

*Supplementary Appendix:*  
**Can War Foster Cooperation?**

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## A Literature search

We sought all papers that: (i) have one or more outcomes that relate to social and political participation, cooperation, or trust; (ii) use a measure of exposure to violence as opposed to other experiences, such as displacement or crime victimization. We include published and unpublished papers.

### A.1 Inclusion and exclusion criteria

We exclude two papers from our analysis that do not include one of the main dependent variables of interest (e.g. they look at trust in government not in fellow citizens), and four papers that do not use war violence as an independent variable (but rather crime, electoral violence, or displacement). Perhaps more importantly, we exclude one paper that does use the dependent and independent variables of interest but for which the micro data are not available. A major reason is that the papers in our analysis vary widely in the measurement and scale of the dependent and independent variables, and in order to make the meta-analysis meaningful, we need access to the raw data of each paper to create standardized measures.

In an alternative approach, we use information on t-statistics reported in the papers (Stanley and Jarrell, 1989). This approach does not require raw replication data. For this analysis we include all papers that have independent variables related to wartime violence exposure and have comparable outcome measures on cooperation. There are two drawbacks to this method. First, a t-statistic combines information on sample size as well as magnitude; hence, a large t-statistic may not necessarily reflect a large effect size. Second, using reported coefficients does not allow investigating relevant dependent variables that the paper does not report. Nonetheless, we consider the results of this alternate approach below.

## B Methods

We use the original data to construct standardized coefficients, as well as to estimate effects for additional outcomes not reported in the original papers but for which data are available. We replicate the studies' original research designs. This is important, since each study has a different empirical strategy for identifying the impact of violence exposure. Research on meta-analysis of multivariate regression slopes emphasizes the importance of having each study capture the true effect of the independent variable, which depends on model specification (Becker and Wu, 2007). Thus, in replicating the models of each study, we assume that the authors of the papers in our sample have made the best efforts to identify the effect of violence on prosocial behavior.

In this approach, we first regress each standardized outcome variable on a binary measure of violence exposure. We use survey weights and/or control variables as specified in the replication file for each study. After calculating the effect of exposure to violence for each study, we create a matrix for each outcome in which each row represents a study. We preserve the regression coefficient,

standard error, and the number of observations.

In addition, since all of the papers in our study use multivariate regressions, we follow the recommendations of existing literature on meta-analysis of multivariate regression coefficients (Becker and Wu, 2007; Patall and Cooper, 2008), and also examine our results using standardized (“beta”) slopes. In order to preserve similarity in the estimations across studies, we use ordinary least squares to estimate the impact of exposure to violence for each study. Hence, for studies using probit or logit estimations we changed the model to an OLS.

In order to overcome the multiple comparisons problem, we also generate a summary index of all outcome measures. For each study, we generate a mean effects index (Kling and Liebman, 2004), calculated from the standardized outcome measures of each study.

## B.1 Meta-analysis models

We estimate the results using fixed effects and random effects meta-analysis models. For each prosocial outcome, we have  $k$  studies reporting estimates for the effect of violence exposure. Meta analysis models assume that each estimate corresponds to a true latent effect size, measured with some error:

$$y_i = \theta_i + \varepsilon_i \tag{1}$$

In the equation above,  $y_i$  represents the estimate for study  $i$ ,  $\theta_i$  is the (unknown) true effect, and  $\varepsilon_i$  is a sampling error, assumed to be distributed normally with mean 0 and variance  $v_i$ . The sampling variance is calculated as:

$$v_i = \frac{(1 - y_i^2)^2}{N_i - 1} \tag{2}$$

Where  $y_i$  is the estimate for study  $i$ , and  $N_i$  is the sample size of the  $i$ th study.

### B.1.1 Fixed effects

The fixed-effects model makes a conditional inference only for the  $k$  studies in our sample. It use weighted least squares to estimate the true average effect:

$$\bar{\theta}_w = \frac{\sum_{i=1}^k w_i \theta_i}{\sum_{i=1}^k w_i} \tag{3}$$

In the equation above,  $\bar{\theta}_w$  represents the weighted average of the true effects ( $\theta_i$ ), where the weight is inverse-proportional to the sampling error:  $w_i = \frac{1}{v_i}$ . In other words, the model gives more weight to studies with smaller sampling variance.

### B.1.2 Random effects

The random effects model allows the true effect to vary between studies, and treats this heterogeneity as random. If  $\theta_i$  represents true effect for study  $i$ , then the model assumes that:

$$\theta_i = \mu + u_i \tag{4}$$

where  $\mu$  is the true *average* effect, and  $u_i$  is a normally distributed error with mean 0 and variance  $\tau^2$ . As such, the random effects model estimates the average population effect by taking into account an additional source of variation between studies:

$$y_i = \theta_i + u_i + \varepsilon_i \tag{5}$$

Similar to the fixed effects model, the random effects model gives more weight to studies with more observations. However, the random effects model weighs studies a bit differently, by drawing on both within-study and between-study variation. It should be noted that fixed effects and random effects models would yield similar results if the variance of  $u_i$  is equal to zero, which means that the true effect is homogeneous across studies (Viechtbauer et al., 2010).

## C Data

### C.1 Independent variable

Using the raw data from each paper, we construct three sets of measures of violence exposure:

1. A measure of the paper’s violence exposure indicator;
2. Indicators of the respondent’s direct or personal exposure to violence; and
3. Indicators of direct or indirect exposure to violence, through the household or community’s exposure. These include, for example, having household members killed or injured, or being in a community that was targeted by violence.

Table A1 reports summary statistics of these various measures of violence exposure.

### C.2 Dependent variables

We construct six standardized outcome variables for the studies in our sample. These outcomes include social groups participation, community leadership/participation, trust, prosocial behavior in experimental games, voting, and knowledge/interest in politics. Tables A2-A7 provide details on the construction of these outcome measures for each study in our sample.

Table A1: Summary statistics of alternate coding of violence exposure

Author	Country	Violence type	Mean	Min	Max	N
Annan et al. (2011)	Uganda	Paper's indicator	0.37	0	1	619
		Community exposure	0.39	0	1	619
		Personal exposure	0.28	0	1	619
Bauer et al. (2014)	Georgia	Paper's indicator	0.24	0	1	565
		Community exposure	0.07	0	1	518
		Personal exposure	0.28	0	1	549
Bauer et al. (2014)	Sierra Leone	Paper's indicator	0.22	0	1	585
		Community exposure	0.32	0	1	584
		Personal exposure	0.35	0	1	586
Bauer, Fiala and Lively (2014)	Uganda	Paper's indicator	0.55	0	1	337
		Community exposure	0.79	0	1	337
		Personal exposure	0.58	0	1	337
Bellows and Miguel (2009)	Sierra Leone	Paper's indicator	0.39	0	1	10496
		Community exposure	0.39	0	1	10496
Blattman (2009)	Uganda	Paper's indicator	0.62	0	1	741
		Community exposure	0.42	0	1	739
		Personal exposure	0.49	0	1	738
Cassar, Grosjean and Whitt (2013)	Tajikistan	Paper's indicator	0.16	0	1	420
		Community exposure	0.19	0	1	420
		Personal exposure	0.16	0	1	420
Cecchi, Leuveland and Voors (2016)	Sierra Leone	Paper's indicator	0.90	0	1	324
		Personal exposure	0.90	0	1	324
De Luca and Verpoorten (2015a)	Uganda	Paper's indicator	0.29	0	1	4607
		Community exposure	0.29	0	1	4607
De Luca and Verpoorten (2015b)	Uganda	Paper's indicator	0.29	0	1	4607
		Community exposure	0.29	0	1	4607
Gilligan, Pasquale and Samii (2014)	Nepal	Paper's indicator	0.47	0	1	252
		Community exposure	0.47	0	1	252
Gneezy and Fessler (2012)	Israel	Paper's indicator	0.40	0	1	50
		Community exposure	0.40	0	1	50
Grosjean (2014)	European countries	Paper's indicator	0.28	0	1	35674
		Community exposure	0.28	0	1	35674
Grossman, Manekin and Miodownik (2015)	Israel	Paper's indicator	0.42	0	1	2334
		Personal exposure	0.17	0	1	2200
Rohner, Thoenig and Zilibotti (2013)	Uganda	Paper's indicator	0.67	0	1	2431
		Community exposure	0.54	0	1	2431
Voors et al. (2012)	Burundi	Paper's indicator	0.71	0	1	286
		Community exposure	0.71	0	1	286
Voors and Bulte (2014)	Burundi	Paper's indicator	0.28	0	1	872
		Community exposure	0.08	0	1	872

Table A2: Social groups participation

Paper	Country	Mean	SD	Min	Max	N
Annan et al. (2011)	Uganda	1.06	1.3	0	7	619
Bauer et al. (2014)	Georgia	0.49	0.5	0	1	422
Bauer et al. (2014)	Sierra Leone	3.15	1.56	0	8	586
Bauer, Fiala and Lively (2014)	Uganda	1.26	1.14	0	5	337
Bellows and Miguel (2009)	Sierra Leone	2.35	1.78	0	7	6686
Blattman (2009)	Uganda	0.75	1.01	0	6	741
Cassar, Grosjean and Whitt (2013)	Tajikistan	0.64	0.97	0	5	296
De Luca and Verpoorten (2015a)	Uganda	0.64	0.96	0	3	4640
Grosjean (2014)	European countries	0.6	1.2	0	8	38860
Voors et al. (2012) <sup>1</sup>	Burundi	0.2	0.4	0	1	285
Voors and Bulte (2014)	Burundi	0.18	0.39	0	1	854

<sup>1</sup> Data for this outcome are taken from raw survey data not analyzed in the original Voors et al. (2012) paper.

Table A3: Community leadership/participation

Paper	Country	Participation in community meetings	Helping/volunteering in the community	Holding community leadership position	Mean	SD	Min	Max	N
Annan et al. (2011)	Uganda		✓	✓	0.06	0.23	0	1	619
Bauer et al. (2014)	Sierra Leone	✓	✓		0.97	0.17	0	1	572
Bauer et al. (2014)	Uganda		✓	✓	0.11	0.31	0	1	337
Bellows and Miguel (2009)	Sierra Leone	✓		✓	0.7	0.46	0	1	10496
Blattman (2009)	Uganda		✓	✓	0.09	0.29	0	1	741
Cassar, Grosjean and Whitt (2013)	Tajikistan	✓	✓		0.45	0.5	0	1	396
De Luca and Verpoorten (2015b)	Uganda	✓			0.76	0.42	0	1	4619
Voors et al. (2012) <sup>1</sup>	Burundi		✓		0.2	0.4	0	1	283

<sup>1</sup> Data for this outcome are taken from raw survey data not analyzed in the original Voors et al. (2012) paper.

Table A4: Trust

Paper	Country	Trust variables	In-group	Out-group	Mean <sup>1</sup>	SD	N
Annan et al. (2011)	Uganda	Considers as brothers and sister (a) neighbors,(b) members of one's tribe, (c) people from northern ethnic groups, (d) people from southern and central ethnic groups	(a) neighbors, (b) members of one's tribe	(c) people from northern ethnic groups, (d) people from southern and central ethnic groups	-0.01	1.00	617
Bauer et al. (2014)	Sierra Leone	Trust people from (a) family, (b) neighborhood, (c) friends, (d) another religion, (e) another ethnicity, (f) people in general	(a) family, (b) neighborhood, (c) friends	(d) another religion, (e) another ethnicity, (f) people in general	0.00	1.00	585
Bauer, Fiala and Levely (2014)	Uganda	Trust people (a) in the village, (b) in the sub-county	(a) village	(b) sub-county	-0.00	1.00	335
Bellows and Miguel (2009)	Sierra Leone	Trust (a) people from the community, (b) outsiders	(a) people from the community	(b) outsiders	0.00	1.00	9605
Cassar, Grosjean and Whitt (2013)	Tajikistan	Trust people from (a) family, (b) neighborhood, (c) other religion, (d) other nationality	(a) family, (b) neighborhood	(c) other religion, (d) other nationality	-0.00	1.00	421
De Luca and Verpoorten (2015a)	Uganda	Trust in people in general		People in general	0.00	1.00	4595
Grosjean (2014)	European countries	Trust people from (a) family, (b) neighborhood, (c) friends, (d) another religion, (e) another nationality	(a) family, (b) neighborhood, (c) friends	(d) another religion, (e) another nationality	0.00	1.00	33800
Rohner, Thoenig and Zilibotti (2013)	Uganda	Trust in (a) relatives, (b) people in general	(a) relatives	(b) people in general	-0.00	1.00	2423
Voors and Bulte (2014)	Burundi	Trust (a) people from community, (b) people in general	(a) people from community	(b) people in general	0.00	1.00	860

*Note:* <sup>1</sup>The mean is calculated from a standardized measure of all trust variables for each study.



Table A5: Prosocial behavior in experimental games

Paper	Country	Game	In-group	Out-group	N
Bauer et al. (2014)	Georgia	Sharing, Envy	Classmates	Subjects from a distant school	565
Bauer et al. (2014)	Sierra Leone	Sharing, Envy	Same village	Distant village	581
Bauer, Fiala and Lively (2014)	Uganda	Trust (returned)	Nearby village		337
Cassar, Grosjean and Whitt (2013)	Tajikistan	Trust		Distant village	426
Cecchi, Leuvelde and Voors (2016)	Sierra Leone	Dictator	Soccer teammates		324
Gilligan, Pasquale and Samii (2014)	Nepal	Public goods, dictator, trust	Same village		252
Gneezy and Fessler (2012)	Israel	Trust, Ultimatum	Same senior housing facility		50
Voors et al. (2012)	Burundi	Social Value Orientation	Same community		285

*Note:* Some studies have multiple games. Descriptive statistics for each game are not shown.

Table A6: Voting

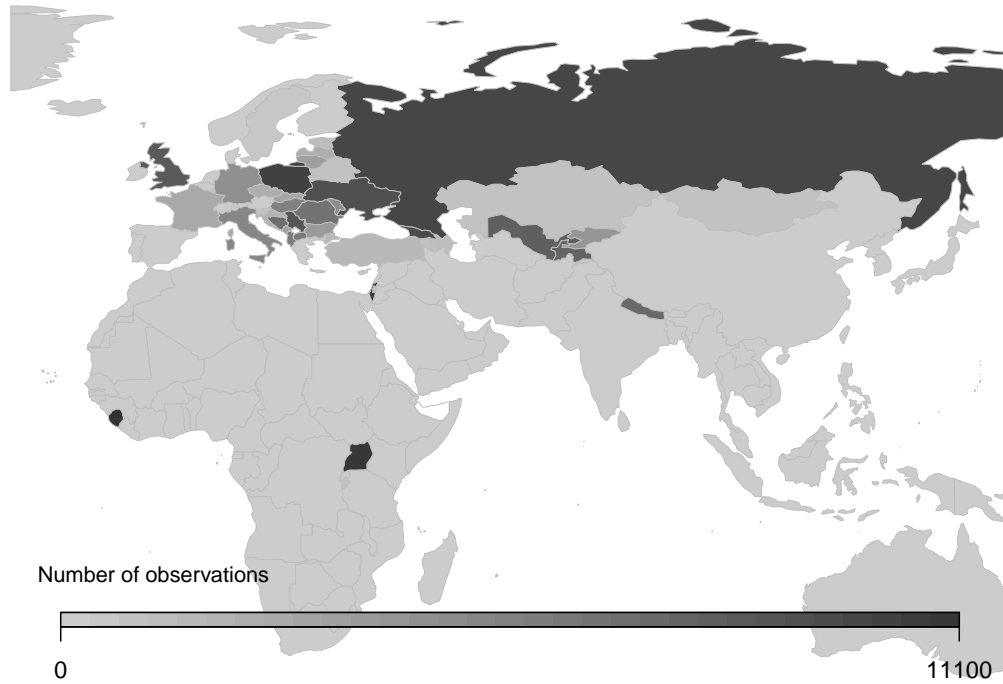
Author	Country	Elections	Mean	SD	Min	Max	N
Annan et al. (2011)	Uganda	Voted in the 2006 Presidential elections; voted in the 2005 referendum	1.12	0.91	0.00	2.00	534
Bauer et al. (2014)	Sierra Leone	Voted in the last presidential general election; voted in the last local government election	1.90	0.38	0.00	2.00	585
Bauer, Fiala and Lively (2014)	Uganda	Voted in the recent election (2011)	0.85	0.35	0.00	1.00	299
Bellows and Miguel (2009)	Sierra Leone	Registered to vote for the presidential and general elections of 2002; registered to vote for the local government elections of 2004; planning on voting in the upcoming presidential election	0.94	0.23	0.00	1.00	10494
Blattman (2009)	Uganda	Voted in the 2001 presidential elections; voted in the 2005 referendum	0.99	0.83	0.00	2.00	473
Cassar, Grosjean and Whitt (2013)	Tajikistan	Voted in the past parliamentary elections; voted in the past presidential elections, voted in the past local elections	2.29	1.03	0.00	3.00	416
De Luca and Verpoorten (2015b)	Uganda	Voted in the 1996, 2006, and 2011 presidential elections	0.81	0.39	0.00	1.00	4642
Grosjean (2014)	European countries	Voted in the most recent local-level elections; voted in the most recent parliamentary elections; voted in the most recent presidential elections	2.02	1.23	0.00	3.00	29813
Grossman, Manekin and Miodownik (2015)	Israel	Voted in the 2013 elections	0.95	0.23	0.00	1.00	2334
Voors et al. (2012) <sup>1</sup>	Burundi	Voted in the last general elections; voted in the last municipal elections; voted in the last referendum	2.84	0.54	0.00	3.00	285

<sup>1</sup> Data for this outcome are taken from raw survey data not analyzed in the original Voors et al. (2012) paper.

Table A7: Knowledge/interest in politics

Author	Country	Variables	Mean	SD	Min	Max	N
Annan et al. (2011)	Uganda	Knows the name of her current LC3; knows the name of her current LC5	0.99	0.76	0.00	2.00	616
Bauer et al. (2014)	Sierra Leone	Is able to name the Local Councilor from ward; is able to name the Paramount Chief for chiefdom	1.37	0.72	0.00	2.00	586
Bellows and Miguel (2009)	Sierra Leone	Is able to name the Paramount Chief for chiefdom; is able to name the Local Councilor who represents him/her in the council; knows the date of the next presidential election	1.58	0.94	0.00	3.00	5193
De Luca and Verpoorten (2015 <i>b</i> )	Uganda	Frequency of discussing politics with friends, family, or neighbors	1.03	0.71	0.00	2.00	4628
Gilligan, Pasquale and Samii (2014)	Nepal	Most of the time understands what politicians are doing	0.23	0.42	0.00	1.00	231
Grosjean (2014)	European countries	Member of a political party	0.06	0.23	0.00	1.00	38447
Grossman, Manekin and Miodownik (2015)	Israel	Interested in politics; member of a political party; member of a group that advocates social and political issues	0.71	0.80	0.00	3.00	2315

Figure A1: Exposure to wartime violence across the world



*Note:* The map reports the countries included in the analysis (excluding crime violence). The shading corresponds to the number of observations, such that darker colors represent larger samples of individuals.

Table A8: Additional studies not included in the meta-analysis

Paper	Country	Published	Data available	Comparable measures	N	Reason for exclusion
Beber, Roessler and Scacco (2014)	Sudan			Community, interest in politics	1,380	Data collected but paper not yet written.
Blattman & Hartman	Liberia		✓	Groups, community, trust, voting, interest/knowledge of politics	9,388	Data collected but paper not yet written.
Gilligan, Pasquale and Samii (2014)	Nepal			Trust, voting, interest in politics	1,228	Data collected but paper not yet written.

## D Heterogeneity in the Effect Size Across Studies

This section analyzes how various study-level covariates moderate the effects of exposure to violence across studies. First, we analyze whether effects vary with studies' empirical strategy. Table A9 reports the identification strategy of each study, broken into several categories. Tables A10 through A13 provide more details on the method of each paper. It can be seen, for example, that almost all studies use multivariate regressions; about half control for local fixed effects; and about a third add "substantive" controls that might drive victimization. Table A14 shows the correlation between study-level empirical strategy variables.

In Table A15 we report results from a meta analysis including these study-level moderators, where the dependent variable is an index of all cooperation outcomes, using both fixed effects and random effects specifications. It can be seen that the addition of substantive controls is not significantly associated with the magnitude of the coefficient across studies. The inclusion of community fixed effects correlates with smaller coefficients, on average, but the relationship is not statistically significant at conventional levels. Studies that control for pre-war covariates tend to report larger effects, and this relationship is statistically significant in the fixed effects model. Further, the use of various sensitivity analyses is significantly associated with smaller effect sizes in the fixed effects estimation. Finally, effect size is negatively correlated with the use of instrumental variables, but the relationship is not statistically significant.

Figure A3 shows a meta analytic scatterplot of the observed effects estimated for individual studies against a continuous scale ranging from 0 to 1, capturing the strength of the causal identification. The scale is constructed from the average of the variables: *Substantive controls*, *FE design*, *Pre-war data* and *Sensitivity*. In the scale, 0 indicates little attempts to measure causal relationships and 1 indicates the use of more tools to identify a causal effect. Overall, it can be seen that studies' empirical strategy does not account for much of the variation in the effects across studies.

Second, we analyze whether the heterogeneity in the effect of violence exposure can be explained by other study-level covariates. In Table A16, we examine the moderating effect of the level of violence exposure captured in each study (personal/household level or community/district level); the length of time between the end of the conflict and the timing of each study; the type of victims (civilians or combatants); and the type of violence (war or crime). We also examine regional variation in the results. It can be seen that the effect decreases in studies measuring violence exposure on the individual level, as opposed to more aggregate levels. In addition, the effect is larger for studies that measure pro-social behaviors later in time. We also find that the effect is larger for studies in which civilians were exposed to violence, as opposed to combatants, and for studies that use crime as the measure of violence exposure.

Table A9: Empirical Strategy

Paper	Country	Reg. with controls	Reg. with controls and community FE	Substantive controls	IV	Sensitivity analysis	Pre-war data
Annan et al. (2011)	Uganda	✓	✓	✓		✓	✓
Bauer et al. (2014)	Georgia	✓	✓			✓	
Bauer et al. (2014)	Sierra Leone	✓	✓				
Bauer et al. (2014)	Uganda	✓	✓			✓	✓
Bellows and Miguel (2006, 2009)	Sierra Leone	✓	✓	✓		✓	✓
Blattman (2009)	Uganda	✓	✓	✓		✓	✓
Cassar et al. (2013)	Tajikistan	✓	✓			✓	✓
Cecchi et al. (2015)	Sierra Leone	✓				✓	
De Luca and Verpoorten (2015a)	Uganda	✓			✓	✓	✓
De Luca and Verpoorten (2015b)	Uganda	✓			✓	✓	✓
Gilligan et al. (2014)	Nepal	✓					✓
Gneezy and Fessler (2012)	Israel						
Grosjean (2014)	European countries	✓	✓	✓			
Grossman et al. (2015)	Israel	✓			✓	✓	
Rohner et al. (2013)	Uganda	✓			✓	✓	✓
Voors et al. (2012)	Burundi	✓	✓	✓	✓	✓	✓
Voors and Bulte (2014)	Burundi	✓	✓	✓	✓	✓	✓

Table A10: Empirical Strategy

Paper	Country	Method	Author's self-described identification method	Controls	Pre-war data?	Substantive controls?	Type of violence exposure	Unit of analysis of DV	Unit of analysis of IV	Selection/attrition/bias	Author's control for bias?
Annan et al. (2011)	Uganda	OLS with controls, sub-county fixed effects.	A regression of the outcome on an abduction indicator, controlling for pre-abduction covariates and sub-county fixed effects. Regressions are weighted by the inverse of an estimate of the propensity scores of attrition and abduction. Abduction was plausibly as-if random.	age, parents' education, parents' died before the war, HH size before the war, HH covariates	Yes, retrospective	Yes	Personal, on family	individual	individual	Yes	The study's estimates are weighted by inverse sampling probabilities and inverse attrition probabilities.
Bauer et al. (2014)	Georgia	OLS with controls	A regression of the outcome on a violence exposure indicator, controlling for demographic variables. Violence exposure is plausibly exogenous because Russian soldiers could not have selected victims since fighting involved aerial, artillery, and tank fire bombings, was short, and soldiers did not have prior knowledge of the local population.	age, gender, brother, sister	No	No	Personal, on family	individual	individual	Yes	To control for measurement bias in children's reporting of victimization, the study correlates victimization measures reported by children to those reported by their teachers. To account for selection bias, the study analyzes rural and urban subsamples, a subsample of children who come from areas not known to fighters, and a model with region fixed effects, finding similar results.
Bauer et al. (2014)	Sierra Leone	OLS with controls	A regression of the outcome on a violence exposure indicator, controlling for demographic variables. The authors pre-selected villages for the study based on evidence from Bellows & Miguel (2009) indicating substantial variation in war exposure.	age, gender, brothers, sisters, education, religion, ethnicity	No	No	Personal, on family	individual	individual	Yes	The study notes that households of community leaders may have been selectively targeted; In an analysis of the characteristics predicting violence exposure, it finds few significant variables.
Bauer, Fiala, and Lively (2014)	Uganda	OLS with controls	A regression of the outcome on an indicator of abduction to the LRA, controlling for individual characteristics. Abduction was plausibly as-if random.	age, family size, parents' education, parents alive before the war, income, HH size, married, literacy, education, wealth, experiential counterpart is male	Yes, retrospective	Yes	Personal, on family	individual	individual	Yes	The study shows that the results hold when including village fixed effects, as well as when dividing the data into subsamples. The study also conducts a sensitivity analysis to examine selective survival, and finds some evidence that non-cooperative individuals were less likely to survive.
Bellows and Miguel (2006, 2009)	Sierra Leone	OLS with controls, enumeration area fixed effects.	A regression of the outcome variable on a violence exposure variable, controlling for individual characteristics, with enumeration area fixed effects. The attacks on villages were indiscriminate.	age, gender, education, traditional leader; pre-war: HH head education, HH head traditional leader, HH head community leader	Yes, retrospective	Yes	On family	individual	individual	Yes	The study controls for a set of post-war and pre-war characteristics that can predict postwar political and socioeconomic outcomes. To minimize selection, it analyzes subsamples that were less likely to be targeted, such as individuals who were too young to be prewar community leaders. To rule out attrition due to migration, the study analyzes a subsample of individuals in the same chiefdom before and after the war, and finds similar results.

Table A11: Empirical Strategy (Cont.)

Paper	Country	Method	Author's self-described identification method	Controls	Pre-war data?	Substantive controls?	Type of violence exposure	Unit of analysis of DV	Unit of analysis of IV	Selection/survival/attrition bias	Author's control for bias?
Blattman (2009)	Uganda	OLS with controls, sub-county fixed effects	A regression of the outcome on an abduction indicator, controlling for pre-abduction covariates and sub-county fixed effects. Regressions are weighted by the inverse of an estimate of the propensity scores of attrition and abduction. Abduction was plausibly as-if random.	age, parents' education, parents' died before the war, HH size before the war, HH covariates	Yes, retrospective	Yes	Personal, on family	individual	individual	Yes	The study's estimates are weighted by inverse sampling probabilities and inverse attrition probabilities.
Cassar, Grosjean, and Whitt (2013)	Tajikistan	OLS with controls, village fixed effects	A regression on the outcome on a violence exposure variable, controlling for individual and household characteristics, and village fixed effects.	age, gender, HH membership, communist party, education, ethnicity region lived during the conflict	Partial, retrospective	Yes	Personal, on family	individual	individual	Yes	To account for selection, the study analyzes a subsample of individuals who were too young to be systematically targeted, as well as individuals who never migrated out of their villages.
Cecchi et al. (2015)	Sierra Leone	OLS with controls	A regression of the outcome on a violence exposure variable, controlling for individual characteristics. The key identifying assumption is that exposure to violence was exogenous with respect to individual characteristics.	age, gender, HH membership, education, meals per day, religion, ethnicity, played whole game, self-declared football skills, scored, left footed, won football game	No	No	Personal, on family	individual	individual	Yes	The study restricts its conclusions to individuals in one locality with varying degrees of violence exposure, and acknowledges that its conclusions may not generalize, because of selective migration.
De Luca and Verpoorten (2015a)	Uganda	Diff-in-diff with district fixed effects	A difference-in-differences estimation, where the treatment is the logged number of violent events in a district taking place between the implementation of the 2000 (pre-conflict) and 2005 (ongoing conflict), and the 2012 (end of the conflict) Afrobarometer survey rounds. The model compares changes in social capital between survey rounds across districts with low levels of violence and districts with high levels of violence.	age, gender, urban/rural, ethnicity, education, district fixed effects, and district-level characteristics interacted with the post-conflict year, including violence perpetrated by other groups during the time span considered and ethnic fractionalization	Yes, prospective	Yes	District-level violent events	individual	District	Yes	The study uses Afrobarometer survey data, which was not collected in highly insecure areas during the conflict; highly insecure enumeration areas were replaced by more safe areas within the same district. The study also examines the impact of selective migration across survey rounds on the results and finds little evidence that the results are driven by migration.
De Luca and Verpoorten (2015b)	Uganda	Diff-in-diff with district fixed effects	A difference-in-differences estimation, where the treatment is the logged number of violent events in a district taking place between the implementation of the 2000 (pre-conflict) and 2005 (ongoing conflict), and the 2008 and 2012 (end of the conflict) Afrobarometer survey rounds. The model compares changes in social capital between survey rounds across districts with low levels of violence and districts with high levels of violence.	age, gender, urban/rural, ethnicity, education, district fixed effects, and district-level characteristics interacted with the post-conflict year, including violence perpetrated by other groups during the time span considered and ethnic fractionalization	Yes, prospective	Yes	District-level violent events	individual	District	Yes	The study uses Afrobarometer survey data, which was not collected in highly insecure areas during the conflict; highly insecure enumeration areas were replaced by more safe areas within the same district. It also examines the validity of the difference-in-differences model assumption and finds that districts affected by violence had similar trends in electoral turnout as districts not affected by violence. In addition, it examines the impact of selective migration and finds that it does not drive the results.

Table A12: Empirical Strategy (Cont.)

Paper	Country	Method	Author's self-described identification method	Controls	Pre-war data?	Substantive controls?	Type of violence exposure	Unit of analysis of DV	Unit of analysis of IV	Selection/survival/attrition bias	Author's control for bias?
Gilligan, Pasquale, and Samii (2014)	Nepal	WLS with matching and matched-pair block fixed effects.	A matching of communities with high levels of violence and those with no violence. A regression of the outcome on a violence exposure indicator on the ward level, with a matching block fixed effect. The model is fitted using weighted least squares, where the weighting accounts for differences between the sample and population distributions over the matching blocks. Standard errors are clustered at the ward level.	matching covariates at the VDC level (in 2001): Maoist control, an indicator for the first hosted armed confrontations up to 2001; an indicator of which ethnic group was the plurality in the VDC; elevation; population, unemployment, illiteracy, school absenteeism,	Yes, prospective	Yes	Village-level measures of fatalities	individual	Village Development Committee (VDC), similar to county	Yes	The study points to the unpredictable fighting pattern during the conflict, a function of both the nature of the insurgency and the country's rough terrain, as a source of exogeneity. As a result, very similar communities were arbitrarily exposed to different levels of violence.
Gneezy and Fessler (2012)	Israel	OLS	Difference in outcome means between wartime and peacetime games.	No controls	No	No	Timing: war vs. peace	individual	Time periods of violence (national)	Yes?	The study does not provide information on mitigating biases.
Grosjean (2014)	European countries	OLS with country fixed effects and PSU (village, suburb) fixed effects.	A regression of the outcome on a violence exposure indicator, controlling for type of conflict (international conflict won, lost, or a civil conflict), individual and household characteristics, country and PSU fixed effects.	No controls	No	No	Personal, on family	individual	individual	Yes	The study acknowledges that victimization may have not been random, but points to the fact that victimization during WWII was operating on respondents' parents and grandparents, mitigating selection concerns with respect to respondents. To account for selective migration, the study restricts the analysis to a subsample of individuals who never moved.
Grossman, Manekin, and Miodownik (2015)	Israel	IV	A two-stage least square (2SLS) instrumental variable (IV) regression with no controls. The IV model estimates the effect of combat exposure on the outcome variable using a health profile score as a binary instrument that takes the value of 1 for combat-eligible soldiers, and 0 otherwise.	No controls	No	No	Personal	individual	individual	Yes	The study argues that its instrument for combat experience, soldiers' health ranking, is valid because it does not correlate with household income, which may be related to political attitudes; it also argues that sorting into a health ranking is unlikely because of the comprehensive nature of the medical examination.



Table A13: Empirical Strategy (Cont.)

Paper	Country	Method	Author's self-described identification method	Controls	Pre-war data? Yes, prospective	Substantive controls?	Type of violence exposure	Unit of analysis of DV	Unit of analysis of IV	Selection/attrition bias	Author's control for bias?
Rohner, Thoenig, and Zilibotti (2013)	Uganda	OLS with controls, IV	A regression of the outcome on a violence exposure variable, controlling for pre-conflict trust level, county/district-level, ethnic-group level, and individual-level characteristics.	Pre-war (district-level) trust; ethnic-group specific controls; individual controls: age, education, employment, gender, rural/urban, religion, ownership of TV/radio; district level population, urbanization rate, demographic structure, share of manufacture and subsistence farming, net migration, fertility, number of micro-enterprises, and unemployment; County-level ethnic fractionalization, avg. satellite nightlight intensity	Yes, prospective	Yes	District-level violent events	individual	District/county	Yes	The study argues that concerns of reverse causality are mitigated by the fact that the outcome is measured three years after the end of the conflict. As a robustness, it instruments violence exposure with distance to Sudan. To account for selective migration, the study notes that by the time of the survey, most displaced individuals returned to their homes; in addition, most migration took place within counties and not across counties.
Voors et al. (2012)	Burundi	OLS with stratum fixed effects	A regression of the outcome on a violence exposure variable, controlling for individual and village-level characteristics, and stratum fixed effects.	individual level: literacy, age, gender; village level: land holdings per capita, language, Gini coefficient, distance to market, conflict over land, ethnic homogeneity, socioeconomic homogeneity, population density, total expenditure per capita, 1998 HH controls, stratum fixed effects	No	Yes	Comm. level share of war related deaths	individual	village/individual	Yes	The study points to the indiscriminate nature of the conflict to argue that violence exposure was arbitrary, which is supported by a comparison of communities targeted and not targeted by violence. An examination of migration patterns shows that selection due to migration is unlikely to drive the results.
Voors and Bulte (2014)	Burundi	OLS with community fixed effects, IV	A regression of the outcome on a violence exposure variable, controlling for individual and village level characteristics, and community fixed effects.	individual level: age, gender, education, wealth, pre-war ownership of livestock or farmed cash crops. Village level: distance to an agricultural market, a Gini variable measuring land inequality	Yes, retrospective	Yes	Personal, on family	individual	individual	Yes	The study examines the likelihood that the results are driven by attrition or selection bias using instrumental variables and pre-war data, and find little evidence for bias due to attrition or selection.

Table A14: Correlation matrix

	Substantive controls	FE design	Pre-war data	Sensitivity	IV
Substantive controls	1.00	0.62	0.12	0.12	-0.03
FE design	0.62	1.00	0.03	0.10	-0.38
Pre-war data	0.12	0.03	1.00	0.38	0.12
Sensitivity	0.12	0.10	0.38	1.00	0.41
IV	-0.03	-0.38	0.12	0.41	1.00

Table A15: Sources of Heterogeneity in Meta Analysis Results: Empirical Strategy

<i>Dependent variable: index of cooperation outcomes</i>						
	Fixed effects with moderators			Random effects with moderators (Mixed effects)		
	Coefficient	Std. Err.	p-value	Coefficient	Std. Err.	p-value
Intercept	0.14***	0.02	0.00	0.13*	0.07	0.06
Substantive controls	-0.03	0.02	0.21	0.00	0.07	0.97
FE design	-0.06	0.03	0.10	-0.10	0.08	0.19
Pre-war data	0.16***	0.02	0.00	0.08	0.05	0.17
Sensitivity	-0.14***	0.02	0.00	0.00	0.07	0.99
Instrumental variables	-0.02	0.02	0.31	-0.10	0.07	0.13

Number of studies: 17  
Total number of subjects: 60,989

**Note:** \*p<0.10, \*\* p<0.05, \*\*\* p<0.01.

The table reports meta analysis results when including study-level covariates in the models. *Substantive controls* is an indicator for studies that control for confounders that associate with risk of violence exposure; *FE design* is an indicator for studies that use community-fixed effects, comparing neighbors within the same community; *Pre-war data* indicates studies that control for pre-war covariates; *Sensitivity* is an indicator for studies that conduct various robustness tests to strengthen main results; and *Instrumental variables* indicates studies that use instrumental variables to for causal identification.

† This analysis excludes crime data.

Table A16: Sources of Heterogeneity in Meta Analysis Results: Other study-level covariates

<i>Dependent variable: index of cooperation outcomes</i>						
	Fixed effects with moderators			Random effects with moderators (Mixed effects)		
	Coefficient	Std. Err.	p-value	Coefficient	Std. Err.	p-value
<i>Personal exposure</i> <sup>1</sup> ( $K=17, N=60,989$ )						
Intercept	0.14***	0.01	0.00	0.12**	0.05	0.01
Personal exposure	-0.09***	0.01	0.00	-0.07	0.05	0.22
<i>Years since war</i> <sup>1,2</sup> ( $K=16, N=28,873$ )						
Intercept	-0.01	0.01	0.35	0.04	0.06	0.49
Years since war	0.01***	0.00	0.00	0.01	0.01	0.45
<i>Violence exposure as a civilian</i> <sup>1</sup> ( $K=17, N=60,989$ )						
Intercept	-0.02	0.02	0.29	0.05	0.05	0.31
Civilian	0.09***	0.02	0.00	0.03	0.06	0.56
<i>Crime vs. war violence exposure</i> ( $K=21, N=125,416$ )						
Intercept	0.07***	0.00	0.00	0.08***	0.02	0.00
Crime	0.01**	0.01	0.02	0.03	0.05	0.58
<i>Region</i> <sup>1</sup> ( $K=17, N=60,989$ )						
Intercept (Africa)	0.10***	0.01	0.00	0.10***	0.03	0.00
Asia	-0.16***	0.02	0.00	-0.08	0.06	0.19
Europe	-0.05***	0.01	0.00	-0.07	0.07	0.32

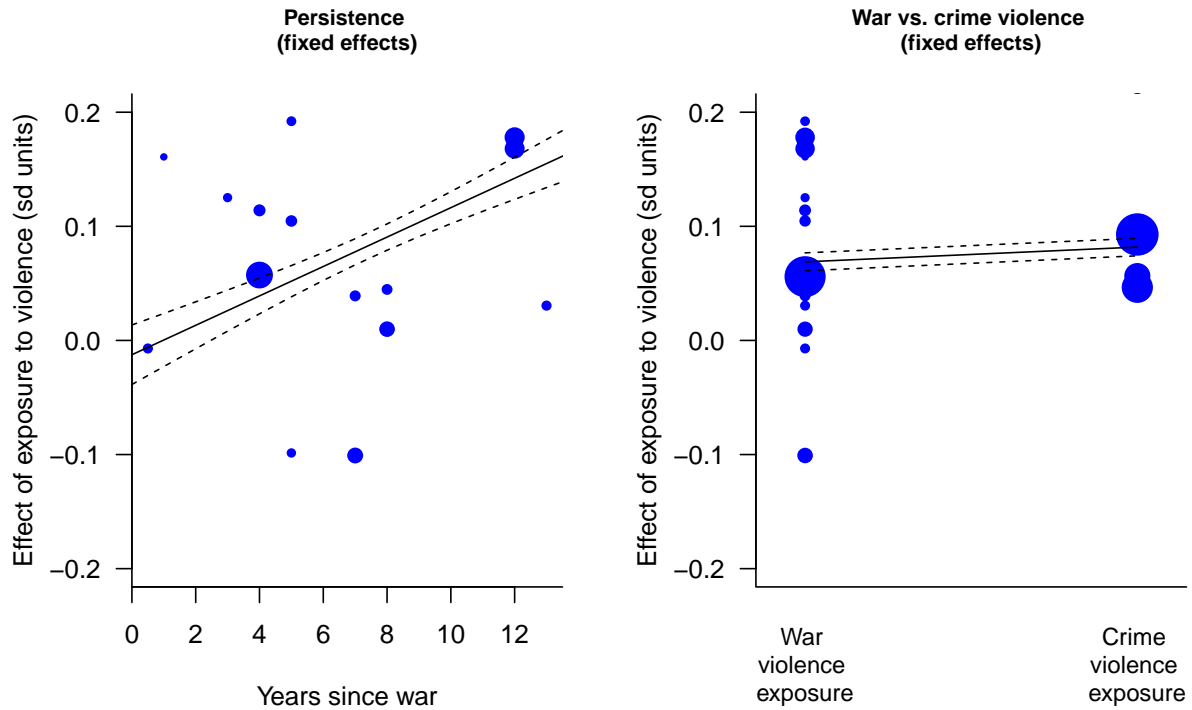
**Note:** \* $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

The table reports meta analysis results when including study-level covariates in the models. Each panel represents a separate regression. *Personal exposure* indicates studies for which exposure to violence is on the personal/household level, as opposed to community/district level; *Years since war* measures the length of time between the end of the conflict and the timing of each study; *Civilian* is an indicator for studies in which civilians were exposed to violence, as opposed to combatants; *Crime* indicates studies for which violence exposure is crime; Finally, *Africa*, *Asia*, and *Europe* are indicators for studies' location.

<sup>1</sup> This analysis excludes crime data.

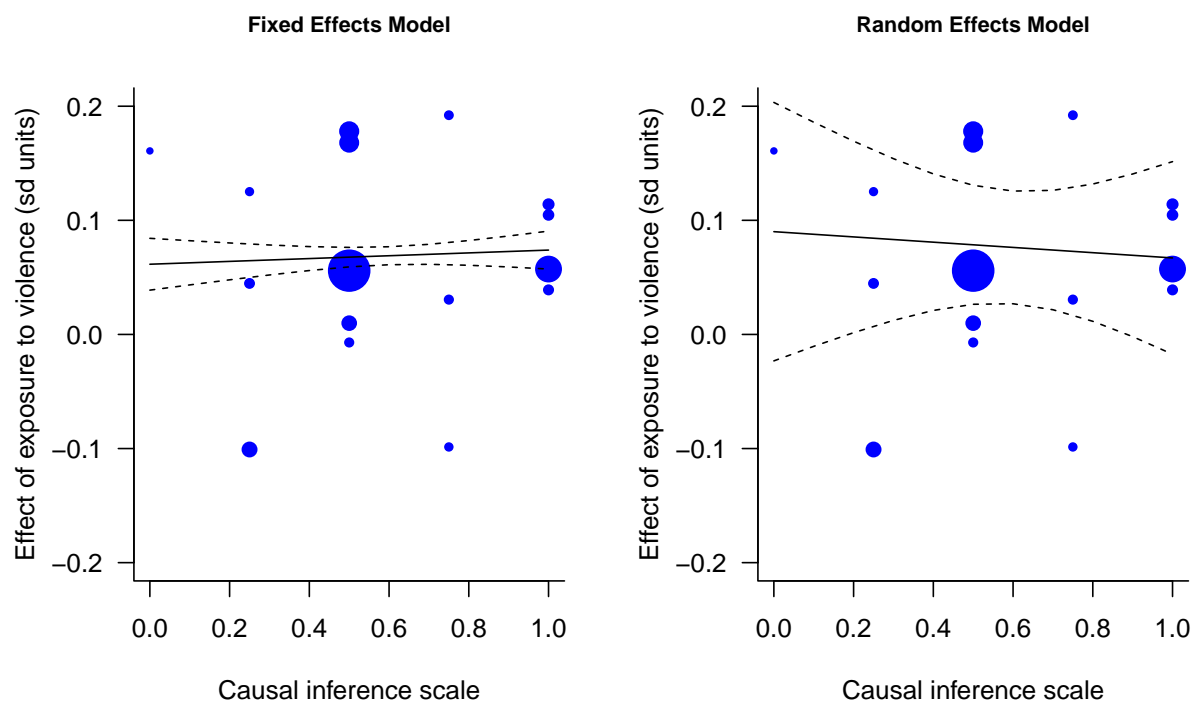
<sup>2</sup> Grosjean (2014) is dropped from the analysis because of high variability in years since war variable.

Figure A2: The effect of war violence exposure over time and versus crime-related violence



**Note:** The left panel shows meta-analytic scatterplot of the observed effects estimated for individual studies, where the dependent variable is an index of all cooperation outcomes, plotted against the length of time between the end of the conflict and the timing of each study. The right panel plots the observed effects against an indicator of war/crime violence exposure. The point sizes are proportional to the inverse of the standard errors, which means that studies with larger samples have larger points. The predicted average effects are added to the plot (with corresponding 95% confidence interval bounds, calculated from a fixed effects model). The Grosjean (2014) study is dropped from the analysis of the left panel because of high variability in years since war variable.

Figure A3: The effect of violence exposure as a function of causal inference design



**Note:** This is a meta analytic scatterplot, showing the observed effects estimated for individual studies, where the dependent variable is an index of all cooperation outcomes, plotted against a causal inference scale. The scale ranges from 0 to 1, where 0 indicates little attempts to measure causal relationships and 1 indicates studies using more tools to causally identify the effect of exposure to violence. The scale is constructed from variables capturing studies' use of community fixed effects, pre-war data, substantive controls, and sensitivity analysis. The point sizes are proportional to the inverse of the standard errors, which means that studies with larger samples have larger points. The predicted average effect is added to the plot (with corresponding 95% confidence interval bounds).

## **D.1 Calculating the time since war exposure**

In Table 1 in the main paper, as well as in table A16 above, we use a measure of time since war exposure for each study. Since studies vary in the measurement of war exposure, as well as in their recording of the specific year(s) in which individuals were exposed to violence, we construct this measure based on the availability of data in each study. For studies that have no information on the timing of violence exposure, we calculate the number of years between the end of the conflict and the data collection. For studies that have more information on the timing of violence exposure, we use this information to construct a more precise measure of the years since war exposure. The table below details our calculation of the time between war violence exposure and the data collection for each study.

## Calculating the time since war exposure

Paper	Country	Conflict	Data collection	Time since war exposure	Calculation of Time since war exposure
Annan et al. (2011)	Uganda	Lord's Resistance Army (LRA) insurgency (1986-2006)	2005-7	~7 years	Length of time between the mean year of abduction (2000) and the data collection.
Bauer et al. (2014)	Georgia and Sierra Leone	Georgia: war with Russia over South Ossetia (2008); Sierra Leone: civil war (1991-2002)	Georgia: 2009; Sierra Leone: 2010	Georgia: 6 months, Sierra Leone: 8 years	Length of time between the end of the conflicts and the data collection
Bauer, Fiala, and Lively (2014)	Uganda	Lord's Resistance Army (LRA) insurgency (1986-2006)	2011	5 years	Length of time between the end of the conflict and the data collection
Bellows and Miguel (2006, 2009)	Sierra Leone	Civil war (1991-2002)	2005, 2007	3-5 years	Length of time between the end of the conflict and the data collection
Blattman (2009)	Uganda	Lord's Resistance Army (LRA) insurgency (1986-2006)	2005-6	~5 years	Length of time between the mean year of abduction (2000) and the data collection.
Cassar, Grosjean, and Whitt (2013)	Tajikistan	Civil war (1992-1997)	2010	13 years	Length of time between the end of the conflict and the data collection
Cecchi et al. (2015)	Sierra Leone	Civil war (1991-2002)	2010	8 years	Length of time between the end of the conflict and the data collection
De Luca and Verpoorten (2015a)	Uganda	Lord's Resistance Army (LRA) insurgency (1986-2006)	2000, 2005, 2012	12 years	Length of time between the pre-war survey round (2000) and the post-war survey round (2012)
De Luca and Verpoorten (2015b)	Uganda	Lord's Resistance Army (LRA) insurgency (1986-2006)	2000, 2005, 2012	12 years	Length of time between the pre-war survey round (2000) and the post-war survey round (2012)
Gilligan, Pasquale, and Samii (2014)	Nepal	Civil war (1996-2006)	2009-10	3 years	Length of time between the end of the conflict and the data collection
Gneezy and Fessler (2012)	Israel	Israel-Hezbollah war (2006)	2005-7	1 year	Length of time between the end of the conflict and the data collection
Grosjean (2014)	35 countries in Europe, the Caucasus and Central Asia	WWII (1939-1945); Yugoslav wars (1991-5); Kosovo war (1998-9); Tajik civil war (1992-7); Chechen wars (1994-2009); Kyrgyzstan clashes (2010)	2010	5 months – 65 years	Length of time between the end of the conflicts and the data collection
Grossman, Manekin, and Miodownik (2015)	Israel	Israeli-Palestinian conflict (1967+)	2013	1-12 years	Length of time between combatant violence exposure in the first and second Intifadas and the data collection
Rohner, Thoenig, and Zilibotti (2013)	Uganda	Lord's Resistance Army (LRA) insurgency (1986-2006)	2000, 2008	8 years	Length of time between the pre-war survey round (2000) and the post-war survey round (2008)
Voors et al. (2012)	Burundi	Civil war (1993-2005)	2007, 2009	4-6 years	Length of time between the study's recorded attacks on villages between 1993-2003 and the data collection
Voors and Bulte (2014)	Burundi	Civil war (1993-2005)	2007	4 years	Length of time between the study's recorded attacks on villages between 1993-2003 and the data collection
De Juan and Pierskalla (2014)	Nepal	Civil war (1996-2006)	2003	0 years	Length of time between the 2003 cease fire and the data collection
Hartman and Morse (2015)	Liberia	Civil war (1989-2003)	2013	10 years	Length of time between the end of the conflict and the data collection
Shewfelt (2009)	Indonesia, Bosnia and Herzegovina, USA (Vietnam veterans)	Indonesia: insurgency in Aceh (1976-2005); B&H: civil war (1992-1995); USA: Vietnam war (1955-1975)	Indonesia: 2007; Bosnia: 2006; USA: 1986	1-11 years	Length of time between the end of the conflicts and the data collection

## **E Additional Results**

### **E.1 Study-by-study meta-analysis results**

Figures A4 - A25 report study-by-study meta-analysis results for fixed-effects and random-effects models. The results are reported in forest plots, in which each line represents an estimate for one study, and the size of the square for each study reflects the its weight in the meta-analysis. Studies with more observations receive a higher weight. The forest plots also report 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the plots. The coefficients in the plot are derived from studies' regressions where the independent variable is a binary indicator of violence exposure, and the various outcome variables are standardized.

### **E.2 Meta-analysis results with alternative independent variables**

As the effects of exposure to violence might be different for different types of violence, we also analyze the results using alternative independent variables: standardized continuous measures; standardized measures of the respondent's direct or personal exposure to violence (e.g., being beaten or injured); and of direct and indirect exposure to violence (e.g., through the household or community's exposure).

Table A17 reports the results. The top panel reports coefficients from a meta-analysis using standardized measures of violence exposure; the middle panel reports the results using standardized measures of exposure to violence at the community level; and the bottom panel reports the results using standardized measures of personal exposure. Overall, we find similar results in all these analyses, where social group participation and community leadership/participation robustly hold across specifications. In some estimations of personal exposure we find negative coefficients on some of the outcomes, but these results should be taken with caution because of the small number of studies measuring personal, direct exposure to violence.

### **E.3 Meta Regression Analysis of reported t-statistics**

As a robustness test, we employ a Meta Regression Analysis (MRA) of reported t-statistics (Stanley and Jarrell, 1989). Our main results are limited to studies for which we have raw replication data. In order to examine results from additional studies, we extracted the t-statistics of results reported in papers by dividing reported coefficients by their standard errors. We prefer t-statistics to regression coefficients to measure effect sizes, because coefficients in our sample are not comparable as a result of heterogeneity across studies in the measurement of the dependent and independent variables. As Stanley and Jarrell (1989) recommend, a t-statistic can be used as a standardized measure of the coefficient of interest.

We estimate an ordinary least squares model in which the dependent variable is the t-statistic reported in each paper, and the independent variable is a weight calculated as the inverse of each



paper’s standard error. In the meta regression, we control for the number of observations in each study. In addition, for the behavioral games outcome, which employs several game measures from the same context, we add a control for the country of each study.

Results are reported in Table A18. It can be seen that the coefficients on social group participation and prosocial behavior in experimental games are positive and significant, corroborating our main results. The coefficients for community participation and interest in politics also positive but are not significant at conventional levels. This is partly because of the small number of studies reporting such results for these outcomes ( $N = 4$ ). Finally, we do not find statistically significant coefficients for trust or voting, similar to our analysis of the raw data.

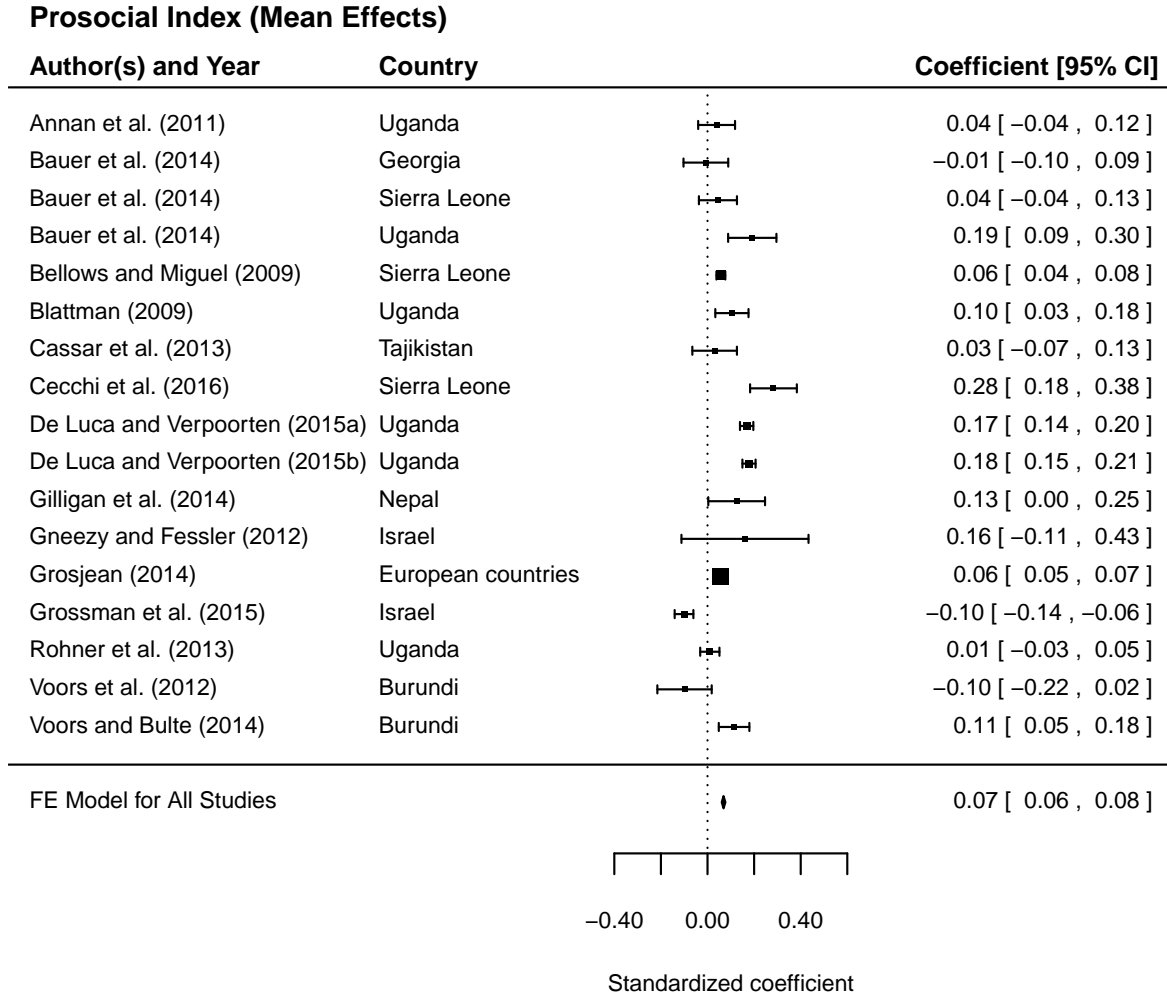
#### **E.4 Meta-analysis results including crime**

We also estimated the results by including additional data on exposure to crime violence across the globe (Bateson, 2012). We estimated the same models reported in the main paper. Table A19 reports the results. Overall, we find that violence exposure is associated with a statistically significant increase in the prosociality summary index. The fixed-effects coefficient is 0.08 standard deviation units (s.e. 0.00, P-value<0.01), and the random-effects coefficient is 0.08 (s.e. 0.02, P-value<0.01).

Looking at the results for different types of outcomes, we find, in both fixed-effects and random effects models, positive and statistically significant coefficients for participation in social groups, community leadership and participation, prosocial behavior in experimental games, and knowledge of politics. We do not find positive and significant effects for voting and trust.

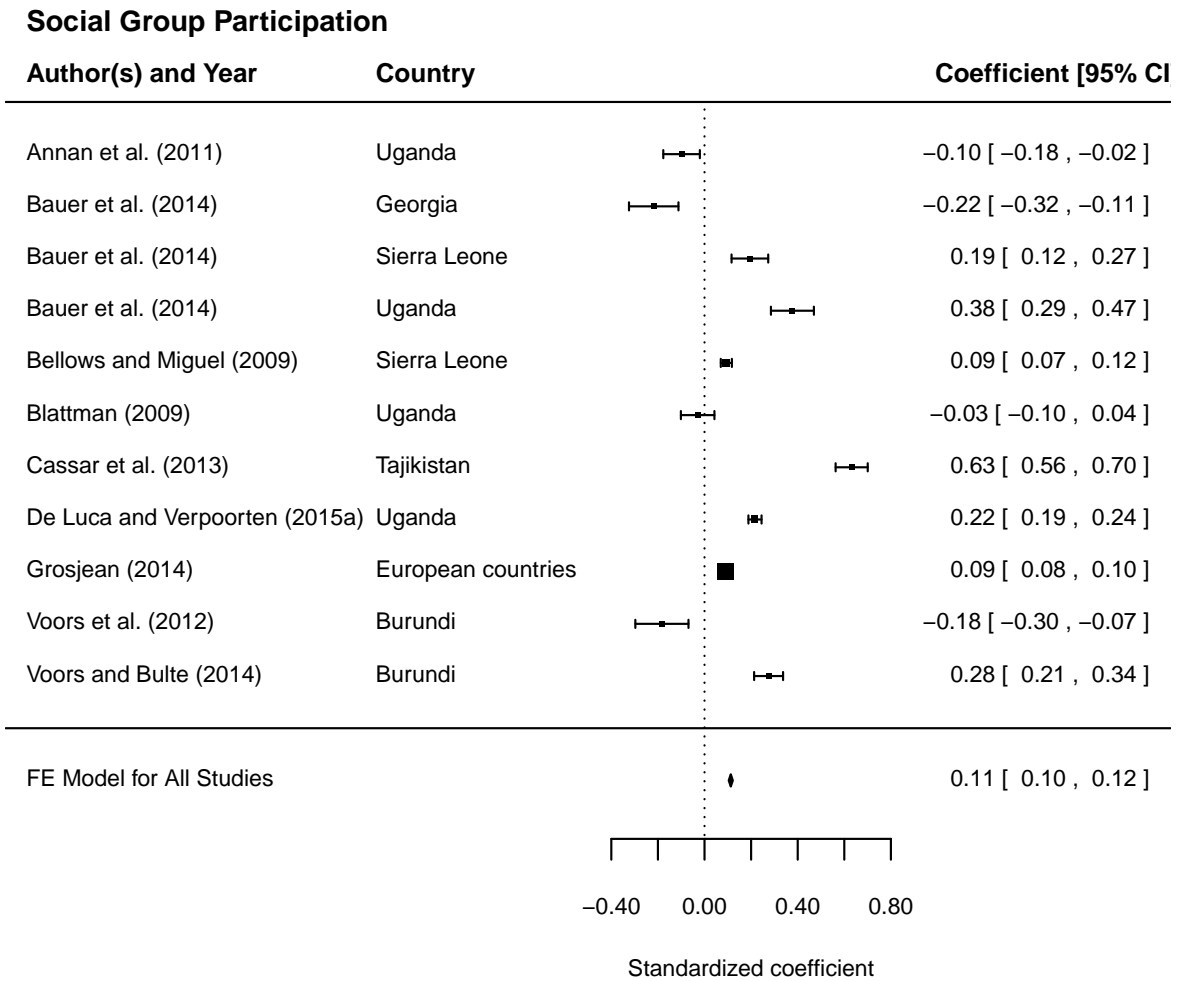
## E.5 Main results in forest plots: Fixed effects models

Figure A4



**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for the summary index (mean effects), calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

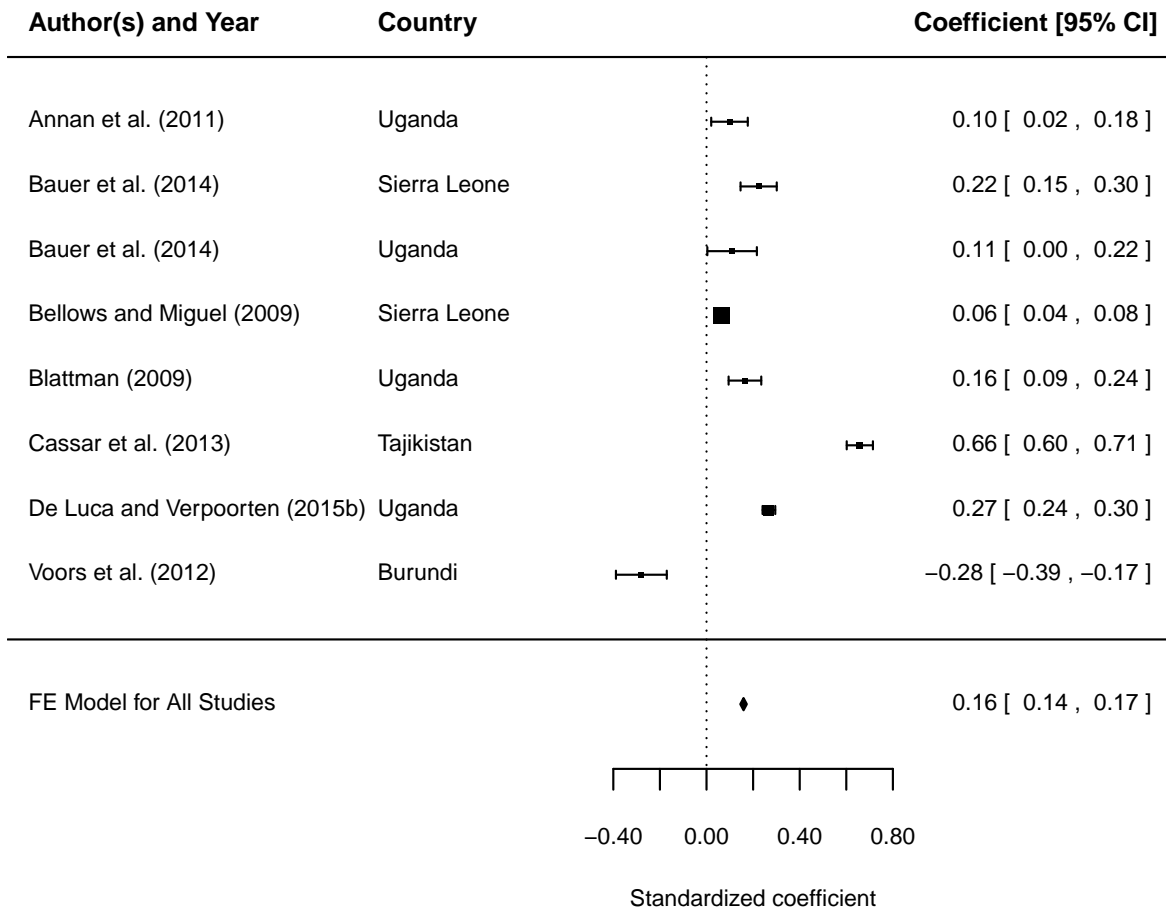
Figure A5



**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for social groups participation, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

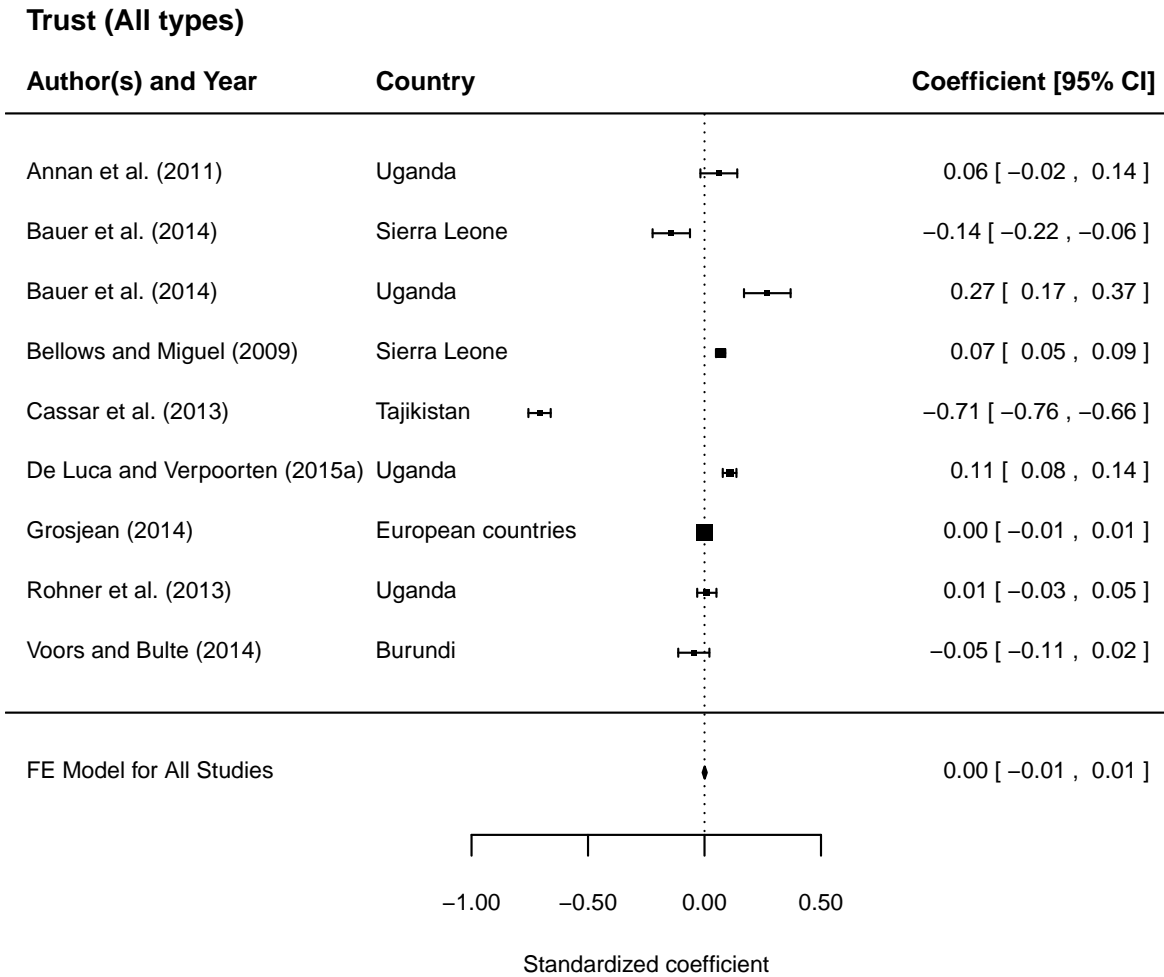
Figure A6

**Community Leadership/Participation**



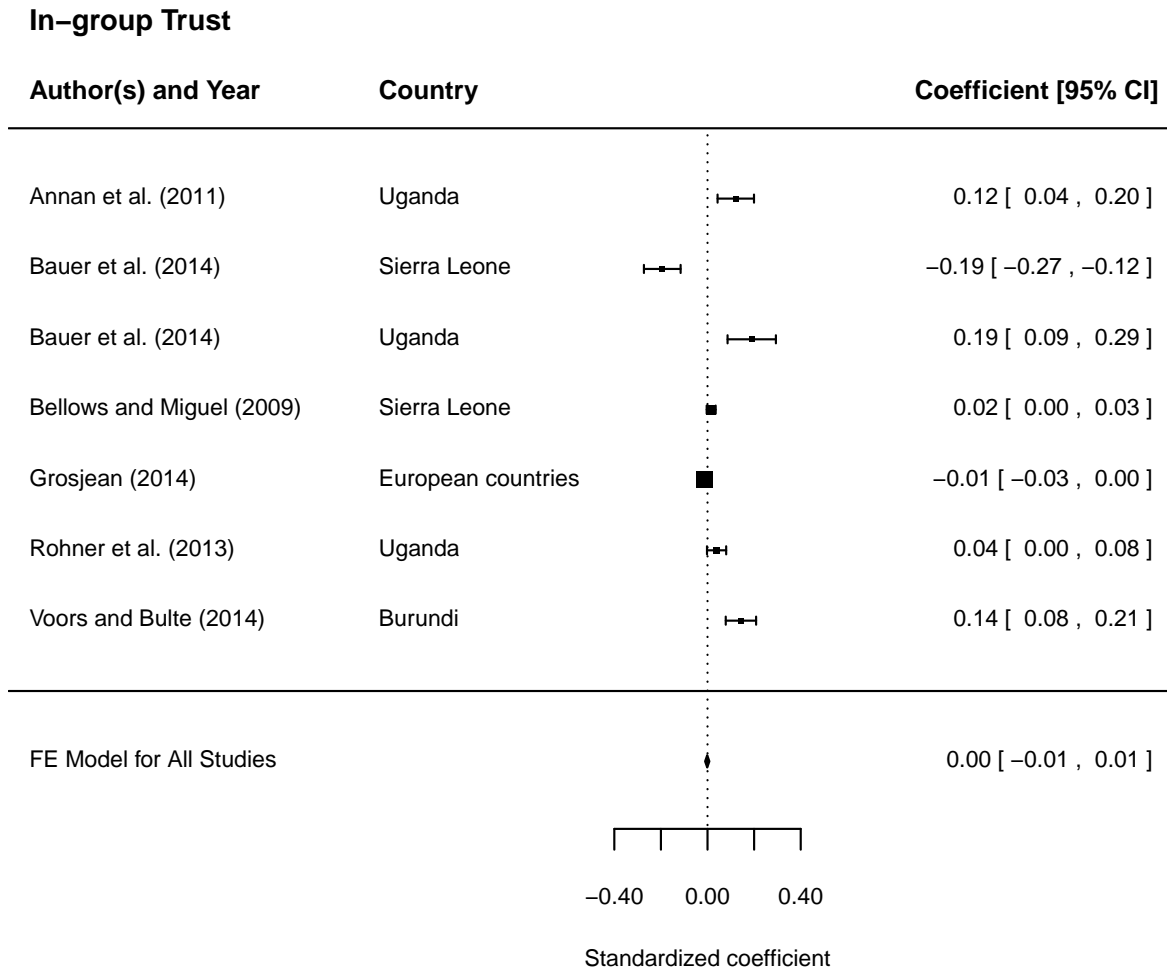
**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for community leadership/participation, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

Figure A7



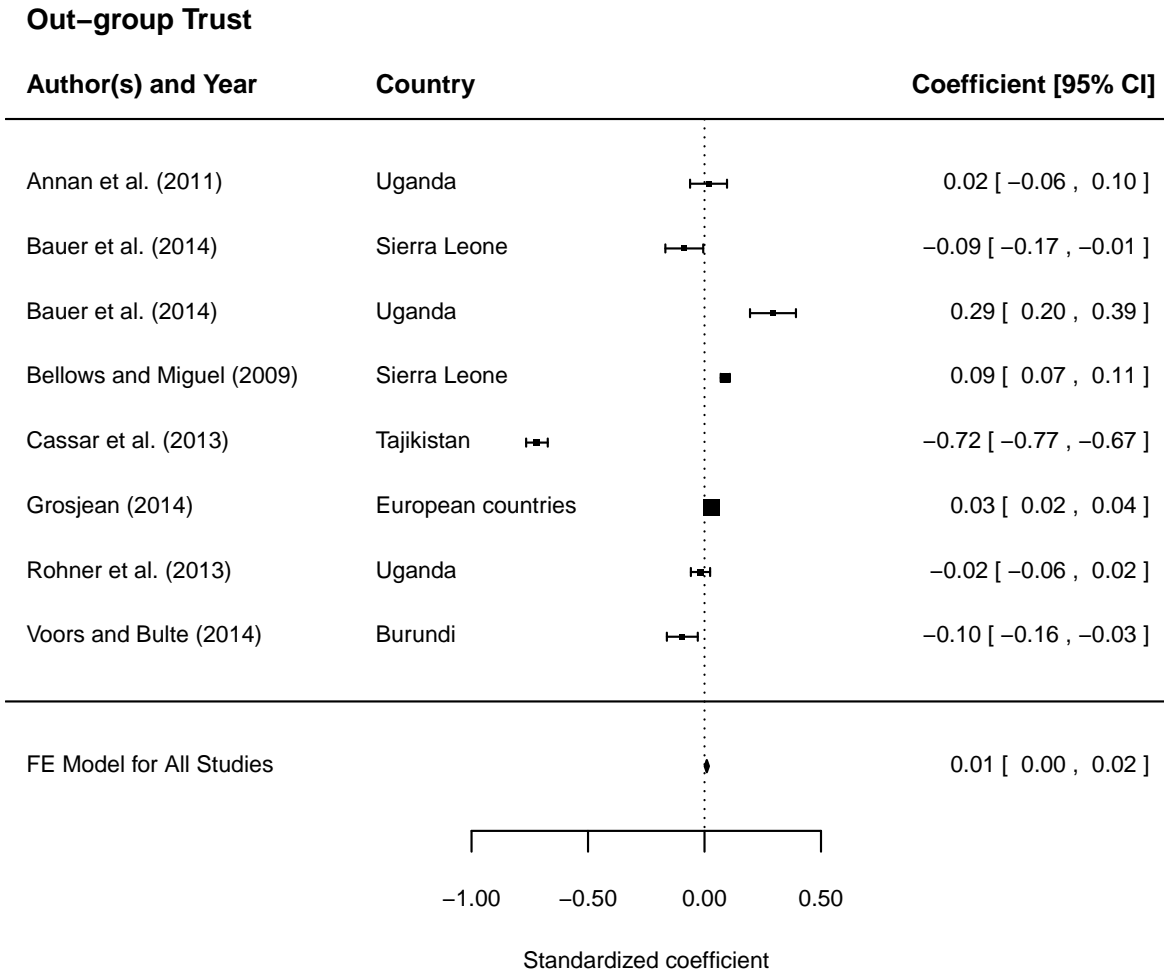
**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for trust, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

Figure A8



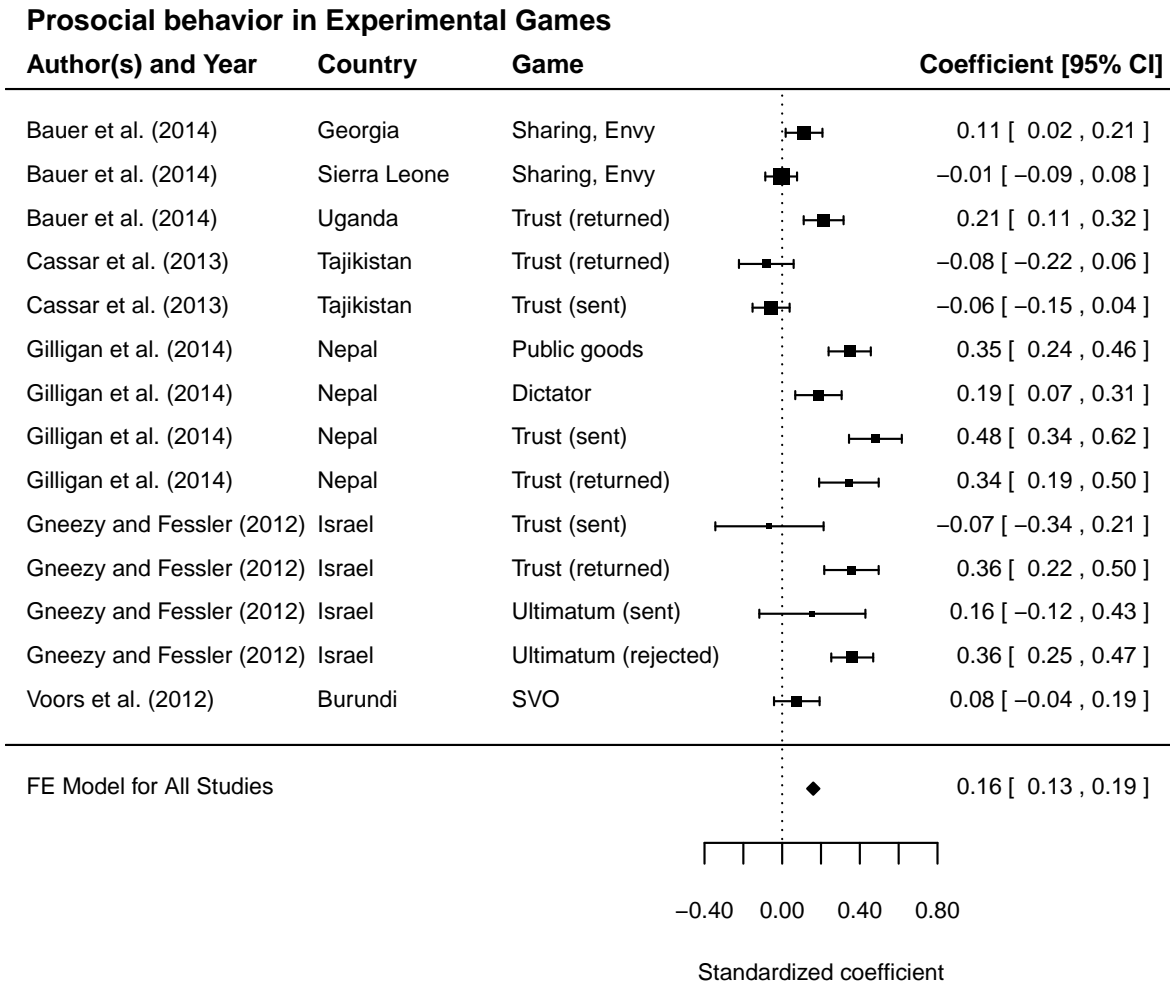
**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for trust in in-group members, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

Figure A9



**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for trust in out-group members, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

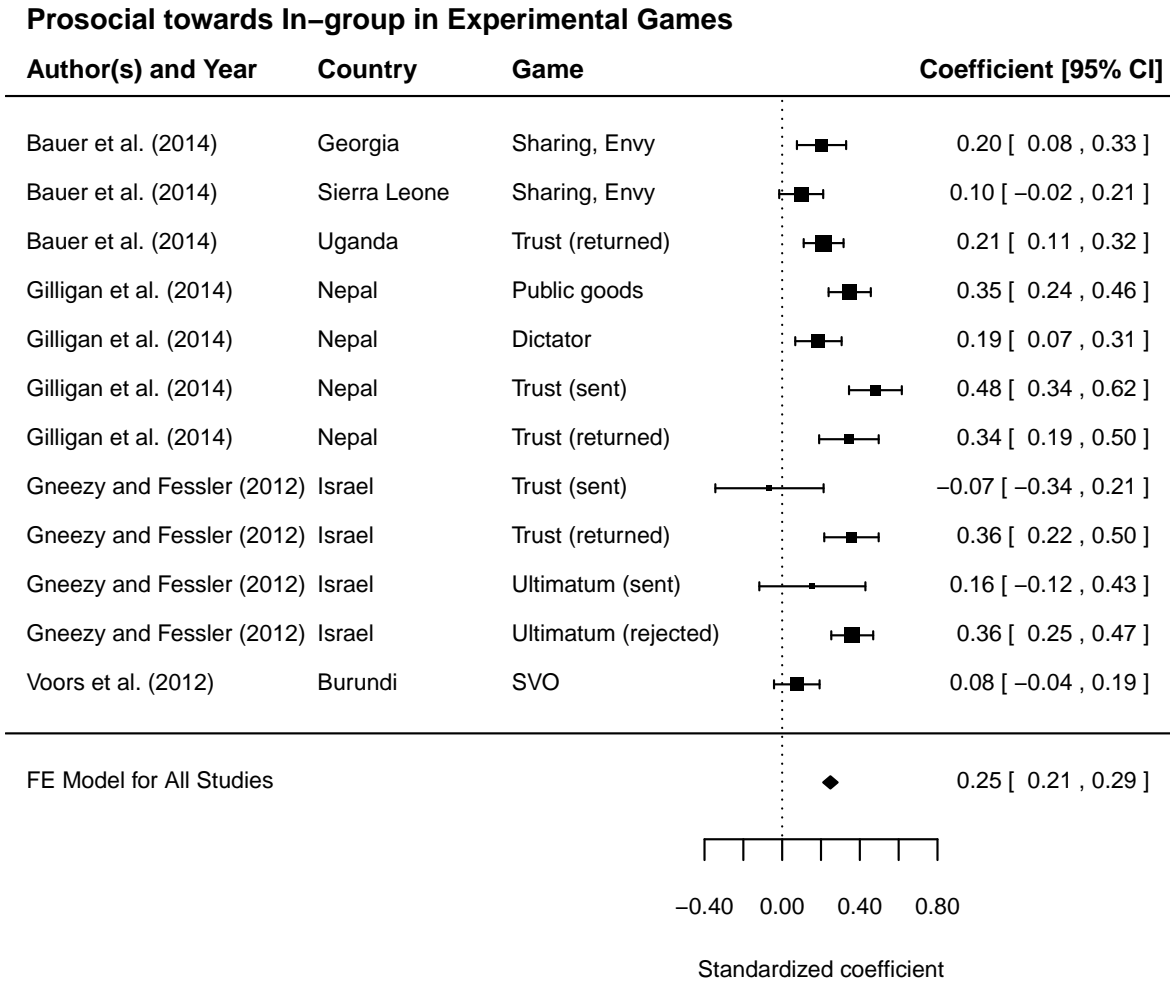
Figure A10



**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for prosocial behavior in experimental games, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.



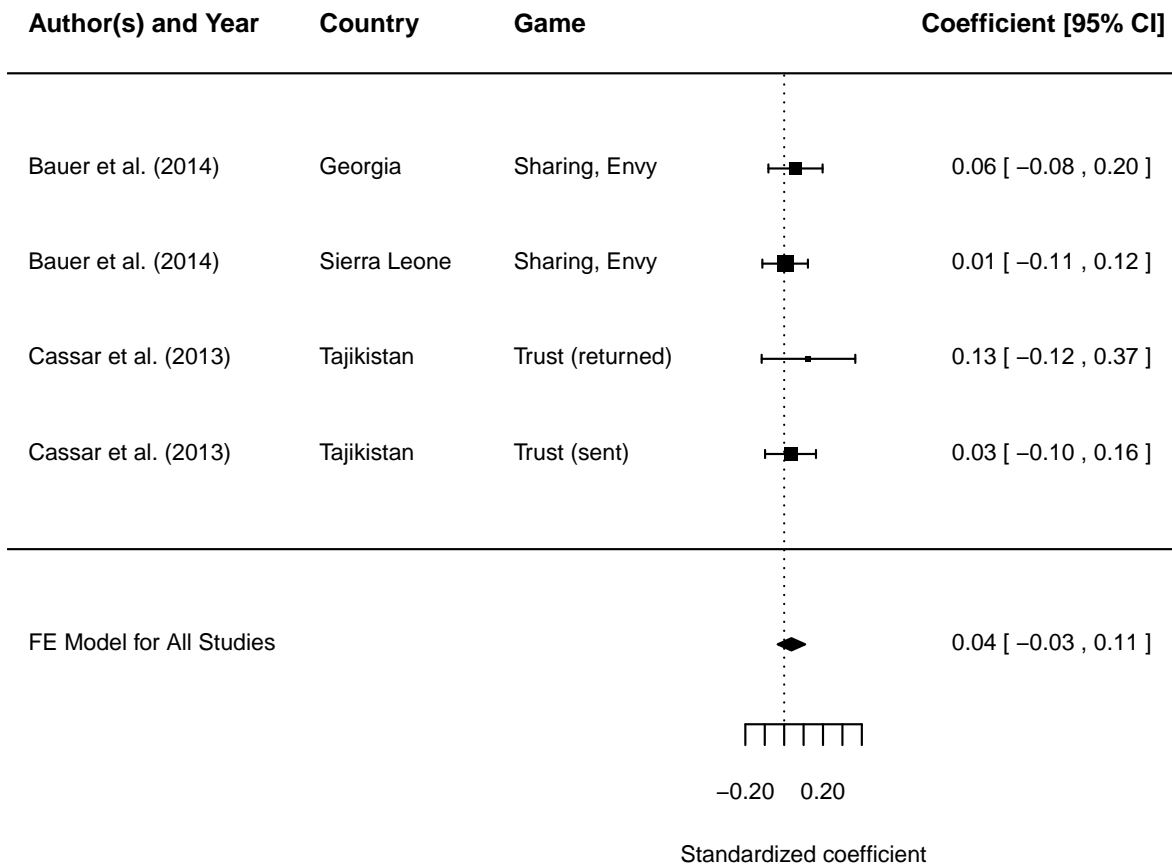
Figure A11



**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for prosocial behavior in experimental games towards in-group members, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

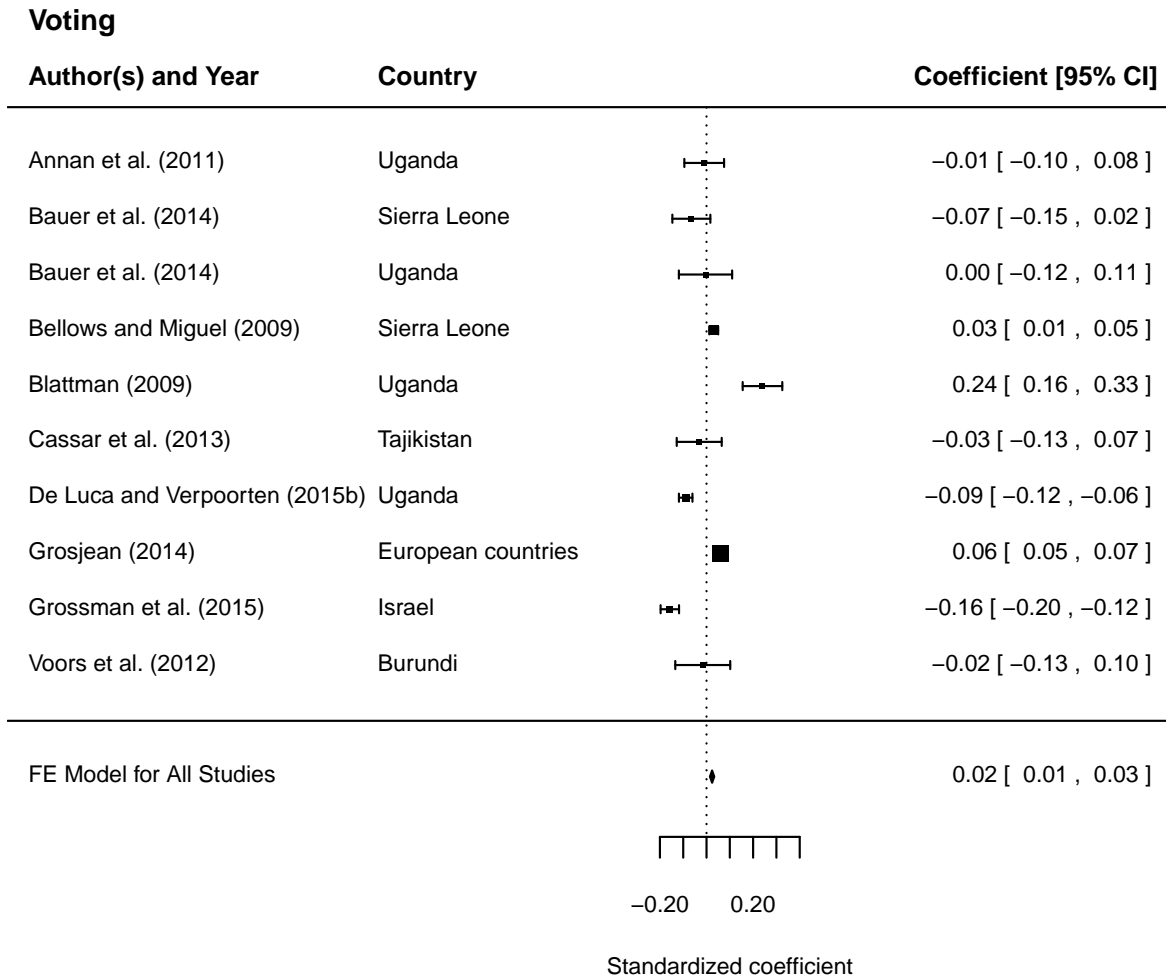
Figure A12

**Prosocial towards Out-group in Experimental Games**



**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for prosocial behavior in experimental games towards out-group members, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

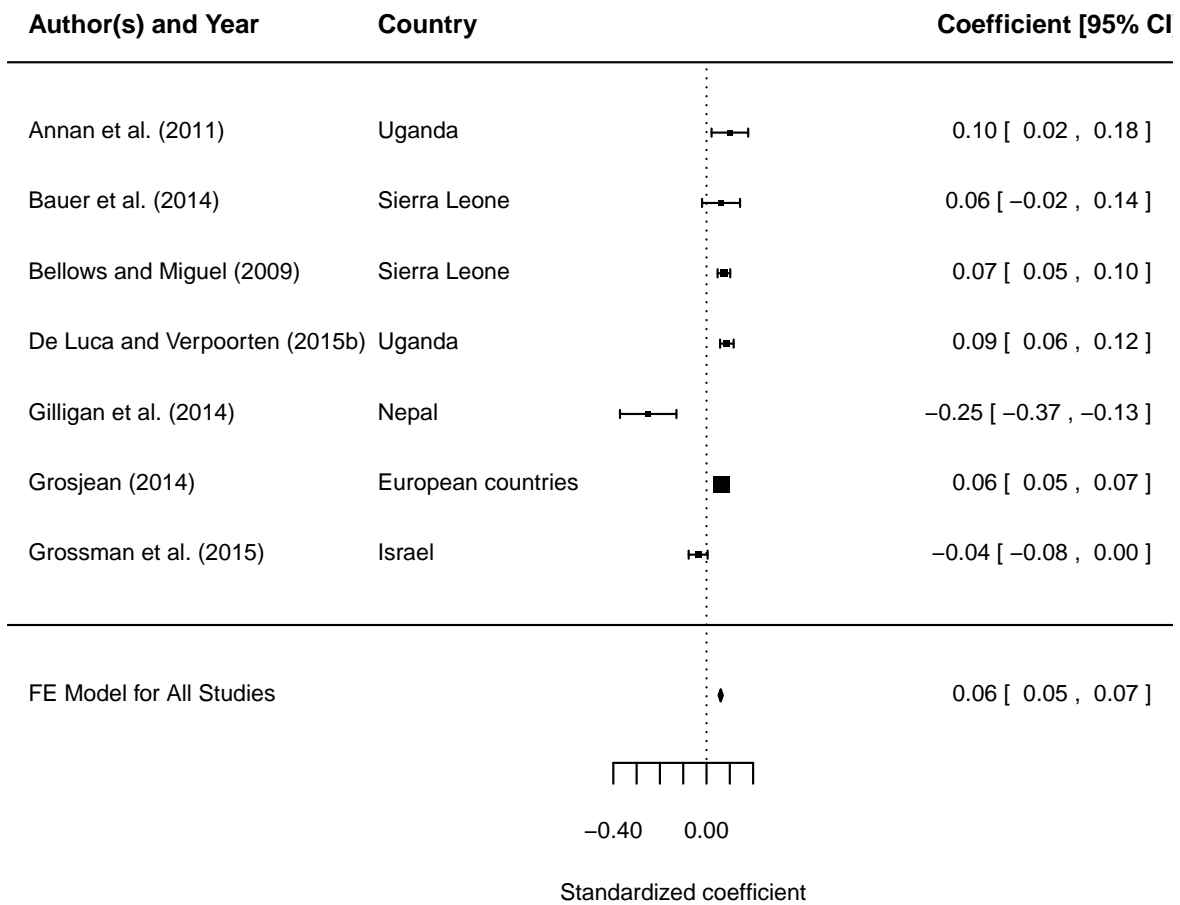
Figure A13



**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for voting, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

Figure A14

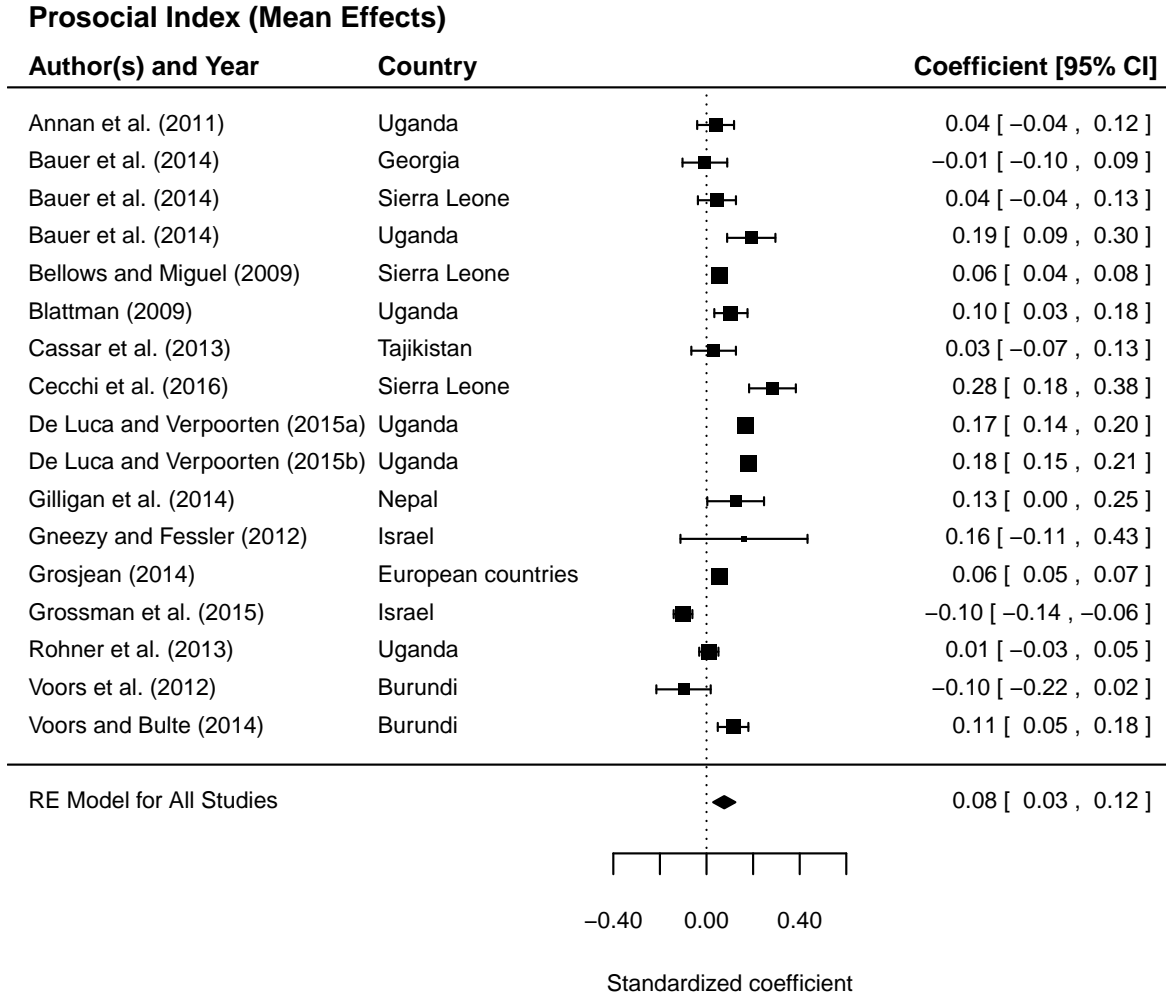
**Knowledge/Interest in Politics**



**Note:** The figure shows a forest plot of fixed-effects meta-analysis results for knowledge/interest in politics, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

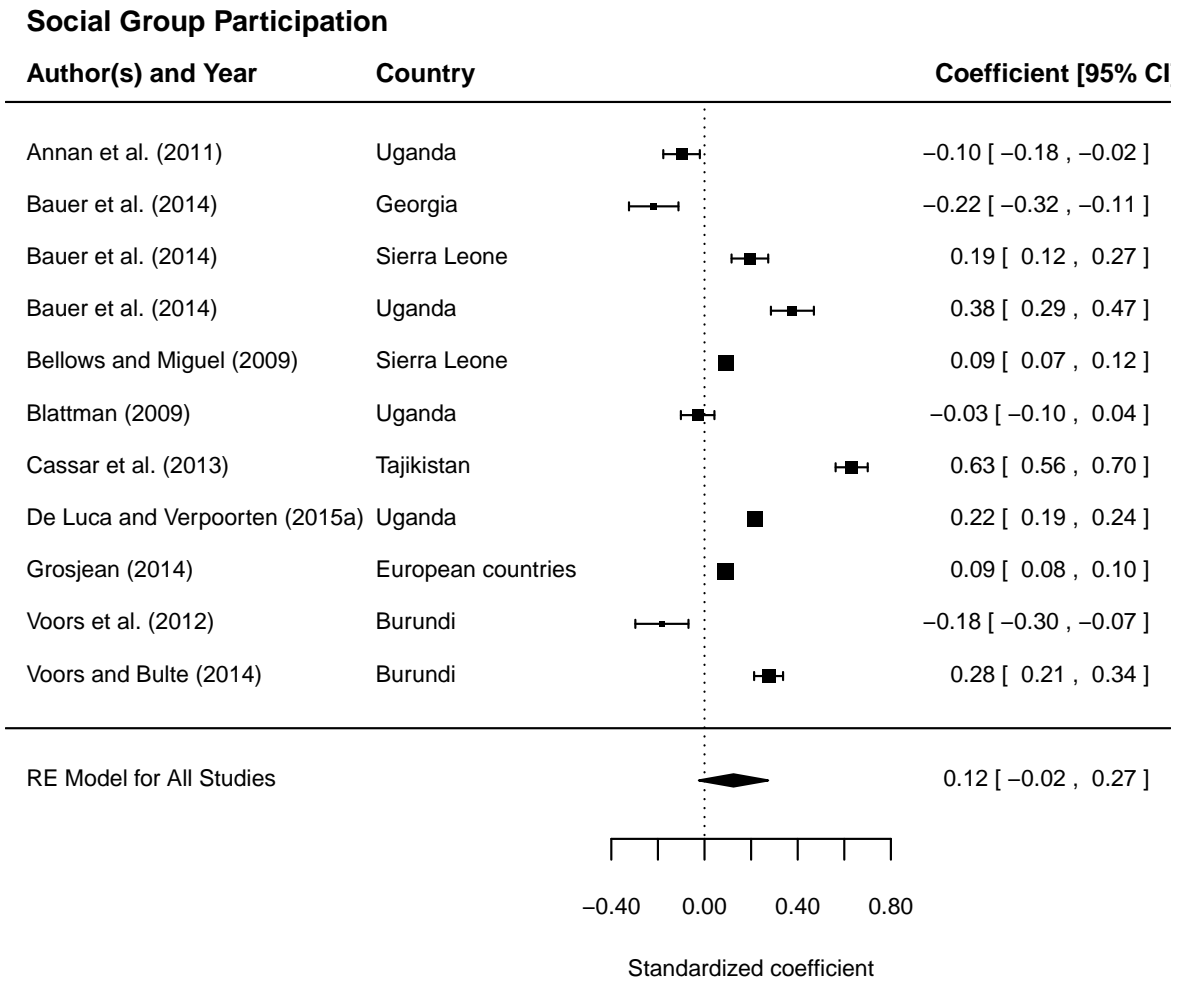
## E.6 Main results in forest plots: Random effects models

Figure A15



**Note:** The figure shows a forest plot of random-effects meta-analysis results for the summary index (mean effects), calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

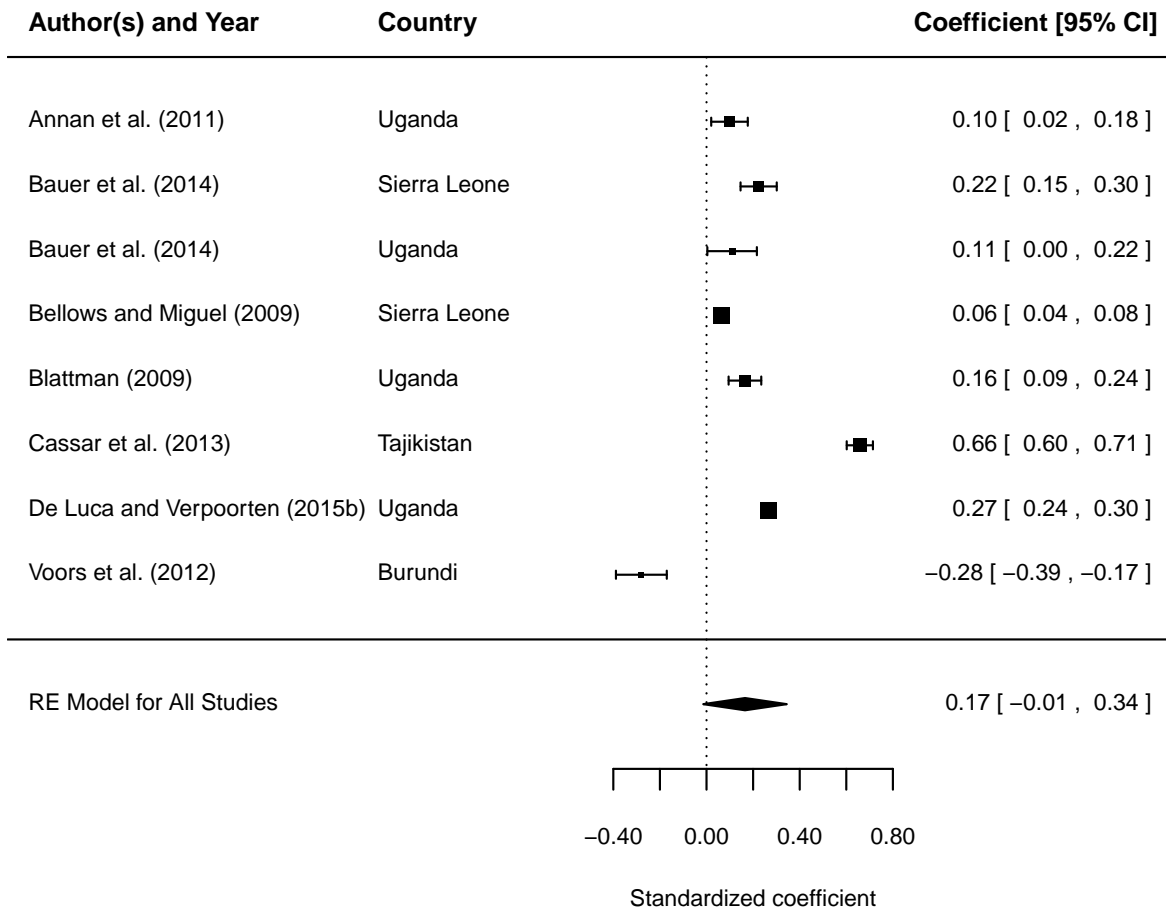
Figure A16



**Note:** The figure shows a forest plot of random-effects meta-analysis results for social groups participation, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

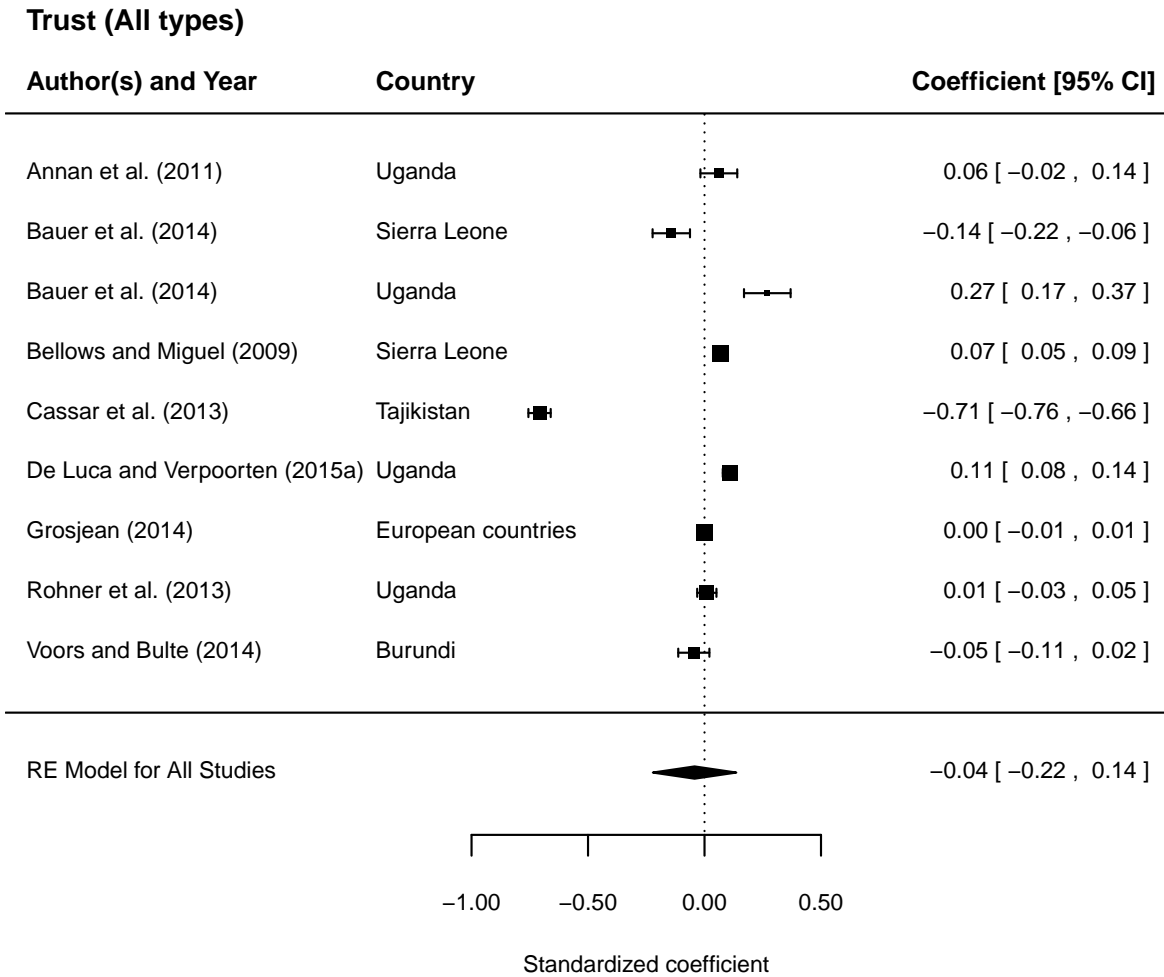
Figure A17

**Community Leadership/Participation**



**Note:** The figure shows a forest plot of random-effects meta-analysis results for community leadership/participation, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

Figure A18

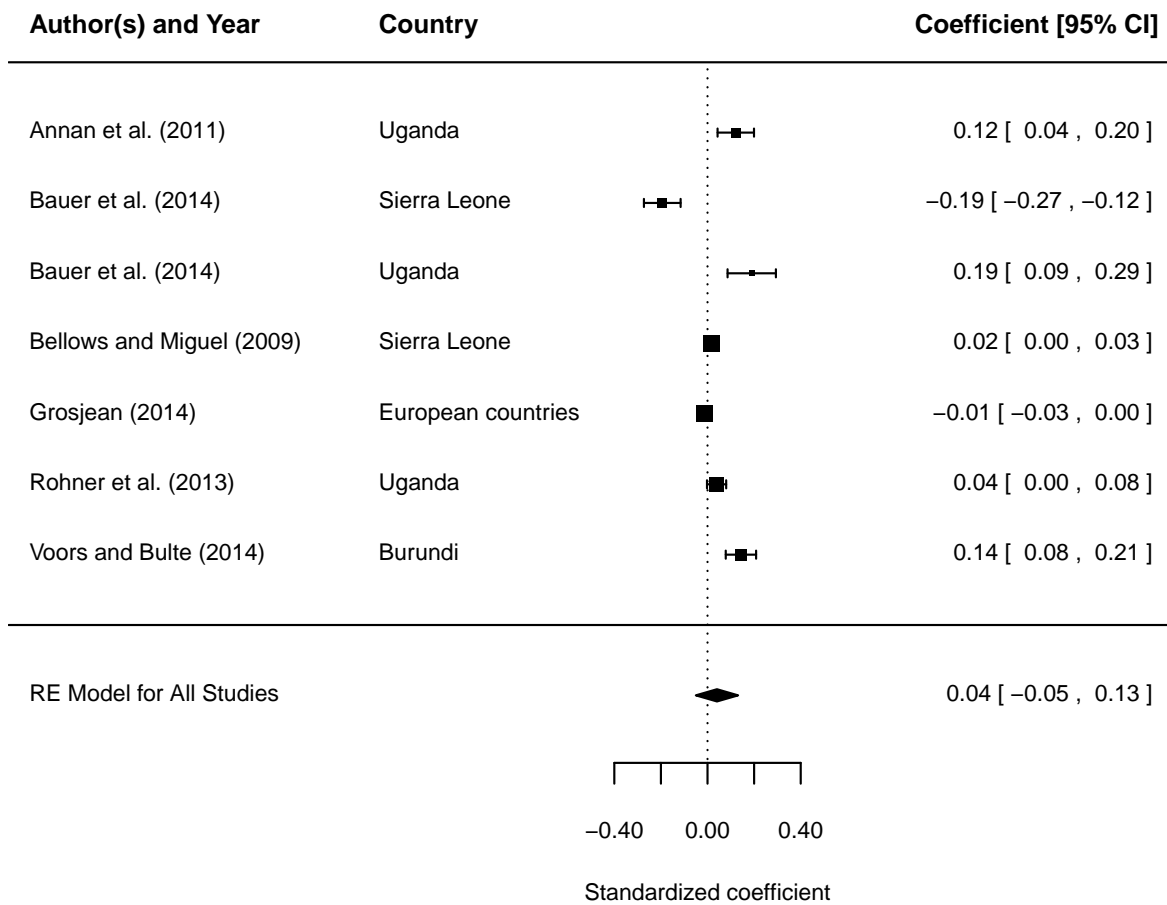


**Note:** The figure shows a forest plot of random-effects meta-analysis results for trust, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.



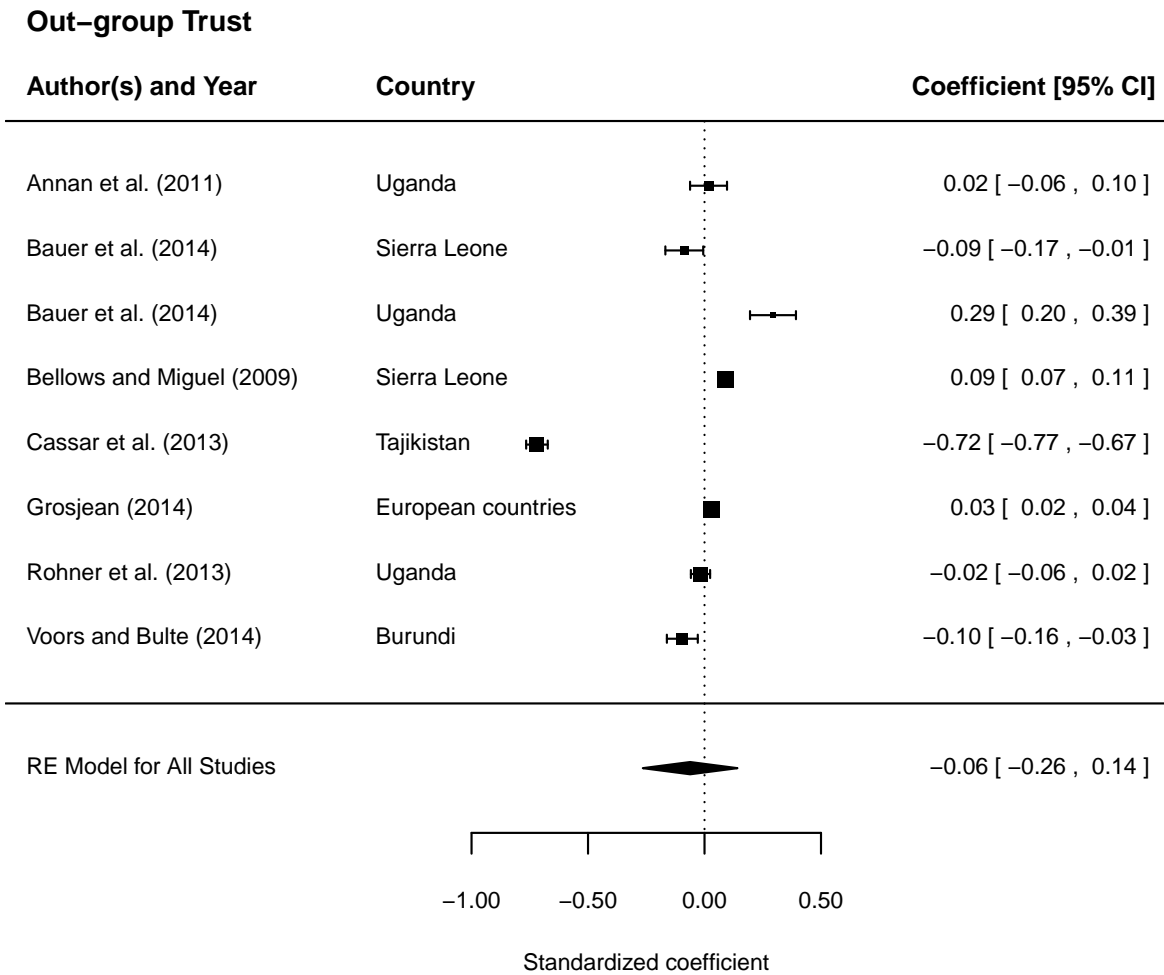
Figure A19

**In-group Trust**



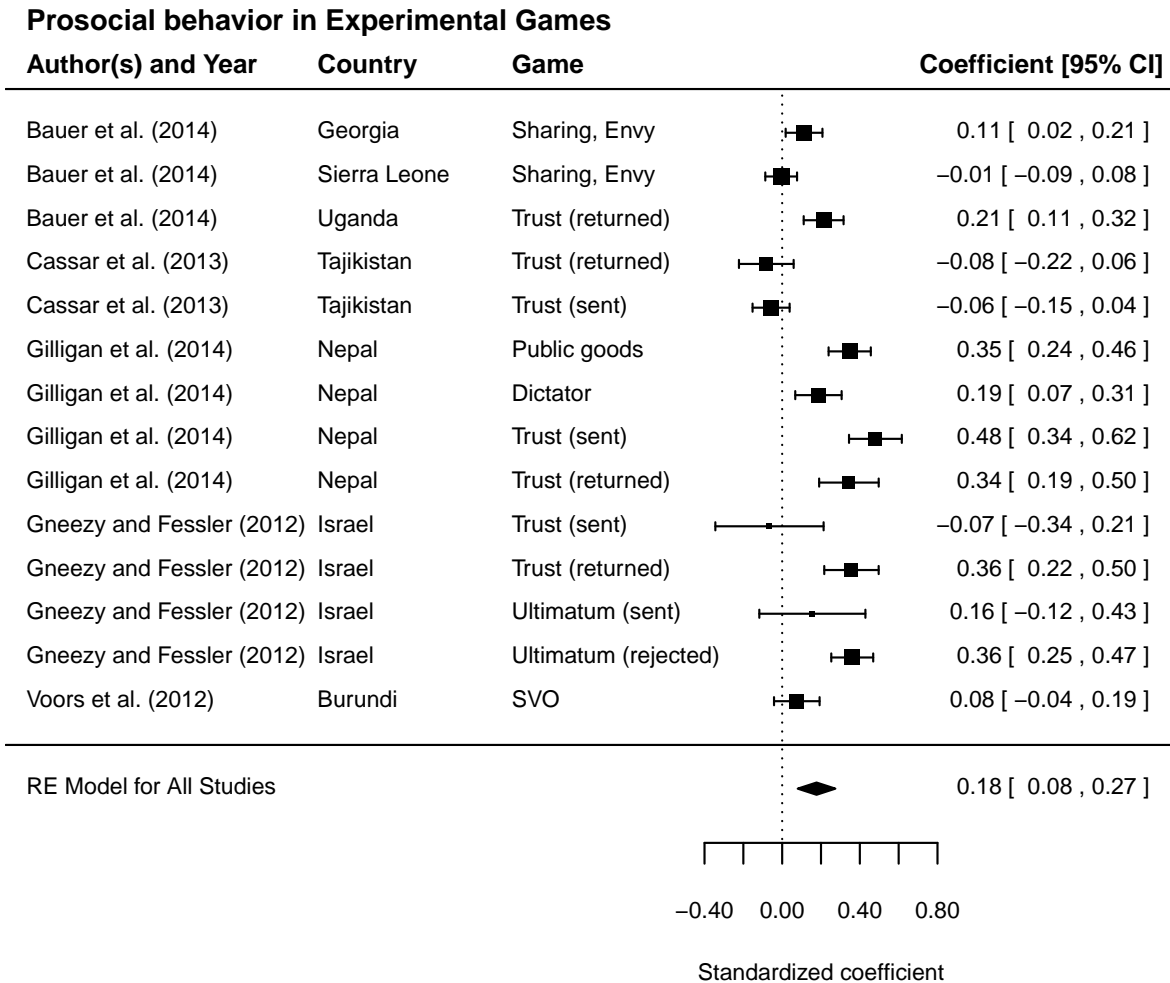
**Note:** The figure shows a forest plot of random-effects meta-analysis results for trust in in-group members, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

Figure A20



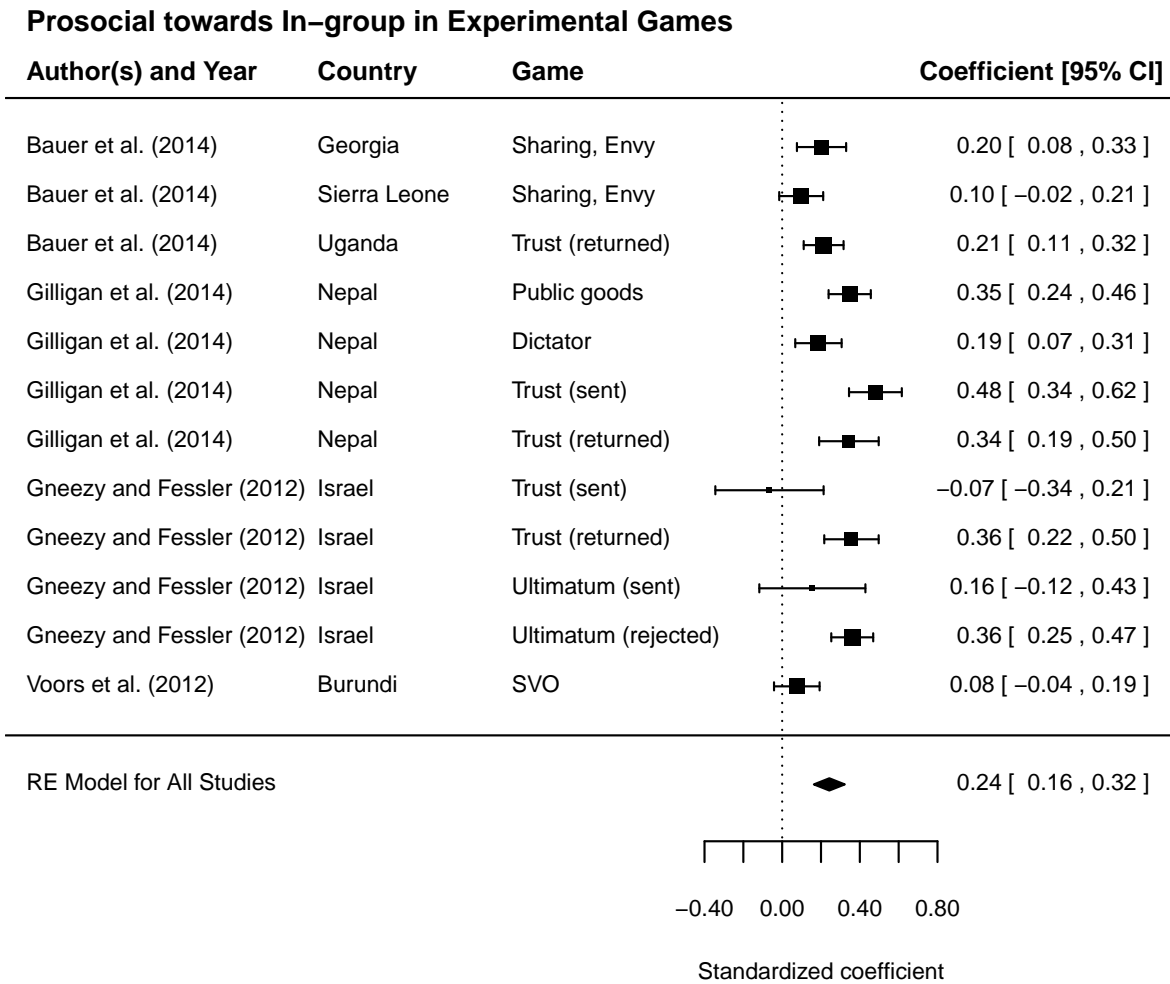
**Note:** The figure shows a forest plot of random-effects meta-analysis results for trust in out-group members, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

Figure A21



**Note:** The figure shows a forest plot of random-effects meta-analysis results for prosocial behavior in experimental games, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

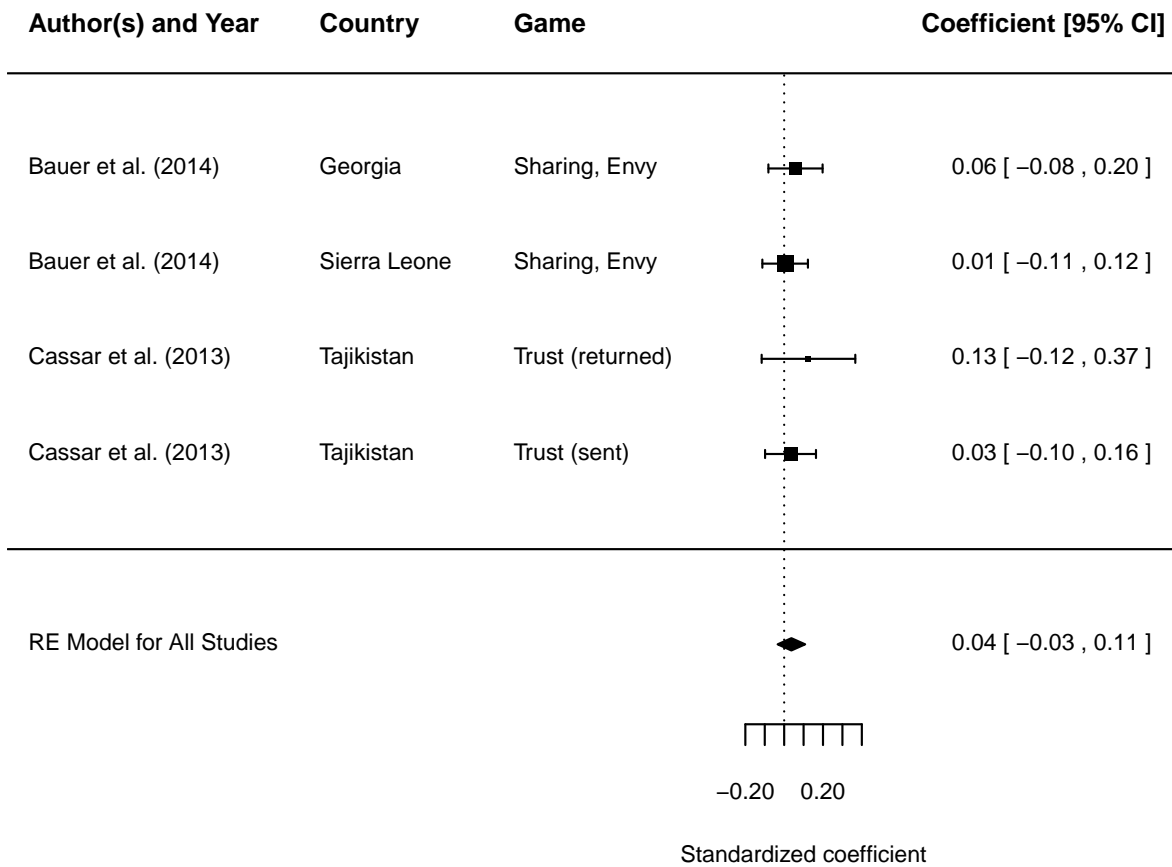
Figure A22



**Note:** The figure shows a forest plot of random-effects meta-analysis results for prosocial behavior in experimental games towards in-group members, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

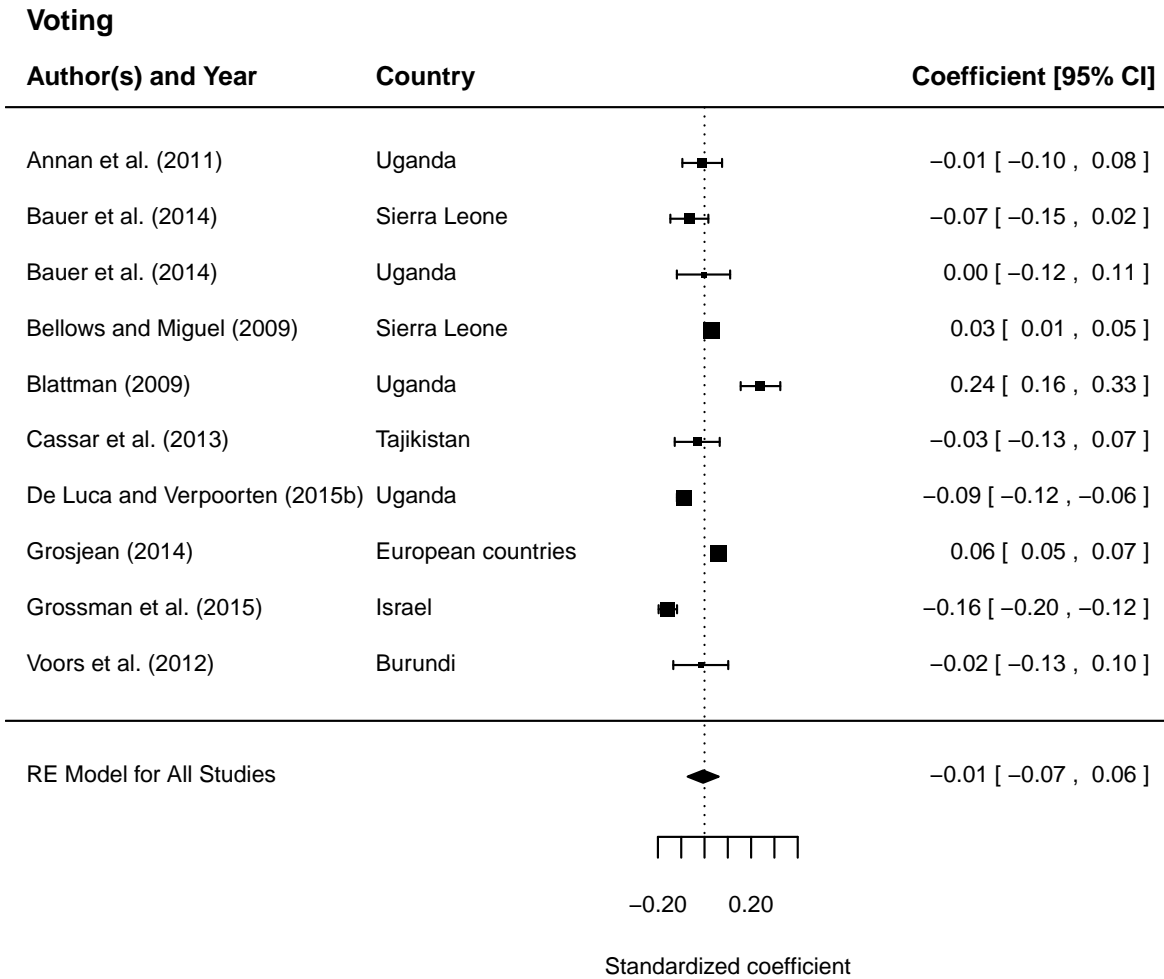
Figure A23

**Prosocial towards Out-group in Experimental Games**



**Note:** The figure shows a forest plot of random-effects meta-analysis results for prosocial behavior in experimental games towards out-group members, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

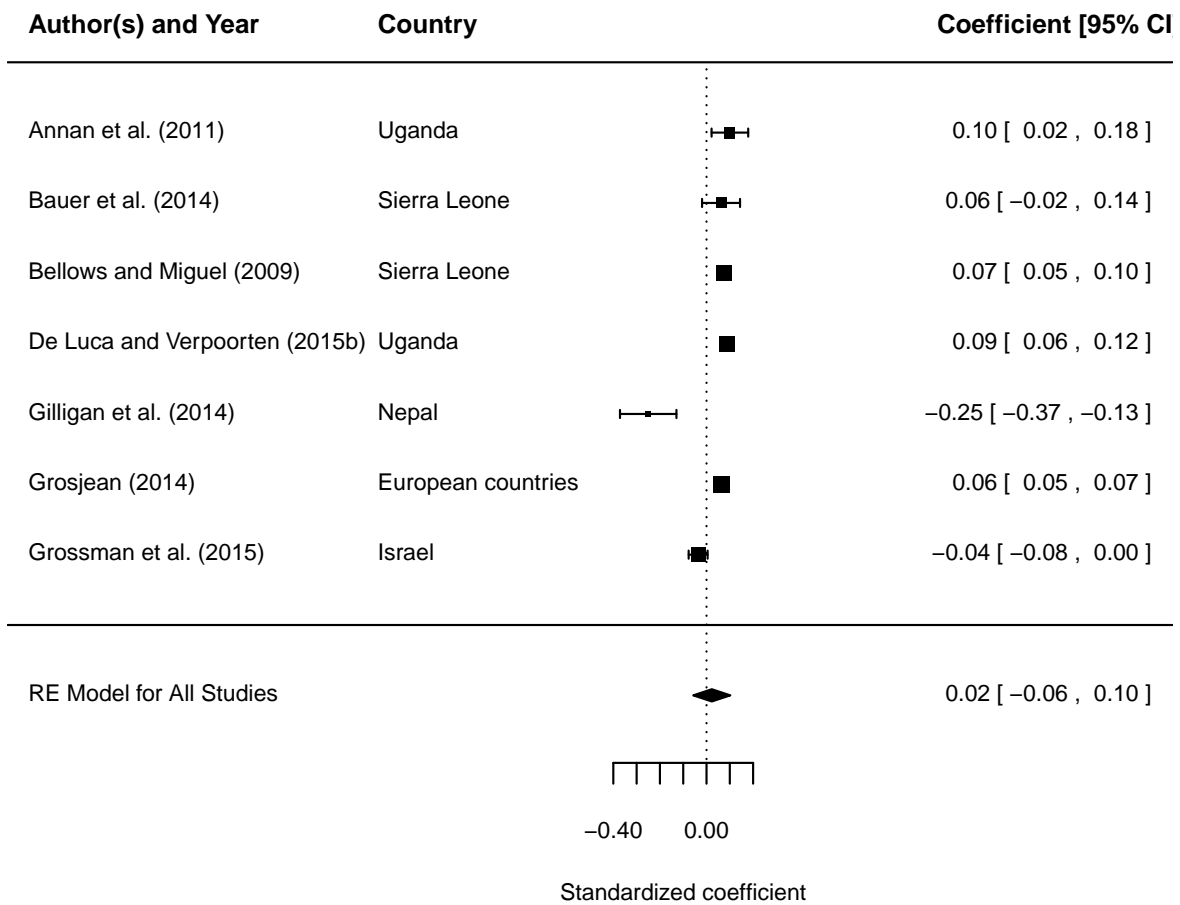
Figure A24



**Note:** The figure shows a forest plot of random-effects meta-analysis results for voting, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

Figure A25

**Knowledge/Interest in Politics**



**Note:** The figure shows a forest plot of random-effects meta-analysis results for knowledge/interest in politics, calculated in standard deviation units. Each square represents an estimate for one study, where square sizes are proportional to the weights used in the meta-analysis. Studies with more observations receive a higher weight. The figure plots 95% confidence intervals for the meta-analysis model, derived from the studies' sampling variances. The average effect of exposure to violence across studies is plotted as a diamond at the bottom of the figure.

Table A17: Additional measures of exposure to violence

Outcome ( <i>Standardized</i> )	Estimate	(1) Fixed Effects	(2) Random Effects	N
<b>A. All violence exposure (standardized)</b>				
Summary index (mean effects)	Coef.	0.03***	0.02	17
	Std. Err	0.00	0.02	
	P-val	0.00	0.32	
Social groups participation	Coef.	0.05***	0.04	11
	Std. Err	0.00	0.03	
	P-val	0.00	0.20	
Community leadership/participation	Coef.	0.08***	0.09***	8
	Std. Err	0.01	0.02	
	P-val	0.00	0.00	
Trust	Coef.	-0.00	-0.02	9
	Std. Err	0.00	0.04	
	P-val	0.48	0.66	
Prosocial behavior in experimental games	Coef.	0.09***	0.10***	15
	Std. Err	0.02	0.03	
	P-val	0.00	0.00	
Voting	Coef.	0.01**	-0.01	10
	Std. Err	0.00	0.02	
	P-val	0.01	0.60	
Knowledge/interest in politics	Coef.	0.03***	0.02	7
	Std. Err	0.00	0.02	
	P-val	0.00	0.46	
<b>B. Community violence exposure (standardized)</b>				
Summary index (mean effects)	Coef.	0.03***	0.02	15
	Std. Err	0.00	0.02	
	P-val	0.00	0.25	
Social groups participation	Coef.	0.05***	0.06**	11
	Std. Err	0.00	0.03	
	P-val	0.00	0.02	
Community leadership/participation	Coef.	0.08***	0.11***	8
	Std. Err	0.01	0.03	
	P-val	0.00	0.00	
Trust	Coef.	-0.00	-0.05	9
	Std. Err	0.00	0.03	
	P-val	0.42	0.16	
Prosocial behavior in experimental games	Coef.	0.06***	0.07***	14
	Std. Err	0.02	0.03	
	P-val	0.00	0.00	
Voting	Coef.	0.02***	0.01	9
	Std. Err	0.00	0.01	
	P-val	0.00	0.57	
Knowledge/interest in politics	Coef.	0.04***	0.04**	6
	Std. Err	0.00	0.02	
	P-val	0.00	0.01	
<b>C. Personal violence exposure (standardized)</b>				
Summary index (mean effects)	Coef.	-0.02*	0.01	8
	Std. Err	0.01	0.03	
	P-val	0.08	0.70	
Social groups participation	Coef.	0.05***	0.07	6
	Std. Err	0.02	0.06	
	P-val	0.00	0.29	
Community leadership/participation	Coef.	0.11***	0.11**	5
	Std. Err	0.02	0.04	
	P-val	0.00	0.01	
Trust	Coef.	-0.09***	-0.08	4
	Std. Err	0.02	0.09	
	P-val	0.00	0.40	
Prosocial behavior in experimental games	Coef.	0.03	0.03	6
	Std. Err	0.02	0.02	
	P-val	0.22	0.22	
Voting	Coef.	-0.09***	-0.04	6
	Std. Err	0.01	0.04	
	P-val	0.00	0.37	
Knowledge/interest in politics	Coef.	-0.04**	-0.04**	3
	Std. Err	0.02	0.02	
	P-val	0.01	0.01	

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

**Note:** The table reports meta-analysis results for each outcome reported in the rows. Column (1) reports results from a fixed-effects model; Column (2) reports results from a random-effects model. The coefficient represents the estimated population effects of exposure to violence across studies, measured in standard deviation units.



Table A18: Meta regression analysis of reported t-statistics

	Estimate	Std. Err.	P-value	N
Social groups participation	0.02**	0.01	0.01	7
Community leadership/participation	0.03	0.01	0.17	4
Trust	0.01	0.02	0.47	5
Prosocial behavior in experimental games	0.25***	0.03	0.00	16
Voting	0.00	0.00	0.53	5
knowledge/interest in politics	0.04	0.02	0.18	4

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

**Note:** The Table reports meta regression analysis (Stanley and Jarrell, 1989) results of reported t-values, for each outcome reported in the rows. The coefficient represents the estimated population effects of exposure to violence across studies, adjusted for the dispersion of the data underlying each study. N reflects the number of studies/games analyzed for each outcome.

Table A19: Including exposure to crime violence

<b>Outcome (<i>Standardized</i>)</b>	<b>Estimate</b>	<b>(1)</b>	<b>(2)</b>
		<b>Fixed Effects</b>	<b>Random Effects</b>
Summary index (mean effects)	Coef.	0.08***	0.08***
	Std. Err	0.00	0.02
	P-val	0.00	0.00
Social groups participation	Coef.	0.11***	0.13**
	Std. Err	0.00	0.06
	P-val	0.00	0.03
Community leadership/participation	Coef.	0.17***	0.19**
	Std. Err	0.00	0.07
	P-val	0.00	0.01
Trust (all)	Coef.	-0.01**	-0.04
	Std. Err	0.00	0.08
	P-val	0.01	0.60
Trust (in-group)	Coef.	-0.01***	0.02
	Std. Err	0.00	0.04
	P-val	0.00	0.50
Trust (out-group)	Coef.	0.00	-0.06
	Std. Err	0.00	0.09
	P-val	0.89	0.53
Prosocial behavior in experimental games (all)	Coef.	0.17***	0.18***
	Std. Err	0.02	0.05
	P-val	0.00	0.00
Prosocial behavior in experimental games (in-group)	Coef.	0.25***	0.24***
	Std. Err	0.02	0.04
	P-val	0.00	0.00
Prosocial behavior in experimental games (out-group)	Coef.	0.04	0.04
	Std. Err	0.04	0.04
	P-val	0.30	0.30
Voting	Coef.	0.00	-0.00
	Std. Err	0.00	0.03
	P-val	0.50	0.99
Knowledge/interest in politics	Coef.	0.08***	0.07**
	Std. Err	0.00	0.03
	P-val	0.00	0.03

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

**Note:** The Table reports meta-analysis results for each outcome reported in the rows. Column (1) reports results from a fixed-effects model; Column (2) reports results from a random-effects model. The coefficient represents the estimated population effects of exposure to violence across studies, measured in standard deviation units. This analysis includes exposure to crime violence.

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