Distinguishing Interpersonal and Ideological Prosociality:
Introducing the Construct of Ideological Prosociality

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Abstract

Prosociality refers to dispositions and behaviors intended to benefit others, and the present study assumed that these dispositions reflect people's values. Much of the research on prosociality has examined prosociality in what can be called the interpersonal domain, e.g., helping others. I propose that prosociality also exists in the ideological domain. People hold prosocial values that concern collectives, not specific individuals. Multilevel analyses of data collected in Wave 8 of the European Social Survey (44,000 respondents in 23 countries) found positive relationships between ideological prosocial values and attitudes toward immigrants, refugees, and gays and lesbians, attitudes about the environment and climate change, social benefits, and income equality. Moreover, these relationships remained significant after controlling for participants' sex, age, income, education, political orientation, and happiness. In contrast, relationships between these attitudes and interpersonal prosocial values were either negative or not significant.

Keywords: prosociality; ideology; socio-political attitudes; political orientation

In this paper I introduce a model of prosociality that assumes that prosociality can be considered in terms of two related, but distinct, domains. One domain, which I label as interpersonal prosociality, concerns people's thoughts, beliefs, and behaviors that are intended to benefit people directly, such as helping, providing social support, and so forth. The second domain, labeled as ideological prosociality, concerns people's thoughts, beliefs, and behaviors that are intended to benefit others collectively, such as a concern for human rights, social equality, environmental quality, and so forth.

The model further assumes that ideological and interpersonal prosociality exist as separate, albeit related, sets of values. In terms of the roles values play, I rely on the work of Shalom Schwartz and colleagues. According to Schwartz (1992), values are trans-situational goals that serve as guiding principles and that underlie and can help to explain people's decision making, attitudes, and behaviors. Over decades, Schwartz and colleagues have developed a series of models of values. The present study used a set of 21 values proposed by Schwartz (2001, p. 267).

The present distinction between ideological and interpersonal prosocial values relies in part on analyses reported by Cieciuch et al. (2014) and Giménez et al. (2019). In both studies, a third-order factor was found that was labeled "Self-transcendence," a label consistent with that proposed by Schwartz (1992). This factor consisted of three of the 19 values studied by Schwartz et al. (2012): benevolence, universalism, and humility.

Putting aside for the moment how scales are labelled, *Benevolence*, which is defined as the "Preservation and enhancement of the welfare of people with whom one is in frequent

personal contact,” and *Universalism*, which is defined as “Understanding, appreciation, tolerance, and protection for the welfare of all people and of nature,” correspond (respectively) to the present constructs of interpersonal and ideological prosociality. *Humility* was present in the 19 value typology, but not in the original 10 value typology. I return to the issue of the labeling and meaning of scales in the discussion section.

Although both of these sets of values refer to prosociality, much of the research on what has been defined or labeled as prosociality has examined prosociality primarily in terms of helping behavior, which would be a manifestation of what Schwartz and colleagues have labeled as Benevolence. Although helping other people is clearly prosocial, there are other ways people can be prosocial, e.g., by supporting social policies that will benefit people in general, which are manifestations of what Schwartz and colleagues have labeled as Universalism.

Ideological and interpersonal prosociality are similar in that both refer to benefiting others. Nevertheless, the two types of prosociality differ in two important ways. First, the intended beneficiaries of interpersonal prosociality are typically individuals, whereas the intended beneficiaries of ideological prosociality are collectives of individuals or society itself. Helping someone complete a task benefits a specific person, whereas participating in a pro-environmental rally is intended to bring about changes that will benefit everyone. Second, and consistent with the first distinction, interpersonal prosociality typically concerns direct actions. Person A helps Person B accomplish a task. In contrast, ideological prosociality typically concerns or involves indirect actions or benefits. Person A participates in a pro-environmental rally in the hope of changing the policies of his/her society so that people will benefit from

cleaner, air, water, and so forth. Such differences leave open the possibility that interpersonal and ideological prosociality may manifest themselves in different ways. For example, someone may be high in interpersonal prosociality and help a stranger push his car out of the snow, while this same person may be low in ideological prosociality and oppose equal rights for LGBT citizens.

Next, I review briefly research on interpersonal and ideological prosociality constructs and discuss some of the implications of recognizing this distinction. Given that the construct of ideological prosociality is being introduced in this paper, ideological prosociality is discussed in somewhat more detail than interpersonal prosociality, which has been studied for decades and about which there are numerous reviews (e.g., Penner et al., 2005; Thielmann et al., 2020).

1.1 Interpersonal prosociality

Much of the existing research on prosociality has defined prosociality in terms of relationships between people, typically helping behavior, what I term interpersonal prosociality. For example, Penner et al.'s (2005) review concerned prosocial behavior, and their "meso-level" focused on helper-recipient dyads with the added note that "helping at this level has been the traditional focus of psychological work on prosocial behavior..." Their discussion focused on various factors that have been found to predict or to be related to who helps whom under what conditions. Their emphasis on helping behavior per se is also apparent in the question that motivated their discussion of the "micro level" (e.g., personality processes) "...initially puzzled by the fact that a behavior they thought should not occur (i.e., helping another person at some sacrifice to oneself) occurred quite frequently." Although they discussed various factors, their discussion was primarily in the service of trying to explain why people helped.

The point here is not criticize their review per se. It was thorough and insightful. Rather, the point is that ideological prosociality or related constructs were not considered. The review primarily concerned helping behavior and how helping varies across situations and contexts. Moreover, the role that values play in shaping helping behavior was not considered.

Another example of the limited focus of previous research can be found in Thielmann et al.'s (2020) review of prosociality and personality. They defined prosociality solely and exclusively in terms of behaviors in economic games, which concern allocating resources to others in (typically) hypothetical situations. No other type of research was considered, nor was any consideration given to the possibility that behavior in economic games may not provide a framework for understanding all types of prosocial behaviors. Although behaviors in such games may be valid indicators of a prosocial orientation, albeit with some caveats (Murnighan & Wang, 2016), research that has relied on such games has not tried to include ideological prosociality as part of the nomological network of economic games.

Conspicuously absent from the Penner et al. and Thielmann et al. reviews, and conspicuously absent from most discussions of, and research about, interpersonal prosociality is the possibility that prosociality can be manifested in ways other than interpersonal behaviors, i.e., helping behavior and behaviors in economic games. The proposed construct of ideological prosociality is intended to expand the nomological network of prosociality to include values, attitudes, and beliefs that concern collective benefits, not just the benefits specific individuals will receive.

1.2 Ideological prosociality

Ideological prosocial values are manifested as dispositions to endorse attitudes, hold beliefs, and engage in behaviors that are not directly intended to benefit specific individuals but are intended to benefit members of collectives or groups. Such collectives may be large (society in general) or limited (members of social minorities). Moreover, the intended beneficiaries do not need to be identified on an individual basis. A person who supports gay rights supports rights for all gays, not just the people he or she knows personally. In contrast, studies of interpersonal prosociality tend to concern beneficiaries who are identified, e.g., someone who has been or might be helped.

The attitudes, beliefs, and behaviors that are manifestations of ideological prosocial values differ from most types of interpersonal prosociality in that they may not be intended to benefit people directly. Supporting prosocial policies, participating in demonstrations for prosocial causes, and voting for candidates who have prosocial agendas may not result in immediate benefits to anyone, but the assumption is that over time, such advocacy and actions will produce benefits. Moreover, the indirectness of the relationships between ideological prosociality and the associated outcomes highlights the importance of values as motivators of ideological prosociality. Interpersonal prosocial behavior often involves some type of immediate feedback such as thanks or seeing the benefits of one's actions. In contrast, the outcomes of ideological prosocial efforts may not be immediately or obviously visible, and in the absence of any immediate, recognizable feedback, values play essential roles as motivators.

In addition to the work of Schwartz and colleagues on values, what I describe as ideologically based prosociality has been discussed in other contexts. For example, the UN

Millennium Goals include components of what I describe as ideological prosociality: community of life, ecological integrity, social and economic justice, and democracy, nonviolence, and peace (UN, 2000). Along the same lines, McFarland and colleagues (McFarland, 2017; McFarland et al., 2012) have examined relationships among various prosocial individual differences (both interpersonal and ideological) in terms of what he describes as “identification with all humanity.” I return to McFarland’s work in the discussion.

Although not mentioned by name, ideological prosociality has also been discussed in other contexts. For example, political scientists have examined how sets of attitudes cluster together, and some of this research finds clusters of attitudes that correspond to ideological prosociality as defined herein (e.g., Fleishman, 1986). In terms of socio-political attitudes, Ho et al. (2012) suggested that Social Dominance Orientation (SDO) “...is related to the endorsement of a broad spectrum of group-relevant social ideologies,” “...is related to attitudes toward group-relevant social policies.” In his review of vegetarianism, Ruby (2012) concluded that: “Broadly speaking, Western vegetarians tend to be liberal in their political views, place emphasis on environmental protection, equality, and social justice, and oppose hierarchy, authoritarianism, capital punishment, and violence in general (p. 146).” The group of attitudes and beliefs discussed by Ruby corresponds closely to the manifestation of the present construct of ideological prosociality.

1.3 The present study

To provide support for the existence of ideological prosociality as defined above I analyzed data from Round 8 of the European Social Surveys (ESS), which was conducted in

2016-2017. I decided to analyze data from a large-scale survey to minimize concerns about the generalizability of the results. I chose the ESS because the survey is among the world's best in terms of methods (e.g., validity of sampling procedures) and because the data collected in the ESS were well-suited to examining ideological prosociality. Specifically, the data collected included measures of people's values, and examining relationships between values and attitudes and beliefs was an important focus of the present study.

The ESS is conducted every two years, and I analyzed data from Round 8 because it included more countries (23) than Round 9 (19 countries) or Round 7 (21 countries). Also, the questions asked in each ESS survey consist of core modules that are included in each round of the ESS and rotating modules that are included in only some rounds. The questions included in Round 8 provided a better basis for examining ideological prosociality than those included in Rounds 9 and 7.

The ESS is state of the art in terms of its methods, which reduces concerns about the generalizability of results due to sampling bias. On the other hand, the data collected in the ESS were not designed to study prosociality. Nevertheless, there were enough measures included in this survey that directly concerned the manifestations of ideological prosociality, as I have defined it, so that on balance, I believe this survey provided a good basis to study ideological prosociality and its manifestations.

2. Methods

2.1 Sample

The eighth version of the European Social Survey (ESS) was conducted during 2016 (59% of observations) and 2017. Respondents were from Austria (2,010), Belgium (1,766), Switzerland (1,525), Czechia (2,269), Germany (2,852), Estonia (2,019), Spain (1,958), Finland (1,925), France (2,070), United Kingdom (1,959), Hungary (1,614), Ireland (2,757), Israel (2,557), Iceland (980), Italy (2,626), Lithuania (2,122), Netherlands (1,681), Norway (1,545), Poland (1,694), Portugal (1,694), Russian Federation (2,430), Sweden (1,551), and Slovenia (1,307). Of these 44,387 participants, 53% were women, and the average was approximately 47 years old. A description of the sampling procedure is available from the ESS (European Social Survey, 2016).

Participation in the ESS is voluntary, as is responding to individual questions, and the number of people who answered each of the questions on the ESS varied somewhat. For the items analyzed in this paper, the number of responses for most items was between 43700 and 44264. The exceptions to this were income and political orientation, to which 36445 and 38583 people answered respectively. Sample sizes are presented in the description of each measure and in the analyses of each measure.

2.2 Measures

2.2.1 Prosocial values

As proposed by Schwartz (2001), the ESS measured 21 values. The items used what is called the “Portrait Value Questionnaire” format. Each item is preceded by the stem “How much like you is this person?” Participants then select one of six options: very much like me, like me,

somewhat like me, a little like me, not like me, and not like me at all. One set of questions was asked of male respondents and another of female respondents.

Ideological prosocial values were defined as the mean response to the three items representing what Schwartz and colleagues have described as Universalism: (1) She strongly believes that people should care for nature. Looking after the environment is important to her, (2) It is important to her to listen to people who are different from her. Even when she disagrees with them, she still wants to understand them, and (3) She thinks it is important that every person in the world should be treated equally. She believes everyone should have equal opportunities in life. Most respondents, 43,826, answered the questions representing ideological prosociality.

Interpersonal prosocial values were defined as the mean response to the two items representing what Schwartz and colleagues have described as Benevolence: (1) It's very important to him to help the people around him. He wants to care for their well-being, and (2) It is important to him to be loyal to his friends. He wants to devote himself to people close to him. Most respondents, 43,769, answered the questions representing interpersonal prosociality.

Schwartz and colleagues strongly recommend correcting for individual differences in the use of the response scale (e.g., European Social Survey, 2021). As per these recommendations, in the present study, this was done by subtracting from the rating of each value the mean rating for all values. The estimated multilevel correlation between the ipsatized (corrected) measures of ideological and interpersonal prosociality was .28, whereas it was .55 between the raw measures.

2.2.2 Measures of attitudes and beliefs

The ESS asked a series of questions about attitudes and beliefs that were presumed to be manifestations of ideological prosociality. Before examining relationships between prosocial values and these attitudes and beliefs, a series of multilevel factor analyses were conducted to determine if sets of items that appeared to measure the same manifestation of ideological prosociality could be combined into single scales. These sets of items concerned attitudes toward immigrants and toward refugees, and attitudes about the environment and climate change, gays and lesbians, social benefits, and income equality. For example, the ESS contained three items that referred to refugees. Was there any justification for treating these three items as one scale?

The data collected in the ESS constitute a multilevel data structure in which people are nested within countries. This nesting means that the data cannot be analyzed with techniques appropriate for single level data sets, e.g., a factor analysis in which all respondents are analyzed in one group. Analyses that do not take the multilevel nature of the ESS data into account can produce inaccurate parameter estimates (Nezlek, 2010). Accordingly, the factor analyses were multilevel factor analyses conducted using the program Mplus (Muthén & Muthén, 2017).

Due to the fact that Round 8 of the ESS has 23 countries, there were some technical problems with formal two-level factor analyses (either CFAs or EFAs) of some measures. In technical terms, these problems were nonidentification due to a non-positive first-order derivative matrix. This occurred because there were not enough countries to estimate the parameters required by some analyses. Given this, following the recommendation of Muthén (Muthén, 1994), I estimated pooled within-country correlation matrices, and the EFAs were based on these matrices. Such matrices took into account the nested structure of the data.

Moreover, despite possible problems with nonidentification, the coefficients estimated by multilevel EFAs and EFAs based on pooled correlation matrices were indistinguishable.

Note: In the descriptions below, shortened versions of some items are presented. Full versions of all items and response scales are available from the ESS (European Social Survey, 2016). For some response scales, higher numbers indicated stronger endorsement of or agreement with a question. To simplify the presentation and scoring, such responses were reverse-scored prior to analysis so that higher numbers always indicated more agreement or stronger endorsement.

Responses to most items that were treated as a single scale were made using the same response scale; however, in two cases, attitudes about climate change and attitudes about immigrants, although most of the items for these subscales used five-or four-point scales, two of the items for climate change and three of the items for immigrants used 0-10 scales. Prior to scoring, responses to these five items were divided by 2. This reduced the influence on composite scores of differences in item means and variances. Also, items that had negative loadings on a factor were reverse scored before the scale scores were calculated. See DiStefano et al. (2009) for a discussion of computing scores to represent the results of factor analyses.

2.2.2.1 Attitudes toward immigration

The ESS contained six questions about immigrants and immigration. The first three concerned opinions about specific groups of immigrants: Allow many/few immigrants of same race/ethnic group as majority, Allow many/few immigrants of different race/ethnic group from majority, Allow many/few immigrants from poorer countries outside Europe. These items were

preceded by the stem “to what extent do you think [country] should,” and respondents answered using a 4-point scale with endpoints labelled 1 = ‘Allow many to come and live here’ and 4 = ‘Allow none.’ Responses to these items were reverse scored prior to analysis.

The next three items concerned the perceived impact immigration has on the host country: Immigration bad or good for country's economy, Country's cultural life undermined or enriched by immigrants, Immigrants make country worse or better place. These items were preceded by stems appropriate to question, and respondents answered using 11-point scale (0 to 10) with higher numbers equaling stronger endorsement. There were 44214 respondents in this analysis.

The results of the EFA of these six items were clear. There was one eigenvalue greater than 1.0 (3.73). All six items loaded on this factor, and all loadings were positive and were between .70 and .83. This meant that higher scores on this factor represented more positive (more prosocial) attitudes toward immigrants. The composite score that was analyzed was defined as the mean of the first three items and the second three items, divided by two. Dividing items by two that used the 0-10 response scale reduced variance of these items, which reduced the influence that item variances have on the variance of scale scores.

2.2.2.2 Attitudes about refugees

The ESS contained three questions about refugees: Government should be generous judging applications for refugee status, Most refugee applicants not in real fear of persecution own countries, and Granted refugees should be entitled to bring close family members. These items were preceded by the stem “how much do you agree or disagree” and respondents

answered using a 5-point scale with endpoints labelled 1 = ‘Agree strongly’ and 5 = ‘Disagree strongly.’ Responses to these items were reverse scored prior to analysis. There were 43700 respondents in this analysis.

The results of the EFA of these three items were clear. There was one eigenvalue greater than 1.0 (1.62), and all three items loaded on this factor. The first and third items (government should be generous and allow family members) had positive loadings (.75 and .59), and the second item (refugees do not really fear persecution at home) had a negative loading (-.35). In other words, higher scores on this factor represented more positive (more prosocial) attitudes toward refugees. The composite score that was analyzed was defined as the mean response to these three items, with the second item reverse scored.

2.2.2.3 Attitudes about social benefits

The ESS contained six questions about social benefits per se. These items all began with “Social benefits/services,”: place too great strain on economy, prevent widespread poverty, lead to a more equal society, cost businesses too much in taxes/charges, make people lazy, and make people less willing care for one another. Respondents answered using a 5-point scale with endpoints labelled 1 = ‘Agree strongly’ and 5 = ‘Disagree strongly.’ Responses to these items were reverse scored prior to analysis. There were 44031 respondents in this analysis.

The EFA of these six items produced two factors with eigenvalues greater than 1.0 (2.21, 1.50). The two prosocial measures, prevent widespread poverty and lead to a more equal society, loaded on the first factor (.87, .58), and so higher scores on this factor represented more positive attitudes (more prosocial) toward the benefits of social benefits. The other four measures loaded

on the second factor (.48 to .80). The two factors were correlated -.05. The composite score that was analyzed was defined as the mean response to the items prevent widespread poverty and lead to a more equal society.

2.2.2.4 Attitudes toward Gays and lesbians

The ESS contained three questions about gays and lesbians: Gays and lesbians free to live life as they wish, Ashamed if close family member gay or lesbian, and Gay and lesbian couples right to adopt children. Respondents answered using a 5-point scale with endpoints labelled 1 = 'Agree strongly' and 5 = 'Disagree strongly.' Responses to these items were reverse scored prior to analysis. There were 43838 respondents in this analysis.

An EFA of these three items produced one factor with an eigenvalue greater than 1.0 (1.93). All three items loaded on this factor. The first and third items (free to live lie as they wish, adopt children) had positive loadings (.79, and .64), and the second item (shame if family member was gay) had a negative loading (-.61). So higher scores on this factor represented more positive attitudes (more prosocial) toward gays and lesbians. The composite score that was analyzed was defined as the mean of the first and third items and the second item reverse-scored.

2.2.2.5 Attitudes about climate change and environmental policies

Climate change and related issues were an important focus of Round 8 of the ESS, and numerous questions were asked. The six questions that most directly concerned what people thought about climate change and what policies they favored were: To what extent feel personal responsibility to reduce climate change, How worried about climate change, Climate change good or bad impact across world, Favor increase taxes on fossil fuels to reduce climate change,

Favor subsidize renewable energy to reduce climate change, Favor ban sale of least energy efficient household appliances to reduce climate change. There were 44224 respondents in this analysis.

Participants answered the first and third questions (felt responsibility and impact across the world) using 11-point scales (0 to 10), and they answered the second question (worried about climate change) using a 1-5 scale (1 = 'not at all,' 5 = 'Extremely'). Participants answered the three questions about policies (taxes, subsidies, and ban sale of inefficient appliances) using a 5-point scale with endpoints labelled 1 = 'Strongly favor' and 5 = 'Strongly disfavor.' Responses to these items were reverse scored prior to analysis.

The EFA of these responses produced two factors with eigenvalues greater than 1.0 (2.07, 1.02). Although there were two eigenvalues greater than 1.0, I decided upon a one-factor solution. First, the second eigenvalue was just above 1.0, and for one of the two factors in the two-factor solution, only one variable loaded above .10. Moreover, the third and fourth factors had eigenvalues of .94 and .86. For the single factor EFA, all six items had positive loadings on this single factor (ranging from .31 to .60), which meant that higher vs. lower scores on this factor indicated that respondents thought climate change was more serious and they were in favor of policies that could mitigate climate change. The composite score that was analyzed was defined as the mean of all items, and responses to the two items that used 0-10 scales were divided by two prior to calculating this mean.

2.2.2.6 Attitudes about policies related to income equality

The ESS contained three questions about income equality: Government should reduce differences in income levels, Large differences in income acceptable to reward talents and efforts, and For a fair society, differences in standard of living should be small. Respondents answered using a 5-point scale with endpoints labelled 1 = ‘Agree strongly’ and 5 = ‘Disagree strongly.’ Responses to these items were reverse scored prior to analysis. There were 44264 respondents in this analysis.

An EFA of these three items produced one factor with an eigenvalue greater than 1.0 (1.61). All three items loaded on this factor. The first and third items (reduce differences in income level and differences in standard of living should be small) had positive loadings (.63, and .59), and the second item (large differences acceptable to reward) had a negative loading (-.45). So higher scores on this factor represented more positive attitudes toward income equality (more prosocial). The composite score that was analyzed was defined as the mean response to these three items, with the second item reverse-scored.

3. Results

3.1 Relationships between prosocial values and manifestations of prosociality

The primary analyses of the study examined if ideological prosocial values were manifested in ideological prosocial beliefs. These analyses were multilevel models that examined relationships between values and respondents’ attitudes and beliefs. The analyses followed the guidelines offered by Nezlek (2010), and they were conducted using the program HLM8 (Raudenbush et al., 2019). As Schwartz (2001) noted values “guide, justify or explain attitudes, norms, opinions and action.” Consistent with this, the present analyses examined how prosocial

values are manifested in attitudes and opinions. In statistical terms, prosocial values were predictors and attitudes and beliefs were outcomes. Schwartz et al. (2012) used a similar analytic framework.

3.2 Multilevel analyses: Covariates

To control for the possibility that relationships between prosocial values and attitudes and beliefs were due to relationships between either of these measures and other individual differences, I included a set of covariates in the analyses. Although research on sex differences in prosociality does not suggest a simple main effect (Balliet et al., 2011), I controlled for respondent gender by including a contrast-coded variable representing sex (1 = women, -1 = men). Given that research has consistently found that political orientation is related to endorsement of prosocial attitudes (e.g., Jost et al., 2009), I included a measure of political orientation, a 0-10 scale with endpoints labelled 0 = Left and 10 = Right. Previous research suggests that wealthier people are more prosocial (Korndörfer et al., 2015), and so I included a measure of total household income, rated on a 1-10 decile scale. Some research suggests that political attitudes can change as people age (Peterson et al., 2020), and age was added. The specific measure was age in year divided by 10. Education has been found to be related to social policy attitudes (Brooks & Weber, 2021), and education was included. Finally, happiness has been found to be related to prosocial behavior and to prosocial attitudes and beliefs (e.g., Aknin et al., 2019), and so I controlled for respondents' general level of happiness using a 0-10 scale with endpoints labelled 0 = extremely unhappy and 10 = extremely happy.

Prior to analysis, the political orientation, income, and happiness scores were divided by 2. This was done to make the metric of these response scales similar to the metrics of the other measures. Note that such transformations do not change the results of significance tests of individual coefficients.

3.3 Multilevel analyses: Descriptive statistics

Before examining relationships between values and attitudes and beliefs all measures were analyzed with a “null” model, i.e., no predictors at either level of analysis. Although such models rarely test hypotheses per se, they do provide estimates of the basic multilevel descriptive statistics: the mean and variance estimates at different levels of analysis. This basic model is presented below. In this model there are i persons nested within j countries.

$$\text{Person-level:} \quad y_{ij} = \beta_{0j} + r_{ij}.$$

$$\text{Country-level:} \quad \beta_{0j} = \gamma_{00} + \mu_{0j}$$

The ESS also provides (and recommends using) weights for analyses of the ESS data to adjust for sample characteristics. The ESS provides separate weights for the person-level and the country-level. In the present analyses, at the person-level, observations were weighted by a measure the ESS labels as “pspweight.” At the country-level, observations were weighted by a measure labelled as “pweight.” For a discussion of using weights in the ESS, see Kaminska (2017).¹

¹I am grateful to Olena Kaminska for her help regarding selecting the appropriate weights for the analyses reported in this paper.

The results of these analyses are summarized in Table 1. The means presented in Table 1 indicate that means of all measures were sufficiently far from the scale endpoints so that there were no “floor” or “ceiling” effects. Also, for all measures there was sufficient variance at the person-level to suggest that analyses at the person-level could be informative (Nezlek, 2010). For most measures, the majority of the variance (80-90%) was at the within-country level. Scores for people varied more within countries than mean scores varied between countries. The one exception to this was the distribution of variances in attitudes toward gays and lesbians, for which the person- and country-level variances were similar.

3.4 Multilevel analyses of relationships between prosocial values and attitudes and beliefs controlling for sex, age, income, education, political orientation, and happiness

To examine relationships between prosocial values and attitudes and beliefs, prosocial values were added as predictors to the person-level model presented previously. Attitudes and beliefs were the outcome measures. The following covariates were added: sex, age, income, education, political orientation, and happiness. All predictors were entered as randomly varying, and all predictors except sex were entered group-mean centered. Sex was entered uncentered.

The model is presented below. In essence, a regression equation was estimated for each country, and the mean coefficient was tested for significance, the significance of the γ_{10} to γ_{80} coefficients.

Person-level: $y_{ij} = \beta_{0j} + \beta_1*(\text{Ideology}) + \beta_2*(\text{Interpersonal}) + \beta_3*(\text{Sex}) + \beta_4*(\text{Age}) + \beta_5*(\text{Income}) + \beta_6*(\text{Education}) + \beta_7*(\text{Orientation}) + \beta_8*(\text{Happiness}) + r_{ij}.$

Country-level (intercept): $\beta_{0j} = \gamma_{00} + \mu_{0j}$

Country-level (Ideology slope): $\beta_{1j} = \gamma_{10} + \mu_{1j}$

Country-level (Interpersonal slope): $\beta_{2j} = \gamma_{20} + \mu_{2j}$

Country-level (Sex slope): $\beta_{3j} = \gamma_{30} + \mu_{3j}$

Country-level (Age slope): $\beta_{4j} = \gamma_{40} + \mu_{4j}$

Country-level (Income slope): $\beta_{5j} = \gamma_{50} + \mu_{5j}$

Country-level (Education slope): $\beta_{6j} = \gamma_{60} + \mu_{6j}$

Country-level (Orientation slope): $\beta_{7j} = \gamma_{70} + \mu_{7j}$

Country-level (Happiness slope): $\beta_{8j} = \gamma_{80} + \mu_{8j}$

The results of these analyses are summarized in Table 2. MLM analyses estimate only unstandardized coefficients, and so the slopes represent the expected change in an outcome (an attitude or a belief) associated with a 1-point increase in a predictor.

As can be seen from these results, scores on the measure of ideological prosocial values were positively related to scores on all measures of prosocial attitudes and beliefs. As indicated by the coefficients presented in Table 2, although attitudes and beliefs that represent manifestations of ideological prosociality varied as a function of sex (women tended to be more ideologically prosocial), income (wealthier people tended to have more ideologically prosocial attitudes and beliefs than the less wealthy, except for support for income equality), education (better educated people tended to have more ideologically prosocial attitudes and beliefs than less well-educated people, except for support for income equality), happiness (happier people tended to have more ideologically prosocial attitudes and beliefs than the less happy, except for support for income equality), and political orientation (right-wing political orientation was negatively

related to all measures of ideological prosocial attitudes and beliefs), ideological prosocial values were related to the outcome measures above and beyond relationships between the covariates and the outcome measures. Moreover, as an indication of the discriminative validity of the present measures of ideological and interpersonal prosocial values, the strength of interpersonal prosocial values was *negatively* related to the provision of social benefits and was unrelated to attitudes toward refugees, gays and lesbians, and income equality.

I have presented the results from models that included all covariates. As can be seen from the sample sizes for each analysis provided in Table 2, the sample sizes were approximately 32,000, which is meaningfully less than the total number of respondents. This difference was due primarily to the fact that many respondents did not answer the income and political orientation questions. See Table 1 for sample sizes. For the sake of transparency, the results of models that contained only the prosocial value measures are summarized in Table 2S, which is available via the OSF repository. https://osf.io/sncvy/?view_only=9f5a9f79d0c843b7a653028ad5a82e8d. With minor exceptions, the results of these analyses are similar to those presented in Table 2.

3.5 Relationships between prosocial values and covariates

To provide a more informed context for understanding the present results, I examined relationships between the measures of prosocial values and the six covariates. These models were structurally the same as those presented in Section 3.4, except that values were the outcomes and the covariates were predictors. The analysis of ideological prosocial values found positive relationships between ideological prosociality and sex ($\gamma_{10} = .03, t = 3.51, p = .002$), age ($\gamma_{20} = .07, t = 13.74, p < .001$), and education ($\gamma_{40} = .03, t = 3.00, p < .01$) and negative

relationships with income ($\gamma_{30} = -.01, t = 2.23, p < .04$) and political orientation ($\gamma_{50} = -.10, t = 4.13, p < .001$). A similar analysis of interpersonal prosocial values found positive relationships between interpersonal prosociality and sex ($\gamma_{10} = .09, t = 5.89, p < .001$), age ($\gamma_{20} = .04, t = 3.25, p < .01$), and happiness ($\gamma_{60} = .05, t = 2.94, p < .01$) and a negative relationship with political orientation ($\gamma_{50} = -.04, t = 4.35, p < .001$).

3.6 Relationships among attitudes and beliefs

The attitudes and beliefs that were analyzed were chosen because it was assumed they were measure of ideological prosociality. Given this, I was interested in whether these attitudes and beliefs could be described by a single factor (or multiple factors). Similar to the previous factor analyses, it was not possible to conduct a formal multilevel CFA or EFA, and so these data were analyzed with an EFA based on a pooled within-country correlation matrix.

Although this analysis produced two factors with eigenvalues greater than 1.0 (1.91 and 1.08), the factor loadings suggested that a single factor was appropriate. Moreover, the eigenvalues for the third and fourth factor were .94 and .86 respectively, and a scree plot confirmed the selection of a single factor solution. All variables had positive and statistically significant coefficients on a single factor, and the SRMR for the within component of the single-factor model was .035, and a widely accepted standard for good fit for these indices is less than .05. For a two-factor model, only one variable, support for pro-environmental policies, loaded above .25 on the second factor (.51), and the two factors were correlated .47.

4. Discussion

The present study found that ideological prosocial values, as measured by items representing the Universalism factor of values proposed by Schwartz and colleagues, were positively related to attitudes and beliefs that endorsed or supported benefits for collectives of individuals. In contrast, interpersonal prosocial values, as measured by items representing the Benevolence factor of values proposed by Schwartz and colleagues, were either unrelated or negatively related to these same outcomes. Moreover, the possibility of such a distinction was one of the motivating questions of the present study. The issue of assuming that Schwartz's factors can be considered as measures of prosociality is considered in a separate section below.

4.1 Ideological prosociality and political orientation/ideology

Although ideological prosocial values and their manifestations were found to be related to left-right political orientation, the present results do not suggest that ideological prosocial values are subsumed by political orientation. Values predicted attitudes and beliefs above and beyond political orientation. Moreover, theoretically, values underlie entities such as political beliefs and attitudes. Nevertheless, understanding such relationships requires further research for at least two reasons.

First, there is some uncertainty regarding the adequacy of representing political ideology with a unidimensional left-right distinction, and Feldman (2013) discusses alternatives to such a representation. One alternative distinguishes social and economic ideologies. Feldman summarizes support for such a distinction and discusses the implications of considering these two dimensions simultaneously, i.e., a four-category typology representing the four combinations of stronger and weaker endorsement of social and economic ideologies. In terms of ideological

and interpersonal prosociality, prosocial values may differ and be manifested differently among individuals in these four quadrants.

Second, there are explanations of political ideology that do not rely on values as foundational elements. Relationships between political ideology and personality have been examined for decades, and this research includes basic structural models of personality and more specific individual differences such as authoritarianism (Caprara & Vecchione, 2013). Moreover, in a well-established body of research, Jost and colleagues (e.g., Jost et al., 2003, 2009) have examined how political ideology reflects motivated social cognition, e.g., motives to manage uncertainty and threat.

Understanding relationships between ideological prosociality and political ideology/orientation will take research designed for this purpose. The present results suggest that such research could be fruitful. Clearly, the two are related, the question is: How? Moreover, it is important to note that although different explanatory frameworks are often presented in isolation, it is likely that they can be examined together, to complement rather than to compete with one another.

4.2 Interpersonal prosociality

Although individual differences in interpersonal prosocial values were positively related to individual differences in ideological prosocial values, individual differences in interpersonal prosocial values were negatively related to support for providing social benefits to the needy. Unfortunately, the ESS did not include measures of the possible manifestations of interpersonal prosocial values.

4.3 McFarland and Identification with All of Humanity

Over the past two decades McFarland and colleagues have examined a construct they describe as “Identification with All of Humanity” or IWAH (e.g., McFarland, 2017; McFarland et al., 2012, 2019). This impressive body of research has found that IWAH (a construct similar to global citizenship studied by other researchers) is related to ideological prosociality as defined in the present paper. For example, McFarland et al. (2012) found that IWAH was positively correlated (.37) with Universalism, and Hamer et al. (2019) reported similar correlations in the two studies they conducted (.35 and .32).

Nevertheless, McFarland et al. (2012) found that IWAH and Universalism were independently related to a measure of concern for human rights, suggesting that the constructs are distinct. Although IWAH and Universalism may be distinct, Hamer et al. (2019) modeled Universalism-tolerance (one of the three components of Universalism) as a cause of IWAH, along with empathy and openness to experience. These relationships were mediated by Social Dominance Orientation and Right Wing Authoritarianism.

Research on relationships between IWAH and Schwartz’s values has focused on Universalism, and so it is not clear how IWAH and Benevolence are related. McFarland et al. (2019, p. 150) mentioned in passing “Correlations with universalism from Schwartz’s (1992) 10-value circumplex model of personal values range up to the .50s, those with benevolence in the .30s...” but they provided no more information than this. Preliminary analyses of a convenience sample of 400 American collegians that I recently collected found that IWAH was positively correlated with Universalism (.41), whereas it was negatively correlated with Benevolence

(-.28). Regardless, it is clear that the conceptual spaces of IWAH and ideological prosociality overlap, and the two models are based on complementary, not competing, views of the world. Future research is needed to understand this synergy.

4.4 Treating Benevolence and Universalism as measure of prosociality

Although Schwartz and colleagues did not explicitly intend to measure prosociality in their measure of values, the items that they describe as measures of Benevolence and Universalism clearly refer to interpersonal and ideological prosociality as defined herein. Given this, I think it is appropriate to refer to them as such. Such use is not meant to challenge the conceptual framework Schwartz and colleagues developed. Rather, discussing Benevolence and Universalism as interpersonal and ideological prosociality applies part of the framework proposed by Schwartz and colleagues to a specific domain, prosociality.

Benevolence and Universalism are values that underlie interpersonal and ideological prosociality, but there may be more to interpersonal and ideological prosociality than the values included in the measures of Benevolence and Universalism. For example, empathy has traditionally been considered to be part of prosociality, and although empathy may be assumed to be part of Benevolence and Universalism, the items do not explicitly concern empathy. Moreover, given the pronounced and consistent differences between how ideological and interpersonal prosociality were related to attitudes and beliefs toward outgroups (e.g., immigrants), it may be that empathy takes two forms, one that concerns close others and another that is more abstract and concerns people with whom an individual does not have a personal relationship. Such possibilities require research specifically designed to answer such questions.

4.5 Limitations and future directions

The results of the present analyses support the existence of a construct along the lines of ideological prosociality, although this support can be considered as only preliminary. The ESS is an excellent survey, but it is limited to Europe, and it is possible that relationships between the constructs of interest would differ in non-Western cultures. Moreover, although the items that were administered in the ESS were valid measures of the constructs they were designed to measure, different measures of these constructs might have provided different results.

An important limitation of some of the measures collected in the ESS the lack of knowing exactly why people exhibited the ideological prosocial behaviors they did. I assumed that it was for ideological (i.e., broadly focused) reasons; however, this might not always be the case. For example, if the primary reason a person is involved in a pro-environmental group is to ensure a better future for her children, it might be difficult to classify this behavior as purely ideologically prosocial. Similarly, if someone attended a rally for social justice because his friends attended, his behavior would not be a manifestation of ideological prosociality. Future research needs to take into account people's motives for engaging in what external observers may classify as prosocial behaviors to ensure that their behaviors are manifestations of the prosocial motives they are assumed to reflect.

Despite these limitations, the present results can serve as a starting point for further study. Such research can include examining other similar surveys (national or international) for support and conducting studies designed specifically to test the proposed model. At this point, it seems that the most important task is determining how/if the conceptual domains of ideological and

interpersonal prosociality should be expanded beyond the values in the Schwartz model. In addition to political ideology and IWAH that have already been considered, such an expansion could include individual differences in constructs such as empathy, moral reasoning, and socio-political beliefs such as authoritarianism. A critical question about such an expansion is the extent to which constructs exist at the same causal level. For example, should empathy be considered as a part of prosociality, as a manifestation of prosociality, as an independent correlate of prosociality, or as precursor to prosociality? Regardless, I believe the proposed model can provide new and meaningful insights into prosociality, which may be a key element in findings ways to deal with the increasing polarization and strife that seem to be dominating more and more of public life.

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Table 1 Descriptive statistics for scale scores and covariates

Outcome	Sample	Mean	Variance estimates	
			Person	Country
Ideological prosocial values	43826	.54	.40	.03
Interpersonal prosocial values	43769	.69	.43	.07
Immigrants	44214	2.54	.68	.15
Refugees	43700	3.05	.64	.09
Social benefits (positive)	43462	3.27	.73	.07
Gays and lesbians	43838	3.41	.80	.80
Climate change/environmentalism	44224	3.21	.45	.05
Income equality	44264	3.40	.56	.05
Age	44232	4.68	3.39	.03
Income	36445	2.67	1.87	.04
Education	44170	3.77	3.19	.13
Political orientation	38583	2.51	1.15	.04
Happiness	44172	3.64	.88	.10

Table 2 Relationships between prosocial values and prosocial attitudes and beliefs controlling for sex, age, income, education, political orientation, and happiness

Outcome	Sample	Ideological prosocial values		Interpersonal prosocial values		Sex	Age	Income	Education	Left-right orientation	Happiness
		coeff.	<i>t</i>	coeff.	<i>t</i>						
Immigrants	32070	.235	5.41***	.012	< 1	-.017	-.050***	.032**	.073***	-.101***	.125***
Refugees	31929	.197	3.33**	.020	1.51	.024*	-.035*	.015*	.032*	-.122**	.065***
Social benefits	31889	.047	2.10*	-.059	6.49***	-.011	.007	.008	-.001	-.026	.040***
Gays/lesbians	31945	.167	3.33**	.011	< 1	.093***	-.112***	.043**	.044***	-.084**	.022**
Environmentalism	32055	.088	4.89***	-.003	< 1	.016*	-.013	.035***	.041***	-.053*	.027**
Income equality	32086	.189	23.58***	.029	1.51	.018	.013**	-.040*	-.033***	-.119***	-.027

Note: Measure of values for analysis of environmental attitudes did not include importance of the environment.

*** $p < .001$, ** $p < .01$, * $p < .05$