tax household income reported at the last interview because this period exactly matches the year for which the amount of donations was reported. If the last interview was missed and/or income was not reported, we used income information from earlier interviews when available.

We used CEX data from the years 2005 to 2012, including a total sample of 79,907 households of which 70,794 households were followed for a whole year within this time range (i.e., 9,113 households had to be excluded because data collection began before 2005 or ended after 2012). Of these, 11,858 households were excluded because no information regarding the state in which they resided was available, 6,771 households were excluded because income was not reported, and 8,232 households were excluded because they participated in only one interview, and we were thus not able to robustly approximate the yearly amount of donations, leading to 43,933 households for which we had an estimate for each variable of interest. For the computation of the amount of yearly donations in percent of yearly income, we had to further exclude 178 households with a negative or zero yearly net income. We also excluded 16 households that reported implausibly high donations ( $> 100\%$  of their annual after-tax income). The remaining 43,739 households were used as one of our two main samples in our analyses. For the second sample, we used only households for which we did not have to extrapolate the yearly amount of income and/or donations (i.e., they participated in all four interviews and provided all the information of interest). This sample consisted of 27,714 households and comprised the same sample that we used in Study 2 in our paper on effects of social class on prosocial behavior (2), but households that provided no information about the U.S. state in which they were living during the interviews were excluded. The 27,714 households (or 43,739 households when including extrapolated data) were nested in 41 U.S. states (between  $n = 12$  to  $n = 3,193$  or  $n = 29$  to  $n = 5,168$  observations per state; see Table S1 for the number of participants in each state).

**Study 2.** In Study 2, we used data from the German Socio-Economic Panel (SOEP Version 29; 3). In addition to the standard survey, an economic game was administered to a randomly selected subgroup of 1,500 participants (750 Player 1; 750 Player 2) in the years 2003 to 2005 and to an additional 117 participants in 2004 and 2005 by ensuring that no more than one member of each household was selected. After being assigned the role of either Player 1 or Player 2, the respondents maintained this role in the following years. A total of 1,424 of the 1,617 participants played the game in at least 1 of the 3 years, and for 1,334 of these participants, we had information on household income. We excluded 15 observations from 10 participants after they had moved from one state to another between 2003 and 2005 because these observations would have violated our three-level model structure.

In the final analyses for Player 1, we thus had 1,781 observations of  $N = 667$  participants nested in 14 federal states (between  $n = 5$  and  $n = 414$  observations per state); for Player 2, we had 1,798 observations of  $N = 667$  participants nested in 13 federal states (between  $n = 4$  and  $n = 392$  observations per state). Player 1 gave an average of  $M = 5.41$  points ( $SD = 2.55$ ), and Player 2 gave  $M = 4.88$  points ( $SD = 2.69$ ). We previously used these data in Study 8 in our paper on effects of social class on prosocial behavior (2).

**Study 3.** In 1998, the ISSP consisted of surveys administered in 31 countries in which participants were asked about volunteering behavior and their household (4). The 1998 ISSP sample consisted of 39,034 participants. We first excluded the 812 participants from Northern Ireland because respondents were not asked about their income, leading to 38,222 participants. We then excluded 6,546 participants with no information on income, and 691 participants who did not answer the question about volunteering. That is, in total, we had information on income and volunteering behavior for 30,985 participants from 30 countries (Australia, Austria, Bulgaria, Canada, Chile, Cyprus, Czech Republic, Denmark, France, Germany, Hungary, Ireland, Israel, Italy, Japan, Latvia, New Zealand, Netherlands, Norway, Philippines, Poland, Portugal, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States) and from  $n = 640$  to  $n = 1,686$  observations per country.

Respondents were asked in 1998: “Have you done any voluntary activity in the past 12 months in any of the following areas? Voluntary activity is unpaid work, not just belonging to an organization or group. It should be of service or benefit to other people or the community and not only to one's family or personal friends. During the last 12 months did you do volunteer work in any of the following areas: a. Political activities (helping political parties, political movements, election campaigns, etc.); b. Charitable activities (helping the sick, elderly, poor, etc.); c. Religious and church-related activities (helping churches and religious groups); d. Any other kind of voluntary activities” (Question 16 in the *Basic Questionnaire* of [4]). Participants answered each of the four questions by choosing from four categories: 1 = no, 2 = yes, once or twice, 3 = yes, 3 to 5 times, or 4 = yes, 6 or more times (we later recoded this scale into a scale from 0 to 3 for our analyses). Participants were additionally instructed: “If the same voluntary activity falls under two or more of the categories listed above, please report it only once under whichever relevant category appears first. For example, if you were involved in political campaigning for candidate endorsed by a church or religious group, you would report it under a. Political activities not under c. Religious and church-related activities.” (Question 16 in the *Basic Questionnaire* of [4]). We used the answer to question “b. Charitable activities” as our measure of volunteering because this captures generous behavior. In addition, participants reported their household income in their country's currency. We standardized the logarithmized income variable per country to ensure that the values would be comparable across the different currencies. We previously used this sample in Study 6 in our paper on effects of social class on prosocial behavior (2).

## Details about the power analysis

We wrote a script to simulate the power of the interaction reported in Côté et al.'s (5) Study 1. The script is provided in the OSF at <https://osf.io/b6m2t/>. For the simulations, we used the results of Côté et al.'s (5) mixed model analysis. For that, we first reanalyzed the original data and obtained the intercept, the main effects of income and economic inequality, the interaction between these two effects, and the variances of the random intercept, the random slope, and the residuum. We compared the results with those reported in Côté et al. (5), and we were able to exactly reproduce the intercept, main effects, and interaction, showing that we indeed estimated the correct model. We then simulated the power to detect the negative interaction effect reported in Côté et al. (5) given all other effects of the model, depending on the number of states and the number of participants in each of the states, and depending on the variability in Ginis between states. We used 1,000 simulations for each power estimate and, as we hypothesized a directed (i.e., negative) interaction effect, we simulated a one-tailed hypothesis with an alpha level of .05.

We estimated that the post hoc power for the data used in Côté et al. (5) was 97.5%, which is reasonably high given the low  $p$ -value of .004 for the interaction in this data set. For our Study 1, which had a much larger sample than Côté et al. (5) but a somewhat smaller number of Level 2 variables (41 instead of 51), we estimated that the power was above 99.9% (in 1,000 simulations there was not even one simulation in which the cross-level interaction was not significant). This result is in accordance with Mathieu et al. (6) who published power simulations of cross-level interactions for models similar to the one that we analyzed. Mathieu et al. (6) concluded that for testing cross-level interactions, sampling larger units is more important than sampling a larger number of units. "When it comes to the power of cross-level interaction tests, our findings suggest that there is about a 3:2 premium on the average size of the lower level samples, as compared to the upper level sample size. In other words, researchers wanting to conduct accurate tests of cross-level interactions should place relatively more emphasis on sampling larger units, as compared to sampling a larger number of units." (6, p. 961).

Not surprisingly, given the large sample size and the large number of countries, the power of our Study 3 was also above 99.9%. Conducting a power analysis for Study 2, however, was not as straightforward because in Study 2 we had a three-level structure (observations nested in participants nested in states). Thus, we were not able to conduct a direct power simulation for the three-level mixed model based on the results by Côté et al. (5) because those data had a two-level structure (thus, we were, e.g., not able to specify the random variance of the person intercept). For this reason, we conducted two different two-level power analyses to estimate the power of our Study 2. As a lower bound estimate, we computed the power for our study assuming that every participant was assessed only once instead of up to three times, which obviously greatly underestimated the true power and was thus a very conservative estimate. As a second estimate, we computed the power under the assumption that all of our observations were independent. Simulation analyses showed power of 65.2% and 87.4% for the analysis of Player 1 and of 63.6% and 81.8% for the analysis of Player 2. The combined statistical power to find a significant effect in at least one of the two analyses for  $P < .05$  was 86.9% and 98.6%.

**Table S1.****U.S. states and sample sizes used in our Study 1 (American Consumer Expenditure Survey) in comparison with Study 1 in Côté et al. (2015; SI Appendix, Ref. 5)**

State	Gini index	<i>N</i> of our Sample A	<i>N</i> of our Sample B	<i>N</i> of Côté et al. (2015)
Alabama	.4705	421	686	18
Alaska	.4132	406	599	3
Arizona	.4571	601	1,089	36
Arkansas	.4618	-	-	15
California	.4751	3,193	5,168	166
Colorado	.4559	352	585	27
Connecticut	.4846	474	685	23
Delaware	.4373	112	140	4
District of Columbia	.5315	69	136	4
Florida	.4760	1,655	2,692	93
Georgia	.4719	806	1,540	46
Hawaii	.4294	370	548	5
Idaho	.4281	329	462	7
Illinois	.4681	1,542	2,243	56
Indiana	.4396	397	618	31
Iowa	.4299	-	-	15
Kansas	.4454	145	189	14
Kentucky	.4666	530	747	22
Louisiana	.4790	563	966	17
Maine	.4400	208	296	9
Maryland	.4444	595	903	26
Massachusetts	.4741	636	1,046	31
Michigan	.4554	918	1,339	48
Minnesota	.4420	458	691	29
Mississippi	.4765	-	-	4
Missouri	.4551	510	768	33
Montana	.4398	-	-	4
Nebraska	.4357	226	414	11
Nevada	.4434	287	502	25
New Hampshire	.4280	113	173	7
New Jersey	.4669	1,041	1,497	35
New Mexico	.4663	-	-	4
New York	.5005	1,788	2,908	89
North Carolina	.4666	-	-	47
North Dakota	.4481	-	-	2
Ohio	.4550	872	1,267	63
Oklahoma	.4593	22	81	22
Oregon	.4517	580	841	25

Pennsylvania	.4611	1,789	2,634	79
Rhode Island	.4634	15	43	2
South Carolina	.4640	759	1,154	23
South Dakota	.4417	-	-	4
Tennessee	.4706	436	678	28
Texas	.4741	1,916	3,337	114
Utah	.4197	341	576	3
Vermont	.4347	-	-	3
Virginia	.4606	915	1,489	35
Washington	.4437	633	919	45
West Virginia	.4596	12	29	8
Wisconsin	.4336	679	1,061	36
Wyoming	.4200	-	-	2
Total N		27,714	43,739	1,498

*Note.* Gini index = 5-year Gini coefficients from the American Community Survey (SI Appendix, Ref. 7) for the year 2012. Sample A includes only households with complete data. Sample B includes households with extrapolated data (see the first text part of the *SI Appendix* for more details about the two samples).

**Table S2.****Study 1. Main Analysis: Results of the mixed Tobit model predicting amount donated to charity in percent of household income (American Consumer Expenditure Survey)**

Variable	Sample A: Only households with complete data ( $N = 27,714$ )				Sample B: Including households with extrapolated data ( $N = 43,739$ )			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>z</i>	<i>P</i>
Intercept	-1.59	0.08	-19.13	<.001	-2.09	0.08	-24.63	<.001
Household income	0.40	0.07	5.82	<.001	0.49	0.06	8.02	<.001
State-level inequality	-4.77	3.94	-1.21	.226	-5.43	3.95	-1.38	.169
Income x Inequality	-3.40	3.34	-1.02	.308	-4.28	2.92	-1.46	.143

*Note.* Households are nested in 41 U.S. states (including District of Columbia). Household income was logarithmized and grand-mean centered; state-level inequality (Gini index) was centered across states. Sample A includes only households with complete data; Sample B includes all households that participated in at least two of the four interviews; for samples with other inclusion criteria, see Table S5.

**Table S3.**

**Study 1: Supplementary results of the mixed linear model predicting amount donated to charity in percent of household income (American Consumer Expenditure Survey) using nonlogarithmized household income (comparable to Côté et al., 2015; Ref. 5 in the SI Appendix)**

	Sample A: Only households with complete data ( $N = 27,714$ )				Sample B: Including households with extrapolated data ( $N = 43,739$ )			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>z</i>	<i>P</i>
Intercept	0.377	0.021	18.04	<.001	0.333	0.017	19.40	<.001
Household income (divided by 10,000)	-0.003	0.004	-0.80	.423	-0.002	0.002	-0.80	.425
State-level inequality (Gini index)	1.071	1.061	1.01	.313	0.418	0.861	0.49	.628
Income x Inequality	0.008	0.178	0.04	.965	0.020	0.100	0.20	.843

*Note.* Households are nested in 41 U.S. states (including District of Columbia). Household income was grand-mean centered, and the Gini index was centered across states. The mixed linear model is identical to the model used in Study 1 in Côté et al. (2015; Ref. 5 in the SI Appendix), who also included nonlogarithmized income as a predictor variable. The sample with extrapolated data include all households that participated in at least two of the four interviews (for results for other inclusion criteria, see Table S5).



**Table S4.****Study 1: Supplementary results of the mixed logit model predicting no donating versus donating (American Consumer Expenditure Survey)**

	Sample A: Only households with complete data ( $N = 27,722$ )				Sample B: Including households with extrapolated data ( $N = 43,755$ )			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>z</i>	<i>P</i>
Intercept	-0.19	0.05	-3.84	<.001	-0.47	0.05	-10.19	<.001
Household income (logarithmized)	0.55	0.03	19.11	<.001	0.54	0.02	26.39	<.001
State-level inequality (Gini index)	-4.42	2.35	-1.88	.059	-4.32	2.18	-1.98	.047
Income x Inequality	-0.87	1.45	-0.60	.551	-1.96	1.02	-1.92	.055

*Note.* 0 = No donating; 1 = Donating. Households are nested in 41 U.S. states (including District of Columbia). Household income was grand-mean centered, and the Gini index was centered across states. In contrast to the main analyses, participants with donations larger than 100% of their yearly income were not excluded because donation amount was not modeled in this analysis.

**Table S5.**

**Study 1: Supplemental analyses predicting amount donated to charity using different inclusion criteria for households with missing data than those reported in the main text (American Consumer Expenditure Survey).**

	Only households with four interviews ( $N = 29,995$ ) <sup>a</sup>				Only households with at least three interviews ( $N = 37,141$ ) <sup>b</sup>			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>z</i>	<i>P</i>
Mixed linear model								
Intercept	0.375	0.019	19.36	<.001	0.359	0.019	19.02	<.001
Household income (divided by 10,000)	-0.003	0.003	-0.98	.325	-0.003	0.002	-1.36	.173
State-level inequality (Gini index)	0.925	0.982	0.94	.346	0.184	0.955	0.19	.847
Income x Inequality	-0.017	0.162	-0.10	.918	0.046	0.119	0.39	.700
Mixed Tobit model								
Intercept	-1.634	0.080	-20.31	<.001	-1.894	0.084	-22.45	<.001
Household income (logarithmized)	0.391	0.065	6.07	<.001	0.411	0.067	6.14	<.001
State-level inequality (Gini index)	-5.189	3.797	-1.37	.172	-7.008	3.958	-1.77	.077
Income x Inequality	-4.211	3.130	-1.35	.178	-3.067	3.211	-0.96	.339

*Note.* Households are nested in 41 U.S. states (including District of Columbia). Household income was grand-mean centered, and the Gini index was centered across states. <sup>a</sup>Different from the main analysis of households with complete data, households were included in this sample when information on income could not be obtained from the fourth interview but had to be taken from one of the earlier interviews. <sup>b</sup>The total donated amount was extrapolated on the basis of the information from the three interviews, and information on income was taken from the last interview in which this information was given.

**Table S6.**

**Study 1: Supplemental analyses predicting amount donated to charity using year-specific Gini indices (2006-2012) matched to the year in which the respective household was interviewed (American Consumer Expenditure Survey)**

	Sample A: Only households with complete data ( $N = 27,714$ )				Sample B: Including households with extrapolated data ( $N = 43,739$ )			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>z</i>	<i>P</i>
Mixed linear model								
Intercept	0.379	0.021	17.95	<.001	0.333	0.017	19.42	<.001
Household income (divided by 10,000)	-0.003	0.004	-0.87	.385	-0.002	0.002	-0.95	.340
State-level inequality (Gini index)	0.235	0.972	0.24	.809	-0.018	0.777	-0.02	.982
Income x Inequality	0.109	0.160	0.68	.495	0.070	0.092	0.76	.444
Mixed Tobit model								
Intercept	-1.594	0.086	-18.48	<.001	-2.090	0.086	-24.36	<.001
Household income (logarithmized)	0.399	0.074	5.42	<.001	0.493	0.064	7.75	<.001
State-level inequality (Gini index)	-11.392	3.290	-3.46	.001	-8.949	2.960	-3.02	.003
Income x Inequality	4.464	3.097	1.44	.149	0.207	2.471	0.08	.933

*Note.* Households are nested in 41 U.S. states (including District of Columbia). Household income was grand-mean centered, and the Gini index was centered across states. The mixed linear model is identical to the model used in Study 1 by Côté et al. (2015; Ref. 5 in the SI Appendix), who also included nonlogarithmized income as a predictor variable. In the statistically more optimal mixed Tobit model, the zero inflation of the dependent variable was considered as part of the model specification, and income was logarithmized to make the distribution more symmetrical.

**Table S7.**

**Study 1: Supplemental analyses predicting amount donated to charity including households that donated more than 100% of their household income and were excluded from the analyses reported in the main text (American Consumer Expenditure Survey)**

	Sample A: Only households with complete data ( $N = 27,722$ )				Sample B: Including households with extrapolated data ( $N = 43,755$ )			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>z</i>	<i>P</i>
Mixed linear model								
Intercept	0.472	0.048	9.76	<.001	0.443	0.043	10.18	<.001
Household income (divided by 10,000)	-0.015	0.008	-1.99	.047	-0.014	0.007	-2.17	.030
State-level inequality (Gini index)	-0.182	2.486	-0.07	.942	-0.201	2.207	-0.09	.927
Income x Inequality	0.498	0.389	1.28	.200	0.294	0.323	0.91	.362
Mixed Tobit model								
Intercept	-5.314	0.206	-25.76	<.001	-7.080	0.234	-30.20	<.001
Household income (logarithmized)	1.221	0.310	3.94	<.001	1.456	0.251	5.79	<.001
State-level inequality (Gini index)	-16.673	9.839	-1.69	.090	-20.280	10.971	-1.85	.065
Income x Inequality	10.825	14.647	0.74	.460	-3.068	11.768	-0.26	.794

*Note.* Households are nested in 41 U.S. states (including District of Columbia). Household income was grand-mean centered, and the Gini index was centered across states. The mixed linear model is identical to the model used in Study 1 by Côté et al. (2015; SI Appendix, Ref. 5), who also included nonlogarithmized income as a predictor variable. In the statistically more optimal mixed Tobit model, the zero inflation of the dependent variable was considered as part of the model specification, and income was logarithmized to make the distribution more symmetrical.

**Table S8.**

**Study 2. Main analysis: Results of the multilevel linear model predicting number of points given to another player in the economic game using logarithmized household income (German Socio-Economic Panel)**

Variable	Player 1				Player 2			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>z</i>	<i>P</i>
Intercept	5.07	0.11	44.26	<.001	4.84	0.14	34.86	<.001
Household income (logarithmized)	0.57	0.20	2.80	.005	0.27	0.14	1.86	.063
State-level inequality (Gini index)	10.36	5.94	1.75	.081	1.08	5.72	0.19	.850
Income x Inequality	7.73	12.19	0.63	.526	1.03	6.76	0.15	.879
Year								
2004	0.31	0.11	2.72	.006	-0.04	0.12	-0.34	.735
2005	0.56	0.12	4.78	<.001	0.09	0.12	0.76	.445
Received by Player 1					0.39	0.02	20.54	<.001

*Note.* Model for Player 1: 1,781 observations of  $N = 667$  participants, nested in 14 federal German states; Model for Player 2: 1,798 observations of  $N = 667$  participants, nested in 13 federal German states. Logarithmized household income and points received by Player 1 were grand-mean centered; state-level inequality (Gini index) was centered across states; year was dummy coded with 2003 as the reference year.

**Table S9.**

**Study 2: Supplementary results of the multilevel linear model predicting number of points given to another player in the economic game (German Socio-Economic Panel).  
Supplemental Analyses with nonlogarithmized income (comparable to Côté et al., 2015; Ref. 5 in the SI Appendix).**

Variable	Player 1				Player 2			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>z</i>	<i>P</i>
Intercept	5.091	0.110	46.28	< .001	4.849	0.138	35.03	< .001
Household income (divided by 10,000)	0.200	0.049	4.10	< .001	0.071	0.041	1.73	.084
State-level inequality (Gini index)	12.634	5.758	2.19	.028	1.129	5.704	0.20	.843
Income x Inequality	5.410	3.424	1.58	.114	-0.303	2.102	-0.14	.886
Year								
2004	0.294	0.113	2.60	.009	-0.040	0.121	-0.33	.738
2005	0.551	0.116	4.74	< .001	0.089	0.124	0.72	.472
Received by Player 1					0.393	0.019	20.54	< .001

*Note.* Model for Player 1: 1,781 observations of  $N = 667$  participants, nested in 14 federal German states; Model for Player 2: 1,798 observations of  $N = 667$  participants, nested in 13 federal German states. Household income and points received by Player 1 were grand-mean centered; the Gini index was centered across states; year was dummy coded with 2003 as the reference year.

**Table S10.****Study 3. Main analysis: Results of the multilevel Tobit model predicting volunteering to participate in charitable activities (International Social Survey Programme)**

Variable	Disposable income inequality				Market income inequality			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>z</i>	<i>P</i>
Intercept	-1.57	0.16	-9.91	<.001	-1.57	.16	-9.76	<.001
Household income	0.07	0.04	1.86	.063	0.07	.04	1.77	.076
Country-level inequality	2.58	2.64	0.98	.328	0.65	4.03	0.16	.871
Income x Inequality	1.82	0.63	2.90	.004	2.26	1.03	2.20	.028

*Note* *N* = 30,985 participants, nested in 30 countries. Logarithmized household income was standardized for each country to account for the different currencies; country-level inequality (Gini index) was centered across countries. Disposable income = post-tax, post-transfer income; Market income = pre-tax, pre-transfer income.

**Table S11.**

**Study 3: Supplementary results of the multilevel linear model predicting volunteering to participate in charitable activities (International Social Survey Programme) using nonlogarithmized income (comparable to Côté et al., 2015; Ref. 5 in the SI Appendix)**

	Ginis based on disposable income				Ginis based on market income			
	<i>b</i>	SE	<i>t</i>	<i>P</i>	<i>b</i>	SE	<i>t</i>	<i>P</i>
Intercept	.476	.040	12.02	<.001	.474	.040	11.77	<.001
Household income (divided by 10,000)	.009	.010	0.86	.391	.008	.011	0.76	.449
Country-level inequality (Gini index)	.713	.664	1.07	.283	.253	1.02	0.25	.804
Income x Inequality	.389	.173	2.25	.024	.469	.277	1.69	.090

*Note.*  $N = 30,985$ , nested in 30 countries. Household income was standardized for each country to account for the different currencies; the Gini index was centered across countries. Results based on 100 multiply-imputed Gini estimates. Disposable income = post-tax, post-transfer income; Market income = pre-tax, pre-transfer income.



**Table S12.****Study 3: Supplementary results of the multilevel logit model predicting no volunteering versus volunteering (International Social Survey Programme)**

	Gini indices based on disposable income				Gini indices based on market income			
	<i>b</i>	SE	<i>t</i>	<i>P</i>	<i>b</i>	SE	<i>t</i>	<i>P</i>
Intercept	-1.12	0.12	-9.19	<.001	-1.13	0.12	-9.10	<.001
Household income (logarithmized)	0.07	0.03	2.39	.017	0.06	0.03	2.15	.031
Country-level inequality (Gini index)	2.02	2.04	0.99	.323	0.43	3.13	0.14	.890
Income x Inequality	1.23	0.46	2.66	.008	1.38	0.76	1.81	.070

*Note.* 0 = No volunteering; 1 = Volunteering. *N* = 30,985, nested in 30 countries. Household income was standardized for each country to account for the different currencies; the Gini index was centered across countries. Results based on 100 multiply-imputed Gini estimates. Disposable income = post-tax, post-transfer income; Market income = pre-tax, pre-transfer income.

**Table S13.**

**Study 1. Within-Between Multilevel Analysis: Results of the mixed Tobit model predicting amount donated to charity in percent of household income, modeling income separately for differences within and between states (American Consumer Expenditure Survey)**

Variable	Sample A: Only households with complete data ( $N = 27,714$ )				Sample B: Including households with extrapolated data ( $N = 43,739$ )			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>z</i>	<i>P</i>
Intercept	-1.62	0.07	-21.76	<.001	-2.11	0.08	-27.72	<.001
Income differences within states	0.39	0.07	5.74	<.001	0.49	0.06	7.99	<.001
Income differences between states	1.48	0.47	3.12	.002	1.46	0.48	3.08	.002
State-level inequality	-1.88	3.88	-0.48	.629	-3.75	3.65	-1.03	.304
Income differences within states × state-level inequality	-3.40	3.36	-1.01	.311	-4.22	2.93	-1.44	.150

*Note.* Households were nested in 41 U.S. states (including the District of Columbia). Household income was logarithmized; to model income differences between persons within states, household income was centered at the state-level mean of income; to model income differences between states, state-level mean income was centered across states; state-level inequality (Gini index) was centered across states. Sample A included only households with complete data; Sample B included all households that participated in at least two of the four interviews.

**Table S14.**  
**Study 2. Within-Between Multilevel Analysis: Results of the multilevel linear model predicting number of points given to another player in the economic game, modeling income separately for differences within participants, within states, and between states (German Socio-Economic Panel)**

Variable	Player 1				Player 2			
	<i>b</i>	SE	<i>z</i>	<i>P</i>	<i>b</i>	SE	<i>Z</i>	<i>P</i>
Intercept	5.11	0.13	40.74	<.001	4.85	0.14	35.21	<.001
Income differences within participants	-0.01	0.13	-0.11	.910	0.31	0.24	1.27	0.204
Income differences within states	0.72	0.17	4.15	<.001	0.30	0.13	2.24	.025
Income differences between states	1.01	0.68	1.50	.134	-0.72	1.07	-0.67	.501
State-level inequality	10.73	6.33	1.69	.090	6.63	8.16	0.81	.416
Income differences within states × state-level inequality	4.81	11.43	0.42	.674	-1.97	6.44	-0.31	.760
Year								
2004	0.31	0.11	2.78	.005	-0.04	0.12	-0.34	.730
2005	0.55	0.12	4.76	<.001	0.09	0.12	0.76	.446
Received by Player 1					0.39	0.02	20.49	<.001

*Note.* Model for Player 1: 1,781 observations from  $N = 667$  participants nested in 14 federal German states; Model for Player 2: 1,798 observations from  $N = 667$  participants nested in 13 federal German states. Household income was logarithmized; to model income differences within participants, household income was centered at the person-level mean of income; to model income differences between persons within states, person-level mean income was centered at the state-level mean of income; to model income differences between states, state-level mean income was centered across states; state-level inequality (Gini index) was centered across states; points received by Player 1 were grand-mean-centered; year was dummy coded with 2003 as the reference year.

## References

1. U.S. Bureau of Labor Statistics (2015) *Consumer Expenditure Survey. Public-use microdata 2005-2012*. Retrieved from <https://www.bls.gov/cex/>
2. Korndörfer M, Egloff B, Schmukle SC (2015) A large scale test of the effect of social class on prosocial behavior. *PLoS One*, 10(7):e0133193.
3. German Institute for Economic Research [Deutsches Institut für Wirtschaftsforschung] (2013) *Socio-Economic Panel (SOEP): Data for years 1984-2012 (Version 29)*. Berlin, Germany: DIW/SOEP. doi:10.5684/soep.v29
4. ISSP Research Group (2000) *International Social Survey Programme: Religion II - ISSP 1998. Study ZA3190*. Cologne, Germany: GESIS Data Archive. doi:10.4232/1.3190
5. Côté S, House J, Willer R (2015) High economic inequality leads higher-income individuals to be less generous. *Proc Natl Acad Sci USA* 112(22):15838–15843.
6. Mathieu JE, Aguinis H, Culpepper, SA, Chen G (2012) Understanding and estimating the power to detect cross-level interaction effects in multilevel modeling. *J Appl Psychol* 97(5):951-966.
7. U.S. Census Bureau (2015) *American Community Survey. Gini index 5-year estimates for 2008-2012, Table B19083*. Retrieved from <http://factfinder.census.gov>