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Political Ideology, Cooperation, and National Parochialism Across 42 Nations

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Summary

Political ideology has been hypothesized to be associated with cooperation and national parochialism (i.e., greater cooperation with members of one's nation), with liberals thought to have more cooperation with strangers and less national parochialism, compared to conservatives. However, previous findings are limited to few – and predominantly western – nations. Here, we present a large-scale cross-societal experiment that can test hypotheses on the relation between political ideology, cooperation, and national parochialism around the globe. To do so, we recruited 18,411 participants from 42 nations. Participants made decisions in a prisoner's dilemma game, and we manipulated the nationality of their interaction partner (national ingroup member, national outgroup member, or unidentified stranger). We found that liberals, compared to conservatives, displayed slightly greater cooperation, trust in others, and greater identification with the world as a whole. Conservatives, however, identified more strongly with their own nation and displayed slightly greater national parochialism in cooperation. Importantly, the association between political ideology and behavior was significant in nations characterized by higher wealth, stronger rule of law, and better government effectiveness. We discuss the implications of these findings for understanding the association between political ideology and cooperation.

Introduction

In a globalized world, cooperation within and across nations is of great importance to promote and maintain public goods across nations [1–3]. These public goods can involve immense challenges that transcend national boundaries, such as the management of pandemics, climate change, and resource conservation, all of which require nations to make costly contributions to the public good and which can prevent collective disaster. Although there is urgency for nations to cooperate to address these challenges, there seems to have been an increase in national parochialism around the globe, with the rise of political parties gaining popularity via nationalist and isolationist agendas [4]. These movements have the potential to hinder the ability to successfully solve these large-scale global challenges. In this paper, we investigate in a social dilemma game whether political ideology is associated with cooperation and national parochialism, and whether this association varies across nations around the world.

Political ideology has previously been associated with variation in values which can affect cooperation [5]. For example, liberals (in the US and Italy) have been found to weight others' outcomes more in social decisions, compared to conservatives [6]. Other research, however, did not find political ideology to be related to a willingness to cooperate with others, or any differences in parochial cooperation based on political party affiliation [7]. One major limitation of previous work is that it concentrated on a limited set of nations (i.e., USA, the Netherlands, and Italy) and that the countries under investigation were WEIRD, i.e., Western, Educated, Industrialized, Rich, and Democratic [6–8].

In this paper, we take a much more comprehensive approach by running a study with representative populations from 42 nations around the world. These countries were chosen to reflect a broad range of institutional, cultural, and ecological factors. Due to the large variance in these factors, we are able to examine (*a*) whether political ideology is associated with cooperation and national parochialism around the globe, (*b*) whether political ideology is associated with psychological mechanisms (i.e., national identification/identification with the world, or trust) that can account for why people cooperate more with ingroup vs outgroup members, and (*c*) whether the relation between political ideology and cooperation is moderated by cross-societal factors such as quality of institutions and prevalence of infectious diseases.

Political ideology and cooperation.

Political ideology can be defined as a set of beliefs about the proper order of society and how it can be achieved [9]. Traditionally, two main political ideologies emerge from the research on differences between these sets of beliefs: conservatives and liberals [5]. These differences in political ideology could reflect differences in how people interact with others [6]. For example, individual differences in political ideology may underlie different strategies in social

interactions, including the degree to which people cooperate with others, or aggress outgroups [10,11]. Liberals, compared to conservatives, are expected to extend their cooperation beyond their close network, and therefore have cooperative interactions with unknown others. Past evidence has indeed found that liberals and conservatives display different preferences about how to distribute resources between themselves and others [6,12,13]. In particular, liberals have been hypothesized to be more concerned for others' outcomes, compared to conservatives (i.e., liberals are more inequality averse) [7]. This is because liberals are less likely to believe that social inequalities are best characterized as zero-sum interactions (i.e., one person's gains is equivalent to another's loss) [14]. This suggests that liberals may be more motivated to sacrifice their own self-interest to establish equal and mutually beneficial outcomes in social interactions [7,15,16].

Importantly, differences in inequality aversion are associated with differences in a willingness to cooperate with others [15]. In fact, cooperation involves actions that benefit others, often at a cost to oneself [17]. Prior models have emphasized different approaches to understanding cooperation (for reviews see, [17,18]), such as models that integrated political ideology and its association with concerns for others [6]. Moreover, conservative ideologies are characterized by higher individualism and self-reliance, values which should prioritize individual interests over collective ones [19]. As prosocial preferences, such as inequality aversion, are associated with higher cooperation toward others [13], we can expect political ideology to be associated with cooperation with others, such that liberals, compared to conservatives, will generally cooperate more with others (H1).

Cooperation with unrelated strangers can be risky, and requires making oneself vulnerable to being exploited [20]. Therefore, cooperation among strangers requires trust and tolerance of uncertainty [21,22]. As interactions with strangers can involve a risk of exploitation, positive beliefs about others' behaviors (i.e., trust) are important to understanding how people behave. As conservatives are characterized by beliefs that others are self-interested and view the world as more threatening [14], it can be hypothesized that conservatives do not expect others to cooperate. Therefore, we hypothesize that liberals, compared to conservatives, generally show higher trust toward strangers (H2a). Importantly, trust is strongly associated with cooperation, especially when the risk of exploitation is high [1,22, 52]. As a consequence, we hypothesize that higher trust (i.e., positive expectations toward others) is associated with greater cooperation, therefore mediating the relation between political ideology and cooperation (H2b).

Political ideology and national parochialism.

Decades of research on human cooperation suggest that cooperation is parochial, i.e., people prefer to cooperate with ingroup members, compared to outgroup members and strangers [24–27]. Little research has been done on political ideology and national parochialism in cooperation. Research on political ideology proposes two potential competing perspectives on how differences in ideologies are potentially related to parochialism [5,28]. On the one hand, research proposes that conservatives are more loyal to their groups [29,30]. Empirical evidence supports the idea that conservatives, compared to liberals, show more prejudice toward others [31,32], while liberals have been found to be less discriminatory, even with people of opposing ideologies ([33], H3a). On the other hand, it has been argued that both liberals and conservatives can engage in prejudice, if they perceive the outgroup holds different world views ([28], H3b). Supporting this idea, research on Democrats and Republicans in the US found that both showed ingroup favoritism (parochialism) when interacting with people from the same versus different political party [7].

Importantly, it is possible that individual differences in political ideology affect two of the psychological mechanisms that have been hypothesized to explain national parochialism, that is expectations (trust) and identification with one's nation and the world as a whole. Supporting this idea, past research has found that people cooperate more with ingroup members because they hold positive expectations that other ingroup members, but not outgroups members, will cooperate [34]. As conservatives are more loyal to their groups and norm abiding [12,29], we hypothesize that conservatives, compared to liberals, will expect more cooperation from ingroup members, compared to outgroup members (H4). Previous cross-cultural research has also found that the degree to which people identify with their nation, compared to the world as a whole, affects investments to local and global public goods [24,35]. Assuming that liberals, compared to conservatives, perceive the world as less threatening [14] and have relatively lower loyalty to group affiliations [12], we hypothesize that liberals, compared to conservatives, will identify less with their nationality and more with the world as whole (H5).

Cross-societal differences in political ideology and cooperation.

Does the relation between political ideology and cooperation and national parochialism vary across nations? To date, research has not examined how individual differences in political ideology relate to cooperation and national parochialism across societies. Evolutionary theory proposes that individual differences in how people cooperate and show parochialism can be the result of adaptive responses to the social environment, which in turn underlie political ideology in humans [36]. Hence, based on this we can expect variation in political ideology around the world. Importantly, according to a post-materialist perspective a critical societal and ecological precondition for self-expression and emergence of individual differences is the fulfillment of basic material needs, such as health [38]. Hence, based on this perspective, we could expect that the expression of these individual differences may vary around the world. In general, it may be that the associations between political ideology, cooperation, and national parochialism occur in societies that promote the fulfillment of these needs. High quality institutions and societies with lower historical prevalence of infectious diseases can mitigate material threats and guarantee safe interactions with unknown strangers [35]. Here we consider the possibility that societies that fulfill basic material needs allow for a stronger association between individual differences in political ideology, cooperation, and national parochialism. In particular, in societies characterized by higher quality of institutions, we hypothesize that liberal, compared to conservative, ideologies will be associated with higher cooperation and less national parochialism (H6). Moreover, in nations characterized by lower prevalence of infectious diseases, liberals will display higher cooperation and lower national parochialism than conservatives (H7) (see Table 1 for summary of hypotheses).

Methods

Participants. We recruited 18,411 participants from 42 nations (Argentina, Australia, Bolivia, Brazil, Canada, China, Colombia, Egypt, Finland, Germany, Greece, Hong Kong, Hungary, India, Indonesia, Italy, Japan, Kenya, Mexico, Malaysia, Morocco, Netherlands, New Zealand, Nigeria, Pakistan, Panama, Peru, Philippines, Poland, Portugal, Russia, Serbia, Singapore, South Africa, South Korea, Spain, Sweden, Taiwan, Turkey, Venezuela, United Kingdom, and United States) varying widely in quality of institutions, state of democracy, prevalence of infectious diseases, and religion. Participants were recruited by a panel agency with the goal to obtain a stratified sample by age, gender and income. Additional information on the sample strategy can be found in [37]. We determined the sample size by conducting a power-analysis to detect a within-subjects effect of national parochialism in cooperation (difference between ingroup and outgroup members/strangers, preregistration of the design can be found here: https://osf.io/gnxv2/). An a priori-power analysis suggested that to detect the effect size of the within-subjects difference reported in a recent meta-analysis (d = 0.27, [38]) at statistical power (1-β) = 0.95 and α = 0.05 required a sample size of 150 people per country. A sensitivity power analysis that considers a sample size of 400 and 800 participants and a 95% statistical power and 5% of probability error, reveals that we can detect very small effect size of discrimination (d = 0.16 and d = 0.12).

Procedure and experimental design.

Participants made several choices in a prisoner's dilemma task in an online survey. The decision making task involved three counterbalanced within-subject treatments about the nationality of their partner in the prisoner's dilemma (Partner's nationality: National Ingroup vs National Outgroup vs Unidentified Stranger) and two counterbalanced within-subjects treatments that varied whether their choice was either private or public (see Table 2 for design summary). The procedure of the experiment was the same across all nations. First, participants gave their informed consent, and then made 12 independent cooperation decisions in a prisoner's dilemma, each with a different partner (either from the same nation, a set of outgroup nations, or an unidentified stranger). After that, participants were asked about their political ideology, national and global identification, and sociodemographic information. We wrote an English version of the survey. After that, we had experts translate the survey by using either the back-translation method or the committee method.

Cooperation and trust. Cooperation was assessed in a 2-person prisoner's dilemma game (PD). In the PD, participants were informed that they would make several decisions and that they were endowed with 10 Monetary Units (MU) for each decision. Each decision was made with a different partner. Participants were informed that both they and their partner could decide to send none, part, or the entire amount to the other. Each MU sent to the other would have then be doubled. Cooperation was measured by the amount of MU (0-10) sent to the partner. Participants were also asked how

many MU (0-10) they expected their partner to send to them. This served as a measure of trust. There was no feedback after decisions.

Observability: Public vs private choices. We also included an experimental manipulation of whether choice in the prisoner's dilemma was made public or not. Since this manipulation was introduced to test hypotheses not related to this project we describe it in the Supplementary information (see SI).

Partner's nationality. In the Ingroup treatment, participants made cooperation decisions by giving between 0 to 10 MU to a partner from the same nation. In the Outgroup treatment, participants made cooperation decisions with a partner from one of a set of other 16 nations. Since participants made 2 outgroup decisions per each observability treatment, we split the outgroup treatment in two sets of outgroup (Outgroup 1 = Canada, Hong Kong, Hungary, Kenya, New Zealand, Panama, Sweden, Venezuela; Outgroup 2: Australia, Colombia, Germany, India, Nigeria, Serbia, Singapore, United States). If the participant was from one of these outgroup nations, we excluded that specific nation from the pools (Outgroup 1 or Outgroup 2). In the unidentified Stranger treatment, the nationality of the partner was not specified (i.e., unknown, see instructions in the SI).

Incentives. A recent meta-analysis found no difference between using incentivized and hypothetical scenarios to study national parochialism [1,27]. Moreover, an experimental study has replicated this same finding across three countries [37]. Nonetheless, as a robustness check we investigated whether cooperation and national parochialism were affected by the use of incentives (vs hypothetical scenarios) in three nations. Participants in Brazil, India and Poland (N ~ 800 per country) were randomly allocated to a between subjects treatment where cooperation decisions could result in real monetary outcomes or a treatment where cooperation decisions resulted in hypothetical outcomes. Participants were endowed with 10 monetary units (MU). Then, they were informed that each MU corresponded to 2.5 minutes average wage in each country. Information of wage in each country were retrieved at https://tradingeconomics.com/country-list/wages. Participants were paid for one of the decisions in the incentive treatment. We found no interactions between national parochialism or observability with incentives, as well as no main effect of incentives on cooperation. These results provide additional empirical support for the conclusion that there is no substantial difference between studies that use incentivized or hypothetical scenarios to study cooperation with ingroup and outgroup members (results can be found in [37]).

Political ideology. Political ideology was assessed by asking participants where they would place themselves on a scale from 0 to 10 on political issues (0 = strong conservative-right leaning, 10 = strong liberal-left leaning). Higher scores in political ideology indicate higher levels of liberalism. Translations were adapted to reflect differences between left and right in political ideology across nations.

National and global identity. National and global identity were assessed by means of two items. Participants were asked how much they agree on the statement "I identify with my nationality" on a 7-points Likert scale for the national identity measure and how much they agree on the statement "I identify with the world as a whole" for the global identity measure (1 = Disagree completely, 7 = Agree completely). Higher scores indicate greater national and global identification.

Analytic strategy. In the models presented below, we used mixed-effects models where participants (level 2) and nations (level 3) were two random intercepts. Additionally, we included partner's nationality as a random slope. Partner's nationality (ingroup vs outgroup and stranger), political ideology, national, and global identification were fixed-effects predictor variables (level 2 variables). Similar to previous research, we combined outgroup and strangers to study the intrinsic motivation of participants to favor others from their own nation (i.e., ingroup favoritism, [27], see also SI). As we did not find evidence for outgroup derogation (people did not cooperate less with outgroups, compared to strangers, see SI), we did not consider this motivation any further. To account for potential self-selection effects, other individual differences variables (e.g., age, and gender) were included as level-2 control variables. Regarding the cross-societal analyses, we ran mixed-effects models where country-level indicators were level 2 predictor variables. A complete report of the results is presented in the Supplementary Information, from Table S6 to Table S24.

To help the interpretability of the cross-cultural analyses, we used a principal component analysis to calculate participant scores for cooperation and national parochialism. A cooperation score was computed based on a model that assumes the data across the 12 decisions load on one factor. The cooperation score can be interpreted as the cooperation

one person displays across all 12 decisions, independent of the treatments, with higher scores indicating higher cooperation. Parochialism scores were based on a model that assumes that the data across the 12 decisions load on two factors (ingroup vs outgroup + stranger treatments). A national parochialism score can be interpreted as the influence of the partner's nationality on cooperation, with higher scores meaning higher national parochialism (see SI section 3 for further details on the principal component analysis). The national parochialism score is based on the outcome of the principle component analysis, and should not be confused with the term for national parochialism, which represents the use of partner nationality to predict cooperation (ingroup vs and outgroup and stranger).

Results

Cooperation, trust and political ideology. First, we tested whether political ideology was associated with cooperation (H1). Across all 42 nations, we found that people who scored high in liberalism (left-leaning) cooperated more with others (independently from whether their partners were from the same nation, other nations, or unidentified strangers) compared to people who were more conservative (mixed-effects regression controlling for age, gender and main treatments: $b = 0.075$, $p < .001$, see Table S6). However, this relation was characterized by a small effect size ($r = .03$) and was statistically significant in only 4 out of 42 nations (see random-effects meta-analysis in Figure S8). We also found that liberals held different expectations about others' cooperation (trust), compared to conservatives (H2a). In fact, in a mixed-effects regression model we found that liberals expected more cooperation from others, compared to conservatives ($b = 0.044$, $p < .001$). This relation was also characterized by a small effect size ($r = .02$) and was statistically significant in only 5 nations (see Figure S9). Finally, we ran a multi-level mediation model [39] to test whether political ideology had an effect on cooperation via the indirect effect of trust. We found that trust partially mediated the relation between political ideology and cooperation (indirect effect: $b = .027$, $p < .001$; 95% *CI* [0.022, 0.030], *prop. mediated* = 0.365) (H2b).

National parochialism, expectations, and political ideology. Across all 42 nations, participants cooperated more when they knew that their partner was from the same nation, compared to when they knew that their partner was from another nation or a stranger ($b = 0.28$, $p < .001$; see also [37]). To test hypothesis 3, we ran a mixed-effects regression, and found that the national parochialism in cooperation was weaker among liberals, compared to conservatives (interaction effect controlling for age and gender: $b = -0.030$, $p < .001$, see Table S7). This result was also robust when computing a national parochialism score (see details on the calculation of the score in the SI, section 3) to test the main effect of political ideology on national parochialism: supporting H3a, and disconfirming H3b, we found that liberals showed less national parochialism than conservatives ($b = -0.053$, $p < .001$). The relation was characterized by a small effect size ($r = -0.02$) and the effect was significant in 6 nations (see Figure S10). Similarly, liberals, compared to conservatives, exhibited smaller differences in terms of expectations (trust) between ingroup members, compared to outgroup members and strangers (interaction effect: $b = -0.098$, $p < .001$). Supporting H4, the relation between expectation and national parochialism was stronger for conservatives, compared to liberals.

National identity, global identity, and political ideology. We then tested whether political ideology was associated with differences in how people identify with their nations or with the world as a whole (H5). In line with the hypotheses, liberals identified less with their nationality, compared to conservatives ($b = -0.110$, $p < .001$). The effect size was small ($r = -0.07$) and this negative relation was statistically significant in 19 out of 42 nations (see Figure S11). By contrast, we found that liberals identified more with the world as a whole, compared to conservatives ($b = 0.163$, $p < .001$). The effect size was small ($r = 0.11$), the relation was statistically significant in 21 out of 42 nations but the positive association was consistent across all nations except Taiwan (see Figure S12).

Cross-societal differences. Finally, we tested whether cross-societal differences in quality of institutions (H6), or historical prevalence of infectious diseases (H7), could moderate the relation between political ideology, cooperation and national parochialism scores around the globe. As we had multiple indices of cooperation (national ingroup, national outgroup, and unidentified strangers), we used a principal component analysis to extract values according to each construct. We found a significant positive interaction between quality of institutions and political ideology predicting cooperation scores. These findings were consistent across three indicators of quality of institutions (government effectiveness: $b = 0.151$, $p = .009$, rule of law: $b = 0.134$, $p = .02$, GDP per capita: $b = 0.180$, $p = .002$). As displayed in

Figure S3, the relation between political ideology and cooperation was stronger in societies characterized by higher government effectiveness, rule of law, and gross domestic product.

Similarly, we found a significant negative interaction between quality of institutions and political ideology predicting national parochialism scores (government effectiveness: $b = -0.067$, $p < .001$, rule of law: $b = -0.054$, $p = .001$, GDP per capita: $b = -0.072$, $p < .001$). The interactions are plotted in Figure S4, and display that the relation between political ideology and national parochialism scores in the observed data becomes stronger in nations characterized by higher quality of institutions.

We found no significant interaction between the historical prevalence of infectious diseases and political ideology predicting cooperation ($p = .204$). However, we found a significant interaction between historical prevalence of infectious diseases and political ideology predicting national parochialism scores ($b = 0.065$, $p < .001$). As displayed in Figure S5, the relation between political ideology and national parochialism scores was stronger in societies characterized by lower historical prevalence of infectious diseases. We also explored other potential cross-societal moderators (i.e., state of democracy, importance of religion, and church attendance) of the relation political ideology, cooperation, and national parochialism which we report in the SI.

Discussion

Research proposes that political ideology is associated with people's willingness to cooperate with strangers, ingroup members, and outgroup members [6,7]. In particular, people with conservative ideologies have been hypothesized to cooperate less with strangers [6,7], and be more willing to express ingroup bias toward people who share their values or identities [7,31]. Other research has questioned these differences and stressed the similarities among people with different political ideologies [28].

In this paper, we tested prominent hypotheses on the relation between political ideology, cooperation and national parochialism in an international experiment involving 42 nations around the globe. Overall, we found that liberals, compared to conservatives, cooperated more with unrelated strangers independently of group membership. Moreover, liberals showed less national parochialism, compared to conservatives. These differences seemed particularly driven by extreme liberal views, instead of extreme conservative views (see results on political extremism in the SI, section 2.7). Contrary to previous research [7], our results support theories which posit the existence of core differences in beliefs, values, and behaviors among people of different ideologies [5]. However, we found these effects in a limited number of nations (4 and 6) and, similar to previous research [7], the magnitude of the effect of the relation between political ideology and cooperation was small (see SI). This suggests that although there are differences in how people cooperate in social dilemmas based on their political ideology, research should be cautious in not overestimating the role of ideology in social dilemmas. In fact, it is possible that other individual differences (e.g., personality, [13]), or contextual factors (e.g., punishment, communication, [23,40]), explain more variance on how people behave in social dilemmas.

Differences in cooperation and national parochialisms among people with different ideologies were also present in the extent to which people trusted strangers, and to which they identified with their nations or the world as a whole. In fact, we found that conservatives, compared to liberals, expected less cooperation from strangers in general, and expected relatively more cooperation from a partner with shared nationality. Moreover, people with conservative rather than liberal ideologies identified more with their nation and identified less with the world as a whole. The effects of the relation between political ideology and identifications were larger than the ones observed in the prisoner's dilemma game, suggesting that individual differences may be less relevant when passing from thinking about subjective self-identification compared to strategic behavior in social dilemmas involving resource allocations. These results further validate the behavioral findings observed in the prisoner's dilemma, suggesting that political ideology can affect interactions with strangers and ingroup members. Moreover, these results inform previous research on international cooperation, by suggesting that individual differences in political ideology can explain why some people engage in universal vs parochial cooperation [1,24].

We further investigated the cross-societal underpinnings of the relation between political ideology and cooperation around the globe. A cross-societal approach can be used to assess the generalizability and variability of the relation between political ideology and cooperation. We found that the relation between political ideology and cooperation was present in a limited set of nations, suggesting that differences in political ideology emerge in specific contexts. We tested two hypotheses based on the idea that a critical societal precondition for self-expression and the individual differences is the fulfillment of basic material needs [41]. We found that in nations characterized by higher quality of institutions (high GDP, government effectiveness, and rule of law) and by lower historical prevalence of infectious diseases, the relation

between political ideology and cooperation was stronger, such that people holding liberal (left-wing), compared to conservative (right-wing), ideologies were more cooperative with strangers. These results contribute to our understanding of how the expression of individual differences in social behaviors can be favored by certain institutional conditions (e.g., countries characterized by high quality of institutions). Similar to findings on gender differences around the globe [41], we found that individual differences in political ideology were more predictive of behavior in nations with higher quality of institutions and more favorable ecological conditions (i.e., lower historical prevalence of infectious diseases).

These results contribute to our understanding of the role of cultural institutions and ecologies in shaping the political brain and psychology around the globe [42,43]. In fact, political orientations have been hypothesized to be related to relevant physiological, psychological and behavioral differences [5,44–46]. However, other research questioned some of these findings and highlighted similarities (rather than differences) in the behavior and physiological responses among people with different world-views [28,47]. These different results may be due to the restricted number of nations (e.g., nations with higher GDP like the USA) and samples used in research on the neuroscience and psychology of political ideology. In fact, we found that individual differences in political ideology are more remarkable in societies with specific institutions, while playing a minor role in others. Therefore, previous research may have underestimated the role of culture and ecologies, which may be crucial to understand the interplay between the environment, the formation of individual differences, and how individual differences are expressed in behavior [48]. As culture has had a prominent role in shaping human brains and behaviors [49,50], future research needs to embrace a cross-cultural approach to understand how differences in ecology, culture, and institutions can affect the biology and psychology of political ideology across nations.

There are a few limitations of this research worth noting. First, we only used one item to assess political ideology across 42 nations. Although this may limit the complexity and variation of political ideology around the globe (e.g., the possibility to distinguish between the social vs economic dimension), previous cross-cultural research finds evidence for the recurrence of a continuum from left to right across culture [51]. Second, some aspect of the design (e.g., online interactions) may contribute to the relatively small variation in the relation between political ideology and cooperation across nations. Third, it is possible that the null effects of political ideology in some nations might become significant when considering larger samples. In fact, the power analysis for this study was conducted to detect an effect size for national parochialism, and not for any (potentially smaller) effects of ideology. That said, in this study we presented empirical evidence from a large set of nations, with standardized instructions across nations, and large samples stratified by age, gender and income. Moreover, our results were consistent across overlapping constructs (cooperation and identification with the world as a whole, national parochialism and identification with one's nation).

Conclusions

To conclude, in a large cross-national experiment, we found that differences in cooperation and national parochialism can partially be accounted for by differences in political ideologies. Conservatives, compared to liberals, cooperated less with others and showed higher national parochialism around the globe. These differences were particularly pronounced in nations characterized by higher wealth, rule of law, and government effectiveness. Altogether, these results contribute to our understanding of the generalizability and variability of ideological behavior around the globe.

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Table 1. Summary of the hypotheses.

#	Hypothesis	Support
1	Liberals, compared to conservatives, will cooperate more with others (independently of the others' group membership)	Yes
2a	Liberals, compared to conservatives, show higher trust toward strangers, independent of the others' nationality	Yes
2b	Higher trust (i.e., positive expectations toward others) is associated to greater cooperation toward others therefore mediating the relationship between political ideology and cooperation	Yes
3a	Liberals will show less national parochialism, compared to conservatives	Yes
3b	No difference in national parochialism between conservatives and liberals	No
4	Conservatives, compared to liberals, will expect more cooperation from ingroup members, compared to outgroup members	Yes
5	Liberals, compared to conservatives, will identify less with their nationality and more with the world as a whole	Yes
6	In nations characterized by higher quality of institutions, higher scores in liberal ideology will be associated with higher cooperation (independently of partner's nationality) and less national parochialism.	Yes
7	In nations characterized by lower prevalence of infectious diseases, liberals will express less national parochialism and higher cooperation toward others (independently of their nationality), compared to conservatives	Partly

Table 2. Summary of the design.

Choices	Membership	Observability	Block
1	Ingroup	Yes	1
2	Ingroup	Yes	1
3	Outgroup 1	Yes	1
4	Outgroup 2	Yes	1
5	Stranger	Yes	1
6	Stranger	Yes	1
7	Ingroup	No	2
8	Ingroup	No	2
9	Outgroup 1	No	2
10	Outgroup 2	No	2
11	Stranger	No	2
12	Stranger	No	2

Notes. Outgroup 1 = Australia, Colombia, Germany, India, Nigeria, Serbia, Singapore, United States
Outgroup 2 = Canada, Hong Kong, Hungary, Kenya, New Zealand, Panama, Sweden, Venezuela

Supplementary Materials for

Political Ideology, Cooperation, and National Parochialism Across 42 Nations

Table of Contents

1. Materials

1.1. Descriptives

Table S1. Societies, sample sizes, %females, mean age, language, average level of political ideology,*= nation with the incentive treatment.

Nation/Society	*N*	Language	M_{age} (*SD*)	%Females	Pol. Ideology
Argentina	387	Spanish	35.02 (11.09)	51.42	5.08(2.41)
Australia	383	English	45.41 (13.40)	57.96	5.33(2.24)
Bolivia	391	Spanish	30.40 (9.16)	46.80	4.65(2.54)
Brazil	832*	Portuguese	34.50 (10.83)	61.66	5.39(3.08)
Canada	379	English	44.11 (13.32)	55.94	5.42(2.55)
China	393	Chinese	30.61 (8.36)	53.18	5.89(2.13)
Colombia	399	Spanish	34.45 (11.81)	53.88	5.46(2.75)
Egypt	408	Arabic	29.44 (8.50)	45.59	4.51(2.34)
Finland	388	Finnish	40.95 (13.27)	54.64	5.71(2.35)
Germany	391	German	44.90 (12.73)	51.92	5.50(2.23)
Greece	396	Greek	40.19 (11.66)	54.55	5.93(2.25)
Hong Kong	390	Complex Chinese	35.67 (11.00)	51.79	5.91(2.21)
Hungary	391	Hungarian	41.27 (12.95)	56.78	5.21(2.22)
India	834*	Hindi, English	33.37 (11.09)	45.92	6.32(2.64)
Indonesia	384	Indonesian	34.00 (10.12)	49.74	5.32(2.90)
Italy	675	Italian	41.33 (12.65)	57.19	5.63(2.63)
Japan	393	Japanese	48.06 (11.82)	52.42	4.80(2.10)
Kenya	383	English	30.48 (9.05)	49.61	5.36(2.89)
Malaysia	404	Malay, English, Chinese	33.85 (10.30)	50.74	5.31(2.20)
Mexico	408	Spanish	33.90 (11.52)	56.37	5.99(2.35)
Morocco	394	Arabic	31.85 (9.68)	49.49	4.55(2.60)
Netherlands	653	Dutch	46.45 (13.36)	55.28	5.60(2.26)
New Zealand	386	English	41.89 (13.04)	59.33	5.54(2.19)
Nigeria	395	English	30.93 (9.58)	44.30	5.25(2.93)
Pakistan	388	Urdu	28.86 (8.85)	24.48	6.89(2.60)
Panama	397	Spanish	31.55 (10.17)	53.65	4.38(2.66)
Peru’	393	Spanish	34.12 (10.56)	58.78	4.58(2.32)
Philippines	384	Filipino	34.56 (11.04)	55.73	5.11(2.59)
Poland	776*	Polish	39.37 (13.07)	53.22	5.48(2.44)
Portugal	448	Portuguese	37.98 (11.64)	55.58	5.55(2.26)
Russia	387	Russian	39.76 (11.09)	51.16	4.87(2.10)
Serbia	390	Serbian	37.60 (11.88)	55.13	5.91(2.48)
Singapore	384	English	39.58 (11.99)	51.82	5.51(2.13)
South Africa	390	English	35.24 (11.48)	52.31	5.18(2.74)
South Korea	379	Korean	40.90 (11.47)	57.78	5.75(1.99)
Spain	389	Spanish	41.16 (11.52)	56.81	5.67(2.35)
Sweden	392	Swedish	43.15 (12.59)	53.57	5.29(2.61)
Taiwan	392	Complex Chinese	36.31 (10.62)	55.36	5.79(2.11)
Turkey	414	Turkish	33.45 (9.97)	44.20	5.74(2.68)

UK	433	English	42.54 (12.78)	56.12	5.49(2.40)
United States	378	English	42.44 (13.30)	60.05	4.96(2.95)
Venezuela	435	Spanish	35.36 (11.53)	47.59	4.16(2.85)
Total	18,411		37.40 (12.52)	52.77%	5.38(2.46)

Table S2. Effect sizes on the relation between political ideology, cooperation, trust, national parochialism score, national identity and identity with the whole world in each country.

Nation	r_{coop}	r_{trust}	r_{np}	r_{nat}	r_{world}
Argentina	-0.036	-0.065	0.059	-0.016	0.061
Australia	0.021	0.011	-0.042	-0.070	0.204
Bolivia	-0.005	0.043	0.068	0.050	0.095
Brazil	0.031	0.040	-0.008	-0.147	-0.001
Canada	0.086	0.095	-0.090	-0.018	0.132
China	0.002	0.044	-0.096	-0.015	0.034
Colombia	0.052	0.029	0.007	-0.051	0.015
Egypt	-0.039	-0.035	0.064	-0.052	0.109
Finland	0.041	0.037	-0.105	-0.191	0.157
Germany	0.089	0.034	-0.071	-0.106	0.170
Greece	0.032	0.001	-0.042	-0.198	0.052
Hong Kong	0.122	0.074	-0.029	-0.246	0.082
Hungary	0.077	0.039	-0.020	-0.207	0.172
India	0.034	0.094	-0.010	0.054	0.159
Indonesia	0.083	0.080	0.006	0.029	0.051
Italy	0.017	0.054	-0.133	-0.158	0.133
Japan	0.073	0.036	-0.119	-0.134	0.072
Kenya	0.039	-0.093	0.035	-0.031	0.001
Malaysia	0.054	0.098	-0.014	-0.077	0.097
Mexico	0.063	0.068	0.035	0.079	-0.002
Morocco	-0.006	-0.034	0.015	-0.117	0.117
Netherlands	0.062	0.049	-0.142	-0.107	0.300
New Zealand	0.085	0.019	0.024	-0.030	0.100
Nigeria	0.167	0.124	0.118	0.157	0.121
Pakistan	-0.002	-0.005	-0.016	0.036	0.069
Panama	0.058	-0.010	-0.094	-0.037	0.054
Peru’	-0.027	-0.057	-0.027	-0.115	0.039
Philippines	0.037	0.106	0.087	0.169	0.090
Poland	0.020	-0.015	-0.045	-0.160	0.215
Portugal	0.026	-0.059	0.034	-0.030	0.029
Russia	-0.021	0.013	-0.086	-0.143	0.179
Serbia	-0.034	-0.006	-0.051	-0.171	0.052
Singapore	0.172	0.112	0.058	0.068	0.143
South Africa	-0.035	-0.065	0.129	0.148	0.104
South Korea	0.091	0.048	0.055	0.030	0.067
Spain	0.026	0.035	-0.175	-0.304	0.175
Sweden	0.080	0.004	-0.078	-0.138	0.331
Taiwan	-0.101	-0.067	0.044	0.015	-0.026

Turkey	-0.074	-0.103	-0.131	-0.279	0.217
UK	0.109	0.057	-0.039	-0.172	0.122
United States	-0.068	-0.068	-0.116	-0.216	0.098
Venezuela	0.001	0.022	0.024	0.033	0.052
Total	0.03	0.02	-0.02	-0.07	0.11

Notes. r_{coop} = correlation coefficient of the relation between political ideology and cooperation; r_{trust} = correlation coefficient of the relation between political ideology and trust (expectations); r_{np} = correlation coefficient of the relation between political ideology and national parochialism score, r_{nat} = correlation coefficient of the relation between political ideology and identification with the own nation, r_{world} = correlation coefficient of the relation between political ideology and identification with the world.

1.2. Cross-societal indicators

Table S3. Mean level scores of the cross-societal indicators.

Country	Government effectiveness	Rule of law	GDP	Historical prevalence of infectious diseases	Importance of religion	Church attendance	Democracy
Argentina	0.2	10	14398.36	-0.12	2.45	4.80	70.2
Australia	1.5	15	53799.94	-0.25	2.82	5.46	90.9
Bolivia	-0.4	6	3393.96	0.34	-	-	57
Brazil	-0.3	9	9821.41	0.93	1.60	3.18	69.7
Canada	1.9	15	45032.12	-1.31	2.18	4.55	91.5
China	0.4	2	8826.99	1.03	3.38	6.60	33.2
Colombia	-0.1	9	6408.92	0.27	1.59	3.45	69.6
Egypt	-0.6	3	2412.73	0.44	1.07	4.19	33.6
Finland	1.9	16	45703.33	-0.75	2.52	5.10	91.4
Germany	1.7	14	44469.91	-0.87	2.95	5.42	86.8
Greece	0.3	11	18613.42	0.08	-	-	72.9
Hong Kong	1.9	11	46193.61	0.27	2.77	5.64	61.5
Hungary	0.5	10	14224.85	-1	2.80	4.94	66.3
India	0.1	9	1942.10	0.94	1.41	3.08	72.3
Indonesia	0	5	3846.86	0.63	1.07	2.57	63.9
Italy	0.5	12	31952.98	0.16	1.96	3.56	77.1
Japan	1.6	15	38428.10	0.43	3.12	4.69	79.9
Kenya	-0.3	5	1594.83	0.95	-	-	51.1
Malaysia	0.8	5	9951.54	0.5	1.19	3.01	68.8
Mexico	0	6	8910.33	0.28	1.63	3.39	61.9
Morocco	-0.2	6	3007.24	0.59	1.12	1.34	49.9
Netherlands	1.9	15	48223.16	-0.87	3.08	5.63	88.9
New Zealand	1.8	15	42940.58	-0.98	2.75	5.46	92.6

Nigeria	-1	4	1968.43	1.16	1.13	1.70	44.4
Pakistan	-0.6	5	1547.85	0.02	1.13	3.70	41.7
Panama	0	10	15196.40	0.09	-	-	70.5
Peru	-0.1	8	6571.93	0.23	1.71	3.74	66
Philippines	-0.1	3	2988.95	0.5	1.16	2.47	67.1
Poland	0.6	11	13863.18	-0.87	1.82	3.12	66.7
Portugal	1.3	15	21136.30	0.47	-	-	78.4
Russia	-0.1	2	10743.10	-0.39	2.64	5.25	29.4
Serbia	0.2	9	5900.04	-0.23	2.08	4.41	64.1
Singapore	2.2	7	57714.30	0.31	1.89	3.95	63.8
South Africa	0.3	9	6151.08	0.11	1.62	2.99	72.4
South Korea	-1.7	13	29742.84	-0.11	2.36	4.18	80
Spain	1	15	28156.82	-0.05	2.94	5.50	80.8
Sweden	1.8	16	53442.01	-0.98	3.01	5.94	93.9
Taiwan	1.3	15	-	0.3	2.37	5.15	77.3
Turkey	0.1	2	10546.15	0.16	1.45	4.18	43.7
United Kingdom	1.4	14	39720.44	-1.01	2.65	5.26	85.3
United States	1.6	12	59531.66	-0.89	2.02	4.27	79.6
Venezuela	-1.4	1	15692.41	0.48	1.54	3.94	31.6

1.3. Descriptive statistics of outcome variables

Table S4. Country-level means of cooperation, trust, national parochialism score, national identification and identification with the world.

Nations/Societies*	Cooperation	Trust	National parochialism score	National identification	Identification with the world
Argentina	4.439	5.086	0.015	5.170	4.615
Australia	4.301	4.312	0.284	5.385	4.762
Bolivia	4.989	4.864	-0.212	5.377	4.969
Brazil	3.893	4.491	-0.218	4.985	4.531
Canada	4.541	4.278	0.355	5.197	4.682
China	3.658	4.577	0.334	6.042	4.958
Colombia	4.451	4.799	-0.167	5.598	5.003
Egypt	4.218	4.152	0.038	5.338	4.668
Finland	4.583	4.462	0.205	5.346	4.488
Germany	4.017	3.866	-0.050	4.873	4.124
Greece	3.740	3.624	0.438	4.932	4.579
Hong Kong	3.811	4.929	-0.356	4.040	4.178
Hungary	4.655	4.203	-0.079	4.526	4.411
India	3.750	4.811	-0.065	5.966	5.602
Indonesia	3.555	5.223	-0.042	5.757	5.479
Italy	4.016	4.022	-0.057	4.416	4.509
Japan	3.440	2.917	-0.173	3.718	3.504
Kenya	3.970	5.022	-0.094	5.713	5.119
Malaysia	3.924	4.250	0.110	5.465	4.801
Mexico	4.133	4.680	-0.080	5.697	5.021
Morocco	4.051	4.052	0.122	5.351	4.85
Netherlands	4.314	3.945	0.110	4.900	4.467
New Zealand	4.781	4.656	0.107	5.187	4.662
Nigeria	4.115	5.160	-0.341	5.809	5.746
Pakistan	4.190	5.187	-0.198	5.774	4.647
Panama	4.552	4.697	-0.035	5.746	4.893
Peru’	4.422	4.763	-0.393	5.948	5.102
Philippines	3.716	4.684	0.022	5.565	5.192
Poland	4.208	4.110	-0.262	5.297	4.949
Portugal	4.145	4.254	0.106	5.515	4.859
Russia	4.060	4.382	0.273	5.408	4.910
Serbia	4.398	4.240	0.033	4.588	4.639
Singapore	3.729	4.059	0.057	5.307	4.837
South Africa	4.112	4.845	-0.131	5.012	4.568
South Korea	4.223	4.410	0.121	4.910	4.384
Spain	4.388	4.321	0.004	5.153	4.928

Sweden	4.591	4.576	-0.173	5.040	4.475
Taiwan	4.367	5.001	-0.045	5.050	4.548
Turkey	4.317	4.512	0.367	5.126	5.039
UK	4.316	4.144	-0.051	4.988	4.565
United States	4.887	4.519	0.011	5.219	4.825
Venezuela	4.866	4.972	0.574	6.078	5.276

Notes. National parochialism score is the output of a principal component analysis which considers the amount of resources (0 to 10 MU) given to the ingroup vs the amount of resources given to outgroup members and strangers across all 12 decisions (see section 3 for further details). *Taiwan and Hong Kong are reported as nations in the manuscript to facilitate reading.

1.4. Operationalization of cross-cultural indicators

Table S5. Description of cross-cultural variables

Predictor	Description	Source
Rule of Law	Perceptions of the extent to which people have confidence in and abide by the rules of society.	Freedom House
Government effectiveness	Perceptions of the quality of public services. the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.	World Bank
GDP per capita	-	World Bank
Democracy	Measure of the state of democracy in 167 countries.	Economist Intelligence Unit (EIU)
Importance of Religion	How important is religion in your life?	World Value Survey (wave 6)
Religious Attendance	How often do you attend religious services?	World Value Survey (wave 6)
Historical Prevalence of Pathogens	Prevalence of leishmanias, schistosomes, trypanosomes, leprosy, malaria, typhus, filariae, dengue, and tuberculosis.	Murray & Schaller (2010)

1.5. Public vs private choice

In the public treatment, participants knew that their choice would be published on a website under a nickname provided by the participant. The nickname was decided by the participant at the beginning of the study and was a string of 2 letters and 2 numbers. There is no real possibility to be personally identified by using the nickname by either the researchers or other third parties. The manipulation had the goal to increase a perception of observability whereas no real personal information was provided. In the private treatment, participants knew that their choice would not be published on any website. Previous research found that this manipulation is effective at increasing cooperation [1,2]. Moreover, we conducted pilot study using our current design and we replicated this finding [3]. After completion of the study, we posted the decisions made in the public treatment on https://what-did-people-do.com/.

We found that people cooperated more in the public treatment, compared to the private treatment ($b = 0.12$, $p < .001$). However, we did not find an interaction between national parochialism and whether choice was either public or private ($p = .60$)

2. Tables

In this section, we provide the full report of the results of the models. First, we report the model with political ideology predicting cooperation (Table S6), then we report models on the interaction between political ideology and national parochialism (Table S7). Next, we present models on the relation between political ideology and trust/expectations (Table S8 and S9). We also include models of political ideology predicting national identification (Table S10). We also report a model with political ideology predicting identification with the world as a whole (Table S11). Next, we report the models on the cross-cultural factors which moderate the relation between political ideology, cooperation and national parochialism (Table S12 and S15). After that, we report models which consider interactions with strangers (Table S16-S17). Then, we present the results of the analyses on political extremism (Table S18 to Table S23). Finally, we report a model in which we test whether national parochialism is driven by outgroup derogation (Table S24).

2.1. Political ideology, cooperation and national parochialism

In this section, we report the model with political ideology predicting cooperation, including the treatments and age and gender as controls: Ingroup vs outgroup/strangers (Ingroup = 1, Outgroup and Stranger = 0), Observability (public choice = 1, private choice = 0). Higher scores in political ideology indicates people holding more liberal (left-wing) ideologies. Results show (Table S6) that people are more cooperative with ingroup members compared to outgroup members and stranger (national parochialism), and that people cooperate more when their choice is public, compared to when their choice is private (see [3] for a further discussion of these results). Liberals, compared to conservatives, cooperated more with others in general,

independent from their partner's group membership. Also, we found that older people were more cooperative, and that men cooperated more than women.

Table S6. Mixed-effect model of political ideology predicting cooperation.

Cooperation	***b***	***SE***	***t***	***p***
Ingroup vs outgroup/strangers	0.278	0.007	38.555	<.001
Observability	0.119	0.007	17.451	<.001
Political ideology	0.081	0.016	4.919	<.001
Age	0.005	0.001	3.829	<.001
Gender (Men =1)	0.183	0.033	5.601	<.001

Notes.

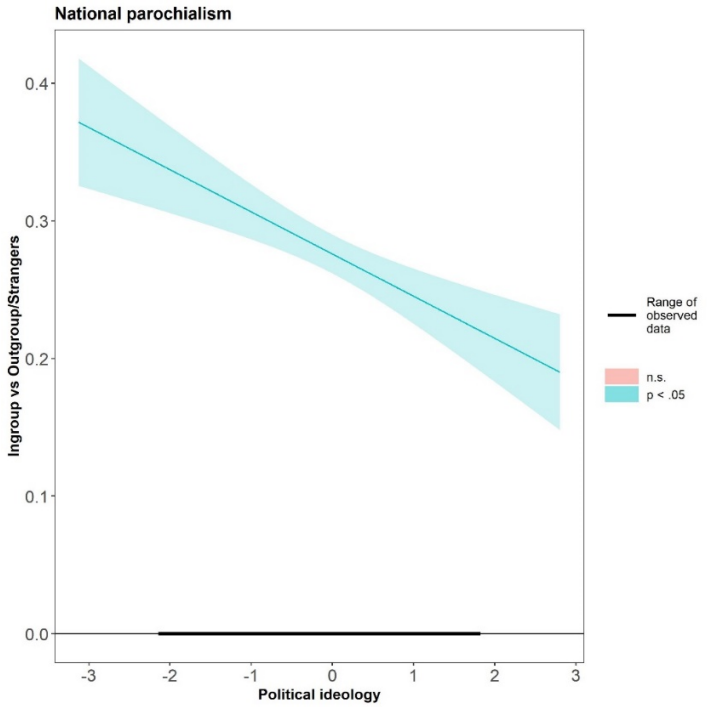
The model in Table S7 adds the interaction between partner group membership (ingroup vs outgroup/strangers) and political ideology to predict national parochialism in cooperation. We found a significant negative interaction, suggesting that national parochialism (although always significant) was more pronounced among conservatives, compared to liberals (see Figure S1).

Table S7. Mixed-effect model of the interaction between political ideology and national parochialism.

Cooperation	***b***	***SE***	***t***	***p***
Ingroup vs outgroup/strangers	0.278	0.007	38.565	<.001
Political ideology	0.091	0.017	5.491	<.001
Observability	0.119	0.007	17.452	<.001
Age	0.005	0.001	3.829	<.001
Gender (Men =1)	0.183	0.033	5.601	<.001
Ingroup vs outgroup/strangers × Political ideology	-0.031	0.007	-4.305	<.001

Notes. × = interaction term.

Figure S1. Floodlight plot showing the regions of political ideology for which there was a statistically significant effect of Ingroup vs Outgroup/Strangers on cooperation. The vertical lines indicate the exact values at which significance began and ended.



2.2. Political ideology and trust

In this section, we report the model with political ideology predicting trust (expectations), including the treatments, and age and gender as controls: Ingroup vs outgroup/strangers (Ingroup = 1, Outgroup and Stranger = 0), Observability (public choice = 1, private choice = 0). Higher scores in political ideology indicate people with more liberal (left-wing) ideologies. Results show (Table S8) that people trust more ingroup members compared to outgroup members and strangers (national parochialism), and that people trust others more when their choice is public, compared to when their choice is private. Liberals, compared to conservatives, trust others more independently of group membership. Older people displayed more trust in others, and men trusted others more than women.

Table S8. Mixed-effect model of political ideology predicting trust.

Trust	*b*	*SE*	*t*	*p*
Ingroup vs outgroup/strangers	0.099	0.007	13.452	<.001
Observability	0.074	0.007	10.577	<.001
Political ideology	0.050	0.016	3.157	0.002
Age	0.010	0.001	7.407	<.001
Gender (Men =1)	0.130	0.031	4.175	<.001

Notes.

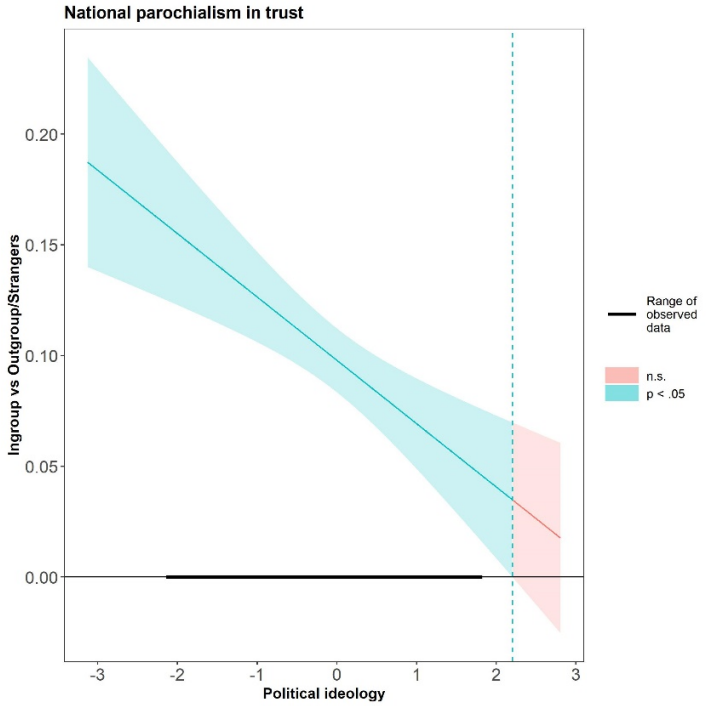
The model in Table S9 adds the interaction between partner group membership (ingroup vs outgroup/strangers) and political ideology to predict national parochialism in trust (expectations). We found a significant negative interaction, suggesting that national parochialism in trust is more pronounced among conservatives, compared to liberals (Figure S2). Figure S2 shows when the relation between trust and national parochialism becomes significant for each level of political ideology.

Table S9. Mixed-effect model of the interaction between political ideology and national parochialism in trust.

Trust	*b*	*SE*	*t*	*p*
Ingroup vs outgroup/strangers	0.099	0.007	13.460	<.001
Political ideology	0.060	0.016	3.744	<.001
Observability	0.074	0.007	10.578	<.001
Age	0.010	0.001	7.406	<.001
Gender (Men =1)	0.130	0.031	4.175	<.001
Ingroup vs outgroup/strangers × Political ideology	-0.030	0.007	-4.046	<.001

Notes. × = interaction term.

Figure S2. Floodlight plot showing the regions of political ideology for which there was a statistically significant effect of Ingroup vs Outgroup/Strangers on trust (expectations). The vertical lines indicate the exact values at which significance began and ended.



2.3. Political ideology, national identification, and identification with the world

In this section, we report the model with political ideology predicting national identification, including age and gender as controls. Higher scores in political ideology indicate people with more liberal (left-wing) ideologies. Results show (Table S10) that liberals, compared to conservatives, identify less with their own nation. Older people identified more with their nation, and men identified less with their own nation, compared to women.

Table S10. Mixed-effect model of political ideology predicting national identification.

National identification	***b***	***SE***	***t***	***p***
Political ideology	-0.110	0.011	-10.164	<.001
Age	0.016	0.001	17.840	<.001
Gender (Men =1)	-0.022	0.021	-1.030	0.303

In Table S11, results show that liberals, compared to conservatives, identified more with the world as a whole. Older people identified more with the world, and there were no gender differences in how people identified with the world.

Table S11. Mixed-effect model of political ideology predicting identification with the world as a whole.

Identification with the world as a whole	***b***	***SE***	***t***	***p***
Political ideology	0.163	0.011	14.783	<.001
Age	0.012	0.001	12.780	<.001
Gender (Men =1)	0.034	0.022	1.539	0.124

2.4. Cross cultural analyses: political ideology, cooperation, and national parochialism score

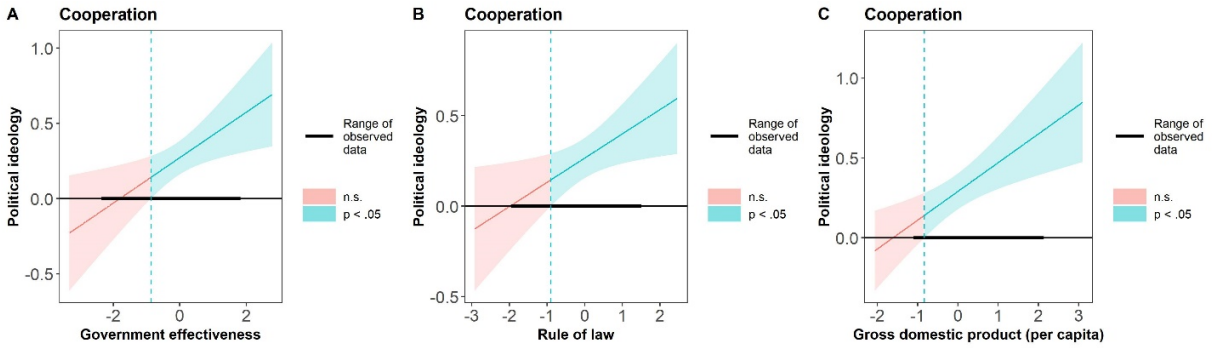
In this section, we report the models with cross-cultural factors interacting with political ideology predicting cooperation and national parochialism. Higher scores in political ideology indicate people with more liberal (left-wing) ideologies. Results show (Table S12) that nations characterized by lower historical prevalence of infectious disease cooperate more with strangers, compared to countries characterized by higher historical prevalence of infectious disease. We found a negative significant interaction between political ideology and all the quality of institutions indicators (government effectiveness, rule of law, and GDP per capita). The relation between political ideology and cooperation is significant in countries characterized by higher quality of institutions (see Figure S3). In particular, Figure S3 shows that political ideology significantly affects cooperation in societies characterized by higher GDP, Rule of Law, and Government effectiveness while it is not significant in countries characterized by lower GDP, ROL, and Government Effectiveness. All other interactions between political ideology and the cross-cultural indicators were not statistically significant.

Table S12. Mixed-effect models of cross-cultural factors interacting with political ideology predicting cooperation.

COOPERATION				
Government effectiveness	***b***	***SE***	***t***	***p***
Political ideology	0.272	0.057	4.788	<.001
Government effectiveness	0.009	0.193	0.049	0.961
Political ideology × government effectiviness	0.151	0.058	2.605	0.009
Rule of law				
Political ideology	0.266	0.057	4.688	<.001
Rule of law	0.264	0.188	1.405	0.168
Political ideology × rule of law	0.134	0.058	2.320	0.020
GDP per capita				
Political ideology	0.291	0.057	5.096	<.001
GDP per capita	0.217	0.197	1.104	0.277
Political ideology × GDP per capita	0.180	0.057	3.139	0.002
Historical prevalence of infectious diseases				
Political ideology	0.260	0.057	4.583	<.001
Historical prevalence of infectious diseases	-0.690	0.173	-3.993	<.001
Political ideology × historical prevalence of infectious diseases	-0.071	0.056	-1.270	0.204

Notes. × = interaction term.

Figure S3. Floodlight plot showing the regions of government effectiveness, rule of law, and GDP per capita for which there was a statistically significant effect of political ideology on cooperation. The vertical lines indicate the exact values at which significance began and ended.



In Table S13, we found a negative significant interaction between political ideology and all the quality of institutions indicators (government effectiveness, rule of law, and GDP per capita). The relation between political ideology and national parochialism score was stronger in countries characterized by higher quality of institutions (see Figure S4). Figure S4 shows when the relation between political ideology and national parochialism becomes significant for each level of the cross-societal indicator. We found a positive significant interaction between historical prevalence of infectious disease and political ideology predicting national parochialism (See Figure S5). Figure S5 show when the relation between political ideology and national parochialism becomes significant for each level of the cross-societal indicator (historical prevalence of infectious disease).

Table S13. Mixed-effect models of cross-cultural factors interacting with political ideology predicting national parochialism score.

NATIONAL PAROCHIALISM SCORE				
Government effectiveness	***b***	***SE***	***t***	***p***
Political ideology	-0.054	0.015	-3.528	<.001
Government effectiveness	0.006	0.034	0.173	0.863
Political ideology × government effectiviness	-0.067	0.016	-4.345	<.001
Rule of law				
Political ideology	-0.051	0.015	-3.341	0.001
Rule of law	-0.022	0.033	-0.676	0.503
Political ideology × rule of law	-0.054	0.016	-3.471	0.001
GDP per capita				
Political ideology	-0.055	0.015	-3.601	<.001
GDP per capita	0.034	0.033	1.028	0.310
Political ideology × GDP per capita	-0.072	0.015	-4.660	<.001
Historical prevalence of infectious diseases				
Political ideology	-0.053	0.015	-3.454	0.001
Historical prevalence of infectious diseases	-0.030	0.034	-0.861	0.394
Political ideology × historical prevalence of infectious diseases	0.065	0.015	4.363	<.001

Notes. × = interaction term.

Figure S4. Floodlight plot showing the regions of government effectiveness, rule of law, and GDP per capita for which there was a statistically significant effect of political ideology on national parochialism score. The vertical lines indicate the exact values at which significance began and ended.

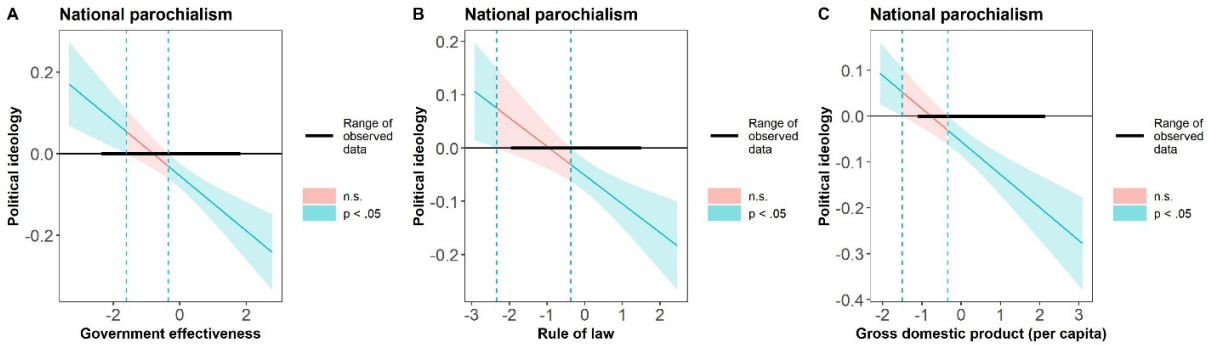
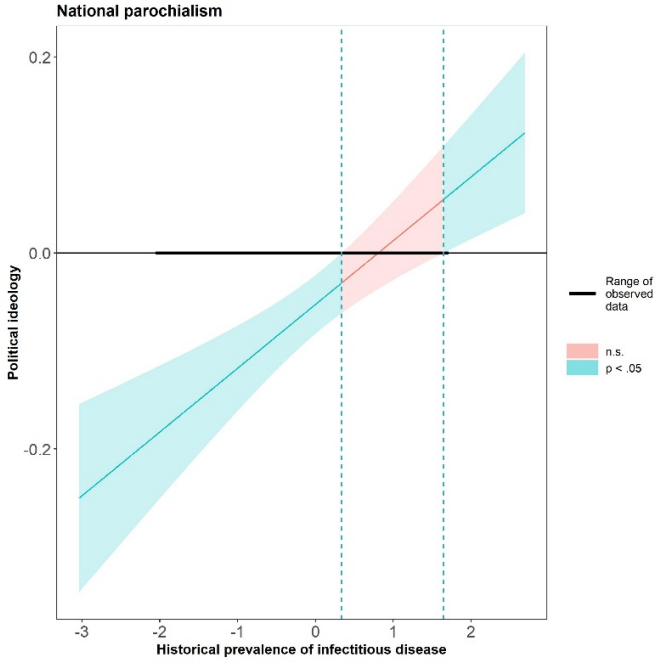


Figure S5. Floodlight plot showing the regions of historical prevalence of infectious disease for which there was a statistically significant effect of political ideology on national parochialism score. The vertical lines indicate the exact values at which significance began and ended.



2.5. Other cross-societal factors

In this section, we report the models with other cross-cultural factors (democracy index, importance of religion) interacting with political ideology predicting cooperation and national parochialism score. Higher scores in political ideology indicate people with more liberal (left-wing) ideologies. Results show (Table S14) a positive significant interaction between political ideology and democracy, and a significant interaction between political ideology and importance of religion. The relation between political ideology and cooperation is significant in countries characterized by greater state of democracy and higher importance of religion (Figure S6). All other interactions between political ideology and the cross-cultural indicators (i.e., church attendance) were not statistically significant.

Table S14. Mixed-effect models of cross-cultural factors interacting with political ideology predicting cooperation

COOPERATION				
Democracy	***b***	***SE***	***t***	***p***
Political ideology	0.263	0.057	4.650	<.001
Democracy	0.205	0.189	1.085	0.284
Political ideology × Democracy	0.152	0.058	2.639	0.008
Importance of religion				
Political ideology	0.284	0.061	4.664	<.001
Importance of religion	0.157	0.198	0.794	0.433
Political ideology × importance of religion	0.137	0.062	2.204	0.028
Church attendance				
Political ideology	0.271	0.061	4.460	<.001
Church attendance	0.295	0.195	1.515	0.139
Political ideology × Church attendance	0.052	0.060	0.859	0.390

Notes. × = interaction term.

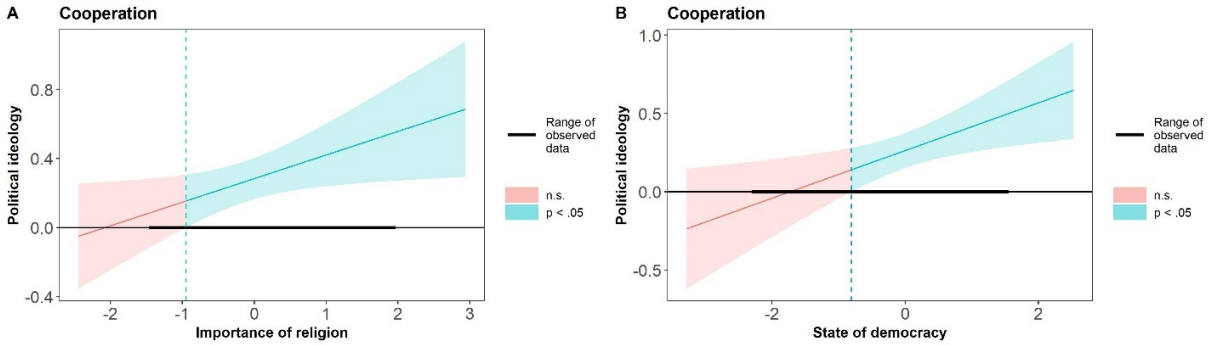


Figure S6. Floodlight plot showing the regions of state of democracy and importance of religion for which there was a statistically significant effect of political ideology on cooperation. The vertical lines indicate the exact values at which significance began and ended.

In Table S15, results show a negative significant interaction between political ideology and democracy, and a significant interaction between political ideology and importance of religion/church attendance. The relation between political ideology and national parochialism gets stronger in countries characterized by greater state democracy, importance of religion, and church attendance (Figure S7).

Table S15. Mixed-effect models of cross-cultural factors interacting with political ideology predicting national parochialism score.

NATIONAL PAROCHIALISM SCORE				
Democracy	***b***	***SE***	***t***	***p***
Political ideology	-0.065	0.016	-4.017	<.001
Democracy	0.056	0.034	1.640	0.110
Political ideology × Democracy	-0.078	0.016	-4.882	<.001
Importance of religion				
Political ideology	-0.065	0.016	-4.005	<.001
Importance of religion	0.029	0.035	0.826	0.414
Political ideology × importance of religion	-0.078	0.016	-4.747	<.001
Church attendance				
Political ideology	-0.055	0.015	-3.601	<.001
Church attendance	0.034	0.033	1.028	0.310
Political ideology × Church attendance	-0.072	0.015	-4.660	<.001

Notes. × = interaction term.

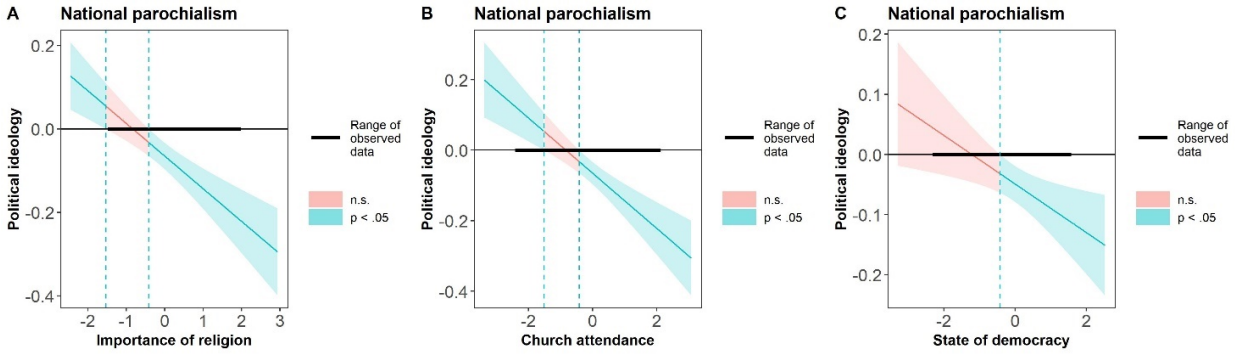


Figure S7. Floodlight plot showing the regions of importance of religion, church attendance, and state of democracy for which there was a statistically significant effect of political ideology on national parochialism. The vertical lines indicate the exact values at which significance began and ended.

2.6. Political ideology and cooperation with only strangers

In this section, we report a model (Table S16) with political ideology predicting cooperation when considering only strangers. We include the observability treatments, age and gender as controls: Observability (public choice = 1, private choice = 0). Higher scores in political ideology indicates people holding more liberal (left-wing) ideologies. Results show that liberals, compared to conservatives, cooperated more with strangers.

Table S16. Mixed-effect model of political ideology predicting cooperation, when the interacting partner is a stranger (i.e., nationality is not specified).

Cooperation	***b***	***SE***	***t value***	***p-value***
Political ideology	0.073	0.017	4.264	<.001
Observability	0.119	0.011	10.513	<.001
Age	0.006	0.001	4.431	<.001
Gender (Men =1)	0.163	0.034	4.777	<.001

In Table S17, we run the same robustness check with trust (expectations), instead of cooperation. Higher scores in political ideology indicates people holding more liberal (left-wing) ideologies. Results show that liberals, compared to conservatives, trusted more strangers.

Table S17. Mixed-effect model of political ideology predicting trust, when the interacting partner is a stranger (i.e., nationality is not specified).

Trust (expectations)	*b*	*SE*	*t value*	*p-value*
Political ideology	0.047	0.017	2.831	0.005
Observability	0.072	0.011	6.276	<.001
Age	0.010	0.001	7.386	<.001
Gender (Men =1)	0.117	0.033	3.555	<.001

2.7. Political extremism, cooperation, and national parochialism

In this section, we report the model with political extremism predicting cooperation, including the treatments, age and gender as controls: Ingroup vs outgroup/strangers (Ingroup = 1, Outgroup and Stranger = 0), Observability (public choice = 1, private choice = 0). Political extremism was computed by clustering together deviations from the mid-point (e.g., 0 and 10, 1 and 9, etc.). Higher scores in political extremism indicates people more extreme political ideology views. Results show (Table S18) that people are more cooperative with ingroup members compared to outgroup members and stranger (national parochialism), and that people cooperate more when their choice is public, compared to when their choice is private. People who scored higher in political extremism cooperated more with others in general, independent from their partner's group membership.

Table S18. Mixed-effect model of political extremism predicting cooperation.

Cooperation	*b*	*SE*	*t value*	*p-value*
Ingroup vs outgroup/strangers	0.278	0.007	38.555	<.001
Observability	0.119	0.007	17.451	<.001
Political extremism	0.064	0.016	3.887	<.001
Age	0.005	0.001	3.653	<.001
Gender (Men =1)	0.170	0.033	5.198	<.001

The model in Table S19 adds the interaction between partner group membership (ingroup vs outgroup/strangers) and political extremism to predict national parochialism in cooperation. We found a significant negative interaction, suggesting that national parochialism was more

pronounced among people who scored higher in political extremism, compared to people who scored lower in political extremism.

Table S19. Mixed-effect model of the interaction political extremism and national parochialism predicting cooperation.

Cooperation	*b*	*SE*	*t value*	*p-value*
Ingroup vs outgroup/strangers	0.278	0.007	38.557	<.001
Political extremism	0.068	0.017	4.132	<.001
Observability	0.119	0.007	17.451	<.001
Age	0.005	0.001	3.653	<.001
Gender (Men =1)	0.170	0.033	5.197	<.001
Ingroup vs outgroup/strangers × Political extremism	-0.014	0.007	-1.966	0.049

Notes. × = interaction term.

In Table S20, we report the model with extremism (on the liberal side) predicting cooperation, including the treatments and age and gender as controls: Ingroup vs outgroup/strangers (Ingroup = 1, Outgroup and Stranger = 0), Observability (public choice = 1, private choice = 0). Political extremism on the liberal side was computed recoding the political ideology scale considering deviations from the mid-point (6 =1, to 10 = 5 etc.). Higher scores in political extremism on the liberal side indicates people more extreme liberal views. Results show people who scored higher in liberal ideology cooperated more with others in general, compared to people with more centrist values.

Table S20. Mixed-effect model of political extremism predicting cooperation.

Cooperation	*b*	*SE*	*t value*	*p-value*
Ingroup vs outgroup/strangers	0.243	0.011	21.658	<.001
Observability	0.098	0.011	9.289	<.001
Political extremism left	0.058	0.018	3.143	0.002
Age	0.002	0.002	1.039	0.299
Gender (Men =1)	0.234	0.052	4.529	<.001

The model in Table S21 adds the interaction between partner group membership (ingroup vs outgroup/strangers) and political extremism (of liberals) to predict national parochialism in

cooperation. We found no significant interaction, suggesting no main differences in national parochialism between centrists and people with more extreme liberal views.

Table S21. Mixed-effect model of political extremism predicting cooperation.

Cooperation	***b***	***SE***	***t value***	***p-value***
Ingroup vs outgroup/strangers	0.285	0.025	11.317	0.000
Political extremism liberal	0.063	0.019	3.378	0.001
Observability	0.098	0.011	9.289	0.000
Age	0.002	0.002	1.039	0.299
Gender (Men =1)	0.234	0.052	4.529	0.000
Ingroup vs outgroup/strangers × Political extremism liberal	-0.015	0.008	-1.867	0.062

In Table S22, we report the model with extremism (on the conservative side) predicting cooperation, including the treatments and age and gender as controls: Ingroup vs outgroup/strangers (Ingroup = 1, Outgroup and Stranger = 0), Observability (public choice = 1, private choice = 0). Political extremism on the conservative side was computed recoding the political ideology scale considering deviations from the mid-point (5 =1, to 0 = 6 etc.). Higher scores in political extremism on the conservative side indicates people more extreme conservative views. Results show no difference in cooperation among people who scored higher in conservative ideology, compared to people with more centrist values.

Table S22. Mixed-effect model of political extremism predicting cooperation.

Cooperation	***b***	***SE***	***t value***	***p-value***
Ingroup vs outgroup/strangers	0.302	0.009	32.079	<.001
Observability	0.133	0.009	14.934	<.001
Political extremism conservative	0.002	0.012	0.167	0.867
Age	0.007	0.002	4.085	<.001
Gender (Men =1)	0.136	0.042	3.231	0.001

The model in Table S23 adds the interaction between partner group membership (ingroup vs outgroup/strangers) and political extremism (of conservatives) to predict national parochialism in cooperation. We found no significant interaction, suggesting no main differences in national parochialism between centrists and people with more extreme conservative views.

Table S23. Mixed-effect model of political extremism predicting cooperation.

Cooperation	*b*	*SE*	*t value*	*p-value*
Ingroup vs outgroup/strangers	0.290	0.015	18.820	<.001
Political extremism conservative	0.001	0.013	0.021	0.983
Observability	0.133	0.009	14.934	<.001
Age	0.007	0.002	4.085	<.001
Gender (Men =1)	0.136	0.042	3.231	0.001
Ingroup vs outgroup/strangers × Political extremism right	0.005	0.005	0.985	0.325

2.8. National parochialism: ingroup favoritism vs outgroup derogation

In this section, we report the model (Table S24) with Contrast 2 (Outgroup vs Stranger) and its interaction with Observability predicting cooperation: Contrast 2 (Stranger = 1, Outgroup = 0), Observability (Public choice = 1, Private choice = 0). Results show that people are more cooperative with outgroup members compared to strangers. These findings suggest that national parochialism seems to be motivated to benefit ingroup members (ingroup favoritism) instead of harming outgroup members (outgroup derogation).

Table S24. Mixed-effect model of Contrast 2 (outgroup vs stranger) and Observability predicting cooperation.

Cooperation	*b*	*SE*	*t*	*p*
Contrast2	-0.15	0.02	-8.25	<.001
Observability	0.12	0.01	10.74	<.001
Contrast2×Observability	-0.002	0.01	-0.16	0.87

Note. Contrast2 = outgroup vs stranger; Observability = public vs private treatments; × = interaction term.

3. National parochialism score

To help the interpretability of the cross-cultural analyses, we used a principal component analysis to calculate participant scores for national parochialism. We run the principal component analysis through the *prcomp* function in R. National parochialism scores were based on a model that assumes that the data across the 12 decisions load on two factors (ingroup vs outgroup + stranger treatments) and represents the third component of a principal component analysis (Table S25). A national parochialism score can be interpreted as the influence of the partner's nationality on cooperation, with higher scores meaning higher national parochialism. The first component represents the overall cooperation level underlying the 12 choices whereas the second component takes into account the observability treatments (public vs private). A matrix of variable loadings is shown at Table S25. The first three components representing the cooperation scores, national parochialism and the observability treatments, explain almost 80% of the variance (see Table S26).

Table S25. Matrix of variable loadings for each component.

#	Treatments	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
1	Ingroup, public	0.290	-0.356	0.355	0.000	0.350	-0.059	0.350	-0.055	0.014	0.219	0.514	0.315
2	Ingroup, public	0.291	-0.367	0.340	-0.022	0.424	0.228	-0.330	0.026	-0.079	-0.069	-0.477	-0.293
3	Ingroup, private	0.294	0.251	0.450	0.015	-0.356	0.053	-0.518	0.316	0.107	-0.154	0.308	0.142
4	Ingroup, private	0.292	0.247	0.461	0.055	-0.357	-0.222	0.485	-0.257	0.014	0.031	-0.358	-0.176
5	Outgroup, public	0.287	-0.243	-0.244	0.275	-0.014	-0.481	0.043	0.245	-0.048	-0.475	-0.240	0.379
6	Outgroup, public	0.288	-0.249	-0.271	0.280	-0.149	-0.209	-0.174	-0.172	0.562	0.234	0.173	-0.421
7	Outgroup, private	0.285	0.289	-0.184	0.419	0.139	0.095	0.161	0.478	-0.410	0.291	0.087	-0.287
8	Outgroup, private	0.288	0.285	-0.170	0.390	0.121	0.429	-0.097	-0.572	-0.014	-0.151	-0.002	0.311
9	Stranger, public	0.288	-0.246	-0.203	-0.321	-0.278	0.260	0.188	-0.090	-0.300	-0.468	0.308	-0.346
10	Stranger, public	0.288	-0.248	-0.225	-0.264	-0.408	0.196	-0.084	0.045	-0.148	0.539	-0.270	0.368
11	Stranger, private	0.286	0.332	-0.149	-0.434	0.281	-0.517	-0.288	-0.276	-0.263	0.113	0.082	-0.058
12	Stranger, private	0.286	0.309	-0.184	-0.393	0.256	0.226	0.269	0.314	0.561	-0.107	-0.127	0.066

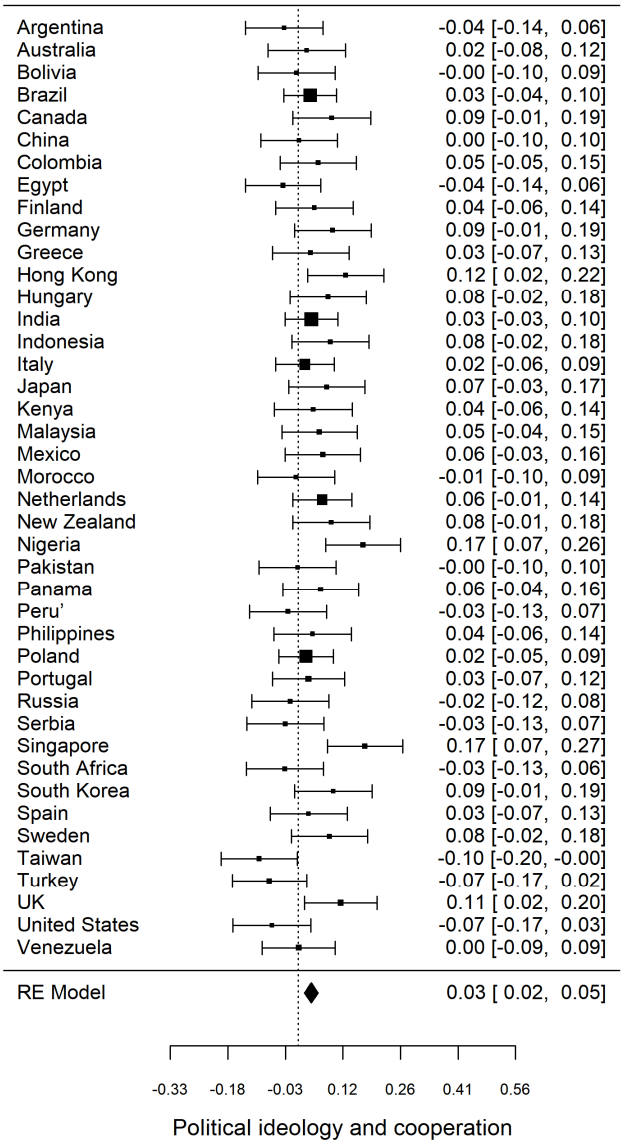
Table S26. Summary of the variance explained by the principal components.

	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
Standard deviation	7.613	2.227	2.030	1.650	1.479	1.445	1.422	1.413	1.403	1.377	1.361	1.353
Proportion of Variance	0.677	0.058	0.048	0.032	0.026	0.024	0.024	0.023	0.023	0.022	0.022	0.021
Cumulative Proportion	0.677	0.735	0.783	0.815	0.840	0.865	0.888	0.912	0.935	0.957	0.979	1.000

4. Meta-analyses

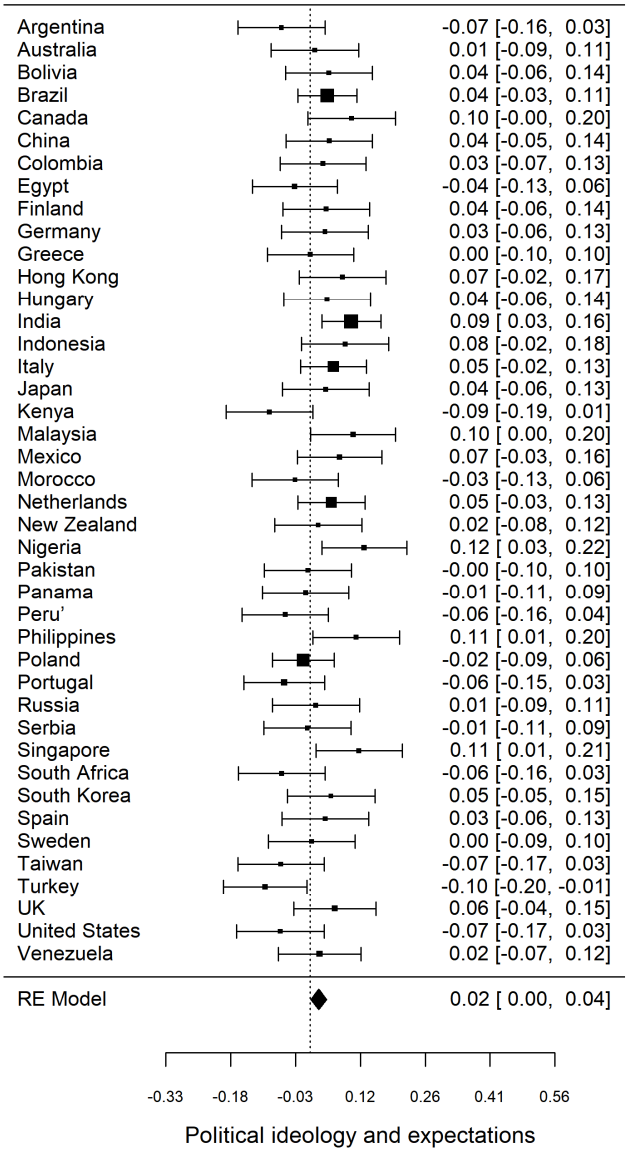
3.1. Political ideology and cooperation

Figure S8. Forest plot displaying the effect size of political ideology predicting cooperation for each country. For each country, we report estimated effect size (*r*) and the corresponding 95% confidence interval. The overall estimated population effect size is represented by the size of the black diamonds, which correspond to the 95% confidence interval.



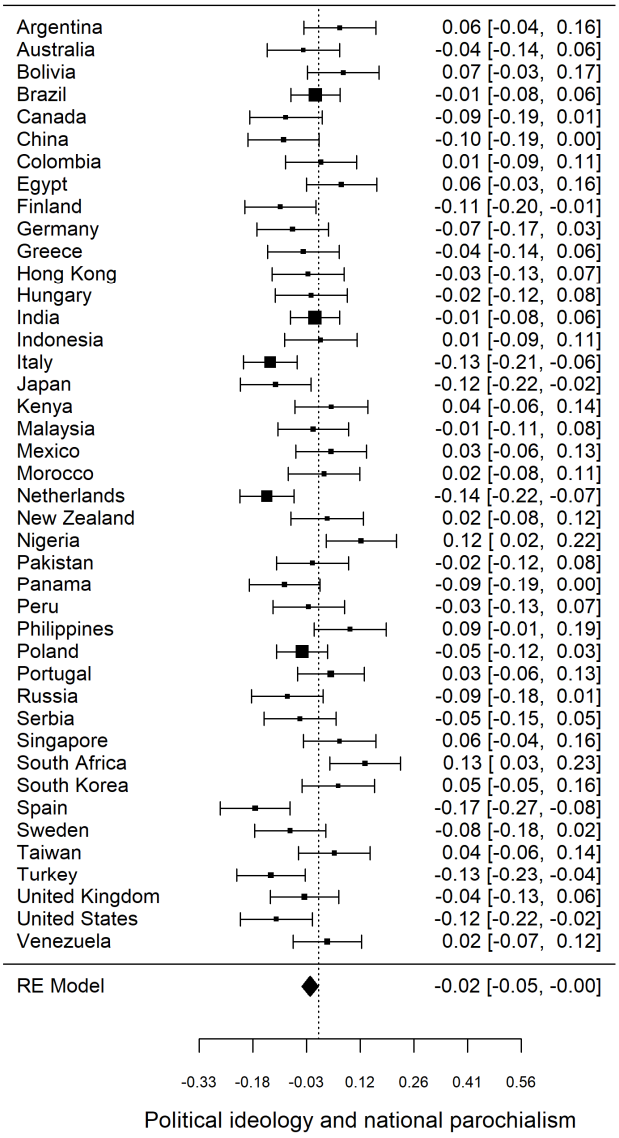
3.2. Political ideology and expectations (trust)

Figure S9. Forest plot displaying the effect size of political ideology predicting expectations (trust) for each country. For each country, we report the estimated effect size (*r*) and corresponding 95% confidence interval. The overall estimated population effect size is represented by the size of the black diamonds, which corresponds to the 95% confidence interval.



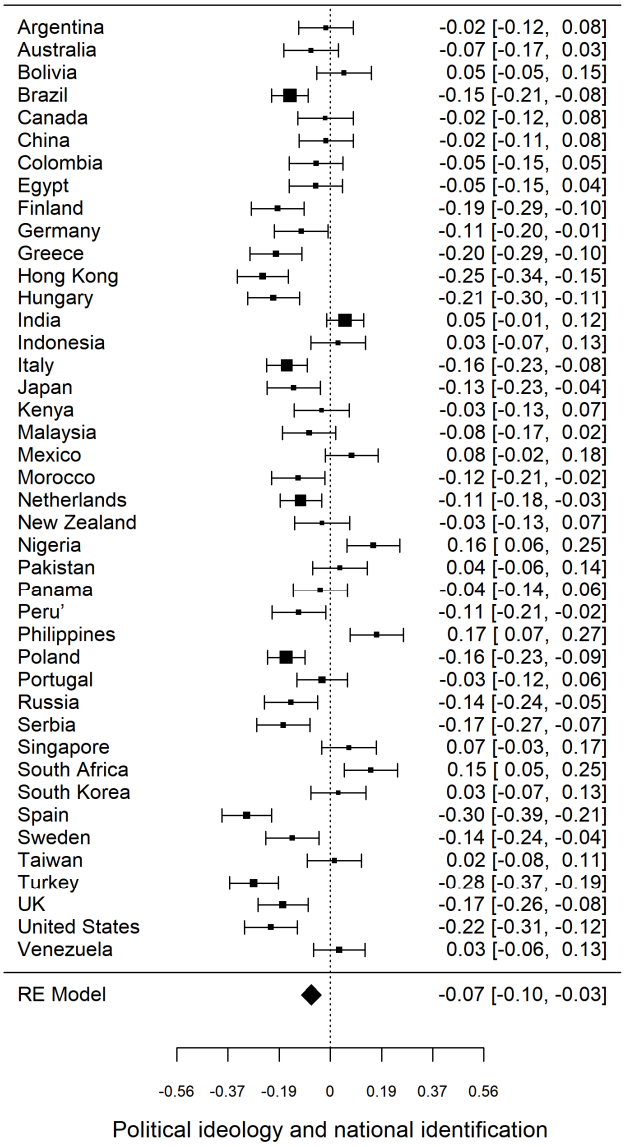
3.3. Political ideology and national parochialism

Figure S10. Forest plot displaying effect size of political ideology predicting national parochialism score for each country. For each country. we report the estimated effect size (*r*) and corresponding 95% confidence interval. The overall estimated population effect size is represented by the size of the black diamonds, which corresponds to the 95% confidence interval.



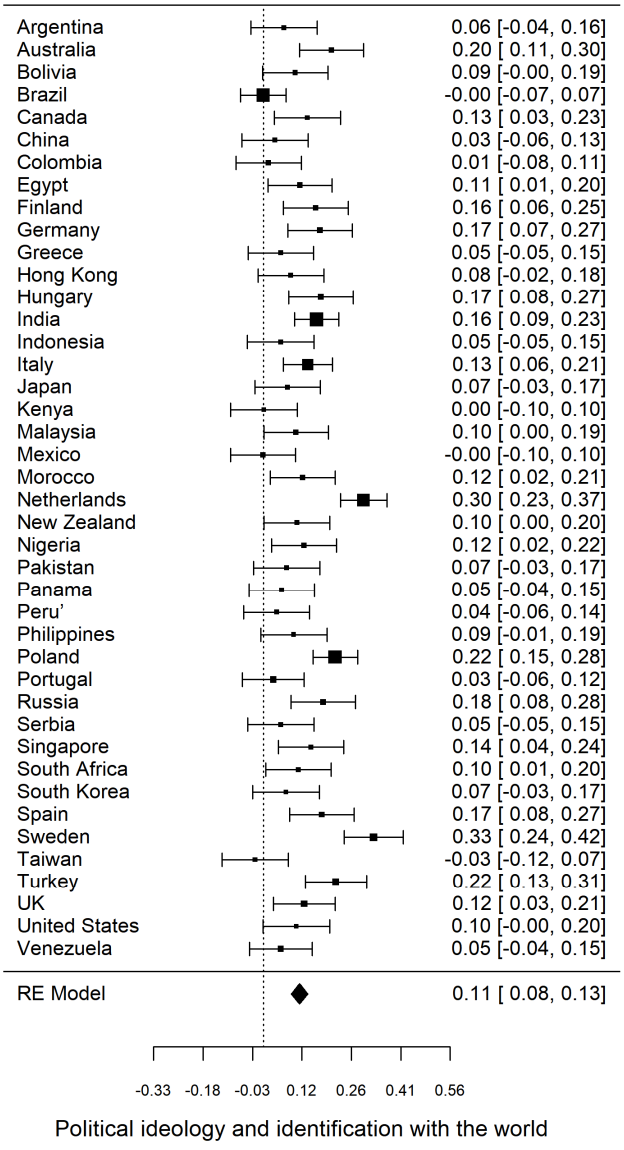
3.4. Political ideology and national identification

Figure S11. Forest plot displaying effect size of political ideology predicting national identification for each country. For each country, we report the estimated effect size (*r*) and corresponding 95% confidence interval. The overall estimated population effect size is represented by the size of the black diamonds, which corresponds to the 95% confidence interval.



3.5. Political ideology and identification with the world

Figure S12. Forest plot displaying the effect size of political ideology predicting identification with the world as a whole for each country. For each country, we report the estimated effect size (r) and corresponding 95% confidence interval. The overall estimated population effect size is represented by the size of the black diamonds, which corresponds to the 95% confidence interval.



4. Instructions

In this section, we include the instructions of the experiment. Regarding the decisions, we include three example of decisions (1 = partner is ingroup, public choice, 2 = partner is outgroup, public choice, 3 = partner is stranger, private choice). All the other decisions are combination of information provided in these 3 examples.

Information Sheet
Introduction. The study is being conducted by Professor ### and Professor ###

We aim at testing some theories about decision making. **For this reason, we kindly ask you to answer the survey seriously.**

Procedures. The purpose of this research is to examine decision making in different situations. **You** will interact with some other participants in some decision making tasks. **Then,** you will be asked to answer some questions about the decision making tasks. We estimate it will take no more than ***25 minutes*** to complete the study.

Risks/Discomforts. There are no anticipated risks for participating in this study.

Benefits. A potential benefit of participating is that you might learn something about decision-making that you might not have been aware of before. You may also be assigned to make a decision involving or being affected by someone from another country.
Anonymity. All of your answers will be anonymous. Any information you provide will be stored indefinitely on the encrypted and password protected site, and on password-protected computers only. When presenting the results of this research, we will in no way focus on individual participants' responses and will instead present the findings in summary form. You will not be asked for information that would enable to identify you personally.

Compensation.
Independent Variable:
[no - payment condition]
You are playing for Monetary Units, a fictional currency that gauges how well you are doing at the decision-making task. These Monetary Units are meaningful in the context of the experiment, but have no value in the real world.
[payment condition]
Depending on you and others' decisions in the decision-making tasks, you will have **an opportunity to earn up to $$ dollars.**

Participation & Rights. Your participation in this study is completely voluntary. You are free to choose to withdraw from the study at any point.

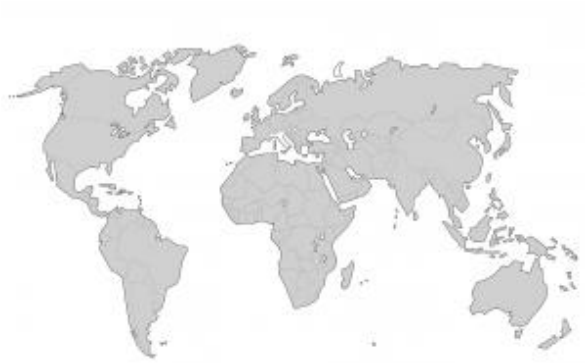
Questions about the Research. If you would like to receive a summary of the results of this study, or have any questions, please email ##### at ####. This project has been reviewed and approved by ##############. If you have any privacy or ethics concerns, please email ############################.

If you understand the information above and agree to participate in this research project, please click “I Agree” to start with this study. If you do not wish to participate right now, please close your web browser. Thank you for considering participating.

Welcome to the study. This is a study about decision making. The study involves **participants from many countries around the world**.

You will be asked to make decisions in several decision making tasks. You will be paired with a different person in each decision making task.

14. Before reading the instructions, please create a nickname for yourself (any combination of two letters and two numbers, such as x2f4)



Please read the instructions carefully because you have the possibility
to **earn [Money]/[Monetary Units] [IV] based on your decisions and others' decisions.**

[Please treat each Monetary Unit (MU) as though it was worth 1.16 USD when making decisions.]/ [Each Monetary Unit (MU) is worth ## USD when making decisions.] [IV]

(page break)

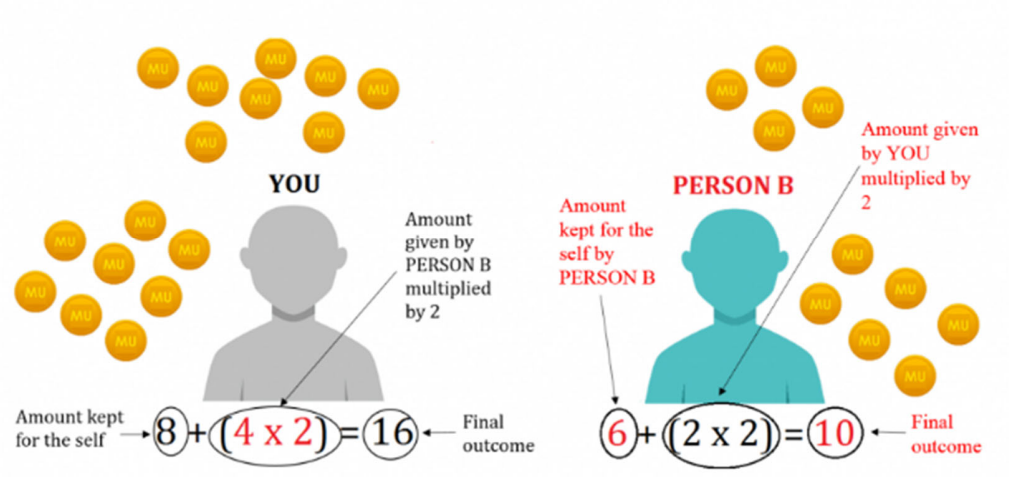
Instructions. In this task, you are paired with another person: PERSON B. Each of you receives 10 monetary units (MU).

[Each monetary unit is $$ cents. This amount is based on the average amount of pay for 2.5 minutes of work in your country.
When you interact with a person from a different country, then the value of an MU will be based on the average amount of pay for 2.5 minutes of work in that country. So, an MU has the same value across all the countries. **] IV FOR PAYMENT CONDITION ONLY**

You and PERSON B have the opportunity to send between 0 and 10 MU to the other and keep the remaining for yourself (in this example you send 2, and your partner sends 4).

Each MU that you and your partner send to the other will be doubled. For example, if you send 2 MU to PERSON B, PERSON B gets 4 MU. If PERSON B sends 4 MU to you, you get 8 MU.

Your final outcome is the result of what you keep for your self, and what you get from PERSON B multiplied by 2 (16 in this example).



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In these tasks, you and other people from around the world will make several decisions.

Each decision will be made with a different partner.

(page break)

To make sure you have understood the instructions, please answer the following questions:

Remember: Both you and Person B begin the task with 10 MU

You send 4 MU. PERSON B sends 3 MU back to you. Then, (choose one)

YOU earn 12, PERSON B earns 10
YOU earn 15, PERSON B earns 12
YOU earn 12, PERSON B earns 15
YOU earn 4, PERSON B earns 3

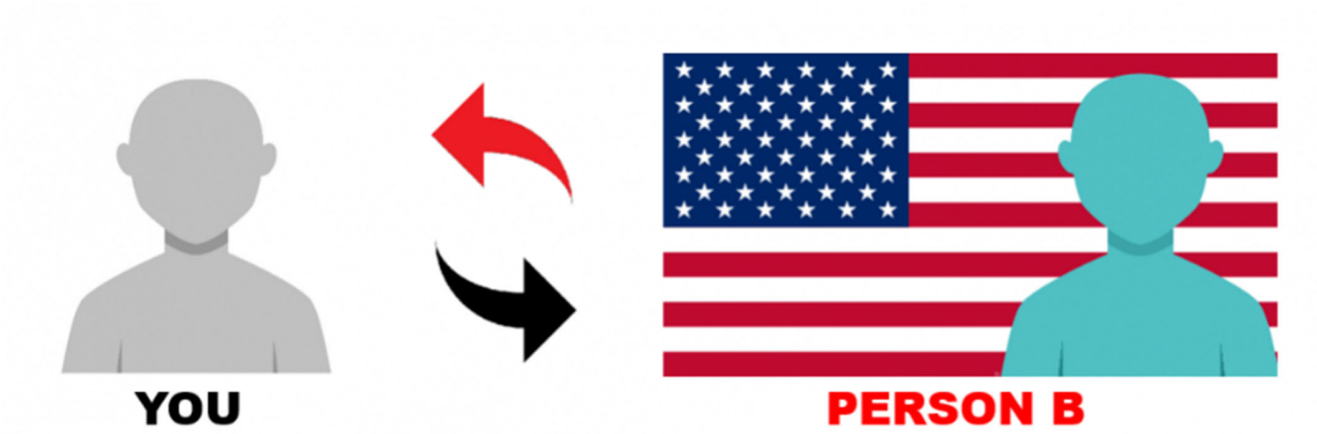
4.1. Example *ingroup* and *public* treatment decision

In this round you will make a decision in the following situation

YOU

PERSON B: is from United States

PLEASE NOTE: Your and your partner's decision in this round will be public. All participants will be given a link to see the results of your individual contribution under your nickname in a widely distributed blog: http://www.what-did-people-do.com



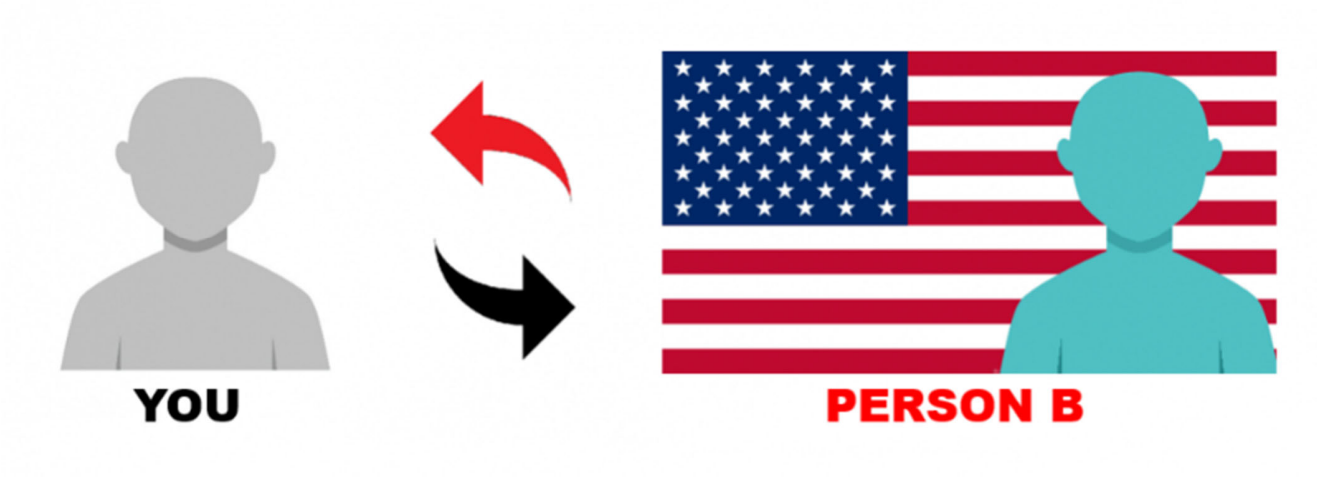
Click here if you are ready to make your decision

(page break)

Please make a decision in the following situation

YOU: NICKNAME HERE
PERSON B: is from United States

PLEASE NOTE: Your and your partner's decision in this round will be public. All participants will be given a link to see the results of your individual contribution under your nickname in a widely distributed blog: http://www.what-did-people-do.com



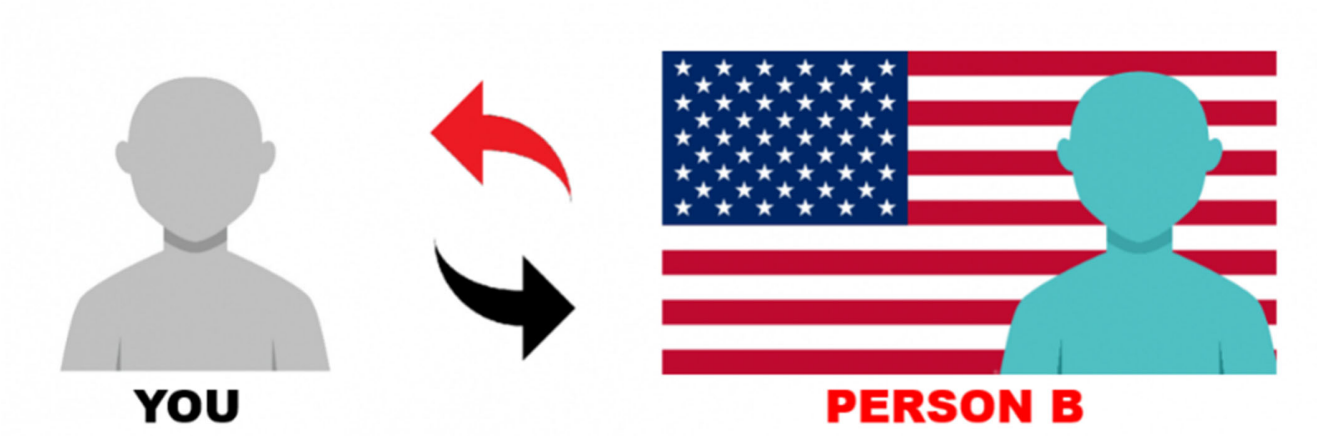
Number of MU you send to the PERSON B (click one number)

[Please treat each Monetary Unit (MU) as though it was worth 1.16 USD for decision-making purposes**] IV FOR NO PAYMENT CONDITION ONLY**
[Each Monetary Unit (MU) is worth ….**] IV FOR NO PAYMENT CONDITION ONLY**

(page break)

What do you expect from PERSON B?

YOU: NICKNAME HERE
PERSON B: is from United States
PLEASE NOTE: Your and your partner's decision in this round will be public. All participants will be given a link to see the results of your individual contribution under your nickname in a widely distributed blog: http://www.what-did-people-do.com



The number of MU you expect PERSON B will send to you

(before they get doubled)
Set the button to a number

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PLEASE NOTE: in the next page, you will make a decision with a different partner

—

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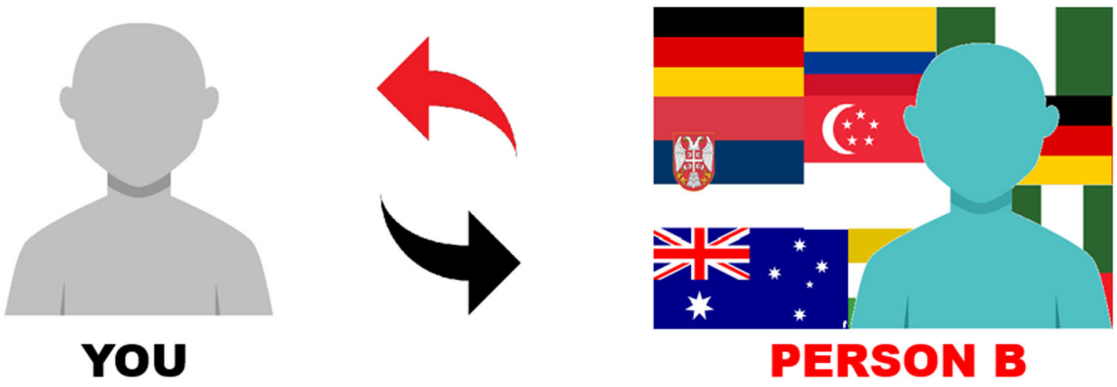
4.2. Example *outgroup* and *public* treatment decision

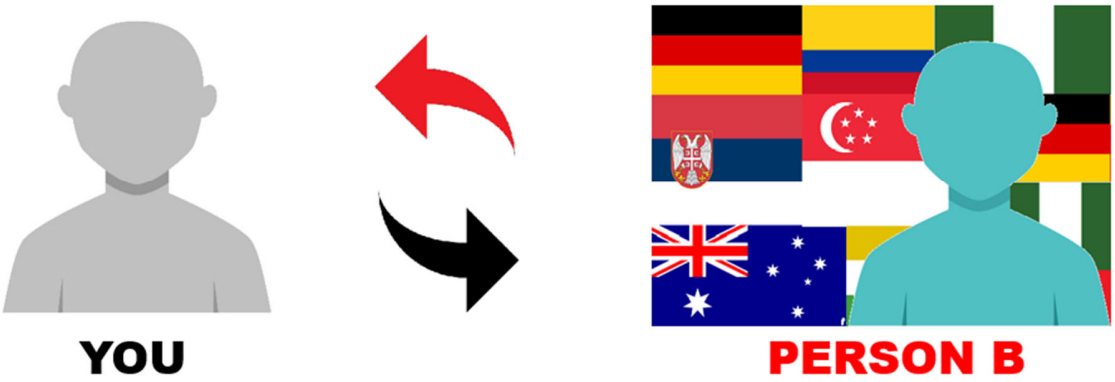
In this round you will make a decision in the following situation

YOU: NICKNAME HERE
PERSON B: is from one of 7 countries excluding United States (Australia, Colombia, Germany, India, Nigeria, Serbia, Singapore)
PLEASE NOTE: Your and your partner's decision in this round will be public. All participants will be given a link to see the results of your individual contribution under your nickname in a widely distributed blog: http://www.what-did-people-do.com



Please make a decision in the following situation

YOU: NICKNAME HERE
PERSON B: is from one of 7 countries excluding United States (Australia, Colombia, Germany, India, Nigeria, Serbia, Singapore)
PLEASE NOTE: Your and your partner's decision in this round will be public. All participants will be given a link to see the results of your individual contribution under your nickname in a widely distributed blog: http://www.what-did-people-do.com



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What do you expect from PERSON B?

YOU: NICKNAME HERE
PERSON B: is from one of 7 countries excluding United States (Australia, Colombia, Germany, India, Nigeria, Serbia, Singapore)
PLEASE NOTE: Your and your partner's decision in this round will be public. All participants will be given a link to see the results of your individual contribution under your nickname in a widely distributed blog: http://www.what-did-people-do.com
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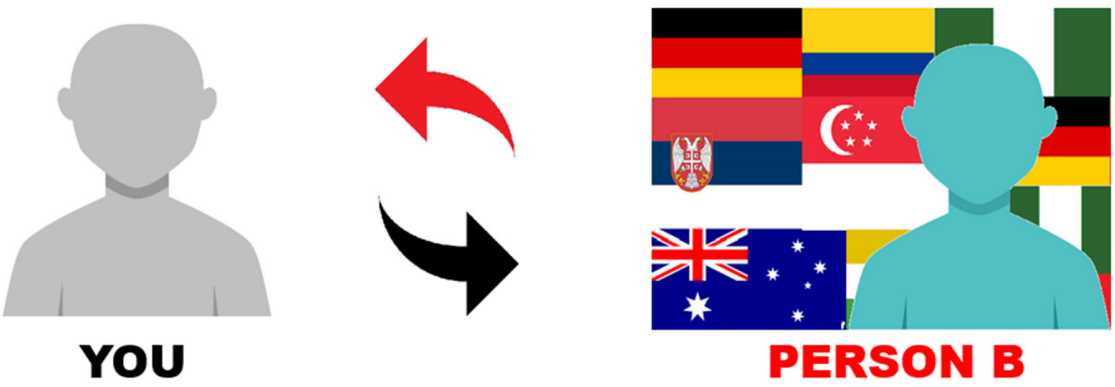

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PLEASE NOTE: in the next page, you will make a decision with a different partner

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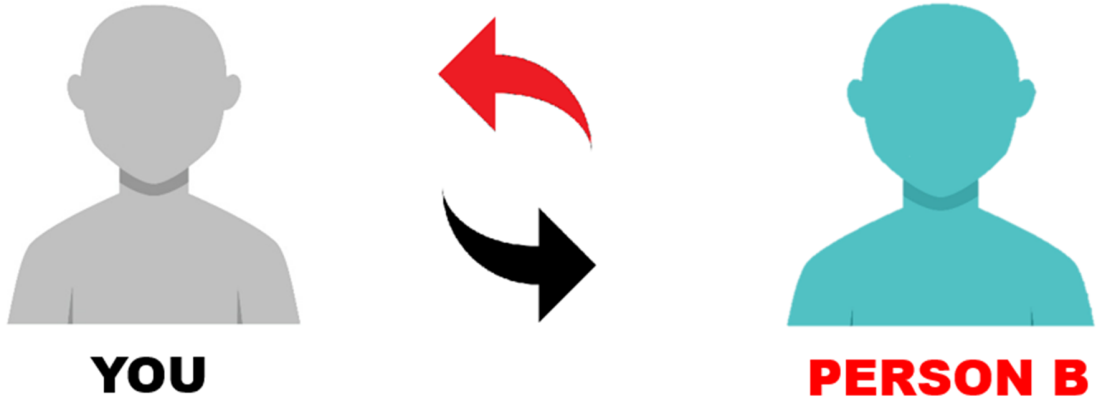
4.3. Example *stranger* and *private* treatment decision

In this round you will make a decision in the following situation

YOU: unknown
PERSON B: unknown
PLEASE NOTE: Your and your partner's decision in this round will be private and not reported to other people



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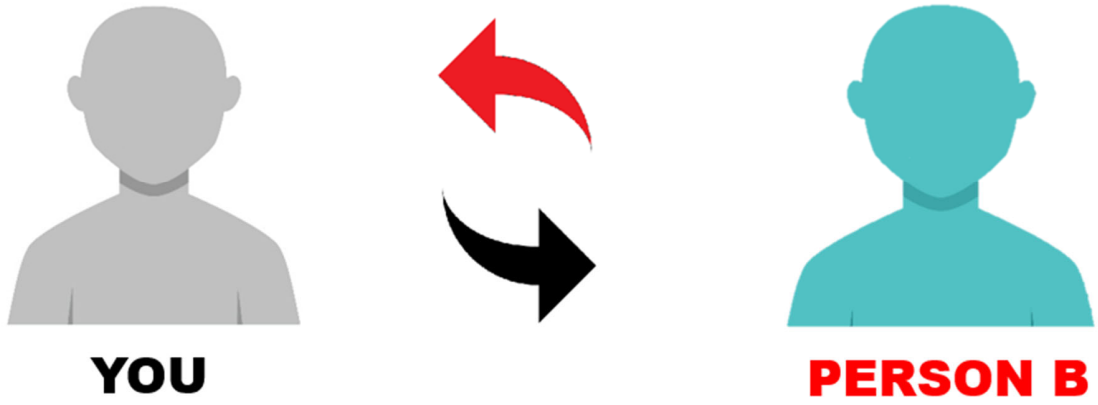
Please make a decision in the following situation

YOU: unknown
PERSON B: unknown
PLEASE NOTE: Your and your partner's decision in this round will be private and not reported to other people



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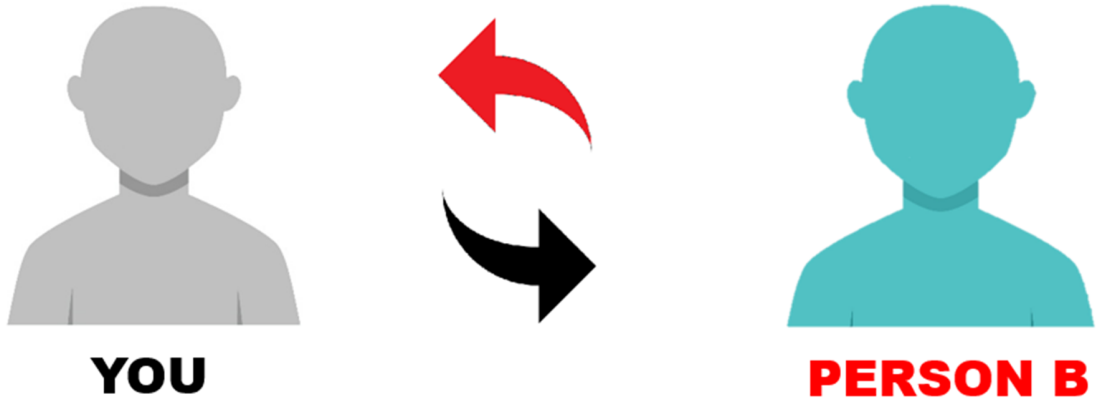
What do you expect from PERSON B?

YOU: unknown
PERSON B: unknown
PLEASE NOTE: Your and your partner's decision in this round will be private and not reported to other people



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PLEASE NOTE: in the next page, you will make a decision with a different partner

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5. References

1. Ariely D, Bracha A, Meier S. 2009 Doing good or doing well? Image motivation and monetary incentives in behaving prosocially. *Am. Econ. Rev.* **99**, 544–555. (doi:10.1257/aer.99.1.544)

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3. Romano, M. Sutter, J. Liu, T. Yamagishi, D. Balliet A. 2020 National Parochialism is Ubiquitous around Globe.