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On the relation between social dominance orientation and environmentalism: A 25-nation study

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Abstract

Approval of hierarchy and inequality in society indexed by social dominance orientation (SDO) extends to support for human dominance over the natural world. We tested this negative association between SDO and environmentalism and the validity of the new Short Social Dominance Orientation scale in two cross-cultural samples of students (N = 4,163, k = 25) and the general population (N = 1,237, k = 10). As expected, the higher people were on SDO, the less likely they were to engage in environmental citizenship actions, pro-environmental behaviors and to donate to an environmental organization. Multilevel moderation results showed that the SDO–environmentalism relation was stronger in societies with marked societal inequality, lack of societal development and environmental standards. The interplay between individual psychological orientations and social context and the view of nature subscribed to by those high in SDO are discussed.

Keywords: social dominance orientation; environmentalism; social context; cross-cultural research

Psychological science has been contributing to the quest of solving environmental problems by identifying key contextual and individual factors that promote pro-environmental actions (for reviews, see Clayton, 2012; Gifford, 2014). These have included normative aspects of the local and the societal context (e.g., Milfont & Markowitz, 2016; Schultz, Bator, Tabanico, Bruni, & Large, 2013) as well as individual differences in personality and values (e.g., Evans et al., 2013; Milfont & Sibley, 2012). One barrier in attempts to promote pro-environmental actions is the pervading belief in human dominance over nature (Pirages & Ehrlich, 1974; White, 1967). The present article investigates this issue and contributes to an emerging line of research examining whether our acceptance of hierarchy and inequality in the social world extends to hierarchy in the natural world, with humans placed above nonhumans (e.g., Milfont, Richter, Sibley, Wilson, & Fischer, 2013).

One of the most commonly used ways of conceptualizing the need to dominate is social dominance orientation (SDO) which assesses the degree to which an individual approves group-based hierarchies and inequalities (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 1999). SDO is one of the most widely used variables in social and personality psychology, and it has been shown to predict a wide variety of intergroup attitudes and behaviors (see Kteily, Ho, & Sidanius, 2012; Lee, Pratto, & Johnson, 2011). Notably, research indicates that this enduring preference towards hierarchy and inequality not only predicts group-relevant variables, but also relates to environmentalism. In one of the first articles describing SDO, Pratto et al. (1994) showed across three samples that individuals scoring higher on SDO were less supportive of environmental policies than individuals scoring lower on SDO, and this negative association remained strong after controlling for political-economic conservatism.

The negative association between SDO and environment-relevant variables has been confirmed in several more recent publications. SDO has been shown to relate to priority

given to business gains over environmental protection (Son Hing, Bobocel, Zanna, & McBride, 2007), support for utilitarian attitudes toward nature (Milfont & Duckitt, 2010), opposition to protecting nature (Milfont, Richter, Sibley, Wilson, & Fischer, 2013), support for environmental inequality (Jackson et al., 2013), denial of anthropogenic climate change (Häkkinen & Akrami, 2014; Milfont et al., 2013), greater beliefs that humans are distinct from and superior to animals (Dhont, Hodson, Costello, & MacInnis, 2014), and more meat consumption (Allen, Wilson, Ng, & Dunne, 2000). In conjunction, these findings indicate that preference for group-based hierarchies and inequalities translates into preference for hierarchy in the natural world, with humans dominating nonhumans.

We note, however, that despite the robustness of the negative association between SDO and environmentalism, most previous research relied on largely Western, single-country studies with single (and often broad) environmentalism measures. Only two previous studies have examined the SDO–environmentalism relation across cultural groups—one examining data from Brazil and Sweden (Jylhä, Cantal, Akrami, & Milfont, 2016) and the other examining the SDO–environmentalism relation only at the country level of analysis (Milfont et al., 2013, Study 2). This highlights a need for a better understanding of how our relationship with nature is influenced by the interplay between the personal desire to dominate and the societal context within which the individual resides, especially because SDO varies within cultural and institutional contexts (Fischer, Hanke, & Sibley, 2012). In this paper, we expand on this research by conducting the first large-scale study examining the association between SDO and three distinct behaviors related to climate change mitigation across 25 countries. We use multilevel analysis that allows the proper examination of the correlation between SDO and environmentalism at the individual-level of analysis while also examining whether country-level indicators may influence that correlation.

Particularly, we test robustness and moderation hypotheses following Pratto et al. (2013). According to the robustness hypothesis, we expect that SDO will correlate negatively with environmentalism for participants in all 25 countries included in our study. At the same time, societal contexts may reinforce or weaken the belief in human dominance over nature. Even if the negative association between SDO and environmentalism is observed consistently across nations, this association may be strongest where contextual factors reinforce the dominating role of humans as the master of nature (see Fischer et al., 2012 for similar discussion). We thus expand the individual-level analysis by examining whether nation-level variables influence the SDO–environmentalism relation (i.e., cross-level interactions). According to the moderation hypothesis, we expect the strength of the negative association between SDO and environmentalism to be moderated by contextual factors that vary across countries.

We focus on three national moderators that may reinforce individual views of human dominance over nature. First, the association between SDO and environment-relevant variables seems to express issues of inequality in the relations between humans and the natural environment. Moreover, unequal access to resources at the national level may reinforce a competitive, dog-eat-dog mentality that in return legitimizes the exploitation of resources and unequal relations between humans and the natural environment. We therefore expect that levels of inequality in a given nation could strengthen the SDO–environmentalism relation, and selected the Gini index as a measure of equality at the level of nations. Second, prior work has shown that national affluence is associated with greater concern for the environment (e.g., Frazin & Vogl, 2013), and that a nation's wealth strengthens the relationship between a person's beliefs in climate change and their environmental actions (e.g., Bain et al., 2016). We therefore expect that levels of affluence in a given nation could strengthen the SDO–environmentalism relation. We selected the Human Development Index

(HDI) as it serves as a parsimonious indicator of affluence and standard of living in a country—including life expectancy, educational attainment and income per capita indicators—and because HDI has been shown to moderate associations between environment-relevant variables (Liu & Sibley, 2012; Milfont & Markowitz, 2016). Finally, in countries that perform poorly in protecting the environment institutions may work to maintain the current system by justifying a status quo in which the environment is degrading, which in turn leads to greater internalization of a belief in human dominance over nature. We therefore expect that levels of environmental performance in a given nation could strengthen the SDO–environmentalism relation, and selected the Environmental Performance Index (EPI) as a measure of how well nations perform on environmental issues.

To provide a stronger test for these hypotheses, we considered three conceptually distinct environmentalism measures (Stern, 2000) related to climate change mitigation: public and political actions, personal domestic actions, and an economic action (donation to a pro-environmental organization). Moreover, we considered two distinct cross-cultural samples: students (N = 4,163, k = 25) and the general population (N = 1,237, k = 10). We also used the opportunity to provide further empirical evidence for the psychometric properties of the 4-item Short Social Dominance Orientation (SSDO) scale, which previously showed good internal reliability and predictive validity across 20 countries and 15 languages (see Pratto et al., 2013). We tested the psychometric properties and measurement invariance of the SSDO in both samples, across 25 countries and 16 languages, of which 13 countries and nine languages were not studied by Pratto et al. (2013).

Method

Country and Participants

Data were collected as part of the *Collective Futures and Climate Change* research project (see Bain et al., 2016). The project coordinators (first three authors) developed the

project and recruited an international research team. The countries were selected a priori based on a combination of environmental indicators and geographic region. The goal was to employ convenience sampling to obtain student and non-student samples from each country where viable (target *N*=200 for each sample). Data were obtained from university students across 25 countries spanning all inhabited continents, plus community samples in 10 countries to establish the generalizability and robustness of findings.

Participants completed surveys online in most countries, using a template developed by the authors to maximize consistency in data collection. In Sweden and Israel, contributors developed their own online versions using the same survey template. Where online administration was impractical (Ghana, Japan, Mexico, Poland, South Africa, South Korea, Venezuela), participants completed a paper-based version of the survey that matched the format of the online survey.

All participants first indicated their beliefs about the reality and importance of climate change. The analyses reported in the present study considered only participants who believed climate change is real to have a more homogenous sample and due to low sample sizes of participants unconvinced that climate change is real in many countries. Table 1 provides an overview of the student and community samples in each country.

Questionnaire translation

For non-English languages, translation-back-translation was completed by competent bilingual speakers or parallel translation where multiple bilingual speakers independently translated the survey. Research coordinators worked with translators until an acceptable translation was agreed upon. All surveys were completed in the major local language. In Ghana and South Africa the common language of student instruction was used (i.e., English in Ghana; English or Afrikaans in South Africa), and in Switzerland participants could choose to complete the survey in either German or French.

Measures

The larger *Collective Futures and Climate Change* study included several validated measures (see Supplementary Material). The relevant measures for the present study are described below.

Social dominance orientation. We used the Short Social Dominance Orientation (SSDO) scale (Pratto et al., 2013). This is a 4-item SDO measure with the following instruction: "There are many kinds of groups in the world: men and women, ethnic and religious groups, nationalities, political factions. How much do you support or oppose these ideas about groups in general?". This is followed by the four items: 'In setting priorities, we must consider all groups' (reversed), 'We should not push for group equality', 'Group equality should be our ideal' (reversed), and 'Superior groups should dominate inferior groups'. Items were rated on a 10-point scale ranging from 1 (*extremely oppose*) to 10 (*extremely favor*). The SSDO score was computed by averaging over items after reverse coding relevant items. We used the SSDO translations reported by Pratto et al. (2013), and created new versions in nine additional languages (see Appendix).

Environmental citizenship intentions. A 12-item measure was used to access participants' intentions regarding environmental citizenship, adapted from Stern et al. (1999). Example items are: 'Sign a petition in support of protecting the environment', 'Join or renew membership of an environmental group', and 'Post pro-environmental messages or links on social media (e.g., Facebook, Twitter)'. Items were rated on a 5-point scale ranging from 1 (*not at all likely*) to 5 (*very likely*), as well as a "na" (*not applicable*) option. Missing and "not applicable" responses were excluded, and the mean of all remaining items was computed.

Private sphere behavioral intentions. A 12-item measure was used to access participants' intentions to engage in pro-environmental behaviors. Examples of the behaviors included: 'Buy environmentally-friendly products', 'Install products to save energy (e.g.,

low-energy light bulbs)', 'Reduce car travel (e.g., walk, cycle, use public transport)', and 'Avoid or reduce eating meat'. Items were rated on a 5-points scale ranging from 1 (*not at all likely*) to 5 (*very likely*), as well as "na" (*not applicable*), with missing and "not applicable" responses excluded before computing the scale mean score.

Donation behavior. In addition to the behavioral intention measures, one question examined participants' donation behavior. Participants were given the instruction: "Each person participating in this survey is eligible to enter a draw for [*local currency equivalent of USD150, adjusted to nearest round number*] Amazon Gift Card. If you win the prize draw, we would like to know if you would commit to donating some or all of this prize to an environmental organization. If you wish to nominate an environmental organization for your donation, please do so here: [space to enter name of environmental organization]. If you do not nominate an environmental organization, we will send the donation amount you nominated to an international not-for-profit environmental organization." We used the proportion of the amount participants indicated authorizing the researchers to donate on their behalf if they won.

Nation Variables

We examined whether three nation-level variables would moderate the SDO–environmentalism relation. The figures for the Gini index and HDI were taken from the 2015 United Nations Human Development Report (see Tables 1 and 3 in the statistical annex of that report). The Gini data was not available for New Zealand and South Korea so we used the most recent Gini data available for these countries from The World Factbook published by the Central Intelligence Agency of the USA. The 2010 Environmental Performance Index was obtained from the website of the Center for International Earth Science Information Network at Columbia University. Greater values for the Gini index, HDI and EPI indicate

more inequality, more human development and greater environmental performance in the country, respectively.

Results

Rejection of dominance and reliability of the SSDO scale

The mean scores on the SSDO were below the scale middle point of 5.5 across all student and community samples (see Tables 2 and 3), but all samples had participants with ratings above the midpoint (except for the Icelandic community sample). Most distributions were positively skewed, apart from four student samples (China, Germany, Japan, and the Netherlands) and two community samples (Australia and China). Finally, the mean scores on the SSDO were comparable for the student (M = 3.17, SD = 1.65; N = 4163) and community (M = 3.17, SD = 1.68; N = 1237) samples. These results are parallel those reported by Pratto et al. (2013), and overall suggest that participants tended to reject a dominance orientation and that the normativity of this dominance rejection was similar across our student and community samples, but with substantial variability within and across countries.

We conducted a meta-analysis of the Cronbach's alphas reported in Table 2 using the approach developed by Rodriguez and Maeda (2006). The weighted average alpha for the student sample was .68 (95% confidence interval: [.66, .70]), with significant heterogeneity in internal reliability across countries, $Q(24) = 212.81$, $p < .001$. Similar results were observed for the community sample, with a weighted average alpha of .67 (95% confidence interval: [.64, .70]) and significant heterogeneity across countries, $Q(9) = 74.89$, $p < .001$. These results are comparable to those reported by Pratto et al. (2013) and indicate good internal reliability for the SSDO despite the low number of items in the scale.

Measurement invariance

As an initial indication of the comparability of the one-factor structure of the SSDO scale in each country, we ran factorial procrustean target rotation using values taken from a principal-components analysis of the overall sample as the norm. As shown in Tables 2 and 3, Tucker's Phi—an index of similarity between factor structures across samples—were above the recommended value of .95 (van de Vijver & Leung, 1997), except for one student sample (Japan) and one community sample (China). This supports the conclusion that the one-factor structure was similar across almost all samples.

Besides factor structure comparability, measurement invariance is a prerequisite when comparing groups on a measured construct. When measurement invariance is demonstrated, we can be certain that participants across all groups interpret the items and the underlying construct in the same way, and group comparisons are then meaningful. We assessed the measurement invariance of SSDO using the alignment approach in Mplus (Asparouhov & Muthén, 2014; see Supplementary Material for details).

The alignment results indicated convergence issues for three countries from the student samples (Brazil, China and Japan) and two countries from the community samples (China and Iceland). These countries were removed from the final alignment model, and results for these countries should be interpreted with caution. Importantly, the alignment results indicated that all items of the SSDO showed invariant measurement loadings for all the remaining countries, and that the SSDO items also showed invariant measurement intercepts in most countries. Given that all four items loaded on the SSDO factor and that the measurement loadings of all items show no indication of measurement noninvariance (except

for item SSDO4 for the community sample in Brazil), the results support configural and metric invariance of the SSDO across countries.[1]

Testing robustness and moderation hypotheses

We expected that people with higher levels of SDO would be less willing to engage in pro-environmental actions (robustness hypothesis), but this effect was not expected to occur to the same extent across all countries (moderation hypothesis). We calculated the correlations between SSDO and the three environmentalism measures for each country, and then calculated a meta-analytical summary of the correlations. The meta-analyses were performed using an Excel program developed by Piers Steel (University of Calgary) that runs the Schmidt–Hunter method with a random-effects model. It computes the average correlation across all samples weighted by sample size, with a 95% confidence interval indicating the likely range of this correlation, and a Q-statistic indicating whether the magnitude of the correlations varies substantially across samples. We report the random-effects weighted means when correcting or not for measurement error.

Tables 2 and 3 present the correlations for each country and sample, with the meta-analytical results at the bottom of each table. The results show that, overall, SDO was negatively correlated with all three climate change mitigation measures across both student and community samples, with corrected weighted correlations in the -.17 to -.26 range. Additional analyses confirmed the linear assumption in the SDO–environmentalism relation (see Supplementary Material). Correlations between SDO and environmental citizenship varied significantly across countries for student and community samples; however, correlations between SDO and private sphere behaviors varied significantly across countries only for the student samples, and correlations with donation behavior did not vary

[1] We also note that the meta-analytical results in Table 2 and 3 extend evidence for the validity of the SSDO by showing that overall men have higher levels of SDO than women, which confirms previous findings (e.g., Lee, Pratto, & Johnson, 2011; Sidanius & Pratto, 1999).

significantly across countries (see significance of Q-statistic in these tables; also Supplementary Material).

For the measures that showed significant variation across countries (environmental citizenship and private sphere behavior), we used multilevel modeling to explore the reasons for variation. We first analyzed data from the student samples, and ran multilevel models examining the extent to which the selected country-level indicators (Gini, HDI and EPI) would account for the variability in the associations between SSDO and environmental citizenship and private sphere behavior. Multilevel models were run in HLM (student version 7) with restricted maximum likelihood estimation, allowing the slopes to vary across countries, and robust standard errors for the final estimation. We used group-mean centering for level-1 variables and grand-mean centering for level-2 variables. Since age, sex and conservative political orientation are related to SDO, environmentalism or both, we included these variables as covariates at level-1.

We first ran separate multilevel empty (random-intercepts) models with each of the two environmentalism measures regressed onto SDO. Replicating the meta-analytical findings, SDO was reliably related to environmental citizenship, $\gamma = -.090$, SE = .014, $t(24) = 6.55$, $p < .001$ and private sphere behavior, $\gamma = -.080$, SE = .010, $t(24) = 7.62$, $p < .001$. In line with the moderation hypothesis, the strength of the associations varied across countries for environmental citizenship, $u = .0030$, $\chi^2(24) = 54.92$, $p < .001$, and private sphere behavior, $u = .0011$, $\chi^2(24) = 41.61$, $p = .014$.

We then added the level-1 covariates in conjunction with the level-2 predictors (Gini, HDI and EPI, one at a time) to test for cross-level interactions (random-intercepts-and-slopes models). The models were run for each pro-environmental measure separately and comprised the level-1 predictors (SDO, age, sex and political orientation) plus the interaction terms between these level-1 predictors and the targeted level-2 moderator. The results in Tables 4 to

6 revealed independent main effects for age and sex for both measures, indicating that older people and women were more likely to act pro-environmentally. The main effect for conservative political orientation was only statistically significant for environmental citizenship, but the direction of the coefficients for both measures indicate that liberals were more likely to act pro-environmentally.

More importantly, the results showed that the level-2 predictors reliably moderated the associations between SDO and the environmentalism measures. Cross-national differences in inequality (indexed by the Gini coefficient) influenced the association between SDO and environmental citizenship (γ = .0030, t = 3.09, p = .046) and private sphere behavior (γ = .0022, t = 2.24, p = .035). Cross-national differences in human development influenced the association between SDO and environmental citizenship (γ = -.288, t = 2.88, p = .008) and private sphere behavior (γ = -.170, t = 2.50, p = .020). Cross-national differences in environmental performance influenced the association between SDO and environmental citizenship (γ = -.0035, t = 4.34, p < .001) and private sphere behavior (albeit marginally: γ = -.0020, t = 1.79, p = .086). The results were statistically non-significant for the community samples (perhaps because there were too few countries), but the cross-level interactions showed the same pattern of associations (see Table S5).

Overall, and framing the moderating results on a positive way, the *lower* participants' SSDO, the *more* they engage in pro-environmental actions, and this association was stronger in societies that are more equal, with better human development indicators, and with better performance on environmental issues. Although the level-2 predictors are correlated[2], the results indicate that HDI has a stronger moderating effect on the SDO–environmentalism relation. Figure 1 illustrates such moderating effect (see Supplementary Material for further information).

[2] Spearman's rank-order correlations showed the Gini index to be negatively associated with both HDI and EPI (-.65, p < .001 and -.54, p < .01, respectively), which are in turn positively associated (.58, p < .01; N = 25 for both).

Discussion

Social dominance orientation (SDO) indexes an individual's preference for group-based inequality and hierarchy, which has been shown to predict a range of intergroup attitudes and behavior as well as environment-relevant variables. We use multilevel modeling to present the first large scale cross-nation study examining the extent to which the SDO–environmentalism relation is robust across individuals from 25 countries (robustness hypothesis), and whether country-level factors would strengthen or weaken this relation (moderation hypothesis). We tested these hypotheses with the 4-item Short Social Dominance Orientation (SSDO) scale, which showed good psychometric properties and measurement invariance in our samples.

Robustness of the SDO–environmentalism relation

Our results confirmed that SDO is a reliable negative predictor of environment-relevant variables. Individuals with higher levels of SDO were less likely to engage in environmental citizenship actions, such as signing a petition in support of protecting the environment, boycotting companies that are not environmentally friendly, or communicating pro-environmental messages to others. Likewise, high-SDO individuals were less likely to engage in private sphere behaviors aimed to reduce energy consumption and negative environmental impacts, and were less likely to donate to an environmental organization.

That SDO was reliably negatively related to all three environmentalism measures and across student and community samples provides strong support for the important role of this individual difference variable for understanding environmental problems. The basic motivation to achieve and maintain hierarchical social structures indexed by SDO helps explain hierarchical relations between humans and the natural environment. Theoretically, this confirms a link between support for social inequality among social groups and support for legitimizing myths justifying human dominance over nature, especially when

environmental exploitation helps sustain and widen the gap between dominant and disadvantaged groups in society (Milfont & Sibley, 2014).

At the same time, it is important to note that the effect sizes for the associations between SDO and environment-relevant variables observed in the present study (as well as in others) were relatively small (in the range of -.17 to -.26 when correcting for reliabilities) when compared to meta-analytical correlations observed between SSDO and attitudes towards minorities—endorsing more women in leadership positions (-.31), protecting ethnic/religious minorities (-.48), and providing aid to the poor (-.43) (see Pratto et al., 2013). It is perhaps unsurprising that SDO scales correlate more strongly with intergroup measures since both measure group-based concepts. In fact, this demonstrates that the SDO–environmentalism relation is more notable because there is no obvious content overlap. We also note that Pratto et al. (1994) observed stronger correlations (-.38 across three samples) between SDO and environmental policies in USA samples, including items such as 'Drilling for oil off the California coast', 'Government-mandated recycling programs', 'Taxing environmental polluters to pay for superfund clean ups', whereas the relationships we identified for USA samples were weaker. This comparison suggests that the strength of the associations between SDO and environmentalism is stronger for more specific (and policy-based) measures, which could be explored in future studies.

It is also worth noting that although negative correlations were observed in most samples and measures, non-trivial positive correlations between SSDO and the environmental citizenship measure were observed in both Ghana and the USA (student samples) and in China (community sample). Inspection of the correlations for individual items showed that the positive correlations were mainly driven by a single SSDO item (i.e., 'Superior groups should dominate inferior groups') in relation to more public behaviors in the environmental citizenship measure (e.g., 'Write a letter or call your member of Parliament or another

government official to support environmental protection', 'Write to newspaper in support of protecting the environment', 'Join public demonstrations or protests supporting environmental protection'). A speculative interpretation is that some who are convinced about the reality of climate change feel the need to take a superior group position to dominate an inferior group (those unconvinced climate change is real) by engaging in more public environmental citizenship actions. Regardless of the explanation, this finding suggests a differential impact of SDO in relation to more visible environmental citizenship actions, which should be investigated in future research.

Moderators of the SDO–environmentalism relation

Besides confirming a negative association between SDO and environmentalism across most of our samples, we also examined whether the strength of this association would differ depending on societal contexts. Comparing the meta-analytical results for each of the environmentalism measures, we observed that only the association between SSDO and the intention to donate to a pro-environmental organization was uniform: High-SDO individuals were less likely to donate to an environmental organization compared to low-SDO individuals, and this finding did not vary across sample type and countries in our study. This indicates that the impact of SDO will likely be uniform for simpler environmentalism measures that do not vary much in content or for measures indexing behaviors that are afforded similarly across cultural contexts.

Notably and supporting our predictions, the levels of inequality, achievement in key dimensions of human development, and performance on environmental issues in a given nation were shown to reinforce individuals' views of human dominance over nature. Pratto et al. (2013) noted that "[t]he more group power differentiation is made salient, the more people apply their orientation toward group inequality to their attitudes" (p. 593). Relating their observation to the environmental domain and our findings, the more group power

differentiation is salient via societal inequality, lack of societal development and environmental standards, the more individuals who favor group inequality will tend to exploit the environment. This suggests that the social context of inequality, lack of societal development and environmental standards gives people who endorse social inequality themselves a stronger basis for not engaging in pro-environmental behaviors. Conversely, the *lower* participants' SSDO, the *more* they endorsed pro-environmental actions, and this association was stronger in societies that are more equal and with better environmental performance, and especially stronger in societies with better records on life expectancy, educational attainment and per capita income. Our findings also provide further evidence for the interplay between individual psychological orientations and social context (see, e.g., Fischer, Milfont, & Gouveia, 2011; Milfont & Markowitz, 2016; Pratto et al., 2013).

Concluding remarks

Our findings confirm that those who endorse social hierarchy and inequality are less likely to act on environmental issues, but that the strength of this association is affected by the societal context in which people live. Factors that curtail the strength of this relationship include living in a more equal, wealthier, and environmentally-oriented society. These factors could thus ameliorate the pervading belief in human dominance over nature. However, our findings are correlational, and thus suggest rather than demonstrate a causal link. If it is true that culture can influence environmental behavior, then it places even more importance on efforts to address social issues like inequality and development around the world because these efforts will not only address social concerns, but reduce barriers to addressing environmental issues as well—these issues are interconnected as illustrated by the United Nations' Sustainable Development Goals.

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Table 1. *Description of country samples*

Country	*N*	Language	*M* age (*SD* age)	Female %
Student				
Australia	177	English	20.5 (3.6)	57
Brazil	160	Portuguese	25.4 (6.7)	68
Canada	118	English	21.2 (3.5)	55
Chile	180	Spanish	19.9 (3.0)	61
China	221	Chinese (simplified)	24.2 (4.4)	55
France	114	French	27.7 (9.8)	81
Germany	196	German	23.3 (4.1)	77
Ghana	154	English	21.7 (2.0)	52
Iceland	246	Icelandic	28.6 (10.1)	76
Israel	142	Hebrew	27.2 (5.4)	55
Japan	127	Japanese	19.1 (1.9)	62
Mexico	203	Spanish	20.5 (1.7)	84
Netherlands	134	Nederland	19.5 (2.6)	70
New Zealand	169	English	19.0 (1.7)	72
Norway	184	Norwegian	25.2 (5.2)	78
Poland	112	Polish	22.8 (3.3)	96
Russia	77	Russian	21.4 (3.1)	83
South Africa	186	English (77%) Afrikaans (23%)	21.6 (4.6)	83
South Korea	128	Korean	21.9 (2.1)	53
Spain	254	Spanish	22.1 (5.5)	68
Sweden	267	Swedish	27.2 (8.7)	64
Switzerland	154	German (98%) French (2%)	24.5 (6.4)	69
UK	152	English	20.4 (3.5)	58
USA	123	English	23.2 (4.8)	78
Venezuela	185	Spanish	19.9 (2.2)	51
Community				
Australia	129	English	45.1 (14.5)	62
Brazil	179	Portuguese	35.0 (11.7)	73
China	122	Chinese (simplified)	33.1 (7.8)	49
Iceland	38	Icelandic	44.1 (14.0)	53
Israel	119	Hebrew	43.2 (12.9)	53
New Zealand	82	English	50.1 (15.9)	48
Poland	143	Polish	26.4 (9.0)	95
Sweden	95	Swedish	33.8 (13.1)	71
USA	151	English	37.3 (12.2)	58
Venezuela	179	Spanish	41.9 (12.9)	64

Table 2. *Short social dominance orientation mean, standard deviation, range, internal reliability statistics, Tucker's phi, and correlations by national sample for the student samples*

Country	*M*	*SD*	Range	Skewness	Alpha	MIC	Tucker's Phi	Correlations with SSDO			
								Sex (0 male, 1 female)	Citizenship	Personal	Donation
Australia	2.70	1.53	1–10	1.25	.76	.44	1.00	-.14	-.16*	-.17*	-.20**
Brazil	3.50	1.67	1–7.75	.23	.57	.25	.98	-.22**	-.10	-.18*	-.10
Canada	2.76	1.65	1–8.50	.85	.84	.57	1.00	-.16	-.24**	-.13	-.22*
Chile	2.78	1.39	1–6.75	.42	.53	.21	.98	-.06	-.17*	-.01	-.12
China	3.79	1.54	1–9.75	-.09	.58	.26	.98	-.17*	.05	-.06	-.25***
France	2.24	1.29	1–5.75	.91	.58	.31	.99	-.12	-.09	-.07	-.08
Germany	4.09	1.62	1–9.25	-.04	.67	.33	1.00	.01	-.24**	-.17*	-.21**
Ghana	2.94	1.63	1–7.25	.53	.64	.31	.99	-.32***	.16*	.01	-.15
Iceland	2.03	1.31	1–7.75	1.51	.81	.51	1.00	-.19**	-.28***	-.27***	-.15*
Israel	3.56	1.74	1–9	.25	.69	.35	1.00	-.28**	-.20*	-.23**	-.12
Japan	4.97	1.17	2.25–8.25	-.03	.33	.11	.92	-.11	-.14	-.19*	-.14
Mexico	3.13	1.49	1–7	.27	.42	.18	.95	-.08	-.09	-.05	-.07
Netherlands	3.63	1.43	1–6.25	-.08	.75	.44	1.00	-.20*	-.15	-.11	-.04
New Zealand	3.15	1.54	1–7.75	.50	.78	.47	1.00	-.03	-.24**	-.21**	-.20*
Norway	3.02	1.55	1–7.75	.42	.68	.35	1.00	-.07	-.20**	-.26***	-.16*
Poland	3.48	1.38	1–7.50	.07	.54	.23	.99	.21	-.19*	-.19*	-.03
Russia	3.87	1.89	1–10	.34	.72	.39	1.00	-.20	-.24*	-.36**	-.11
South Africa	2.37	1.37	1–6	.83	.57	.28	.99	-.02	-.04	-.15*	-.10
South Korea	4.62	1.18	1–9	.07	.49	.20	.97	-.02	-.07	-.07	-.12
Spain	2.98	1.44	1–7.25	.37	.62	.33	.98	-.25***	-.27***	-.26***	-.12
Sweden	2.55	1.57	1–9.75	1.18	.72	.40	1.00	-.23***	-.35***	-.34***	-.24**
Switzerland	3.71	1.63	1–10	.35	.73	.38	.99	-.12	-.16	-.05	-.09
UK	2.84	1.59	1–8	.54	.76	.45	1.00	-.23**	-.15	-.11	-.02
USA	2.99	1.81	1–6.25	.38	.75	.44	.99	-.21*	.13	-.16	-.14
Venezuela	3.32	1.50	1–8	.44	.52	.23	.97	-.16*	-.19*	-.18*	-.02
	Average correlations based on random-effects weighted mean (weighted by N *and uncorrecting for reliability):*							**-.14** [-.18,-.10] Q(24) = 39.07*	**-.15** [-.20,-.10] Q(24) = 64.49***	**-.16** [-.20,-.12] Q(24) = 40.59*	**-.14** [-.16,-.11] Q(24) = 19.05
	Average correlations based on random-effects weighted mean (weighted by N *and correcting for reliability):*							**-.19** [-.23,-.13] Q(24) = 34.64	**-.21** [-.27,-.14] Q(24) = 66.65***	**-.22** [-.27,-.17] Q(24) = 41.01*	**-.17** [-.20,-.14] Q(24) = 17.16

Note. Citizenship refers to public/political behaviors, Personal to domestic behaviors, and Donation to financial behavior. The short social dominance orientation scale was rated from 1 to 10. Item 2 for Poland had to be recoded as the Polish translation of this item was anti-SDO. MIC = mean inter-item correlation. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3. *Short social dominance orientation mean, standard deviation, range, internal reliability statistics, Tucker's phi, and correlations by national sample for the community samples*

Country	*M*	*SD*	Range	Skewness	Alpha	MIC	Tucker's Phi	Correlations with SSDO			
								Sex (0 male, 1 female)	Citizenship	Personal	Donation
Australia	3.78	1.68	1–8.25	-.18	.67	.35	.99	-.07	-.11	-.31***	-.12
Brazil	3.37	1.64	1–7.25	.08	.53	.20	.96	-.12	-.18*	-.20**	-.09
China	4.65	1.50	1–6.25	-1.40	.49	.17	.56	-.20*	.20*	-.19*	-.17
Iceland	1.87	1.01	1–5.50	1.78	.64	.33	.99	-.58***	-.25	-.01	-.07
Israel	3.22	1.44	1–6.25	.05	.54	.24	1.00	-.10	-.30**	-.16	-.21*
New Zealand	2.89	1.63	1–7.75	.88	.77	.45	1.00	-.20	-.36**	-.21	-.19
Poland	3.16	1.55	1–7	.36	.64	.31	1.00	.16	-.07	-.14	-.18
Sweden	2.51	1.55	1–7.75	1.14	.72	.41	.99	-.15	-.19	-.37***	-.37***
USA	2.58	1.73	1–7.50	.91	.84	.58	1.00	-.16*	-.21*	-.15	-.21**
Venezuela	2.77	1.40	1–7	.31	.48	.22	.98	-.09	-.15*	-.10	-.11
	Average correlations based on random-effects weighted mean (weighted by N *and uncorrecting for reliability):*							**-.11** [-.20,-.02] Q(9) = 23.53**	**-.15** [-.24,-.06] Q(9) = 24.24**	**-.19** [-.24,-.13] Q(9) = 9.04	**-.17** [-.22,-.12] Q(9) = 7.34
	Average correlations based on random-effects weighted mean (weighted by N *and correcting for reliability):*							**-.14** [-.25,-.03] Q(9) = 25.78**	**-.21** [-.32,-.08] Q(9) = 25.97**	**-.26** [-.33,-.18] Q(9) = 9.32	**-.22** [-.28,-.15] Q(9) = 6.61

Note. Citizenship refers to public/political behaviors, Personal to domestic behaviors, and Donation to financial behavior. The short social dominance orientation scale was rated from 1 to 10. MIC = mean inter-item correlation. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4. Multilevel random coefficient models predicting two environmentalism measures for the student sample with the Gini index as the level-2 predictor

	Fixed part			Random part	
	γ	*se*	*t*	σ^2_u	χ^2
Environmental citizenship					
Intercept	2.976	0.077	38.849***	0.155	772.442***
Gini index	0.018	0.009	2.066†		
Age	0.018	0.003	5.759***	<0.001	25.666
Age × Gini	<0.001	<0.001	-1.187		
Sex (0 male, 1 female)	0.112	0.027	4.091***	0.002	20.332
Sex × Gini	0.002	0.002	0.661		
Conservative political orientation	-0.068	0.015	-4.444***	0.003	40.888*
Conservative political orientation × Gini	0.001	0.001	0.810		
SDO	-0.072	0.012	-6.129***	0.002	35.596*
SDO × Gini	0.003	0.001	3.087**		
Private sphere behavior					
Intercept	3.870	0.057	68.324***	0.084	612.202***
Gini index	0.002	0.006	0.354		
Age	0.025	0.003	8.781***	<0.001	36.991*
Age × Gini	<0.001	<0.001	0.295		
Sex (0 male, 1 female)	0.208	0.023	9.044***	0.003	25.749
Sex × Gini	-0.003	0.002	-1.094		
Conservative political orientation	-0.014	0.011	-1.189	0.001	38.326*
Conservative political orientation × Gini	0.001	0.001	0.652		
SDO	-0.063	0.008	-7.627***	0.001	30.056
SDO × Gini	0.002	0.001	2.243*		

Note. $N = 3{,}752$, $k = 25$. Political orientation was measured with a 7-point scale ranging from 1 (very liberal) to 7 (very conservative). Reported results are for the final estimation of fixed effects with robust standard errors ($DF = 23$). * $p < .05$. ** $p < .01$. *** $p < .001$. † $p < .08$.

Table 5. Multilevel random coefficient models predicting two environmentalism measures for the student sample with the Human Development Index (HDI) as the level-2 predictor

	Fixed part			Random part	
	γ	*se*	*t*	σ^2_u	χ^2
Environmental citizenship					
Intercept	2.976	0.068	43.467***	0.122	592.229***
HDI	-2.610	0.671	-3.890***		
Age	0.018	0.003	6.259***	<0.001	24.036
Age × HDI	0.044	0.022	1.998†		
Sex (0 male, 1 female)	0.105	0.027	3.846***	0.002	20.033
Sex × HDI	0.399	0.381	1.049		
Conservative political orientation	-0.067	0.015	-4.532***	0.003	38.756*
Conservative political orientation × HDI	-0.185	0.081	-2.299*		
SDO	-0.071	0.012	-6.039**	0.002	37.750*
SDO × HDI	-0.288	0.100	-2.879*		
Private sphere behavior					
Intercept	3.870	0.057	68.485***	0.084	602.179***
HDI	-0.288	0.534	-0.540		
Age	0.024	0.003	8.529***	<0.001	39.374*
Age × HDI	0.023	0.027	0.846		
Sex (0 male, 1 female)	0.204	0.022	9.360***	0.002	23.083
Sex × HDI	0.537	0.271	1.980†		
Conservative political orientation	-0.013	0.011	-1.125	0.001	38.304*
Conservative political orientation × HDI	-0.006	0.086	-0.066		
SDO	-0.063	0.009	-7.242***	0.001	33.230†
SDO × HDI	-0.170	0.068	-2.498*		

Note. $N = 3{,}752$, $k = 25$. Political orientation was measured with a 7-point scale ranging from 1 (very liberal) to 7 (very conservative). Reported results are for the final estimation of fixed effects with robust standard errors ($DF = 23$). * $p < .05$. ** $p < .01$. *** $p < .001$. † $p < .08$.

Table 6. Multilevel random coefficient models predicting two environmentalism measures for the student sample with the Environmental Performance Index (EPI) as the level-2 predictor

	Fixed part			Random part	
	γ	*se*	*t*	σ^2_u	χ^2
Environmental citizenship					
Intercept	2.976	0.082	36.094***	0.179	845.553***
EPI	-0.006	0.006	-1.075		
Age	0.017	0.003	5.502***	<0.001	23.047
Age × EPI	<0.001	<0.001	-0.180		
Sex (0 male, 1 female)	0.110	0.026	4.184**	0.001	18.440
Sex × EPI	0.004	0.002	2.455*		
Conservative political orientation	-0.067	0.015	-4.645***	0.003	35.391*
Conservative political orientation × EPI	-0.003	0.001	-2.561*		
SDO	-0.071	0.010	-6.915***	0.001	26.417
SDO × EPI	-0.003	0.001	-4.342***		
Private sphere behavior					
Intercept	3.869	0.055	69.791***	0.080	593.550***
EPI	0.006	0.004	1.383		
Age	0.025	0.003	9.158***	<0.001	30.221
Age × EPI	<0.001	<0.001	-1.303		
Sex (0 male, 1 female)	0.208	0.023	9.161***	0.002	24.714
Sex × EPI	0.003	0.002	1.597		
Conservative political orientation	-0.013	0.011	-1.124	0.001	38.301*
Conservative political orientation × EPI	-0.001	0.001	-0.834		
SDO	-0.063	0.008	-7.583***	0.001	31.031
SDO × EPI	-0.002	0.001	-1.794†		

Note. $N = 3{,}752$, $k = 25$. Political orientation was measured with a 7-point scale ranging from 1 (very liberal) to 7 (very conservative). Reported results are for the final estimation of fixed effects with robust standard errors ($DF = 23$). * $p < .05$. ** $p < .01$. *** $p < .001$. † $p < .09$.

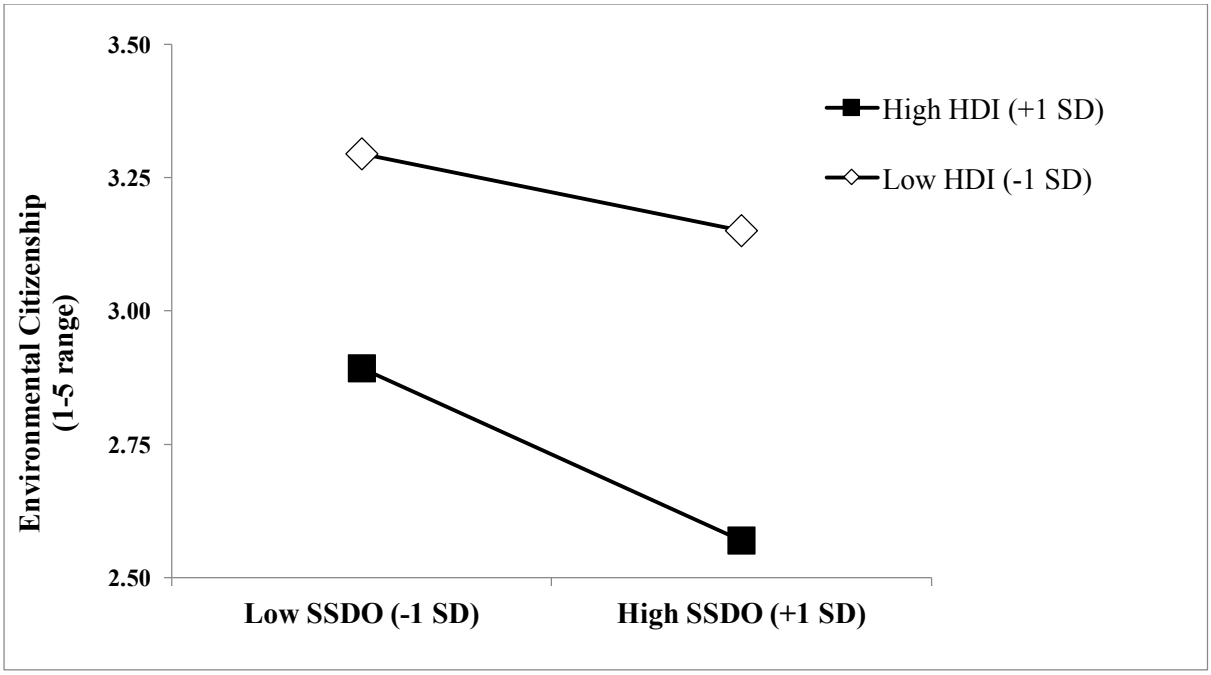

Figure 1. Slopes for the association between social dominance orientation and environmental citizenship for the student samples ($N = 3752$, $k = 25$) at difference levels of country-level standard of living as indexed by the 2015 Human Development Index (HDI).

Note. Simple slopes analysis confirmed that the association between SDO and environmental citizenship is stronger (steeper slope) at higher levels of HDI ($\gamma = -.10$, $t = 5.52$, $p < .001$) than at lower levels ($\gamma = -.04$, $t = 2.39$, $p = .025$). The lowest levels of environmental citizenship occur in individuals who reported high SDO and live in countries with high levels of HDI. Portraying the moderation on a positive light, the *lower* participants' scores on the SSDO, the *more* they engage in environmental citizenship actions, and this effect is *stronger* in nations with better human development indicators.

Supplementary Material
On the relation between social dominance orientation and environmentalism: A 25-nation study

Measurement Invariance

Summary of Measurement Invariance Testing

To compare groups meaningfully on a psychological construct, measurement invariance of the measure must be demonstrated (see, e.g., Chen, 2008; Milfont, & Fischer, 2010). Measurement invariance specifies a hierarchy of psychometric conditions in multiple-group confirmatory factor analysis to test levels of equivalence in successive steps. The three main levels of increasingly stringent measurement invariance testing are described below.

Configural invariance examines whether the factor structure of a given measure is invariant across groups. The factor structure of the SSDO implies that the four items are reliable observed indicators of the latent social dominance construct. Configural invariance is demonstrated by showing that the 4-item, one-factor structure fits the data from all groups.
Metric invariance examines whether relations between scale items and the construct (i.e., factor loadings) are the same across groups. This indicates whether respondents attribute the same meaning to the latent social dominance construct across groups. Metric invariance is demonstrated by showing that the SSDO items have invariant measurement loadings across groups.
Scalar invariance examines whether the item intercepts are the same across groups. This indicates that the standing of groups on the latent social dominance construct can be compared. Scalar invariance is demonstrated by showing that the SSDO items have invariant measurement intercepts across groups.

Measurement invariance using the alignment method

We ran a multi-group factor analysis to test for measurement invariance using the alignment approach, which provides the most optimal measurement invariance pattern in the data while estimating factor means for each group (Asparouhov & Muthén, 2014). We detail the procedure and results below, but we start with the overall conclusion from the alignment results for both student and community samples. All four items loaded on the SSDO factor and the measurement loadings of all four items show no indication of measurement noninvariance (except item SSDO4 for the community sample in Brazil). Therefore, the results we report below support configural and metric invariance of the SSDO across 22 countries (L. K. Muthén, personal communication, August 25, 2016), with item SSDO3 ('Group equality should be our ideal'; reverse coded) the most invariant item across both student and community samples.

We used the alignment approach with maximum-likelihood estimation. We first ran a free alignment model for the student samples, which was poorly identified. We then ran a fixed alignment model using Mexico as the reference group with factor mean fixed to 0, as this country had a factor mean closest to zero in the free model. The first run of the fixed alignment model showed that the residual covariance matrix was not positive definite for three countries (Brazil, China and Japan). These countries were removed from the final alignment model, and final results reported in the main article for these countries should be interpreted with caution.

Table S1 presents the alignment results for the student samples. All items of the SSDO show invariant measurement loadings for all countries, while few countries show invariant measurement intercepts. Item SSDO3 had no significant measurement noninvariance and is particularly useful for comparing the 22 countries on SDO. Confirming this assertion, the fit function values show that the intercept for item SSDO3 contributes the least, while the other item intercepts provide similar contributions to the overall fit. Table S2 shows the factor means ordered from high to low for the student samples, and indicates groups that have factor means significantly different ($p < .05$). Germany had the highest level of social dominance orientation as measured by the SSDO and Iceland had the lowest level. Since scalar invariance was not fully supported—as indicated by variance of measurement intercepts for few countries—mean comparison of social dominance orientation should be interpreted with caution.

We then used the free alignment model for the community samples, which was also poorly identified. The fixed alignment model used Israel as the reference group with factor mean fixed to 0. The first run of the fixed alignment model showed that the residual covariance matrix was not positive definite for two countries (China and Iceland). These countries were removed from the final alignment model, and results reported in the main article for the community samples from these countries should be interpreted with caution. Table S3 presents the alignment results. Only item SSDO4 showed measurement noninvariance for the measurement loadings in Brazil. All other items show measurement invariance for the measurement loadings, and noninvariance for the measurement intercepts was marked for the Swedish sample and for item SSDO4. Again, item SSDO3 had no significant measurement noninvariance. Table S4 indicates that among the community samples Australia had the highest level of social dominance orientation and USA had the lowest level. Again, mean comparison should be interpreted with caution because scalar invariance was not fully supported.

Table S1. *Approximate measurement (non-) invariance for intercepts and loadings of the SSDO over 22 countries for the student samples*

	Country code	Fit function contribution
Intercepts		
SSDO1	1 4 5 **(7)** 8 9 **(10)** 13 17 18 19 21 26 27 28 29 30 **(32)** 33 35 36 37	-132.688
SSDO2	1 4 **(5)** 7 8 9 10 13 **(17)** 18 19 21 **(26)** 27 28 29 **(30)** 32 33 35 36 **(37)**	-170.792
SSDO3	1 4 5 7 8 9 10 13 17 18 19 21 26 27 28 29 30 32 33 35 36 37	-79.402
SSDO4	1 4 5 **(7)** 8 9 **(10)** 13 17 18 19 **(21)** 26 27 28 29 **(30) (32)** 33 35 36 37	-160.700
Loadings		
SSDO1	1 4 5 7 8 9 10 13 17 18 19 21 26 27 28 29 30 32 33 35 36 37	-157.771
SSDO2	1 4 5 7 8 9 10 13 17 18 19 21 26 27 28 29 30 32 33 35 36 37	-117.754
SSDO3	1 4 5 7 8 9 10 13 17 18 19 21 26 27 28 29 30 32 33 35 36 37	-107.846
SSDO4	1 4 5 7 8 9 10 13 17 18 19 21 26 27 28 29 30 32 33 35 36 37	-144.389

Note. Countries in bold are those with significantly noninvariant measurement parameter

Table S2. *Factor mean comparisons of the SSDO across 22 countries as estimated by the multi-group alignment method for the student samples*

Ranking	Group code	Country code	Country name	Factor mean	Groups with significantly smaller factor mean
1	5	8	Germany	2.079	27 13 36 9 21 19 37 26 35 4 5 30 1 32 17 28 7 10
2	16	29	South Korea	2.044	13 21 19 37 26 35 4 5 30 1 32 17 28 7 10
3	19	33	Switzerland	1.564	21 19 37 26 35 4 5 30 1 32 17 28 7 10
4	10	18	Netherlands	1.283	19 37 26 35 4 5 30 1 32 17 28 7 10
5	14	27	Russia	1.182	30 1 32 17 28 7 10
6	8	13	Israel	1.131	5 30 1 32 17 28 7 10
7	21	36	USA	0.922	28 7 10
8	6	9	Ghana	0.805	10
9	12	21	Norway	0.765	32 17 28 7 10
10	11	19	New Zealand	0.66	32 17 28 7 10
11	22	37	Venezuela	0.528	32 17 28 7 10
12	13	26	Poland	0.463	28 7 10
13	20	35	UK	0.437	28 7 10
14	2	4	Canada	0.381	28 7 10
15	3	5	Chile	0.339	28 7 10
16	17	30	Spain	0.326	28 7 10
17	1	1	Australia	0.277	28 10
18	18	32	Sweden	0.001	
19	9	17	Mexico	0	
20	15	28	South Africa	-0.198	
21	4	7	France	-0.211	
22	7	10	Iceland	-0.422	

Table S3. *Approximate measurement (non-) invariance for intercepts and loadings of the SSDO over eight countries for the community samples*

	Country code	Fit function contribution
Intercepts		
SSDO1	1 3 13 19 26 **(32)** 36 37	-14.740
SSDO2	1 3 13 19 26 **(32)** 36 37	-11.954
SSDO3	1 3 13 19 26 32 36 37	-16.563
SSDO4	1 **(3) (13)** 19 26 **(32)** 36 **(37)**	-20.037
Loadings		
SSDO1	1 3 13 19 26 32 36 37	-12.962
SSDO2	1 3 13 19 26 32 36 37	-17.276
SSDO3	1 3 13 19 26 32 36 37	-14.498
SSDO4	1 **(3)** 13 19 26 32 36 37	-25.789

Note. Countries in bold are those with significantly noninvariant measurement parameter

Table S4. *Factor mean comparisons of the SSDO across eight countries as estimated by the multi-group alignment method for the community samples*

Ranking	Group code	Country code	Country name	Factor mean	Groups with significantly smaller factor mean
1	1	1	Australia	.377	26 37 32 19 36
2	2	3	Brazil	0.172	37 32 19 36
3	3	13	Israel	0	37 32 19 36
4	5	26	Poland	-0.204	36
5	8	37	Venezuela	-0.514	
6	6	32	Sweden	-0.561	
7	4	19	New Zealand	-0.629	
8	7	36	USA	-0.97	

Testing for nonlinearity in the SDO–environmentalism relationships

The meta-analytical approach we report in the main text does not allow examination of nonlinear associations because correlations assume purely linear relationships. We tested for nonlinearity (i.e., quadratic effects) in the SDO–environmentalism relationships following the approach used by Webster, Smith, Brunell, Paddock, and Nezlek (in press). We first standardized each variable within each of the samples, then squared the standardized SSDO scores, and finally regressed each of the environmentalism variables onto the standardized and squared SSDO scores sequentially.

Starting with the student samples, the results show that there was no quadratic relationship between SSDO and environmentalism. The linear relationship between SSDO and environmental citizenship was significantly negative (b = -.151, t_{4031} = -9.71, p < .001, r = -.16 [-.19, -.13]). We then added the squared SSDO scores into the model and results showed that the quadratic relationship was not statistically significant (b = -.01, t_{4030} = -.58, p = .56, r = -.06 [-.09, -.02]). Similar findings were observed for the other two environmentalism measures. Private sphere: SSDO scores, b = -.163, t_{4032} = -10.51, p < .001, r = -.16 [-.19, -.13], and the squared SSDO scores (b = .001, t_{4031} = .06, p = .95, r = -.06 [-.09, -.03]). Donation: SSDO scores, b = -.133, t_{3799} = -8.26, p < .001, r = -.13 [.001, .02] and the squared SSDO scores (b = -.02, t_{3798} = -1.13, p = .26, r = -.06 [.001, .02].

No quadratic relationships between SSDO and environmentalism were observed for the community sample either. The linear relationship between SSDO and environmental citizenship was significantly negative (b = -.149, t_{1210} = -5.23, p < .001, r = -.14 [-.20, -.08]), but not the quadratic relationship (b = -.004, t_{1209} = -.15, p = .88, r = -.02 [-.08, .04]). Similarly, the linear relationship between SSDO and donation was statistically significant (b = -.169, t_{1139} = -5.79, p < .001, r = -.18 [-.23, -.12]), but not the quadratic relationship (b = -.044, t_{1138} = 1.48, p = .14, r = -.08 [-.14, -.03]). Finally, the linear relationship between SSDO and private sphere behavior was statistically significant (b = -.185, t_{1234} = -6.63, p < .001, r = -.19 [-.25, -.13]) and the quadratic relationship was only marginally significantly positive (b = .049, t_{1233} = 1.72, p = .086, r = .03 [-.04, .09]). Overall, the results confirm a linear association between SDO and environmentalism, but future studies should test for nonlinearity in this relationship.

Examining heterogeneity across samples

The Q-statistics in Tables 2 and 3 already provide a test of whether the magnitude of the correlations varies substantially across samples. Following the approach used by Webster et al. (in press), we examined heterogeneity in the SDO–environmentalism relation across samples by using a distinct approach: an omnibus test assessing variance explained by a model that assumed different slopes for different country samples.

For the student dataset, we first created a set of 24 Helmert contrasts to code for differences among the 25 samples. The Helmert contrasts were cross-multiplied with the standardized SDO scores to create 24 interaction terms. A similar approach was used for the community samples, yielding 9 Helmert contrasts and 9 interaction terms between the contrasts and the standardized SDO scores. We then regressed each of the standardised environmentalism variables onto the Helmert contrasts (first step) and the interactions terms (second step) in the student and community samples. According to Webster and colleagues (in press), standardization affects within-sample means (intercepts), but not associations (slopes) so the Helmert contrasts will explain zero variance in the outcome but the set of Helmert contrast interactions will assess whether between-sample variance in slopes is significant.

The omnibus tests for the interaction set were statistically significant for all three environmentalism variables in the student samples: Environmental citizenship ($\Delta F_{9, 1211}$ = 6.55, $p < .001$, $\Delta R^2 = .04$), Private sphere ($\Delta F_{9, 1235} = 3.05$, $p < .01$, $\Delta R^2 = .02$), and Donation ($\Delta F_{9, 1140} = 2.62$, $p < .01$, $\Delta R^2 = .02$). Similar results were obtained for the community sample, with the omnibus tests for the interaction set statistically significant for all three environmentalism variables: Environmental citizenship ($\Delta F_{24, 3958} = 3.96$, $p < .001$, ΔR^2 = .03), Private sphere ($\Delta F_{24, 3986} = 6.21$, $p < .001$, $\Delta R^2 = .04$), and Donation ($\Delta F_{24, 3753} = 3.53$, $p < .001$, $\Delta R^2 = .02$). These results indicate that the slopes (i.e., the correlations between SDO and the environmentalism measures) differ across country samples. In the HLM analyses, we focus only on the variables that showed consistent evidence of heterogeneity in this omnibus test and the Q-statistics.

HLM analyses for the community samples

We ran similar analyses for the community sample and focused on the environmentalism measure that showed significant variation across countries (environmental citizenship; see omnibus test and Q-statistics). The multilevel empty (random-intercepts) model replicated the meta-analytical findings by showing that SDO was reliably related to environmental citizenship, $\gamma = -.091$, SE = .030, $t(9) = 3.39$, $p = .008$. In line with the moderation hypothesis, the strength of this association varied across countries, $u = .0044$, $\chi 2(9) = 20.27$, $p = .016$. Table S5 presents the results for the cross-level interactions.

Although the moderation of the Gini index, the Human Development Index (HDI), and the Environmental Performance Index (EPI) on the SDO–environmentalism relation was not statistically significant, the pattern of findings are similar to those observed for the student samples (see Tables 4 to 6 in the main text). Specifically, the effects were negative for both HDI and EPI, and positive for Gini. The results for the community samples were also comparable to those for the student sample regarding the independent main effects of the control variables (age, gender and political orientation). Older people and women were more likely to engage in environmental citizenship behaviors, as were liberals (albeit this association was not statistically significant).

Table S5. Multilevel random coefficient models predicting environmental citizenship for the community sample with the Gini index, the Human Development Index (HDI), and the Environmental Performance Index (EPI) as the level-2 predictors

	Fixed part			Random part	
	γ	*se*	*t*	σ^2_u	χ^2
GINI					
Intercept	3.357	0.120	28.025***	0.134	152.594***
Gini index	0.009	0.015	0.612		
Age	0.011	0.004	2.941*	0.000	14.299†
Age × Gini	0.001	<0.001	1.455		
Sex (0 male, 1 female)	0.225	0.068	3.327*	0.006	3.325
Sex × Gini	-0.001	0.009	-0.150		
Conservative political orientation	-0.042	0.046	-0.906	0.014	25.559**
Conservative political orientation × Gini	0.001	0.006	0.235		
SDO	-0.059	0.025	-2.365*	0.002	11.758
SDO × Gini	<0.001	0.003	0.132		
HDI					
Intercept	3.359	0.106	31.797***	0.102	106.473***
HDI index	-2.350	1.416	-1.660		
Age	0.012	0.004	3.047*	<0.001	17.648*
Age × HDI	-0.032	0.054	-0.591		
Sex (0 male, 1 female)	0.218	0.063	3.443*	0.004	2.900
Sex × HDI	0.467	0.778	0.600		
Conservative political orientation	-0.040	0.042	-0.945	0.012	24.742**
Conservative political orientation × HDI	-0.393	0.556	-0.707		
SDO	-0.064	0.023	-2.725*	0.002	8.320
SDO × HDI	-0.584	0.301	-1.943†		
EPI					
Intercept	3.361	0.121	27.876***	0.136	149.996***
EPI index	-0.005	0.010	-0.480		
Age	0.012	0.004	2.980*	0.000	20.634**
Age × EPI	0.000	0.000	0.072		
Sex (0 male, 1 female)	0.216	0.068	3.207*	0.005	3.207
Sex × EPI	0.000	0.006	0.057		
Conservative political orientation	-0.050	0.042	-1.174	0.011	21.406**
Conservative political orientation × EPI	-0.005	0.004	-1.272		
SDO	-0.072	0.022	-3.323*	0.001	5.299
SDO × EPI	-0.005	0.002	-2.139†		

Note. N = 1,072, k = 10. Political orientation was measured with a 7-point scale ranging from 1 (very liberal) to 7 (very conservative). Reported results are for the final estimation of fixed effects (DF = 8); the robust standard errors could not be computed for these models. * p < .05. ** p < .01. *** p < .001.

Simple Slope Analysis

Due to space constraints, we do not present results from the simple slope analysis and resulting graphs in the main text. However, we have made available an Excel file containing all the analyses we have performed to compute the simple slope analysis and the graphs.

In order to calculate the simple slope analysis, we first requested variance-covariance matrices from the HLM analyses and then used the online tool developed by Preacher and colleagues (http://www.quantpsy.org/interact/hlm2.htm) to compute the tests of simple slopes. We used HLM's graphing feature to probe the cross-level equations using the 25th to 75th percentiles for the level-1 and level-2 variables. We also used the 25th and 75th percentiles of the level-2 variables as the conditional values in the simple slope analysis on the online tool.

The Excel file presents the variance-covariance matrix, output from the tests of simple slopes using the online tool and the default HLM graph for each of the cross-level interactions for the student samples. In the main text, we report one cross-level interaction to illustrate (i.e., effect of HDI on the association between SSDO and environmental citizenship). We do not report these results for the community sample as the cross-level interactions did not reach significance, perhaps due to the small number of countries at level-2.

Additional Measures

As noted in the main text, the present study is part of the larger *Collective Futures and Climate Change* research project. In addition to the measures described in the Methods section of the paper, the survey included additional scales and measures listed below. Bain et al. (2016) provide more information and references for these measures. Table S6 presents descriptive statistics for the environmentalism measures used in the main document.

SCALES
Climate change importance
Collective futures (conditions, character and values of the imagined society)
Environmental identity
System justification
Consideration of future consequences
National identity
Environmental striving
Human-nature relationships

DEMOGRAPHICS
Climate change beliefs
Employment
Religion/Religiosity
Cultural background
Relative income
Rural/urban location
Duration living in the country

Table S6. Mean, standard deviation, range, internal reliability statistics for each environmentalism measure by national sample for the student samples

	Citizenship						Private						Donation		
Country	*M*	*SD*	Range	Skewness	Alpha	MIC	*M*	*SD*	Range	Skewness	Alpha	MIC	*M*	*SD*	Skewness
Australia	2.90	0.94	1–4.91	.05	.91	.49	3.83	0.72	1.25–5.00	-.67	.84	.33	.38	.32	.71
Brazil	3.60	0.84	1–5.00	-.59	.89	.42	4.14	0.75	1.18–5.00	-1.35	.88	.40	.39	.35	.65
Canada	2.99	0.88	1.09–4.91	-.17	.92	.50	3.96	0.71	2.17–5.00	-.37	.87	.38	.26	.29	1.19
Chile	3.31	0.86	1–5.00	-.10	.88	.40	3.94	0.97	1–5.00	-1.38	.93	.55	.19	.26	1.72
China	3.65	0.88	1–5.00	-.53	.91	.50	4.24	0.71	1–5.00	-1.41	.92	.52	.19	.22	1.47
France	3.23	1.04	1–5.00	-.26	.92	.52	4.28	0.61	2.50–5.00	-1.04	.84	.31	.49	.39	.17
Germany	2.79	0.80	1.09–4.70	.08	.87	.38	4.20	0.60	1.33–5.00	-1.15	.84	.33	.43	.31	.49
Ghana	3.49	0.82	1.14–5.00	-.60	.85	.33	3.69	0.68	1.65–5.00	-.47	.84	.31	.31	.23	.85
Iceland	2.99	1.01	1–5.00	-.03	.93	.54	3.88	0.70	1.75–5.00	-.49	.87	.36	.34	.38	.81
Israel	2.94	0.99	1–5.00	-.12	.92	.51	3.89	0.81	1–5.00	-.96	.90	.46	.25	.28	1.60
Japan	2.31	0.76	1–4.27	.16	.90	.46	3.56	0.72	1.08–4.91	-.74	.90	.43	.28	.33	1.31
Mexico	3.61	0.83	1–5.00	-.45	.89	.42	4.11	0.71	1–5.00	-1.27	.90	.45	.29	.29	1.03
Netherlands	2.03	0.76	1–4.30	.97	.91	.49	3.03	0.83	1–4.58	-.35	.90	.45	.23	.27	1.50
New Zealand	2.47	0.90	1–4.55	.16	.91	.50	3.52	0.81	1.08–5.00	-.66	.89	.41	.31	.27	1.03
Norway	3.29	0.83	1–5.00	-.30	.90	.45	4.04	0.64	1.40–5.00	-.81	.76	.21	.57	.39	-.12
Poland	2.36	0.76	1–3.91	.15	.89	.44	3.79	0.68	1.91–5.00	-.53	.83	.31	.24	.29	1.57
Russia	2.83	0.85	1–4.45	-.28	.86	.36	3.47	0.87	1.08–5.00	-.22	.89	.41	.35	.33	.67
South Africa	3.02	0.89	1–5.00	.04	.90	.45	3.69	0.71	1–5.00	-.63	.85	.33	.34	.33	.88
South Korea	2.64	0.73	1–4.36	-.04	.89	.43	3.53	0.61	1–5.00	-.74	.84	.31	.32	.24	1.03
Spain	3.07	0.89	1.09–5.00	.07	.90	.44	4.04	0.65	1–5.00	-.90	.88	.39	.37	.35	.67
Sweden	3.17	0.91	1–5.00	-.10	.90	.44	4.10	0.72	1.33–5.00	-1.17	.88	.39	.43	.38	.42
Switzerland	2.81	0.76	1–4.64	-.04	.84	.33	4.09	0.64	1.83–5.00	-1.00	.81	.30	.54	.37	.03
UK	2.60	0.90	1–4.91	.48	.91	.49	3.81	0.69	1.91–5.00	-.44	.84	.33	.21	.25	1.56
USA	2.81	0.88	1–5.00	.28	.90	.45	3.75	0.75	2.00–5.00	-.09	.88	.39	.40	.37	.59
Venezuela	3.34	0.80	1.22–5.00	-.37	.87	.37	3.97	0.57	2.25–5.00	-.53	.77	.22	.44	.33	.50

Note. Citizenship refers to public/political behaviors, Personal to domestic behaviors, and Donation to financial behavior. Donation behavior ranged from 0 to 1, representing the proportion of the amount of the prize money to donate: 0 (no donation) to 100% (donating all of the prize money), respectively. MIC = mean inter-item correlation.

Table S7. Mean, standard deviation, range, internal reliability statistics for each environmentalism measure by national sample for the community samples

	Citizenship						Private						Donation		
Country	*M*	*SD*	Range	Skewness	Alpha	MIC	*M*	*SD*	Range	Skewness	Alpha	MIC	*M*	*SD*	Skewness
Australia	3.20	1.02	1–5.00	-.24	.93	.56	4.19	0.58	2.50–5.00	-.53	.85	.37	.29	.29	1.09
Brazil	3.41	1.02	1–5.00	-.47	.91	.49	4.13	0.77	1–5.00	-1.05	.88	.40	.48	.39	.30
China	3.97	0.66	1.36–5.00	-.91	.85	.35	4.27	0.48	2.80–5.00	-.77	.84	.31	.17	.26	2.14
Iceland	3.63	1.02	1–5.00	-.53	.91	.50	4.05	0.71	2.11–5.00	-.58	.83	.34	.48	.46	.11
Israel	3.25	0.96	1.09–5.00	-.14	.90	.44	4.21	0.58	2.75–5.00	-.46	.84	.32	.24	.30	1.64
New Zealand	3.59	1.01	1–5.00	-.54	.92	.52	4.28	0.57	2.33–5.00	-1.31	.82	.30	.74	.36	-.93
Poland	2.55	0.89	1–5.00	.41	.89	.44	3.90	0.70	1.25–5.00	-1.01	.87	.38	.22	.27	1.81
Sweden	3.28	0.97	1.27–5.00	-.28	.92	.51	4.20	0.74	1.75–5.00	-1.11	.85	.35	.44	.36	.34
USA	3.08	0.97	1–5.00	-.29	.91	.49	4.08	0.69	1.92–5.00	-.87	.86	.36	.25	.24	1.20
Venezuela	3.75	0.77	1.45–5.00	-.47	.90	.45	4.24	0.61	2.08–5.00	-.79	.89	.44	.53	.38	.08

Note. Citizenship refers to public/political behaviors, Personal to domestic behaviors, and Donation to financial behavior. Donation behavior ranged from 0 to 1, representing the proportion of the amount of the prize money to donate: 0 (no donation) to 100% (donating all of the prize money), respectively. MIC = mean inter-item correlation.

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Appendices

Appendix A. We present below translations of the SSDO for languages not already provided by Pratto et al. (2013). We used the same instructions as in the original article. Note, however, that Item 2 of the SSDO as originally presented in Pratto et al. had to be recoded for Poland as the Polish translation of this item was anti-SDO. We only noticed this issue after data collection and researchers planning to use the SSDO in Poland should consider rewording that item to better fit the original statement in English.

Portuguese (Brazilian)
Para estabelecer prioridades, temos que considerar todos os grupos
Não deveríamos forçar a igualdade entre os grupos
Igualdade entre os grupos deveria ser o nosso ideal
Grupos superiores deveriam dominar grupos inferiores

Icelandic
Þegar við forgangsröðum eigum við að taka tillit til allra samfélagshópa
Við ættum ekki að ýta á eftir jafnrétti samfélagshópa
Við ættum að stefna að jafnrétti samfélagshópa
Æðri samfélagshópar ættu að drottna yfir óæðri samfélagshópum

Hebrew
את בחשבון לקחת חייבים אנחנו ,עדיפויות סדר בקביעת הקבוצות כל
קבוצתי לשוויון לדחוף צריכים לא אנחנו
שלנו האידיאל להיות צריך קבוצות שוויון
נחותות קבוצות על להשתלט צריכות נעלות קבוצות

Japanese
優先順位を決めるとき、私たちは全ての集団を考慮しなければならない。
集団の平等性を強要してはいけない。
集団の平等は私たちの理想にならなければならない。
優秀な集団が劣っている集団を支配しなれけばならない。

Norwegian
Når vi skal prioritere, må vi ta hensyn til alle grupper.
Vi bør ikke drive frem likhet mellom grupper.
Likhet mellom grupper bør være vårt ideal.
Overlegne grupper bør dominere underlegne grupper.

Russian
П р и определении приоритетов, мы должны учитывать все группы
М ы не должны настаивать на равенстве групп
Р а в е н с т в о групп должно быть нашим идеалом
В ы с ш и е слои общества должны доминировать над низшими

Afrikaans
Wanneer prioriteite gekies word moet alle groepe in ag geneem word
Ons moenie groepsgelykheid afdwing nie
Groepsgelykheid moet 'n ideaal wees

Superieure groepe moet domineer oor minderwaardige groepe

Korean

우선순위를 정할 때, 우리는 모든 집단들을 고려해야 한다

집단 평등성을 강요하지 않아야 한다

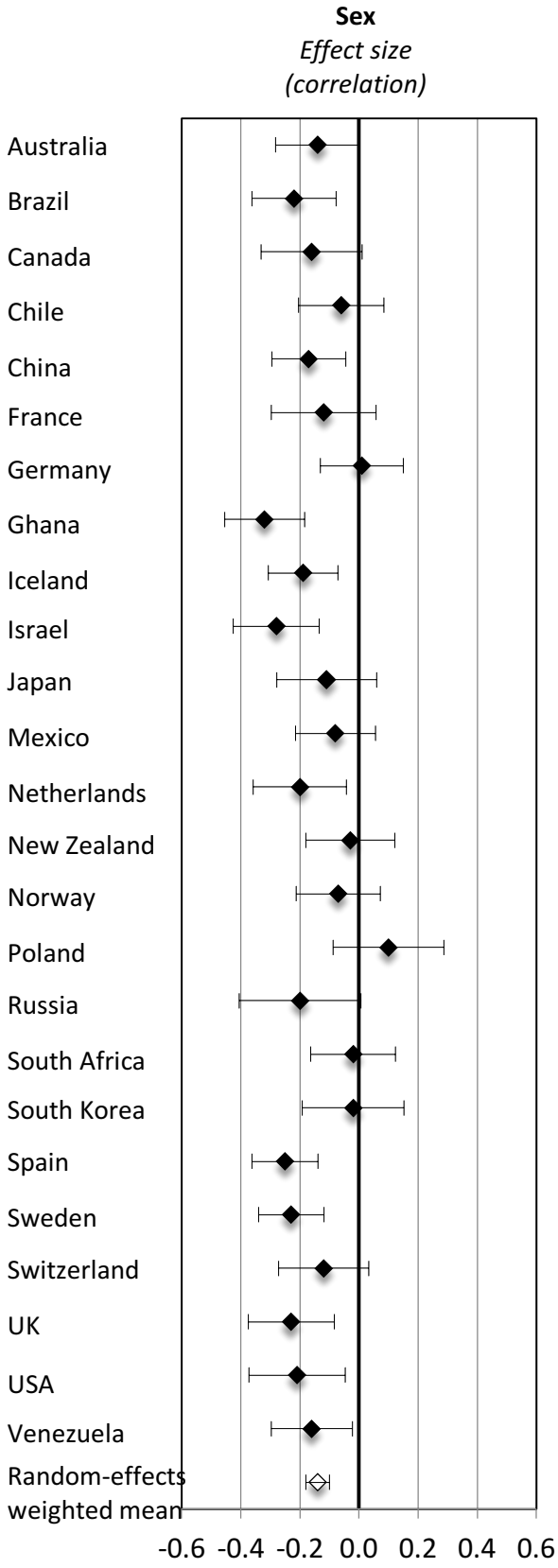
집단 평등은 우리의 이상(ideal)이되어야 한다

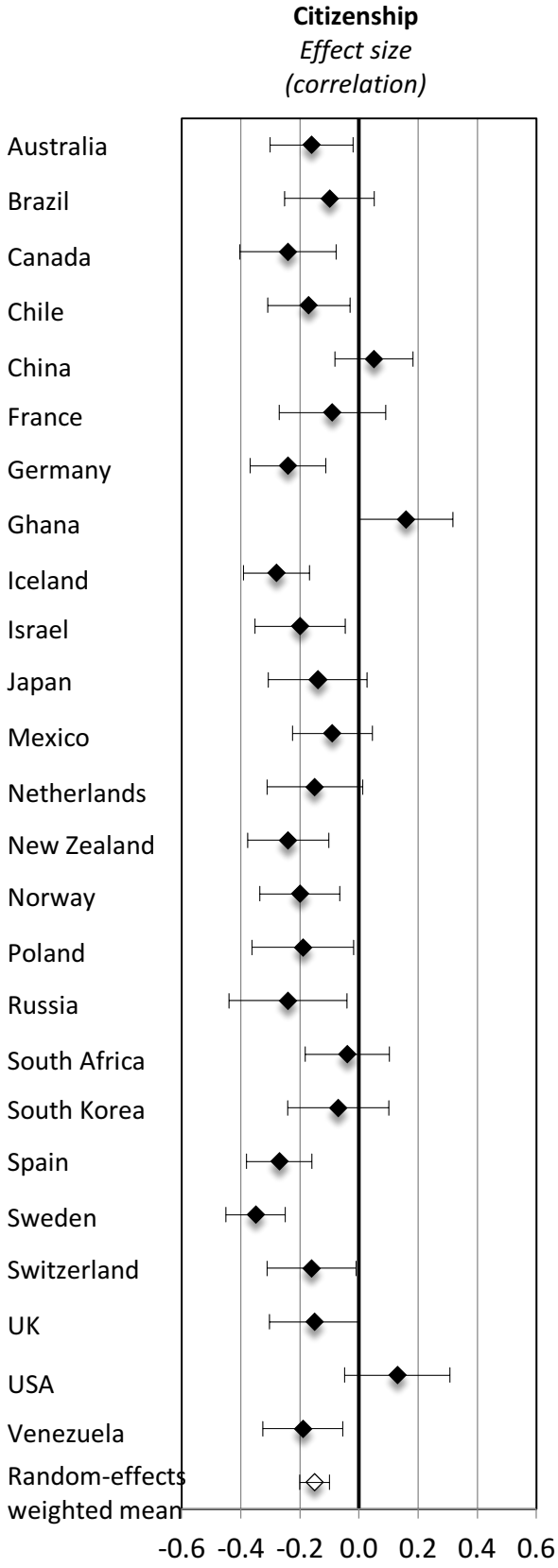
우수한 집단들이 열등한 집단들을 지배해야 한다

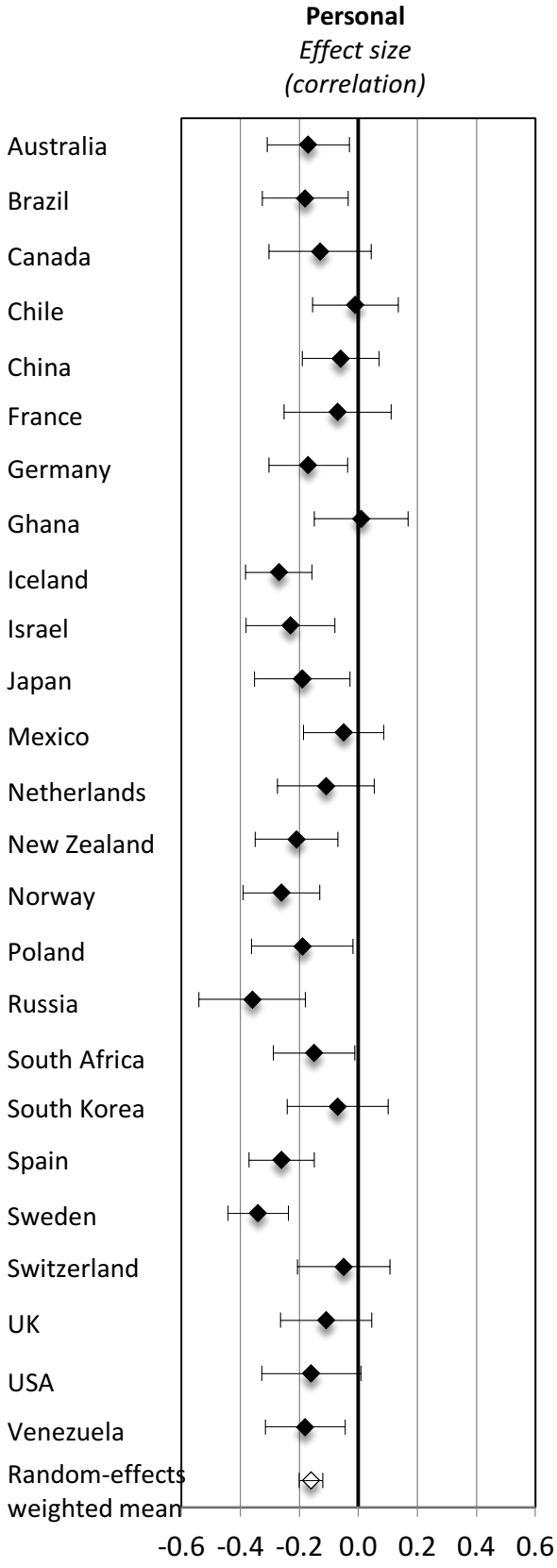
Swedish

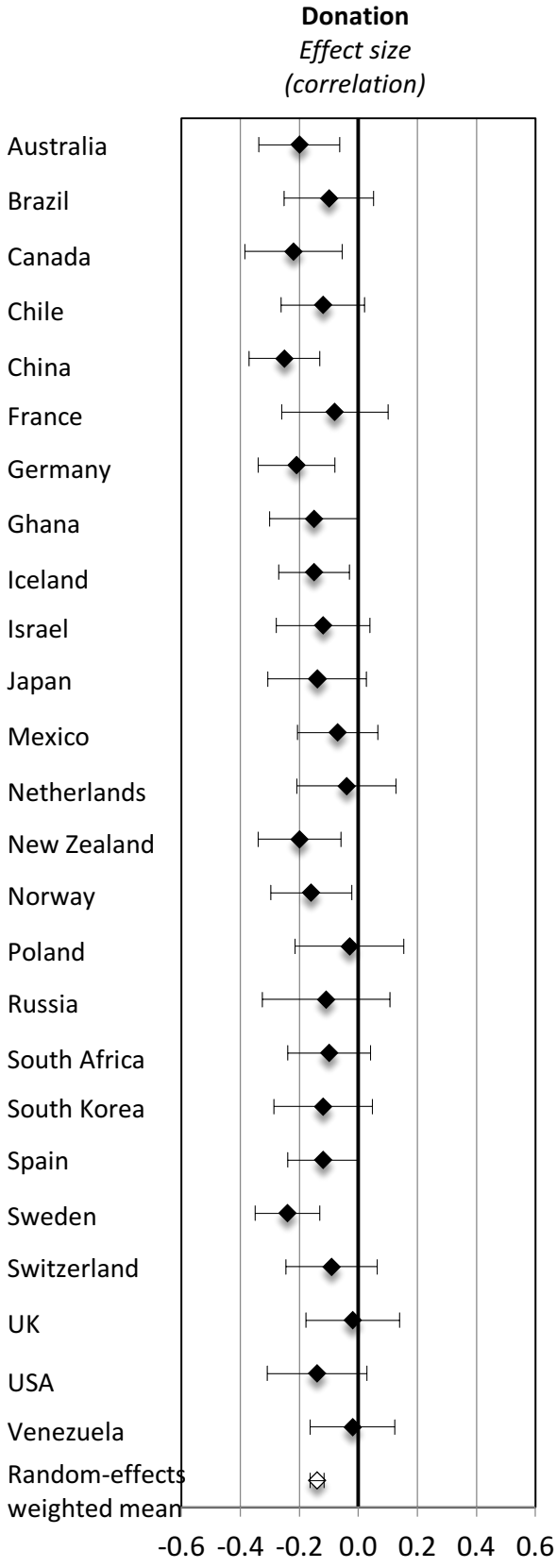
När prioriteringar fastställs måste man ta hänsyn till alla grupper
Vi borde inte verka för jämställdhet mellan alla grupper
Gruppers jämställdhet borde vara vårt ideal
Överlägsna grupper borde dominera underlägsna grupper

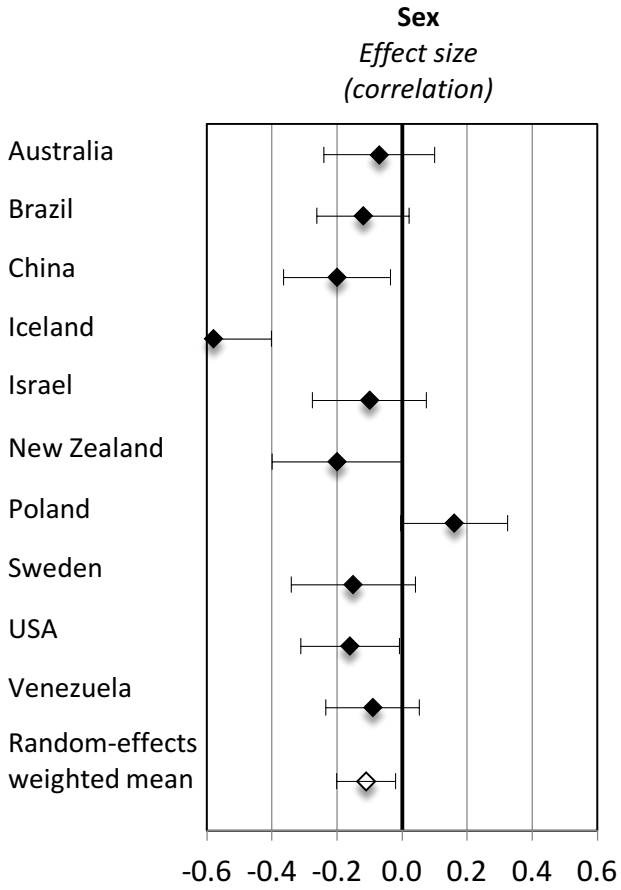
Appendix B. Below we present graphs depicting the correlations between SSDO and the four variables reported in text (sex, environmental citizenship intentions, private sphere behavioral intentions, and donation behaviour) for the students (N = 4,163, k = 25) and community (N = 1,237, k = 10) samples. Please note these are just *indicative* forest plots; in proper forest plots the square size would correspond to power for each study/sample and the meta-analytical average would be a big diamond without error bars.

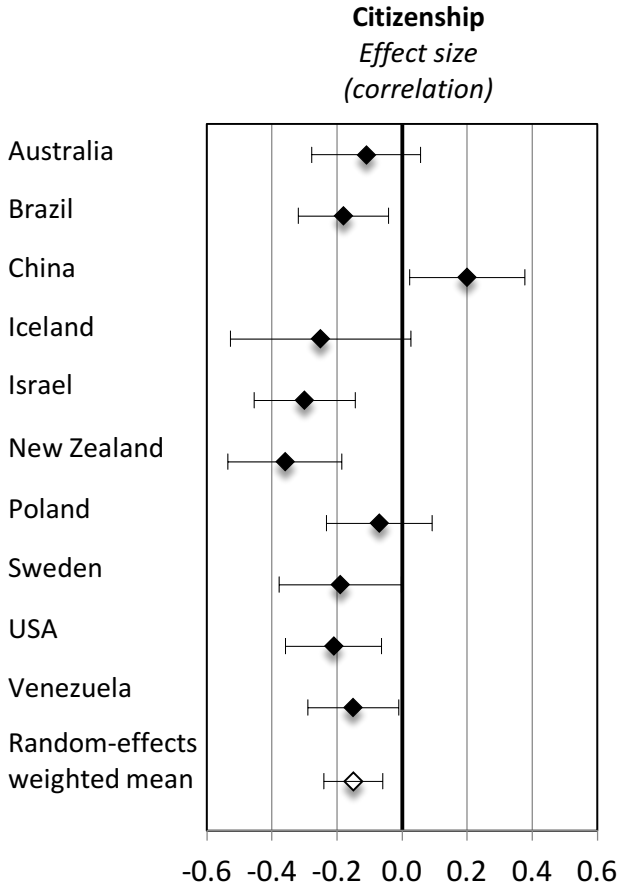

Sex
Effect size
(correlation)
Australia
Brazil
Canada
Chile
China
France
Germany
Ghana
Iceland
Israel
Japan
Mexico
Netherlands
New Zealand
Norway
Poland
Russia
South Africa
South Korea
Spain
Sweden
Switzerland
UK
USA
Venezuela
Random-effects
weighted mean
-0.6 -0.4 -0.2 0.0 0.2 0.4 0.6

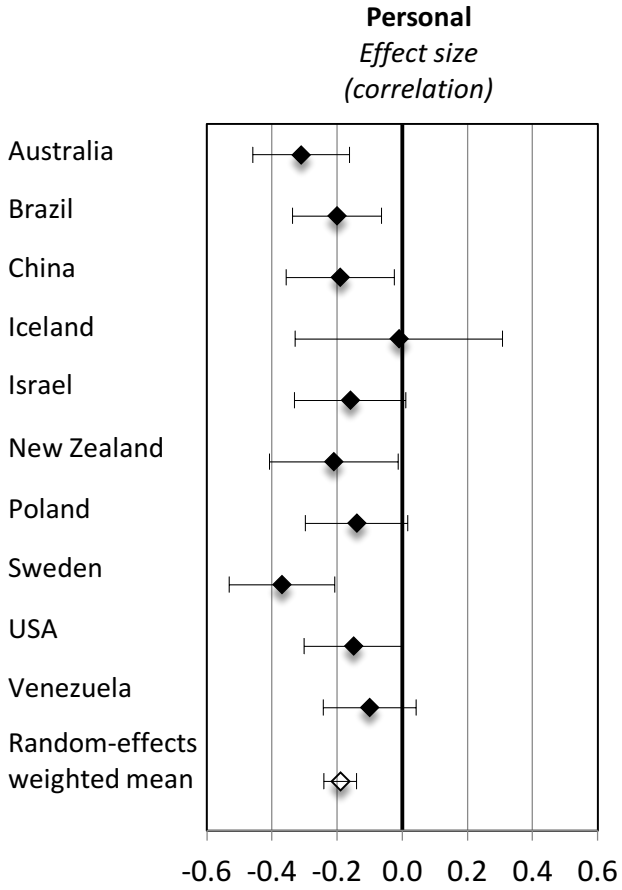

Citizenship
Effect size
(correlation)
Australia
Brazil
Canada
Chile
China
France
Germany
Ghana
Iceland
Israel
Japan
Mexico
Netherlands
New Zealand
Norway
Poland
Russia
South Africa
South Korea
Spain
Sweden
Switzerland
UK
USA
Venezuela
Random-effects weighted mean
-0.6 -0.4 -0.2 0.0 0.2 0.4 0.6

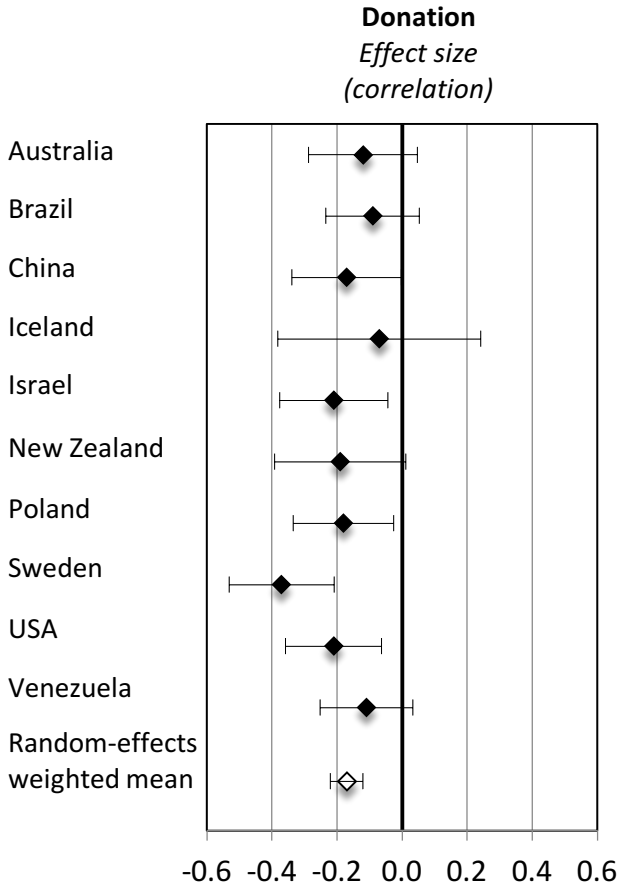

Personal
Effect size
(correlation)
Australia
Brazil
Canada
Chile
China
France
Germany
Ghana
Iceland
Israel
Japan
Mexico
Netherlands
New Zealand
Norway
Poland
Russia
South Africa
South Korea
Spain
Sweden
Switzerland
UK
USA
Venezuela
Random-effects weighted mean
-0.6 -0.4 -0.2 0.0 0.2 0.4 0.6


Donation
Effect size
(correlation)
Australia
Brazil
Canada
Chile
China
France
Germany
Ghana
Iceland
Israel
Japan
Mexico
Netherlands
New Zealand
Norway
Poland
Russia
South Africa
South Korea
Spain
Sweden
Switzerland
UK
USA
Venezuela
Random-effects
weighted mean
-0.6 -0.4 -0.2 0.0 0.2 0.4 0.6


Sex
Effect size
(correlation)
Australia
Brazil
China
Iceland
Israel
New Zealand
Poland
Sweden
USA
Venezuela
Random-effects
weighted mean
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6


Citizenship
Effect size
(correlation)
Australia
Brazil
China
Iceland
Israel
New Zealand
Poland
Sweden
USA
Venezuela
Random-effects
weighted mean
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6


Personal
Effect size
(correlation)
Australia
Brazil
China
Iceland
Israel
New Zealand
Poland
Sweden
USA
Venezuela
Random-effects
weighted mean
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6


Donation
Effect size
(correlation)
Australia
Brazil
China
Iceland
Israel
New Zealand
Poland
Sweden
USA
Venezuela
Random-effects
weighted mean
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6

Appendix C. Below we present the full SPSS outputs displaying the complete correlation matrix for the variables in each sample and country.

Appendix Table 1. Correlation matrix by national sample for the student samples

country			SDO	sex_d	envcitextended	privsphere	donate_prop
Australia	SDO	Pearson Correlation	1	-.139	-.157*	-.166*	-.198**
		Sig. (2-tailed)		.066	.037	.028	.008
		N	177	177	177	176	177
	sex_d	Pearson Correlation	-.139	1	-.082	.029	.007
		Sig. (2-tailed)	.066		.276	.702	.921
		N	177	177	177	176	177
	envcitextended	Pearson Correlation	-.157*	-.082	1	.527**	.173*
		Sig. (2-tailed)	.037	.276		.000	.021
		N	177	177	177	176	177
	privsphere	Pearson Correlation	-.166*	.029	.527**	1	.158*
		Sig. (2-tailed)	.028	.702	.000		.036
		N	176	176	176	176	176
	donate_prop	Pearson Correlation	-.198**	.007	.173*	.158*	1
		Sig. (2-tailed)	.008	.921	.021	.036	
		N	177	177	177	176	177
Brazil	SDO	Pearson Correlation	1	-.216**	-.104	-.179*	-.097

		Sig. (2-tailed)		.006	.189	.024	.222
		N	160	160	160	159	160
	sex_d	Pearson Correlation	-.216**	1	.149	.157*	.026
		Sig. (2-tailed)	.006		.059	.049	.742
		N	160	160	160	159	160
	envcitextended	Pearson Correlation	-.104	.149	1	.514**	.337**
		Sig. (2-tailed)	.189	.059		.000	.000
		N	160	160	160	159	160
	privsphere	Pearson Correlation	-.179*	.157*	.514**	1	.223**
		Sig. (2-tailed)	.024	.049	.000		.005
		N	159	159	159	159	159
	donate_prop	Pearson Correlation	-.097	.026	.337**	.223**	1
		Sig. (2-tailed)	.222	.742	.000	.005	
		N	160	160	160	159	160
Canada	SDO	Pearson Correlation	1	-.159	-.240**	-.134	-.219*
		Sig. (2-tailed)		.086	.009	.148	.018
		N	118	118	117	118	117
	sex_d	Pearson Correlation	-.159	1	.177	.244**	-.046
		Sig. (2-tailed)	.086		.057	.008	.621
		N	118	118	117	118	117
	envcitextended	Pearson Correlation	-.240**	.177	1	.530**	.302**
		Sig. (2-tailed)	.009	.057		.000	.001
		N	117	117	117	117	116
	privsphere	Pearson Correlation	-.134	.244**	.530**	1	.160
		Sig. (2-tailed)	.148	.008	.000		.086
		N	118	118	117	118	117
	donate_prop	Pearson Correlation	-.219*	-.046	.302**	.160	1

		Sig. (2-tailed)	.018	.621	.001	.086	
		N	117	117	116	117	117
Chile	SDO	Pearson Correlation	1	-.055	-.173*	-.012	-.117
		Sig. (2-tailed)		.464	.020	.868	.117
		N	180	180	180	180	179
	sex_d	Pearson Correlation	-.055	1	.156*	.068	-.129
		Sig. (2-tailed)	.464		.037	.366	.086
		N	180	180	180	180	179
	envcitextended	Pearson Correlation	-.173*	.156*	1	.482**	.022
		Sig. (2-tailed)	.020	.037		.000	.769
		N	180	180	180	180	179
	privsphere	Pearson Correlation	-.012	.068	.482**	1	-.131
		Sig. (2-tailed)	.868	.366	.000		.081
		N	180	180	180	180	179
	donate_prop	Pearson Correlation	-.117	-.129	.022	-.131	1
		Sig. (2-tailed)	.117	.086	.769	.081	
		N	179	179	179	179	179
China	SDO	Pearson Correlation	1	-.169*	.049	-.057	-.247**
		Sig. (2-tailed)		.012	.465	.399	.000
		N	221	221	221	221	218
	sex_d	Pearson Correlation	-.169*	1	.011	.125	.057
		Sig. (2-tailed)	.012		.874	.063	.406
		N	221	221	221	221	218
	envcitextended	Pearson Correlation	.049	.011	1	.626**	-.109
		Sig. (2-tailed)	.465	.874		.000	.108
		N	221	221	221	221	218
	privsphere	Pearson Correlation	-.057	.125	.626**	1	-.066
		Sig. (2-tailed)	.399	.063	.000		.331
		N	221	221	221	221	218
	donate_prop	Pearson Correlation	-.247**	.057	-.109	-.066	1
		Sig. (2-tailed)	.000	.406	.108	.331	
		N	218	218	218	218	218
France	SDO	Pearson Correlation	1	-.115	-.090	-.071	-.075
		Sig. (2-tailed)		.222	.339	.456	.429
		N	114	114	114	114	113
	sex_d	Pearson Correlation	-.115	1	.092	.186*	-.060
		Sig. (2-tailed)	.222		.328	.047	.528
		N	114	115	115	115	114
	envcitextended	Pearson Correlation	-.090	.092	1	.652**	.306**
		Sig. (2-tailed)	.339	.328		.000	.001
		N	114	115	115	115	114

	privsphere	Pearson Correlation	-.071	.186*	.652**	1	.189*
		Sig. (2-tailed)	.456	.047	.000		.045
		N	114	115	115	115	114
	donate_prop	Pearson Correlation	-.075	-.060	.306**	.189*	1
		Sig. (2-tailed)	.429	.528	.001	.045	
		N	113	114	114	114	114
Germany	SDO	Pearson Correlation	1	.013	-.243**	-.168*	-.212**
		Sig. (2-tailed)		.857	.001	.019	.003
		N	196	196	196	196	194
	sex_d	Pearson Correlation	.013	1	.018	.069	-.107
		Sig. (2-tailed)	.857		.802	.335	.135
		N	196	197	197	197	195
	envcitextended	Pearson Correlation	-.243**	.018	1	.564**	.351**
		Sig. (2-tailed)	.001	.802		.000	.000
		N	196	197	197	197	195
	privsphere	Pearson Correlation	-.168*	.069	.564**	1	.285**
		Sig. (2-tailed)	.019	.335	.000		.000
		N	196	197	197	197	195
	donate_prop	Pearson Correlation	-.212**	-.107	.351**	.285**	1
		Sig. (2-tailed)	.003	.135	.000	.000	
		N	194	195	195	195	195
Ghana	SDO	Pearson Correlation	1	-.320**	.162*	.008	-.151
		Sig. (2-tailed)		.000	.047	.919	.156
		N	154	154	151	153	90
	sex_d	Pearson Correlation	-.320**	1	-.278**	-.093	.070
		Sig. (2-tailed)	.000		.001	.253	.515
		N	154	154	151	153	90
	envcitextended	Pearson Correlation	.162*	-.278**	1	.582**	.243*
		Sig. (2-tailed)	.047	.001		.000	.022
		N	151	151	151	150	89
	privsphere	Pearson Correlation	.008	-.093	.582**	1	-.032
		Sig. (2-tailed)	.919	.253	.000		.768
		N	153	153	150	153	90
	donate_prop	Pearson Correlation	-.151	.070	.243*	-.032	1
		Sig. (2-tailed)	.156	.515	.022	.768	
		N	90	90	89	90	90
Iceland	SDO	Pearson Correlation	1	-.191**	-.276**	-.267**	-.148*
		Sig. (2-tailed)		.003	.000	.000	.025
		N	246	244	246	246	232
	sex_d	Pearson Correlation	-.191**	1	.016	.149*	-.064
		Sig. (2-tailed)	.003		.798	.020	.330

		N	244	246	246	246	232
	envcitextended	Pearson Correlation	-.276**	.016	1	.642**	.325**
		Sig. (2-tailed)	.000	.798		.000	.000
		N	246	246	248	248	234
	privsphere	Pearson Correlation	-.267**	.149*	.642**	1	.202**
		Sig. (2-tailed)	.000	.020	.000		.002
		N	246	246	248	248	234
	donate_prop	Pearson Correlation	-.148*	-.064	.325**	.202**	1
		Sig. (2-tailed)	.025	.330	.000	.002	
		N	232	232	234	234	234
Israel	SDO	Pearson Correlation	1	-.282**	-.198*	-.227**	-.120
		Sig. (2-tailed)		.001	.018	.007	.154
		N	142	142	142	142	142
	sex_d	Pearson Correlation	-.282**	1	.160	.242**	.109
		Sig. (2-tailed)	.001		.058	.004	.197
		N	142	142	142	142	142
	envcitextended	Pearson Correlation	-.198*	.160	1	.719**	.172*
		Sig. (2-tailed)	.018	.058		.000	.041
		N	142	142	142	142	142
	privsphere	Pearson Correlation	-.227**	.242**	.719**	1	.202*
		Sig. (2-tailed)	.007	.004	.000		.016
		N	142	142	142	142	142
	donate_prop	Pearson Correlation	-.120	.109	.172*	.202*	1
		Sig. (2-tailed)	.154	.197	.041	.016	
		N	142	142	142	142	142
Japan	SDO	Pearson Correlation	1	-.108	-.144	-.192*	-.139
		Sig. (2-tailed)		.227	.106	.031	.130
		N	127	126	127	127	120
	sex_d	Pearson Correlation	-.108	1	.158	.111	-.076
		Sig. (2-tailed)	.227		.077	.218	.413
		N	126	126	126	126	119
	envcitextended	Pearson Correlation	-.144	.158	1	.577**	.222*
		Sig. (2-tailed)	.106	.077		.000	.015
		N	127	126	127	127	120
	privsphere	Pearson Correlation	-.192*	.111	.577**	1	.241**
		Sig. (2-tailed)	.031	.218	.000		.008
		N	127	126	127	127	120
	donate_prop	Pearson Correlation	-.139	-.076	.222*	.241**	1
		Sig. (2-tailed)	.130	.413	.015	.008	
		N	120	119	120	120	120
Mexico	SDO	Pearson Correlation	1	-.080	-.093	-.050	-.068

		Sig. (2-tailed)		.259	.190	.482	.421
		N	203	203	198	202	144
	sex_d	Pearson Correlation	-.080	1	-.017	-.052	.094
		Sig. (2-tailed)	.259		.810	.464	.262
		N	203	203	198	202	144
	envcitextended	Pearson Correlation	-.093	-.017	1	.545**	.349**
		Sig. (2-tailed)	.190	.810		.000	.000
		N	198	198	198	197	142
	privsphere	Pearson Correlation	-.050	-.052	.545**	1	.276**
		Sig. (2-tailed)	.482	.464	.000		.001
		N	202	202	197	202	144
	donate_prop	Pearson Correlation	-.068	.094	.349**	.276**	1
		Sig. (2-tailed)	.421	.262	.000	.001	
		N	144	144	142	144	144
Netherlands	SDO	Pearson Correlation	1	-.200*	-.150	-.105	-.043
		Sig. (2-tailed)		.021	.085	.229	.620
		N	134	134	133	134	133
	sex_d	Pearson Correlation	-.200*	1	.014	.166	-.107
		Sig. (2-tailed)	.021		.877	.055	.220
		N	134	134	133	134	133
	envcitextended	Pearson Correlation	-.150	.014	1	.533**	.337**
		Sig. (2-tailed)	.085	.877		.000	.000
		N	133	133	133	133	132
	privsphere	Pearson Correlation	-.105	.166	.533**	1	.277**
		Sig. (2-tailed)	.229	.055	.000		.001
		N	134	134	133	134	133
	donate_prop	Pearson Correlation	-.043	-.107	.337**	.277**	1
		Sig. (2-tailed)	.620	.220	.000	.001	
		N	133	133	132	133	133
New Zealand	SDO	Pearson Correlation	1	-.031	-.243**	-.212**	-.197*
		Sig. (2-tailed)		.685	.001	.006	.012
		N	169	169	169	168	163
	sex_d	Pearson Correlation	-.031	1	.014	.204**	-.052
		Sig. (2-tailed)	.685		.858	.008	.507
		N	169	169	169	168	163
	envcitextended	Pearson Correlation	-.243**	.014	1	.515**	.292**
		Sig. (2-tailed)	.001	.858		.000	.000
		N	169	169	169	168	163
	privsphere	Pearson Correlation	-.212**	.204**	.515**	1	.239**
		Sig. (2-tailed)	.006	.008	.000		.002
		N	168	168	168	168	162

	donate_prop	Pearson Correlation	-.197*	-.052	.292**	.239**	1
		Sig. (2-tailed)	.012	.507	.000	.002	
		N	163	163	163	162	163
Norway	SDO	Pearson Correlation	1	-.067	-.204**	-.257**	-.161*
		Sig. (2-tailed)		.363	.005	.000	.029
		N	184	184	184	184	184
	sex_d	Pearson Correlation	-.067	1	.132	.208**	.050
		Sig. (2-tailed)	.363		.074	.005	.501
		N	184	184	184	184	184
	envcitextended	Pearson Correlation	-.204**	.132	1	.592**	.482**
		Sig. (2-tailed)	.005	.074		.000	.000
		N	184	184	184	184	184
	privsphere	Pearson Correlation	-.257**	.208**	.592**	1	.383**
		Sig. (2-tailed)	.000	.005	.000		.000
		N	184	184	184	184	184
	donate_prop	Pearson Correlation	-.161*	.050	.482**	.383**	1
		Sig. (2-tailed)	.029	.501	.000	.000	
		N	184	184	184	184	184
Poland	SDO	Pearson Correlation	1	.212*	-.187*	-.189*	-.033
		Sig. (2-tailed)		.026	.048	.046	.741
		N	112	111	112	112	100
	sex_d	Pearson Correlation	.212*	1	.039	.004	-.194
		Sig. (2-tailed)	.026		.687	.966	.055
		N	111	111	111	111	99
	envcitextended	Pearson Correlation	-.187*	.039	1	.499**	.189
		Sig. (2-tailed)	.048	.687		.000	.059
		N	112	111	112	112	100
	privsphere	Pearson Correlation	-.189*	.004	.499**	1	.195
		Sig. (2-tailed)	.046	.966	.000		.052
		N	112	111	112	112	100
	donate_prop	Pearson Correlation	-.033	-.194	.189	.195	1
		Sig. (2-tailed)	.741	.055	.059	.052	
		N	100	99	100	100	100
Russia	SDO	Pearson Correlation	1	-.198	-.238*	-.363**	-.108
		Sig. (2-tailed)		.084	.037	.001	.351
		N	77	77	77	77	76
	sex_d	Pearson Correlation	-.198	1	.130	.132	-.090
		Sig. (2-tailed)	.084		.260	.251	.441
		N	77	77	77	77	76
	envcitextended	Pearson Correlation	-.238*	.130	1	.579**	.181
		Sig. (2-tailed)	.037	.260		.000	.119

		N	77	77	77	77	76
	privsphere	Pearson Correlation	-.363**	.132	.579**	1	.082
		Sig. (2-tailed)	.001	.251	.000		.482
		N	77	77	77	77	76
	donate_prop	Pearson Correlation	-.108	-.090	.181	.082	1
		Sig. (2-tailed)	.351	.441	.119	.482	
		N	76	76	76	76	76
South Africa	SDO	Pearson Correlation	1	-.018	-.044	-.150*	-.104
		Sig. (2-tailed)		.812	.551	.041	.212
		N	186	186	185	186	146
	sex_d	Pearson Correlation	-.018	1	.031	.088	-.029
		Sig. (2-tailed)	.812		.667	.227	.729
		N	186	190	189	190	148
	envcitextended	Pearson Correlation	-.044	.031	1	.602**	.118
		Sig. (2-tailed)	.551	.667		.000	.154
		N	185	189	189	189	147
	privsphere	Pearson Correlation	-.150*	.088	.602**	1	.142
		Sig. (2-tailed)	.041	.227	.000		.085
		N	186	190	189	190	148
	donate_prop	Pearson Correlation	-.104	-.029	.118	.142	1
		Sig. (2-tailed)	.212	.729	.154	.085	
		N	146	148	147	148	148
South Korea	SDO	Pearson Correlation	1	-.020	-.073	-.068	-.119
		Sig. (2-tailed)		.822	.412	.448	.193
		N	128	127	128	127	121
	sex_d	Pearson Correlation	-.020	1	-.045	-.003	-.033
		Sig. (2-tailed)	.822		.613	.976	.716
		N	127	128	128	127	121
	envcitextended	Pearson Correlation	-.073	-.045	1	.585**	.101
		Sig. (2-tailed)	.412	.613		.000	.266
		N	128	128	129	128	122
	privsphere	Pearson Correlation	-.068	-.003	.585**	1	.172
		Sig. (2-tailed)	.448	.976	.000		.059
		N	127	127	128	128	121
	donate_prop	Pearson Correlation	-.119	-.033	.101	.172	1
		Sig. (2-tailed)	.193	.716	.266	.059	
		N	121	121	122	121	122
Spain	SDO	Pearson Correlation	1	-.246**	-.269**	-.259**	-.123
		Sig. (2-tailed)		.000	.000	.000	.053
		N	254	254	254	253	247
	sex_d	Pearson Correlation	-.246**	1	.119	.206**	-.073

		Sig. (2-tailed)	.000		.057	.001	.250
		N	254	255	255	254	248
	envcitextended	Pearson Correlation	-.269**	.119	1	.486**	.237**
		Sig. (2-tailed)	.000	.057		.000	.000
		N	254	255	255	254	248
	privsphere	Pearson Correlation	-.259**	.206**	.486**	1	.236**
		Sig. (2-tailed)	.000	.001	.000		.000
		N	253	254	254	254	247
	donate_prop	Pearson Correlation	-.123	-.073	.237**	.236**	1
		Sig. (2-tailed)	.053	.250	.000	.000	
		N	247	248	248	247	248
Sweden	SDO	Pearson Correlation	1	-.229**	-.346**	-.338**	-.238**
		Sig. (2-tailed)		.000	.000	.000	.000
		N	267	267	265	267	265
	sex_d	Pearson Correlation	-.229**	1	.135*	.242**	.024
		Sig. (2-tailed)	.000		.028	.000	.703
		N	267	267	265	267	265
	envcitextended	Pearson Correlation	-.346**	.135*	1	.564**	.324**
		Sig. (2-tailed)	.000	.028		.000	.000
		N	265	265	265	265	263
	privsphere	Pearson Correlation	-.338**	.242**	.564**	1	.301**
		Sig. (2-tailed)	.000	.000	.000		.000
		N	267	267	265	267	265
	donate_prop	Pearson Correlation	-.238**	.024	.324**	.301**	1
		Sig. (2-tailed)	.000	.703	.000	.000	
		N	265	265	263	265	265
Switzerland	SDO	Pearson Correlation	1	-.119	-.158	-.053	-.090
		Sig. (2-tailed)		.143	.050	.518	.269
		N	154	154	154	154	152
	sex_d	Pearson Correlation	-.119	1	.109	.088	.117
		Sig. (2-tailed)	.143		.180	.278	.151
		N	154	154	154	154	152
	envcitextended	Pearson Correlation	-.158	.109	1	.553**	.428**
		Sig. (2-tailed)	.050	.180		.000	.000
		N	154	154	154	154	152
	privsphere	Pearson Correlation	-.053	.088	.553**	1	.205*
		Sig. (2-tailed)	.518	.278	.000		.011
		N	154	154	154	154	152
	donate_prop	Pearson Correlation	-.090	.117	.428**	.205*	1
		Sig. (2-tailed)	.269	.151	.000	.011	
		N	152	152	152	152	152

UK	SDO	Pearson Correlation	1	-.232**	-.145	-.107	-.015
		Sig. (2-tailed)		.004	.075	.193	.859
		N	152	152	152	150	152
	sex_d	Pearson Correlation	-.232**	1	.120	.269**	-.042
		Sig. (2-tailed)	.004		.142	.001	.606
		N	152	152	152	150	152
	envcitextended	Pearson Correlation	-.145	.120	1	.508**	.292**
		Sig. (2-tailed)	.075	.142		.000	.000
		N	152	152	152	150	152
	privsphere	Pearson Correlation	-.107	.269**	.508**	1	.185*
		Sig. (2-tailed)	.193	.001	.000		.024
		N	150	150	150	150	150
	donate_prop	Pearson Correlation	-.015	-.042	.292**	.185*	1
		Sig. (2-tailed)	.859	.606	.000	.024	
		N	152	152	152	150	152
USA	SDO	Pearson Correlation	1	-.206*	.134	-.159	-.142
		Sig. (2-tailed)		.022	.138	.079	.125
		N	123	123	123	122	119
	sex_d	Pearson Correlation	-.206*	1	.033	.158	.026
		Sig. (2-tailed)	.022		.719	.082	.780

		N	123	123	123	122	119
	envcitextended	Pearson Correlation	.134	.033	1	.580**	.169
		Sig. (2-tailed)	.138	.719		.000	.066
		N	123	123	123	122	119
	privsphere	Pearson Correlation	-.159	.158	.580**	1	.364**
		Sig. (2-tailed)	.079	.082	.000		.000
		N	122	122	122	122	119
	donate_prop	Pearson Correlation	-.142	.026	.169	.364**	1
		Sig. (2-tailed)	.125	.780	.066	.000	
		N	119	119	119	119	119
Venezuela	SDO	Pearson Correlation	1	-.162*	-.189**	-.176*	-.019
		Sig. (2-tailed)		.028	.010	.017	.807
		N	185	184	185	184	174
	sex_d	Pearson Correlation	-.162*	1	.165*	.197**	-.066
		Sig. (2-tailed)	.028		.025	.007	.389
		N	184	184	184	183	173
	envcitextended	Pearson Correlation	-.189**	.165*	1	.546**	.120
		Sig. (2-tailed)	.010	.025		.000	.115
		N	185	184	185	184	174
	privsphere	Pearson Correlation	-.176*	.197**	.546**	1	.056
		Sig. (2-tailed)	.017	.007	.000		.464
		N	184	183	184	184	173
	donate_prop	Pearson Correlation	-.019	-.066	.120	.056	1

	Sig. (2-tailed)	.807	.389	.115	.464	
	N	174	173	174	173	174

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix Table 2. Correlation matrix by national sample for the community samples

country			SDO	What is your gender?	envcitextended	privspher e	donate_pro p
Australia	SDO	Pearson Correlation	1	-.074	-.113	-.308**	-.116
		Sig. (2-tailed)		.404	.207	.000	.191
		N	129	129	126	128	128
	What is your gender?	Pearson Correlation	-.074	1	.071	.023	-.066
		Sig. (2-tailed)	.404		.433	.792	.457
		N	129	129	126	128	128
	envcitextended	Pearson Correlation	-.113	.071	1	.624**	.285**
		Sig. (2-tailed)	.207	.433		.000	.001
		N	126	126	126	125	125
	privsphere	Pearson Correlation	-.308**	.023	.624**	1	.246**
		Sig. (2-tailed)	.000	.792	.000		.005
		N	128	128	125	128	127
	donate_prop	Pearson Correlation	-.116	-.066	.285**	.246**	1
		Sig. (2-tailed)	.191	.457	.001	.005	
		N	128	128	125	127	128
Brazil	SDO	Pearson Correlation	1	-.120	-.176*	-.201**	-.087
		Sig. (2-tailed)		.108	.019	.007	.252
		N	179	179	176	179	177
	What is your gender?	Pearson Correlation	-.120	1	.132	.190*	-.092
		Sig. (2-tailed)	.108		.080	.011	.225
		N	179	179	176	179	177
	envcitextended	Pearson Correlation	-.176*	.132	1	.646**	.232**

		Sig. (2-tailed)	.019	.080		.000	.002
		N	176	176	176	176	174
	privsphere	Pearson Correlation	-.201**	.190*	.646**	1	.249**
		Sig. (2-tailed)	.007	.011	.000		.001
		N	179	179	176	179	177
	donate_prop	Pearson Correlation	-.087	-.092	.232**	.249**	1
		Sig. (2-tailed)	.252	.225	.002	.001	
		N	177	177	174	177	177
China	SDO	Pearson Correlation	1	-.195*	.196*	-.185*	-.173
		Sig. (2-tailed)		.031	.030	.041	.057
		N	122	122	122	122	121
	What is your gender?	Pearson Correlation	-.195*	1	.095	.076	-.053
		Sig. (2-tailed)	.031		.296	.406	.564
		N	122	122	122	122	121
	envcitextended	Pearson Correlation	.196*	.095	1	.496**	-.059
		Sig. (2-tailed)	.030	.296		.000	.519
		N	122	122	122	122	121
	privsphere	Pearson Correlation	-.185*	.076	.496**	1	.179*
		Sig. (2-tailed)	.041	.406	.000		.050
		N	122	122	122	122	121
	donate_prop	Pearson Correlation	-.173	-.053	-.059	.179*	1
		Sig. (2-tailed)	.057	.564	.519	.050	
		N	121	121	121	121	121
Iceland	SDO	Pearson Correlation	1	-.576**	-.252	-.007	-.067
		Sig. (2-tailed)		.000	.126	.968	.705
		N	38	38	38	38	34
	What is your gender?	Pearson Correlation	-.576**	1	.042	.142	.286
		Sig. (2-tailed)	.000		.803	.394	.101
		N	38	38	38	38	34
	envcitextended	Pearson Correlation	-.252	.042	1	.485**	.193
		Sig. (2-tailed)	.126	.803		.002	.273

		N	38	38	38	38	34
	privsphere	Pearson Correlation	-.007	.142	.485**	1	.205
		Sig. (2-tailed)	.968	.394	.002		.244
		N	38	38	38	38	34
	donate_prop	Pearson Correlation	-.067	.286	.193	.205	1
		Sig. (2-tailed)	.705	.101	.273	.244	
		N	34	34	34	34	34
Israel	SDO	Pearson Correlation	1	-.093	-.301**	-.156	-.211*
		Sig. (2-tailed)		.315	.001	.090	.021
		N	119	119	118	119	119
	What is your gender?	Pearson Correlation	-.093	1	.203*	.286**	-.032
		Sig. (2-tailed)	.315		.027	.002	.726
		N	119	119	118	119	119
	envcitextended	Pearson Correlation	-.301**	.203*	1	.704**	.278**
		Sig. (2-tailed)	.001	.027		.000	.002
		N	118	118	118	118	118
	privsphere	Pearson Correlation	-.156	.286**	.704**	1	.245**
		Sig. (2-tailed)	.090	.002	.000		.007
		N	119	119	118	119	119
	donate_prop	Pearson Correlation	-.211*	-.032	.278**	.245**	1
		Sig. (2-tailed)	.021	.726	.002	.007	
		N	119	119	118	119	119
New Zealand	SDO	Pearson Correlation	1	-.193	-.363**	-.206	-.191
		Sig. (2-tailed)		.082	.001	.063	.096
		N	82	82	81	82	77
	What is your gender?	Pearson Correlation	-.193	1	.216	.342**	.097
		Sig. (2-tailed)	.082		.052	.002	.402
		N	82	82	81	82	77
	envcitextended	Pearson Correlation	-.363**	.216	1	.399**	.246*
		Sig. (2-tailed)	.001	.052		.000	.032
		N	81	81	81	81	76

	privsphere	Pearson Correlation	-.206	.342**	.399**	1	.078
		Sig. (2-tailed)	.063	.002	.000		.499
		N	82	82	81	82	77
	donate_prop	Pearson Correlation	-.191	.097	.246*	.078	1
		Sig. (2-tailed)	.096	.402	.032	.499	
		N	77	77	76	77	77
Poland	SDO	Pearson Correlation	1	.160	-.070	-.142	-.179
		Sig. (2-tailed)		.058	.427	.091	.067
		N	143	142	130	143	106
	What is your gender?	Pearson Correlation	.160	1	-.001	-.113	.023
		Sig. (2-tailed)	.058		.992	.180	.816
		N	142	144	130	143	107
	envcitextended	Pearson Correlation	-.070	-.001	1	.425**	.436**
		Sig. (2-tailed)	.427	.992		.000	.000
		N	130	130	131	130	97
	privsphere	Pearson Correlation	-.142	-.113	.425**	1	.227*
		Sig. (2-tailed)	.091	.180	.000		.019
		N	143	143	130	144	107
	donate_prop	Pearson Correlation	-.179	.023	.436**	.227*	1
		Sig. (2-tailed)	.067	.816	.000	.019	
		N	106	107	97	107	107
Sweden	SDO	Pearson Correlation	1	-.148	-.194	-.367**	-.365**
		Sig. (2-tailed)		.151	.060	.000	.000
		N	95	95	95	95	93
	What is your gender?	Pearson Correlation	-.148	1	.193	.144	-.028
		Sig. (2-tailed)	.151		.060	.165	.788
		N	95	95	95	95	93
	envcitextended	Pearson Correlation	-.194	.193	1	.608**	.337**
		Sig. (2-tailed)	.060	.060		.000	.001
		N	95	95	95	95	93

	privsphere	Pearson Correlation	-.367**	.144	.608**	1	.327**
		Sig. (2-tailed)	.000	.165	.000		.001
		N	95	95	95	95	93
	donate_prop	Pearson Correlation	-.365**	-.028	.337**	.327**	1
		Sig. (2-tailed)	.000	.788	.001	.001	
		N	93	93	93	93	93
USA	SDO	Pearson Correlation	1	-.161*	-.206*	-.149	-.213**
		Sig. (2-tailed)		.048	.012	.068	.009
		N	151	151	150	151	150
	What is your gender?	Pearson Correlation	-.161*	1	.085	.179*	.045
		Sig. (2-tailed)	.048		.302	.028	.584
		N	151	151	150	151	150
	envcitextended	Pearson Correlation	-.206*	.085	1	.602**	.313**
		Sig. (2-tailed)	.012	.302		.000	.000
		N	150	150	150	150	149
	privsphere	Pearson Correlation	-.149	.179*	.602**	1	.220**
		Sig. (2-tailed)	.068	.028	.000		.007
		N	151	151	150	151	150
	donate_prop	Pearson Correlation	-.213**	.045	.313**	.220**	1
		Sig. (2-tailed)	.009	.584	.000	.007	
		N	150	150	149	150	150
Venezuela	SDO	Pearson Correlation	1	-.092	-.148*	-.099	-.113
		Sig. (2-tailed)		.221	.050	.187	.191
		N	179	179	176	179	136
	What is your gender?	Pearson Correlation	-.092	1	.061	.203**	-.076
		Sig. (2-tailed)	.221		.424	.006	.377
		N	179	180	177	180	136
	envcitextended	Pearson Correlation	-.148*	.061	1	.648**	.184*
		Sig. (2-tailed)	.050	.424		.000	.034
		N	176	177	177	177	133

privsphere	Pearson Correlation	**-.099**	**.203****	**.648****	**1**	**.249****
	Sig. (2-tailed)	**.187**	**.006**	**.000**		**.004**
	N	**179**	**180**	**177**	**180**	**136**
donate_prop	Pearson Correlation	**-.113**	**-.076**	**.184***	**.249****	**1**
	Sig. (2-tailed)	**.191**	**.377**	**.034**	**.004**	
	N	**136**	**136**	**133**	**136**	**136**

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).