Social Preferences and Political Participation

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Abstract

Models of political participation have begun to incorporate actors who possess "social preferences". However, these models have failed to take into account the potentially incongruent political goals of different social preference types. These goals are likely to play an important role in shaping political behavior. To examine the effect of distinct social preferences on political activity we conducted an experiment in which participants played five rounds of a modified dictator game (Andreoni and Miller 2002). We used the decisions in these games to determine their preference type and mapped these types to reported political activity. Our results show that subjects who were most interested in increasing total welfare in the dictator game were more likely to participate in politics than subjects with selfish preferences, whereas subjects most interested in reducing the difference between their own well-being and the well-being of others were no more likely to participate than subjects with selfish preferences.

Keywords Political participation; behavioral economics; experiments; elections.

Rational choice models of political participation based on the assumption that actors are purely self-interested typically fail to explain why so much participation occurs (Fiorina 1990).[1] In these models the cost of participation, even if small, typically outweighs the expected personal benefit of participation. If this is the case, we should observe very little political participation, but in fact large numbers of citizens are politically active. Alternative models have begun to incorporate actors who care not only about themselves, but also about the well-being of others. In particular, formal models based on an assumption that actors have "social preferences" have been constructed to explain voting behavior (Edlin et. al. 2007, Fowler 2006, Jankowski 2002, Jankowski 2004, Sandroni and Feddersen 2006) and political participation more broadly (Fowler and Kam 2006). They have also been tested empirically (Fowler 2006, Fowler and Kam 2006, Loewen 2010). This approach is motivated in part by a vast literature within behavioral economics which shows that in an experimental setting many individuals are willing to help others, often anonymous to them, even when it is personally costly to do so. In models assuming political actors with social preferences, individuals consider the benefits to themselves and to others they care about and weigh them against the cost of participation. This decision-making calculus is "rational" in the sense that individuals have complete and coherent preferences, but these preferences are not purely selfish (Charness and Rabin 2002).

Thus far, the political science literature has treated social preferences in nearly monolithic fashion–the principal type of social preference that has been considered is one in which there is a direct correspondence between how concerned actors are for others and how much

they participate (Edlin, Gelman, and Kaplan 2007, Fowler 2006, Jankowski 2002, Jankowski 2004). The only exception to this has been allowing actors to express differing degrees of concern for different groups of citizens (Fowler and Kam 2006, Loewen 2010). While behavioral economists have modeled, and observed in the laboratory, several distinct forms of concern for the payoffs of others, thus far no studies have empirically related different types of social preferences to political participation. Our contribution is to demonstrate the differing relationships between different types of social preferences and a composite measure of political participation. By doing so, we move beyond both the more narrow consideration of uniform social preferences and the act of voting. Our work thus speaks to both a social preferences literature and to the much broader empirical literature concerned with the individual-level differences that motivate political participation, whether senses of duty (Blais 2002), race and gender (Leighley and Nagler 1992), information (Klassen 2005) or socioeconomic status (Verba et. al. 1995).

Two prominent types of social preferences that have been identified are *Rawlsian* and *utilitarian* preferences (Andreoni and Miller 2002).[2] Both of these types extend utility beyond narrow self-interest, but they differ in important ways. Rawlsians care more about reducing the difference between their own well-being and the well-being of others, whereas utilitarians care more about increasing everyone's average well-being. This difference is important for applications of social preferences to political participation. *Utilitarians* might participate more than those who are purely selfish, but only if political outcomes have an effect on total social welfare. Similarly, *Rawlsians* might participate more than those who

are purely selfish, but only if political outcomes can be used to redistribute resources to those most in need. In reality, politics probably influences both welfare and the distribution of resources, but it is not clear which effect dominates or how much they affect participation among those with other-regarding preferences.

This issue poses a potential limitation for empirical studies linking social preferences to individual political behavior. Individuals with Rawlsian preferences and individuals with utilitarian preferences both behave altruistically, or express a desire for altruism, rendering them observationally equivalent if not examined carefully. In the parlance of the dictator game, both types of subjects may give away money to others, though they may have different underlying motivations for this action. If these two groups do have different views on politics as a means for benefitting others, the more complex underlying relationship between social preferences and political participation may be clouded by lumping the two groups together. What is required is a behavioral measure which can reveal distinct motivations and then map these motivations to political participation.

To examine the effect of distinct social preferences on political activity we designed a two part study. First, we instructed participants to play five rounds of a modified dictator game and used the decisions in these games to determine their preference type (Andreoni and Miller 2002). Second, participants completed a detailed survey of their recent political activity. This research design allows us to map revealed preferences to a large variety of political activities. To preview our results, we find that subjects who were most interested in increasing total welfare in the dictator game were more likely to participate in politics than

subjects with selfish preferences, whereas subjects most interested in reducing the difference between their own well-being and the well-being of others were no more likely to participate in politics than subjects with selfish preferences. These results highlight the importance of accounting for heterogeneity when studying the link between social preferences and political behavior. Indeed, the results that follow suggest that different social preferences are related to distinctly different rates of political participation.

Social Preferences and Political Participation

Utilitarianism, in the words of John Harsanyi (1980, p.116), is concerned with "*maximizing social utility*...defined as the sum, or arithmetic mean, of all utilities." Harsanyi (1980) theorized that the paradox of voting could be overcome by individuals guided by utilitarian principles. Voters deciding the fate of some policy measure they view as socially desirable, he argued, would go to the polls, even though it was costly to do so, because voting would yield higher social utility than abstaining. Edlin, Gelman, and Kaplan's (2007) social benefit model of voting, for example, is an extension of this thinking. The model assumes that the benefit associated with participation is $B_s + \alpha N B_o$, where N is the number of people affected by the political outcome, B_s is the benefit to oneself and B_o is the benefit to the average voter if the preferred outcome occurs, and α is a scalar measure, between zero and one, of an individual's level of altruism. The expected value of participation is $P(B_s + \alpha N B_o) - C$ where P is the probability that participation generates the desired political outcome. If

$P \approx \frac{1}{N}$ (as many scholars have argued – see Gelman, King, and Boscardin 1998; Gelman, Katz, and Bafumi 2004; Mulligan and Hunter 2003), this calculus of voting reduces to a decision to vote when $\alpha B_o > C$. This model is largely similar to those proposed by others (Fowler 2006, Jankowski 2002, Jankowski 2004, Sandroni and Feddersen 2006). We note that its logic extends to any act of political participation which resembles a collective action problem and not only the act of voting.

Rawlsian preferences, on the other hand, have not been explicitly linked to political participation in any formal or empirical model. Harsanyi (1975), in a criticism of John Rawls' maximin principle, offers a possible explanation for why a desire to reduce the difference between one's own well-being and the well-being of others may not translate into increased political participation. Harsanyi argues that focusing on this difference "would require us to give *absolute* priority to the interests of the worst-off individual, *no matter what*, even under the most extreme conditions. Even if his interests were affected only in a very minor way, and all other individuals in society had opposite interests of the greatest importance, his interests would always override anybody else's."(p. 596) Political outcomes are often redistributive, favoring one group over another, but individuals with Rawlsian preferences would only support redistributions that strictly go to the worst-off. Because politics rarely is the venue for this type of redistribution, individuals with Rawlsian preferences may devote their altruism to other outlets better capable of achieving their distributional goals. For example, Andreoni and Vesterlund (2001) provide evidence of a possible link between Rawlsian preferences and charitable giving. In the context of voting and other means of po-

litical engagement then, we should expect utilitarians to exhibit greater participation than Rawlsians. Accordingly, our work examines this link between different social preferences and political participation across a number of acts of political engagement (Verba, Schlozman, and Brady 1995).

Research Design

Our study was conducted at the University of California, Davis in the spring of 2005. Subjects were recruited from various social science majors and were offered course credit for participating in the study. A total of 234 subjects participated in the complete study. The study had two parts. First, subjects were asked to make five decisions in what is called the "dictator game". Upon completion of the first task they were asked to complete a questionnaire eliciting information about their political behavior and views, age, sex, and socio-economic background. Subjects in the study ranged in age from 19 to 49 with an average age of 20.6 years. The subject pool was 41% women and 56% of subjects identified themselves as white.

The dictator game involves two "players". The first player determines a split of some endowment, usually a sum of money, between herself and the other player. The second player simply receives whatever the first player has allocated to her and thus has no strategic role in the game. If the first individual were only concerned with her own well-being, she would keep the entire endowment and pass nothing. Therefore, any positive allocation to the second

player is viewed as altruistic behavior. For a review of the literature on the dictator game see Camerer (2003).

Subjects in our study were asked to play five modified dictator games, modeled after Andreoni and Miller (2002). In each dictator game, subjects were asked to split 10 lottery tickets between themselves and an anonymous recipient. Subjects were informed that every ticket they contributed would give the recipient either 1, 2, or 3 chances to win the prize and every ticket they kept would give themselves either 1, 2, or 3 chances to win the prize, depending on the game.[3] The order of the games was randomized. This design serves to vary the relative price of giving in order to check decisions against rationality conditions and determine the social preference type of the subject.[4]

Subjects were informed that their participation made them eligible to win $100. They were told that a number corresponding to a ticket would be randomly drawn and matched with the subject holding it. As noted above, the drawing was weighted according to the type of ticket held, with some giving the holder one chance, some giving them two chances, and some giving them three chances. At the conclusion of the study, the winning number was announced by email and a winner came forward with the winning ticket to claim the $100 prize. Fowler (2005) has shown that this type of experimental design yields results consistent with those reported in experiments where subjects were asked to split a cash endowment. Our results are also very similar to Andreoni and Miller (2002) leading us to conclude the lottery prompts subjects to treat the experiment as if they were being paid for a randomly chosen decision.

Though economists sometimes criticize low-stakes experiments like this one, a survey of the experimental economics literature by Camerer and Hogarth (1999) shows that stake size has only a small effect on average behavior and the biggest effect of stakes on behavior is changing from zero to positive stakes. Furthermore, Carpenter, Verhoogen, and Burks (2005) show specifically for the dictator game that changing from low stakes to high stakes has no effect on mean allocations.

Finally, compared to verbal questions in which it is costless for a subject to succumb to social desirability, behavioral measures from choices made in the dictator game require subjects to pay a cost to reveal false social preferences in the name of social desirability. By comparison, it is never financially costly in conventional survey research for a subject to lie about their preferences. Accordingly, on the preferences side, at least, our design works against social desirability better than conventional survey questions. Moreover, we have no reason to believe that those who succumb to social desirability would be more likely to reveal different kinds of social preferences. For example, it is not clear whether egalitarian motives or motives to maximize group welfare represent the most desirable outcome perceived by subjects. As a result, desirability should not bias efforts to classify subjects who express social preferences.

Preferences

The modified dictator game provides two critical pieces of information. First, allocation choices (subject to the budget constraint) in each relative price condition can be analyzed to see if they meet the conditions required for rationality. Over 94% of our subjects made consistent choices across the five games.[5] Second, these choices can be used to determine each subject's preference type. A set of rational choices can be represented by a utility function and thus key parameters of interest can be estimated econometrically in order to provide more information about preferences.

Classification

Subjects were classified into three utility types: selfish, Rawlsian, and utilitarian. Strong selfish types choose according to the utility function $U_s(\pi_s, \pi_o) = \pi_s$, strong Rawlsians[6] choose according to $U_s(\pi_s, \pi_o) = min\{\pi_s, \pi_o\}$, and strong utilitarians choose according to $U_s(\pi_s, \pi_o) = \pi_s + \pi_o$ where π_s is the subject's own payoff in the dictator game, π_o is the payoff to the other player, and U_s is the subject's utility. Optimal utility for each player varies by type. These optimal utilities for each game are presented graphically in Figure 1. Notice that Rawlsians achieve optimal utility by giving progressively less as it becomes less expensive to give.[7] Meanwhile, utilitarians should keep everything when it is expensive and give everything away when it is cheap. In other words, Rawlsians achieve maximum utility by ensuring equal chances between themselves and the other player in each game,

while Utilitarians maximize utility by ensuring the greatest number of total chances between themselves and other player.

[Figure 1 About Here]

Those subjects not perfectly falling into one of these three categories are grouped into the category they most resemble based on the Euclidean distance of their allocation choices from those of the strong utilitarian type.[8] The breakdown of subjects into categories is presented in Table 1. Pure subjects are those who gave all of their endowment away in each of the five games.

[Table 1 About Here]

Our experiment yielded fewer subjects with utilitarian preference types and more selfish and Rawlsian types than Andreoni and Miller (2002). They find 47.2% of their sample made up of selfish utility-types, 30.4% Rawlsian, and 22.4% utilitarian. The discrepancy between our results and those of Andreoni and Miller may be explained by sampling differences. Our study recruited subjects from a variety of social science majors, whereas Andreoni and Miller used only upper-level economics students. Fehr, Naef, and Schmidt (2006), in an experiment studying preferences for efficiency versus equity, found that a majority of economics students chose efficient allocations over egalitarian ones, whereas a majority of non-economics social science majors in the subject pool favored allocations consistent with a desire to avoid inequality. It is likely that the significantly higher number of utilitarians Andreoni and Miller found is partially an artifact of their sampling technique.

We perform two further tests of our estimates of subjects' preferences, namely by econometrically estimating a demand function for each utility type and by examining how each utility type is related to stated preferences for equality. These further tests support our classifications and can be found in the frist two sections of the Online Appendix.

Political Participation

Subjects in our study were asked a series of yes/no questions about what type of political activity they engage in, as well as more detailed questions about their political attitudes and interest in politics. We follow Verba, Schlozman, and Brady's (1995) construction of an index of overall political activity as the unweighted sums of yes/no responses. The components of the index are volunteering for a candidate's campaign, volunteering for a local government board or council or attending regularly, initiating contact with a government official, engaging in informal community work, participating in a protest, contributing money to a candidate, being a member of or giving money to an organization that takes stands on political issues, and voting in the 2004 general election. Therefore, there is maximum of eight total acts of political participation. We note that this index covers a range of conventional and non-conventional (or formal and informal) activities, and is widely used (e.g. Burns, Schlozman, and Verba 2001). Moreover, it resembles earlier measures of participation (e.g. Verba and Nie 1972). It displays a respectably high internal consistency within our sample (Cronbach's $\alpha = 0.67$).[9]

The study averages are: 28% of subjects volunteered for a campaign, 30% volunteered for a local government or council, 47% initiated contact with a government official, 39% did informal community work, and 44% participated in a protest, 23% contributed money to a candidate, 48% were members of or gave money to an organization that takes stands on political issues and 75% voted in the 2004 general election. Subjects participated in 3.35 activities on average. This compares closely with Verba et al's average estimate of 3 acts of participation for college educated respondents (1995, p 207).

A simple examination of the raw data, presented in Table 2, suggests that utilitarian participation is significantly greater than that of Rawlsian ($p = 0.04$ one-tailed test), pure ($p = 0.02$ one-tailed test) and selfish ($p = 0.005$ one-tailed test) subjects. This analysis is only suggestive of a relationship between social preferences and political participation. An appropriate test must include controls for other variables known to influence political participation.

[Table 2 About Here]

Regression Analysis

The first regression presented in Table 3 is a simple model with dichotomous variables for Rawlsian and utilitarian preferences, as revealed in decisions made in the dictator game. We also include a dichotomous variable for pure subjects, i.e. those who gave away their entire endowment in all five games. The base category, not included in the model, is the selfish

utility type. Therefore, the participation among Rawlsian and utilitarian preferences types is being compared to participation of selfish types. In other words, we are asking if Rawlsians and utilitarians participate significantly more than selfish preference types. The simple model shows that only the utilitarian preference type is significant (at the 5% level). We note that this significant result is despite the small number of utilitarians present within our sample. Utilitarians also appear more likely to participate than Rawlsians (F(1,231)=2.95, p=0.04 one-tailed).

[Table 3 About Here]

In order to control for other political, socioeconomic, and non-political institutional affiliation variables that may influence levels of participation, we include several variables studied by Verba, Schlozman, and Brady (1995) (their book provides an exhaustive review of these variables). These variables include political controls for the respondent's level of interest in politics, how politically informed they are, their feelings about whether or not they have a say in what government does, their party identification and how strongly they identify with the party; socioeconomic controls for whether or not their family income is at or above the sample median, gender, ethnicity, and age; and religious attendance and contributions to control for non-political activity. Even with these controls added and even given our small number of utilitarians, the coefficient on utilitarian preferences remains significant ($p = 0.03$). However, we note that in this specification, the difference in participation between utilitarians and Rawlsians is less clear (F(1,218)=1.80, p=0.09, one-tailed). As was

found by Verba, Schlozman, and Brady (1995), political interest exerts a strong (significant) influence on participation, whereas efficacy and strength of partisanship do not. Our results differ from Verba, Schlozman, and Brady's (1995) in that we do not find political information and family income to be significant. This difference is most likely due to the lack of variation present in these two variables, given our convenience sample. Finally, we find that that partisan strength is not related to participation, but that partisanship is related. Republican respondents are less likely to report engaging in political participation than Democratic respondents.

A potential criticism of our analysis is that there are only eighteen utilitarian subjects in our sample. A limited number of utilitarians makes it more difficult to detect differences in participation by preference type, due to a potential lack of power. But, as our results show, we do not encounter this problem. We find a significant difference between utilitarian and selfish voters even with a limited number of utilitarians in our sample.

Another objection is that valuable information is being lost by using dichotomous variables for each utility type and that our results may be driven by our small number of pure utilitarians. To address this objection, we have reestimated our models using continuous measures of each utility type. For each measure, we calculate the Euclidean distance between a purely selfish or altruistic allocation type and a strong Rawlsian or utilitarian type. According to these measures, an individual with a 1 on Rawlsianism is the maximum possible distance from another pure type, while an individual with a 0 on Rawlsianism is the maximum possible distance from the pure Rawlsian type. The same logic applies for an

individual with a 1 or 0 on utilitarianism. We present these results in Table 4. As can be seen, our results are robust to this other specification.

[Table 4 About Here]

The simple model and the model with controls are very similar to those presented in Tables 2 and 3. The continuous measure of utilitarian preferences is significant with and without controls but the measure of Rawlsian preferences is not in either case. A likelihood ratio test also rejects adding a measure of selfish preferences to the model (the null hypothesis that the coefficient is zero fails to be rejected, $p = 0.17$). Once again, utilitarians appear more likely to participate than Rawlsians (F(1,232)-2.83, p=0.04 one-tailed) in the simple model. They also appear more likely to participate in the model with controls (F(1,219) p=0.04 one-tailed). All of the control variables also maintain their signs and similar magnitudes and significance. The interpretation of the utilitarian coefficient is that as one gets closer to having pure utilitarian preferences, the more politically active one becomes, controlling for other potentially significant influences.

Finally, we note that we present a number of robustness checks in the Online Appendix. First, we replaced our revealed measures for utilitarian and Rawlsian preferences with responses from the question used to probe expressed preferences for equality. When added to the full model with controls, the coefficient on this variable is insignificant ($p = 0.18$), suggesting that the dictator game measures more precisely capture the components of altruism that contribute to political activity better than simple expressed preferences

for equality.[10] Second, we present Huber regressions to account for the effects of possible outliers on our estimations. Third, we present regressions which consider each participatory act separately. Finally, we present results with pure altruists excluded, to demonstrate that our results are not driven by this classification. Our results hold across each of these specifications.

Conclusion

Our research design allows us to map individuals' revealed social preferences to political activity, and we are able to show that utilitarian social preferences make one more likely to be politically active. This suggests that utilitarians view political activity as a means to increase social welfare. Individuals with Rawlsian preferences, on the other hand, are no more likely than selfish individuals to participate in politics. This is potentially because they do not view politics as a means to help those least fortunate. An area for future research is to explore the non-political activities of utilitarians and Rawlsians, such as religious or charitable contributions and volunteering, to determine if this is indeed the case.

Our work has two clear limitations. First, we have elicited just two types of social preferences, while others exist. Future work could distinguish further other variants, such as paternalist or nosy preferences (Sen 1976) or spitefulness (van Lange 1999). Second, our experiment was conducted on a convenience sample of university students. The relationships we have uncovered may exist only among similar populations. Future replications of our

experiment on more general populations would test the generalizability of our findings.

Our current results speak directly to existing work on social preferences and political participation, especially given their conflicting results. For example, Fowler (2006) finds that altruism, as measured in a single dictator game, has a positive but not significant direct effect on the tendency to vote, while Fowler and Kam (2006) find that general altruism and altruism particular to certain groups, as revealed in dictator games, both predict political activity. Finally, Loewen (2010) finds that general altruism, as measured in dictator games, does not predict the decision to vote, but altruism towards certain groups does. He also finds that turnout increases as the size of groups increases. Our results qualify this previous work by highlighting the importance of different types of social preferences. Such differences cannot be uncovered in a conventional dictator game. Since Rawlsians tend to split their allocation 50-50 in a normal dictator game, utilitarians might do the same since the total amount divided remains the same for any split. Thus, both the pool of self-interested subjects (those who give nothing) and the pool of altruistic subjects (those who give something) might contain utilitarians. Moreover, the pool of altruists contains Rawlsians who apparently do not participate in politics any more than self-interested subjects do. The inability to distinguish these disparate motivations means that a simple attempt to correlate giving in a single dictator game with political participation is likely to show only a weak (if any) correlation.

Our finding that utilitarians participate more than selfish individuals and Rawlsians do not also carries important implications for political theory, formal models of participation,

cross-national empirical accounts of participation, and individual-level accounts of turnout. First, it supports Harsanyi's twin arguments about the effect of redistributive and welfare-maximizing social preferences on participation. He noted that since utilitarians care less about their own costs and more about policies that make everyone better off, they would be more likely to vote than purely self-interested individuals. He also argued that Rawlsians would find politics a much less suitable domain for action than utilitarians because it is difficult to use sweeping policies to target redistribution to the least fortunate. As a result, they may not participate because they view time spent on political activity as a substitute for time spent on nonpolitical activities aimed at directly helping the poor. The empirical evidence in this article supports both of these claims.

Second, the evidence also supports assumptions made in a recent game theoretic analysis of other-regarding preferences by Sandroni and Feddersen (2006). They assume that individuals are motivated primarily by aggregate welfare and they show that a large fraction of a population of such individuals will choose to participate. However, our results also suggest that the population is heterogeneous, with most people exhibiting selfish preferences and others exhibiting nonutilitarian other-regarding preferences. Although the Sandroni and Feddersen model predicts that many utilitarians will participate, these individuals may make up only a small fraction of the population. Our results may not be representative as they are based on a laboratory experiment with college students, but they do suggest that Rawlsians and self-interested individuals may make up a large and relatively nonparticipatory part of the population.

Third, our findings speak to work examining and explaining cross-national variation in political participation, especially institutional explanations (e.g. Powell 1982, Jackman 1987). If such work overlooks differences in the distribution of social preferences within various populations, or does not take account of important national differences in redistributive politics, then it risks overstating the importance of formal institutions in the explanation of varying rates of political participation (Blais 2006). Our work suggests that future analysis should pay greater attention to the degree and type of redistribution present in different countries.

Fourth, our findings add to an expansive literature on individual-level determinants of political participation (e.g. Finkel 1985, Leighley and Nagler 1992a, 1992b, Schlozman et. al. 1995, Hetherington 1999, Blais 2000). This literature has catalogued an exhaustive list of individual-level differences that correlate with voter turnout, such that we know the typical effects of income, education, age, gender, martial status, political interest, information, trust, religious attendence, and scores of other variables. We add to this work by demonstrating that other individual-level differences, namely different social preferences, also account for variation in political participation. They do not stand in for these other determinants, as the effects of control variables show. Instead, they explain an element of the decision to vote largely uncovered by this empirical literature. Moreover, our paper suggests an experimental framework may be best suited for uncovering such additional determinants.

An area of future research is to explore the properties of social preferences, including their origins and malleability. For example, are social preferences fixed or able be changed

under certain conditions and over the course of the life cycle (see Fehr, Bernhard and Rockenbach 2008)? Also, are different social preference types learned or do they have a more fundamental basis? Research in behavioral genetics, using both twin study (e.g. Cesarini et. al. 2009), and genetic association designs (Knafo et. al. 2007), has shown a genetic component to the other regarding behavior revealed in economic games. Searching for a genetic basis for different social preferences is a promising avenue of research and, based on the results we present here, has important implications for the study of political behavior.

Accounting for actors with social preferences has done much to advance our understanding of the phenomenon of widespread political participation. However, as our results have shown, there is theoretically and empirically important variation in social preferences. The puzzle of participation may persist until we can understand how people with different kinds of preferences are motivated to take part in political life. What is more certain is that such preferences should form a starting point for the explanation of political participation.

Tables

	Strong	Weak	Total	Percent
Selfish	60	68	128	55.4
Rawlsian		73	73	31.6
Utilitarian	3	15	18	7.8
Pure	12		12	5.2

Table 1: Subject Types. Subjects are classified according the procedure described in the Appendix.

	Number of Activities	S.E.
Selfish	3.08	0.17
Rawlsian	3.56	0.25
Utilitarian	4.56	0.49
Pure	3.08	0.51
Experiment Total	3.35	0.13

Table 2: Participation Raw Averages. Cell entries indicate the average number of political activities undertaken by each subject type and their standard errors.

	Simple Model			*With Controls*		
Variable	Coef	S.E.	p	Coef	S.E.	p
Social Preference Type						
Rawlsian	0.53	0.32	0.10	0.47	0.29	0.10
Utilitarian	1.52	0.55	0.01	1.14	0.48	0.02
Pure	0.08	0.66	0.90	0.27	0.59	0.64
Political Variables						
Political Interest				3.50	0.55	0.00
High Political Info				0.08	0.31	0.80
Internal Efficacy				0.44	0.48	0.35
External Efficacy				0.53	0.61	0.39
Partisan Strength				0.62	0.41	0.14
Partisan ID				-0.91	0.40	0.02
Citizen				0.54	0.64	0.40
Socioeconomic Status						
High Income				0.34	0.26	0.19
Female				0.45	0.28	0.11
White				0.56	0.26	0.03
Age				0.92	0.53	0.08
Religious Activities						
Attendance				0.93	0.52	0.08
Contribution				0.02	0.30	0.94
(Intercept)	3.00	0.19	0.00	-1.79	0.83	0.03
LogLik (model)	-496.4			-456.2		
LogLik (null)	-500.7			-500.7		

Table 3: Dependent variable: Political Activity Index. N=234. The models are estimated using tobit regression. All variables are rescaled to [0,1] for ease of interpretation. Social Preference Types are measured dichotomously.

	Simple Model			*With Controls*		
Variable	Coef	S.E.	p	Coef	S.E.	p
Rawlsianism	0.42	0.58	0.47	0.30	0.52	0.57
Utilitarianism	2.32	0.97	0.02	1.98	0.85	0.02
Political Variables						
Political Interest				3.60	0.55	0.00
High Political Info				0.08	0.31	0.79
Internal Efficacy				0.39	0.47	0.41
External Efficacy				0.49	0.61	0.42
Partisan Strength				0.51	0.41	0.21
Partisan ID				-0.99	0.40	0.01
Citizen				0.37	0.65	0.56
Socioeconomic Status						
High Income				0.37	0.65	0.56
Female				0.49	0.28	0.08
White				0.57	0.26	0.03
Age				0.97	0.52	0.06
Religious Activities						
Attendance				0.96	0.52	0.07
Contribution				0.06	0.30	0.84
(Intercept)	2.39	0.42	0.00	-2.11	0.86	0.02
LogLik (model)		-497.7			-456.7	
LogLik (null)		-495.0			-495.0	

Table 4: Dependent variable: Political Activity Index. N=234. The models are estimated using tobit regression. All variables are rescaled to [0,1] for ease of interpretation. Social Preference Types are measured continuously.

Figures

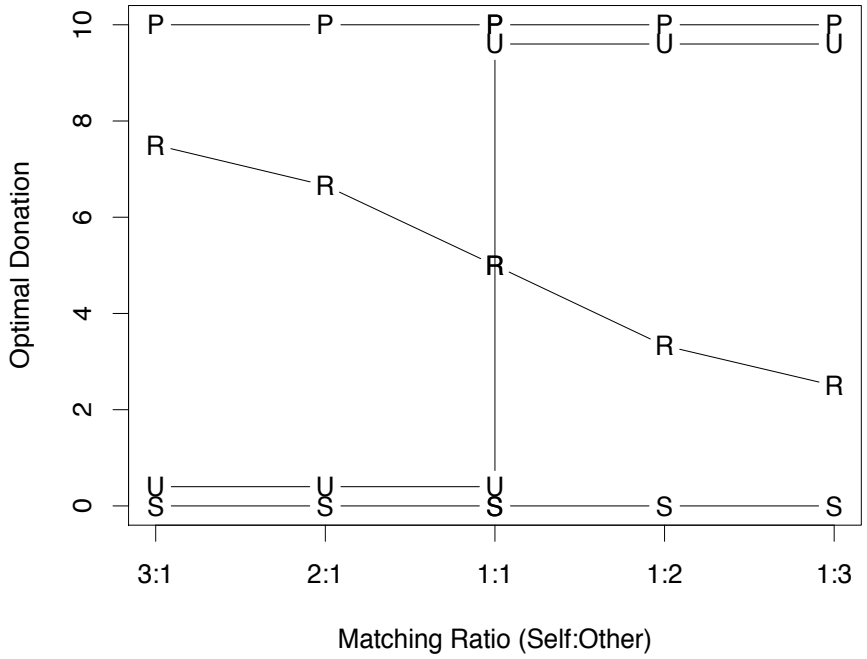

Figure 1: Optimal allocation to the other player in each dictator game. P=Pure, U=Utilitarian, S=Selfish, and R=Rawlsian.

Appendix

Political Activity Index

The Political Activity Index is comprised of eight acts of participation. They include: *Vote*: "In talking to people about elections, we find that they are sometimes not able to vote because they are not registered, they do not have the time, or they have difficulty getting to the polls. Did you happen to vote in the 2004 general election in November?" *Volunteer Candidate*: "Have you ever as a volunteer - that is, for no pay at all or for only a token amount - for a candidate running for national, state, or local office?" *Contribute to a Candidate*: "Have you ever contributed money to an individual candidate, a party group, a political action committee, or any other organization that supports candidates in elections?" *Join a Political Organization or Donate to a Political Organization*: "Are you a member of any organizations that take stands on any public issues, either locally or nationally?" or "Not counting membership dues, have you given money to any organizations that take stands on any public issues, either locally or nationally?" *Attend Local Board Meetings or Volunteer Local Board*: "Have you ever regularly attended meetings of an official local government board or council?" or "Have you ever served in a voluntary capacity, that is, for no pay at all or for only a token amount, on any local governmental board or council that deals with community problems and issues such as a town council, a school board, a zoning board, a planning board, or the like?" *Informal Community Work*: "Aside from membership on a board or council or attendance at meetings, have you ever informally gotten together with or

worked with others in your community or neighborhood to try to deal with some community problem?" *Government Contact*: "Aside from contacts made as a regular part of your job, have you ever initiated any contacts with a government official or someone on the staff of such an official, such as someone in the White House, a Congressional or Senate Office, or a federal agency like the EPA or IRS?" *Protest*: "Have you ever taken part in a protest, march, or demonstration on some national or local issue (other than a strike against your employer)?" (0 = No, 1 = Yes).

Summary Statistics

	Selfish	Rawlsian	Utilitarian	Pure
Vote	0.76	0.79	0.83	0.42
Board	0.28	0.29	0.50	0.08
Volunteer	0.26	0.27	0.56	0.17
Contact	0.48	0.41	0.61	0.50
Informal	0.36	0.40	0.61	0.33
Protest	0.34	0.52	0.61	0.67
Organization	0.44	0.56	0.50	0.58
Contribute	0.16	0.32	0.33	0.33

Appendix Table 1: Experiment means for components of the political activity index by preference classification.

0.1 Political Activity Index Component Regressions

	Vote		*Board*		*Volunteer*		*Contact*		*Informal*		*Protest*		*Organization*		*Contribute*	
	Coeff	p	Coeff	p	Coeff	p	Coeff	p	Coeff	p	Coeff	p	Coeff	p	Coeff	p
Rawlsian	0.46	0.31	0.00	1.00	0.12	0.77	-0.25	0.46	0.08	0.80	0.80	0.02	0.45	0.17	1.17	0.01
Utilitarian	0.17	0.82	0.84	0.14	1.17	0.04	0.39	0.49	0.97	0.07	1.14	0.04	0.10	0.86	0.84	0.19
Pure	-1.98	0.03	-2.20	0.06	-0.47	0.61	0.44	0.56	-0.25	0.72	1.49	0.04	1.06	0.13	0.71	0.46
Political																
Interest	1.63	0.07	2.45	0.00	3.14	0.00	1.68	0.01	1.76	0.01	2.00	0.00	1.85	0.00	3.09	0.00
Info	0.13	0.79	-0.43	0.28	0.36	0.43	0.49	0.18	-0.24	0.49	0.33	0.35	0.17	0.62	-0.11	0.82
Int Eff	0.70	0.34	0.38	0.55	0.26	0.70	0.01	0.98	0.05	0.93	0.24	0.67	0.31	0.56	0.69	0.35
Ext Eff	2.29	0.01	1.09	0.18	1.50	0.10	0.38	0.59	-0.23	0.75	-0.55	0.43	-1.07	0.13	1.36	0.17
Strength	0.63	0.30	-0.38	0.48	1.42	0.02	0.69	0.15	-0.79	0.10	-0.21	0.67	1.10	0.02	1.49	0.03
ID	-0.70	0.29	-1.54	0.01	0.56	0.27	-0.01	0.98	-1.18	0.02	-0.93	0.06	0.45	0.33	-1.33	0.03
Citizen	18.94	0.99	-0.26	0.80	-2.15	0.02	15.85	0.99	0.31	0.74	-1.36	0.15	-0.04	0.96	-1.09	0.31
SES																
Income	0.66	0.10	-0.12	0.72	0.38	0.28	0.44	0.14	0.10	0.73	-0.24	0.43	0.16	0.59	0.07	0.85
Female	1.09	0.02	-0.22	0.54	0.97	0.01	0.29	0.38	0.25	0.44	-0.02	0.96	0.59	0.07	-0.12	0.77
White	0.98	0.02	0.30	0.38	0.14	0.70	0.35	0.25	0.52	0.09	0.02	0.96	0.33	0.27	0.92	0.03
Age	0.95	0.24	0.79	0.24	0.84	0.25	0.65	0.29	-0.77	0.21	0.49	0.43	0.70	0.25	2.02	0.01
Religious																
Attend	1.36	0.11	1.47	0.03	-1.71	0.02	0.45	0.47	1.18	0.06	0.37	0.55	0.10	0.87	0.62	0.42
Contrib	-1.19	0.01	0.19	0.62	0.81	0.05	-0.12	0.73	0.05	0.89	-0.17	0.63	-0.03	0.93	0.65	0.16
(Intercept)	-22.23	0.99	-2.98	0.02	-4.67	0.00	-18.98	0.98	-1.07	0.35	-0.33	0.77	-2.82	0.01	-6.77	0.00
LL (model)	-89.05		-119.77		-110.44		-140.98		-141.55		-141.24		-146.28		-96.29	
LL (null)	-127.94		-139.11		-137.27		-159.63		-154.44		-158.29		-160.06		-125.61	

Appendix Table 2: N=234. Components of the Political Activity Index are estimated using logit regression. All variables are rescaled to [0,1] for ease of interpretation.

First Differences

	Rawlsian			Utilitarian		
	First Difference	2.5%	97.5%	First Difference	2.5%	97.5%
Vote	0.00	0.00	0.05	0.00	-0.01	0.01
Board	0.01	-0.12	0.15	0.17	-0.07	0.43
Volunteer	0.00	-0.12	0.14	0.25	0.01	0.53
Contact	-0.03	-0.17	0.11	0.08	-0.16	0.32
Informal	0.01	-0.14	0.15	0.20	-0.03	0.43
Protest	0.18	0.02	0.32	0.24	0.02	0.49
Organization	0.10	-0.05	0.26	-0.01	-0.22	0.23
Contribute	0.13	0.02	0.29	0.12	-0.03	0.38

Appendix Table 3: Simulated first differences and 95% confidence intervals based on the regressions in Appendix Table 2. The first difference is the change in dependent variable resulting from a switch from selfish preferences to either Rawlsian (first three columns) or Utilitarian (second three columns) preferences. All other variables are held at their means. The reported results are based on 1000 simulations.

Question Wording and Coding

Political Information Political is the number of correct answers to the following 4 multiple choice and open answer questions. "Which party currently has the most members in the House of Representatives in Washington?" (Republican / Democrat) "Which party currently has the most members in the Senate in Washington?" (Republican / Democrat) "Who has the final responsibility to decide if a law is constitutional or not?" (President / Congress / Supreme Court) "Whose responsibility is it to nominate judges to the Federal Courts?" (President / Congress / Supreme Court). This variable is severely skewed–72% of all subjects scored 4 out of 4 on a test of political information. Therefore, we created a dichotomous variable for high information (4 out of 4).

Political Interest is the mean answer to two questions: "Thinking about your local community, how interested are you in local community politics and local community affairs?" and "How interested are you in national politics and national affairs?" (0 = not much interested, 1/2 = somewhat interested, 1 = very much interested).

For *external efficacy* we follow Craig, Niemi and Silver (1990) and Niemi, Craig, and Mattei (1991) by creating an index that sums responses from four questions: "People like me don't have any say about what the government does"; "I don't think public officials care much what people like me think"; "How much do you feel that having elections makes the government pay attention to what the people think?"; and "Over the years, how much attention do you feel the government pays to what the people think when it decides what to do?" The

first two questions are coded 0 = agree strongly, 1/4 = agree somewhat, 1/2 = neither, 3/4 = disagree somewhat, and 1 = disagree strongly. The third and fourth questions are coded 1 = a good deal, 1/2 = some, and 0 = not much.

Internal efficacy is the answer to the question "please indicate whether you agree or disagree with the following statement: 'Sometimes politics and government seem so complicated that a person like me can't really understand what's going on.'" (0 = agree strongly, 1/4 = agree somewhat, 1/2 = neither, 3/4 = disagree somewhat, 1 = disagree strongly).

For the remaining variables we follow the coding procedure in Timpone (1998) and the question wording used in the NES.

Strength of party identification is coded 0 = independents and apoliticals, 1/3 = independents leaning towards a party, 2/3 = weak partisans, and 1 = strong partisans.

Partisan Identification is based on the standard NES set of questions where 0 = Strong Democrat, 1/6 = Democrat, 1/3 = Independent Leaning Democrat, 1/2 = Independent, 2/3 = Independent Leaning Republican, 5/6 = Republican, and 1 = Strong Republican. The remaining questions are based on those that appear in Verba, Schlozman, and Brady (1995).

Citizen is 1 for U.S. citizen and 0 for all others.

Income is the answer to: "Please choose the category that describes the total amount of income earned in 2003 by the people in your household. Consider all forms of income, including salaries, tips, interest and dividend payments, scholarship support, student loans, parental support, social security, alimony, and child support, and others." (1 = $15,000 or

under, 2 = $15,001 - $25,000, 3 = $25,001 - $35,000, 4 = $35,001 - $50,000, 5 = $50,001 - $65,000, 6 = $65,001 - $80,000, 7 = $80,001 - $100,000, 8 = over $100,000). The median income for our sample is the seventh of eight categories $80,000-$100,000. Therefore, we created a dichotomous variable for high income ($80,000 or more).

Female is 1 for female, 0 for male.

White is 1 for white and 0 for all others.

Age is coded 1/6 = 18 years old, 1/3 = 19, 1/2 = 20, 2/3 = 21, 5/6 = 22, 1 = 23 or older.

Religious Attendance is the answer to the question "How often do you attend religious services?" (0 = never, 1/3 = a few times a year, 1/2 = once or twice a month, 2/3 = almost every week, 1 = every week).

Religious Contribution is the answer to "Not counting membership dues, have you given money to any religious organization?" (0 = no, 1 = yes).

Notes

[1]Loewen acknowledges the support of the Killam Trusts and the Social Science and Humanities Research Council of Canada. An online appendix for this article is available at `http://jhfowler.ucsd.edu` and `http://www.cambridge.org/jop/DOI`. Data and supporting materials necessary to reproduce the numerical results in the paper will be made available at `http://jhfowler.ucsd.edu` and `http://www.cambridge.org/jop/DOI` upon publication.

[2]Andreoni and Miller also refer to these as "Leontief" and "substitute" preferences, respectively.

[3]This thus gives us five payoff conditions, 3:1, 2:1, 1:1, 1:2, 1:3.

[4]The relative price of giving is simply the value of keeping the ticket divided by the value of the ticket to the other player if passed. For example, if a ticket is worth 1 chance if kept and 3 chances to the other player if passed, the relative price of giving is 0.33.

[5]For details on the Weak Axiom of Revealed Preference (WARP) see Varian (1992). In short, subjects' choices are in violation of WARP if they choose the most expensive Rawlsian (or utilitarian) allocation while not choosing the less expensive Rawlsian (or utilitarian) allocation. Three subjects violated WARP in two or more of their five decisions. Ten subjects violated WARP in one of five decisions. Our results do not change when we exclude individuals who violated WARP.

[6]Single tickets are not divisible. As a result, we cannot classify an individual as a strong Rawlsian. This is because a strong Rawlsian would keep 6.67 tickets when the value of given tickets was worth double and 7.5 when they were worth triple. She would give 3.33 tickets when the value of kept tickets was worth double and 2.5 when they were worth triple. There is no way of knowing if a strong Rawlsian subject is choosing to round up or down.

[7]This point is best illustrated using a numerical example. Giving to the other player is most expensive in our game when the fraction of the endowment kept is tripled and least expensive when the fraction sent is tripled. When giving is most expensive, a Rawlsian subject maximizes her utility when she keeps 2.5

(assuming a perfectly divisible endowment), which is tripled, and passes 7.5 ($min\{2.5 \times 3, 7.5\} = 7.5$). When giving is least expensive, a Rawlsian maximizes her utility when she keeps 7.5 and passes 2.5, which is tripled ($min\{7.5, 2.5 \times 3\} = 7.5$).

[8]Because strong utilitarians may choose any allocation when the relative price is one, the Euclidean distance is calculated for a vector of four allocation decisions in which the relative price is not equal to one.

[9]We also conducted a maximum-likelihood factor analysis on our eight measures of participation. This analysis revealed only one factor with an eigenvalue greater than one (1.64). Factor loadings of the scale components ranged from 0.26 (for vote) to 0.54 (for campaign volunteering). Our results do not change significantly if we drop the weakest loading factor. Likewise, our results do not change significantly if we consider political and non-political factors separately.

[10]Furthermore, the failure of this variable to significantly predict greater participation suggests that our subjects are not succumbing to social desirability on either our behavioral measures of social preferences or our dependent variable.

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Social Preferences and Political Participation: Online Appendix

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Online Appendix

Econometric Estimation of Subject Types

To check our classification of subjects into weak types, we econometrically estimate the demand function for each weak utility type to make sure that the values of key parameters are reasonable. To do this we assume that subjects not characterized by strong utility types have underlying preferences represented by a CES utility function.[1] We follow Andreoni and Miller (2002) in this approach, thus allowing a comparison between their results and ours. The CES is a flexible functional form that allows different types of altruistic giving to be represented by a single parameter (Fisman, Kariv, and Markovits 2005). The CES utility function is given by:

$$U_s = (a\pi_s^\rho + (1-a)\pi_o^\rho)^{1/\rho}$$

where the share parameter a indicates selfishness and ρ captures the convexity of preferences through the elasticity of substitution $\sigma = 1/(\rho - 1)$. Maximizing this function subject to the budget set[2] yields the simplified demand function:[3]

$$\frac{\pi_s}{m'} = \frac{A}{p^r + A}$$

[1] CES stands for constant elasticity of substitution. For more details on the properties of the CES utility function see Varian (1992).

[2] The budget set is $\pi_s + p\pi_o = m'$ where p is the relative price of giving and m' is the ticket endowment multiplied by the hold value of the tickets (or the ticket endowment in terms of the price of keeping the tickets).

[3] $A = [a/(1-a)]^{1/(1-\rho)}$ and $r = -\rho/(1-\rho)$

Since the dependent variable is censored at zero and one, the parameters (A and r) are estimated using a random-effects tobit model. Values of a, ρ, and σ are derived from the estimates of A and r.

Parameter	Weak Selfish	Weak Rawlsian	Weak Utilitarian
a	0.76	0.50	0.50
ρ	0.69	-0.47	0.65
σ	-3.24	-0.68	-2.82

Table 1: Estimates of Parameters for CES Utility Function.

The derived parameters are similar to those reported in Andreoni and Miller (2002).[4] Weakly selfish subjects have the largest selfishness parameter ($a = 0.76$) and weakly Rawlsian and utilitarian subjects share identical selfishness values ($a = 0.50$). The curvature of the indifference curves, measured by ρ, also have the expected values and signs.[5] Based on these results we are confident our classification criteria is distinguishing between different preference types.

[4] Andreoni and Miller (2002) report:

	Weak Selfish	Weak Rawlsian	Weak Utilitarian
a	0.76	0.65	0.58
ρ	0.62	-0.35	0.67
σ	-2.64	-0.74	-3.02

[5] The CES function approaches a utilitarian utility function as $\rho \to 1$ and a Rawlsian utility function as $\rho \to -\infty$.

Robustness Check of Subject Types

As an additional check of our classification of social preferences we compare each classified utility type's response to an expressed preference for equality. As part of our study, we asked subjects the question, "If people were treated more equally in this country we would have many fewer problems. Do you agree strongly, agree somewhat, neither agree nor disagree, disagree somewhat, or disagree strongly with this statement?" The responses by Rawlsian and utilitarian preference types are presented in Appendix Figure 1.

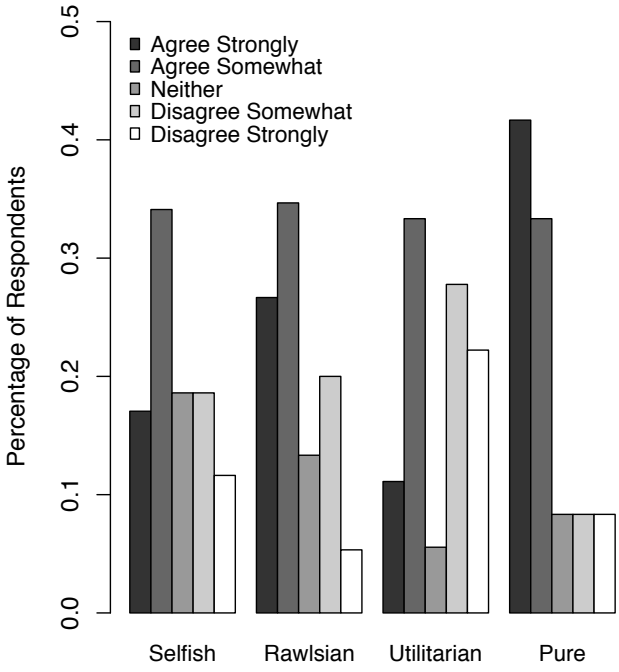

Figure 1: "If people were treated more equally in this country we would have many fewer problems"

Rawlsians, based on their agreement with the statement, appear to be concerned with equity as we would expect. Utilitarians, on average, do not exhibit the same expressed preference for equality as Rawlsians even though both behave altruistically. A Mann-Whitney U test reveals that the average response of Rawlsians is statistically different from that of Utilitarians ($p = 0.05$, two-tailed test).

Results with Stated Preferences for Equality

	With Controls		
Variable	Coef	S.E.	p
Equality preference	-0.15	0.11	0.19
Political Variables			
Political Interest	3.51	0.56	0.00
High Political Info	0.08	0.31	0.80
Internal Efficacy	0.48	0.48	0.32
External Efficacy	0.58	0.62	0.35
Partisan Strength	0.58	0.42	0.17
Partisan ID	-0.70	0.44	0.11
Citizen	0.47	0.65	0.47
Socioeconomic Status			
High Income	0.42	0.26	0.11
Female	0.58	0.27	0.04
White	0.62	0.27	0.04
Age	1.10	0.53	0.04
Religious Activities			
Attendance	0.89	0.52	0.09
Contribution	0.14	0.30	0.62
(Intercept)	-1.46	0.84	0.08
LogLik (model)	-458.6		
LogLik (null)	-500.7		

Table 2: Dependent variable: Political Activity Index. N=234. The models are estimated using tobit regression. All variables are rescaled to [0,1] for ease of interpretation.

Additional results

In this section, we present three sets of additional results. First, to address the possibility that our results are driven by outliers, we reestimate Tables 3 and 4 in the text using Huber regressions. Second, to test whether our results are driven by the aggregation of acts in our index, we reestimate Tables 3 and 4 using a logit regression in which each individual act is an observation. We correct for multiple observations per respondent by calculating robust standard errors and include a fixed effect for each act to capture differences in the baseline probability of undertaking each act. The results suggest that our results are robust to outliers and not driven by the aggregation of political activities in an index. Third, we present reestimations of Tables 3 and 4 when pure altruists our excluded. Our results continue to hold, suggesting that the difference between utilitarians and Rawlsians is not driven by our treatment of altruists.

Huber Regressions

	Simple Model			*With Controls*		
Variable	Coef	R.S.E.	p	Coef	R.S.E.	p
Social Preference Type						
Rawlsian	0.44	0.30	0.15	0.39	0.28	0.16
Utilitarian	1.48	0.52	0.00	1.10	0.50	0.03
Pure	0.01	0.53	0.99	0.14	0.51	0.78
Political Variables						
Political Interest				3.09	0.48	0.00
High Political Info				0.02	0.51	0.78
Internal Efficacy				0.41	0.46	0.37
External Efficacy				0.56	0.40	0.33
Partisan Strength				0.52	0.40	0.19
Partisan ID				-0.75	0.37	0.05
Citizen				0.37	0.56	0.52
Socioeconomic Status						
High Income				0.26	0.25	0.30
Female				0.43	0.26	0.10
White				0.52	0.23	0.03
Age				0.90	0.49	0.07
Religious Activities						
Attendance				0.73	0.47	0.12
Contribution				0.01	0.29	0.96
(Intercept)	3.08	0.18	0.00	-1.09	0.72	0.14
F		3.11			7.01	
Prob > F		0.027			0.000	

Table 3: Dependent variable: Political Activity Index. N=234. The models are estimated using Huber regression. All variables are rescaled to [0,1] for ease of interpretation. Social Preference Types are measured dichotomously. F tests for the difference between Rawlsians and Utilitarians return one-tailed p-values of 0.03 and 0.08.

	Simple Model			*With Controls*		
Variable	Coef	R.S.E.	p	Coef	R.S.E.	p
Rawlsianism	0.33	0.53	0.54	0.21	0.48	0.66
Utilitarianism	2.18	0.93	0.02	1.85	0.81	0.02
Political Variables						
Political Interest				3.19	0.48	0.00
High Political Info				0.02	0.29	0.94
Internal Efficacy				0.37	0.46	0.42
External Efficacy				0.52	0.58	0.37
Partisan Strength				0.44	0.40	0.27
Partisan ID				-0.82	0.37	0.03
Citizen				0.23	0.56	0.68
Socioeconomic Status						
High Income				0.28	0.24	0.26
Female				0.47	0.26	0.07
White				0.53	0.24	0.03
Age				0.94	0.50	0.06
Religious Activities						
Attendance				0.74	0.47	0.12
Contribution				0.04	0.28	0.88
(Intercept)	2.42	0.39	0.00	-1.40	0.76	0.07
F		2.88			7.58	
Prob > F		0.058			0.000	

Table 4: Dependent variable: Political Activity Index. N=234. The models are estimated using Huber regression. All variables are rescaled to [0,1] for ease of interpretation. Social Preference Types are measured continuously. F tests for the difference between Rawlsians and Utilitarians return one-tailed p-values of 0.04 and 0.03.

Replication with non-aggregated acts

	Simple Model			*With Controls*		
Variable	Coef	R.S.E.	p	Coef	R.S.E.	p
Social Preference Type						
Rawlsian	0.25	0.17	0.14	0.25	0.17	0.13
Utilitarian	0.83	0.29	0.00	0.66	0.29	0.02
Pure	0.00	0.31	0.99	0.05	0.35	0.89
Political Variables						
Political Interest				1.94	0.30	0.00
High Political Info				0.04	0.18	0.82
Internal Efficacy				0.28	0.28	0.33
External Efficacy				0.37	0.24	0.30
Partisan Strength				0.34	0.24	0.17
Partisan ID				-0.47	0.24	0.04
Citizen				0.23	0.40	0.56
Socioeconomic Status						
High Income				0.17	0.15	0.25
Female				0.28	0.16	0.08
White				0.34	0.14	0.02
Age				0.55	0.30	0.07
Religious Activities						
Attendance				0.46	0.30	0.12
Contribution				0.01	0.17	0.96
Wald χ^2		186.39			7.01	
Prob $> \chi^2$		0.00			0.000	

Table 5: Dependent variable: Individual political activity. N=1872. The models are estimated using logistic regression. All variables are rescaled to [0,1] for ease of interpretation. Social Preference Types are measured dichotomously. Standard errors are corrected for eight observations per respondent. Fixed effects for each political activity are estimated but not presented. F tests for the difference between Rawlsians and Utilitarians return one-tailed p-values of 0.02 and 0.08.

	Simple Model			*With Controls*		
Variable	Coef	R.S.E.	p	Coef	R.S.E.	p
Rawlsianism	0.19	0.30	0.53	0.16	0.29	0.57
Utilitarianism	1.22	0.52	0.02	1.13	0.50	0.02
Political Variables						
Political Interest				2.00	0.31	0.00
High Political Info				0.04	0.18	0.81
Internal Efficacy				0.26	0.28	0.37
External Efficacy				0.34	0.35	0.33
Partisan Strength				0.28	0.24	0.26
Partisan ID				-0.51	0.23	0.02
Citizen				0.15	0.39	0.71
Socioeconomic Status						
High Income				0.18	0.15	0.21
Female				0.30	0.16	0.06
White				0.34	0.15	0.02
Age				0.57	0.30	0.06
Religious Activities						
Attendance				0.47	0.29	0.11
Contribution				0.03	0.17	0.88
Wald χ^2		188.29			248.60	
Prob $> \chi^2$		0.00			0.00	

Table 6: The models are estimated using logistic regression. N=1872. All variables are rescaled to [0,1] for ease of interpretation. Social Preference Types are measured continuously. Standard errors are corrected for eight observations per respondent. Fixed effects for each political activity are estimated but not presented. F tests for the difference between Rawlsians and Utilitarians return one-tailed p-values of 0.04 and 0.04.

Replication with pure altruists excluded

	Simple Model			*With Controls*		
Variable	Coef	S.E.	p	Coef	S.E.	p
Social Preference Type						
Rawlsian	0.53	0.32	0.10	0.51	0.29	0.08
Utilitarian	1.51	0.56	0.00	1.15	0.49	0.01
Political Variables						
Political Interest				3.67	0.57	0.00
High Political Info				0.06	0.32	0.84
Internal Efficacy				0.60	0.49	0.22
External Efficacy				0.48	0.62	0.44
Partisan Strength				0.88	0.43	0.04
Partisan ID				-0.98	0.41	0.02
Citizen				0.46	0.68	0.50
Socioeconomic Status						
High Income				0.32	0.27	0.23
Female				0.36	0.28	0.20
White				0.62	0.27	0.02
Age				1.13	0.55	0.04
Religious Activities						
Attendance				0.97	0.55	0.08
Contribution				-0.04	0.31	0.89
(Intercept)	2.99	0.20	0.00	-2.114	0.89	0.02
LogLik (model)		-432.4			-431.9	
LogLik (null)		-476.5			-476.5	

Table 7: Dependent variable: Political Activity Index. N=222. The models are estimated using tobit regression. All variables are rescaled to [0,1] for ease of interpretation. Social Preference Types are measured dichotomously. Pure altruists are excluded. F tests for the difference between Rawlsians and Utilitarians return one-tailed p-values of 0.05 and 0.10.

	Simple Model			*With Controls*		
Variable	Coef	S.E.	p	Coef	S.E.	p
Rawlsianism	0.44	0.60	0.46	0.41	0.53	0.44
Utilitarianism	2.34	1.00	0.02	2.06	0.87	0.02
Political Variables						
Political Interest				3.79	0.57	0.00
High Political Info				0.06	0.32	0.84
Internal Efficacy				0.57	0.49	0.25
External Efficacy				0.42	0.62	0.50
Partisan Strength				0.78	0.43	0.07
Partisan ID				-1.03	0.41	0.01
Citizen				0.29	0.69	0.67
Socioeconomic Status						
High Income				0.35	0.27	0.19
Female				0.41	0.28	0.15
White				0.62	0.27	0.02
Age				1.17	0.55	0.03
Religious Activities						
Attendance				0.96	0.55	0.08
Contribution				-0.01	0.31	0.96
(Intercept)	2.36	0.45	0.00	-2.54	0.94	0.01
LogLik (model)		-473.6			-432.4	
LogLik (null)		-476.5			-476.5	

Table 8: Dependent variable: Political Activity Index. N=222. The models are estimated using tobit regression. All variables are rescaled to [0,1] for ease of interpretation. Social Preference Types are measured continuously. Pure altruists are excluded. F tests for the difference between Rawlsians and Utilitarians return one-tailed p-values of 0.05 and 0.05.