

# Affinity, Antipathy and Political Participation: How Our Concern For Others Makes Us Vote

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## 1. Introduction

*Voting is essentially a group experience.* (Lazarsfeld et al., 1968: 137)

*Gypsies, tramps, and thieves, these are the people who will vote  
for McGovern.* (sung at the 1972 Republican National Convention)

Elections are not the simple aggregation of millions of individual and independent decisions whether and for whom to vote. Nor are they simply about self-interested decisions. Elections are instead a competition between groups of people who rely on more than self-interest when deciding when and how to participate in politics. These individuals engage in other-regarding behaviour in which they consider the benefits of an election outcome for whole groups of people. If we wish to understand the decision to participate in politics, we need to take account of this element of individual decision making.

In this article, I provide an interpretation of other-regarding behaviour and electoral participation in which I argue that antipathy and affinity towards others—specifically, other partisans—can be used to explain the decision to vote or not to vote. Using a game from behavioural economics, the dictator game, I demonstrate empirically that citizens who

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have stronger preferences or greater concern for some partisans than others are more likely to vote, especially as the size of these groups grows. This suggests that models of voter turnout that rely only on self-regarding considerations, including even duty and social obligation, are incomplete. A more fulsome account of the decision to vote takes account of this variation in individuals' concern for others.

The demonstration of this argument proceeds as follows. In the next section, I justify a conception of politics as a contest between groups of citizens. In this view, politics is not just a contest between parties fighting for the support of individual citizens. Rather, it is a fight over scarce resources between groups of citizens and their respective representatives in political parties; how individuals feel about various partisan groups matters for their understanding of politics. In section 3, I formalize a calculus for voting that is consistent with this view of politics, particularly by incorporating a regard for others. The model demonstrates how affinity for co-partisans and antipathy towards other partisans can drive the decision to vote. It thus departs from the conventional rational choice model of voting by incorporating concern for others and not relying on a duty term to explain the paradox of participation. It is also thus similar to those models presented by Fowler (2006), Fowler and Kam (2007) and Edlin and colleagues (2007), though it presents a more direct empirical test. In presenting the model, I argue that such an account provides a more satisfactory theoretical explanation of the decision to vote than a model that depends on duty, resources or partisan identification. In section 4, I describe a large online survey experiment that uses dictator games to measure antipathy and affinity. Dictator games involve giving a subject a sum of money and then observing how much of that money they are willing to share with a recipient. I describe the properties of dictator games and their suitability for the measurement of affinity and antipathy. I show in section 5 that behaviour in these games is consistent with what we should expect according to partisan identification. Partisans give more to their fellow partisans and less to the partisans of other parties and this difference increases with strength of partisanship. For example, those individuals who identify with the Conservative party give more money to fellow Conservatives than to Liberals. And this difference increases with strength of partisanship. Section 6 presents multiple regression models of the decision to vote in the 2006 Canadian federal election that incorporate measures of antipathy and affinity. Closely resembling conventional models of turnout, these models demonstrate that antipathy and affinity matter independent of other well-known correlates of the decision to vote, such as media attention, party identification, education, income and election competitiveness. Moreover, the models suggest that both affinity and antipathy independently predict turnout. I discuss these findings and conclude in section 7.

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**Abstract.** Some citizens differ in their levels of concern for the supporters of various parties. I demonstrate how such concerns can motivate citizens to vote. I first present a simple formal model that incorporates concern for others and election benefits to explain the decision to vote. By predicting substantial turnout, this model overcomes the “paradox of participation.” I then verify the model empirically. I utilize a series dictator games in an online survey of more than 2000 Canadians to measure the concern of individuals for other partisans. I show how the preferences revealed in these games can predict the decision to vote in the face of several conventional controls. Taken together, the formal model and empirical results generate a more fulsome and satisfactory account of the decision to vote than an explanation which relies solely on duty.

**Résumé.** Les citoyens ne se préoccupent pas tous des partisans des divers partis politiques. Je démontre comment de telles préoccupations peuvent motiver les citoyens à participer aux élections. Je présente d’abord un modèle formel qui explique la décision de voter en intégrant les préoccupations à l’égard des autres électeurs et les bénéfices associés à une élection. En prédisant une part substantielle de la participation, ce modèle surmonte le paradoxe de la participation électorale. Ensuite, le modèle est vérifié empiriquement. J’emploie à cette fin une série de jeux du dictateur insérés dans une enquête menée en ligne auprès de 2000 Canadiens afin de mesurer leur degré de préoccupation à l’égard des autres partisans. Je montre comment les préférences révélées dans ces jeux peuvent prédire la décision de voter. Ensemble, le modèle formel et les résultats empiriques produisent une explication plus éloquente et plus satisfaisante de la décision de voter lors d’une élection que les explications qui s’appuient seulement sur le sens du devoir.

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## 2. Group Politics

Politics can be understood as a contest between groups of people. Three sets of evidence support this view. First, we generally understand parties as having different bases of support, bases that can generally be described in terms of social groups.<sup>1</sup> The Liberal Party, for example, is the party of visible minorities and Catholics, of Quebec federalists, of francophones outside of Quebec. The Conservative Party is traditionally the party of Protestants, rural Canadians, and Westerners. And the New Democratic Party is a party of union members, women, and increasingly urban dwellers (Bibby, 1990; Blais, 2005; Blais et al., 2002). While there is some debate over the importance of social groupings for vote choice (see, for example, Clarke et al., 1979; LeDuc, 1984), it remains true that parties often think of their support in terms of groups and pursue votes accordingly (for a popular account, see, Wells, 2006). And, as an empirical matter, we can explain vote choice as a function of group membership (Blais et al., 2002; for a non-Canadian example, see Abramson, Aldrich and Rhode, 2006).

Second, the rhetoric of parties frames politics as a competition between different groups. In doing so, parties attempt to paint a positive picture of the individuals who support them and paint a negative picture of the individuals supporting other parties. While the invocation of gypsies, tramps, and thieves is perhaps too strong, parties do draw caricatures of their supporters and their opponents. Take, for example, the leaders’ debate during the 2006 Canadian federal election.<sup>2</sup> Stephen Harper, the leader of the Conservative Party, characterized his party as

“on the side of the people who work hard, pay their taxes, and play by the rules.” Similarly, the leader of the New Democratic Party, Jack Layton, cast his party as the one which would “make politicians in Parliament accountable to you, and we’ll work day in and day out, not for the well-connected, but for working families... We’ll ensure dignity and respect for seniors. And we’ll make sure there’s [sic] opportunities for young people.” Prime Minister Paul Martin accused the Conservative party of being on the side of “richer Canadians” and opposed to the interests of their “working class” counterparts. In all of these rhetorical appeals, leaders are framing their policy offerings in terms of the groups that they benefit. Their intention is to draw a picture of the type of people who support their party. If a favourable picture can be drawn, then voters are more likely to be convinced that casting a ballot for a party is going to benefit people whom they like and people who are like them.<sup>3</sup>

Third, we know that voters think about their membership in parties in the same way they think about their membership in other groups. Indeed, Campbell and colleagues’ original conception of party identification was that it was similar to affiliation with other groups, whether religious, ethnic or racial (1960; see also Greene, 2004: 136–37). Recent research has confirmed this view and argued that individuals identify with parties the same way they identify with other social groups (Green et al., 2002; Greene, 2004). In doing so, they adopt positive images not only of their party but of the people who support their party. And they sometimes adopt more negative views of those who support other parties (for more general work on social identity theory, see Tajfel, 1978). Arguably, this suggests that our conceptions of party identification are incompletely served by questions that ask only about attachment to a party and not about feelings towards a party’s supporters.

Taken together, these arguments suggest that people vote as groups, parties conceive of elections as contests between groups of voters, and voters think of parties and partisans in the same terms in which they think of other social groups. When we combine this with the possibility that some individuals are motivated by a concern for others, then it becomes puzzling that existing models of the decision to vote would not take account of affinity towards others. What is needed, then, is an account of voting in which (some) individuals take account of their feelings of the various groups who stand to benefit from an election’s outcome. In the next section, I formalize such an account.

### 3. A Different Calculus of Voting

Riker and Ordeshook (1968) provide perhaps the definitive self-interested account of turnout. Indeed, in his extensive review of the decision to

vote or not to vote, Blais (2000) takes this as *the* rational choice model. A “paradox of participation” emerges from this model, namely in that it predicts no or very low turnout. To review, the original model posits three components:  $B$ , the benefits an individual receives from an election outcome,  $C$ , the costs an individual incurs in voting, and  $P$ , the probability that an individual’s vote will be decisive. An individual decides to vote if  $PB > C$ . The problem with the model is immediately apparent. In only the rarest circumstances is  $P$  ever anything but infinitesimally small. Indeed, as Fowler (2006: 675) observes, numerous scholars have demonstrated formally (Chamberlain and Rothchild, 1981; Edlin et al., 2007) and empirically (for example, Gelman et al., 2004; Mulligan and Hunter, 2003) that in any election,  $P$  is about equal to  $1/N$ . It thus does not make rational sense for a voter to go to the polls.

To resolve this paradox of participation, Riker and Ordershook proposed adding a duty term,  $D$ , resulting in  $D + PB > C$ . Thus, if a citizen’s sense of duty plus the discounted benefits of winning were greater than the cost of voting, then they would cast a ballot. In his extensive review of the literature, Blais (2000: 2–11) outlines six additional amendments to the model by rational choice scholars (Downs, 1957; Ferejohn and Fiorina, 1974; Mueller, 1989; Uhlaner, 1986, 1989a, 1989b, 1999; Niemi, 1976; Barry, 1978; Aldrich, 1993) and four non-rational choice-based explanations (for example, Brady, Verba and Schlozman, 1995; Rosenstone and Hansen, 1994; Blais, 2000: 13–14). After this, he too comes to an explanation that “assumes that citizens are concerned with the well-being of their community as much as with their own self-interest” and that encapsulates such a concern in a *sense of duty*.

In my view, an explanation that relies on duty is only half right. That many citizens have a sense of duty seems uncontroversial. That it would take the form of a concern for others seems equally uncontroversial. But this is still a static explanation (Fowler, 2006: 675) because it does not condition this concern for others on the importance of the election. In other words, it does not explain why a sense of duty would be greater for some elections than others. As such, it does little to explain the variation we see in levels of turnout between national and local elections, for instance.<sup>4</sup> Finally, it does not clearly specify whether this obligation to the group is oriented towards others in the group, that is, individuals want to help others, or whether it is self-oriented, that is, an individual wants to feel as though she is a member of the group.

We can find a way out of this paradox, I and others would argue, if we develop a model that allows for a concern for others and that effectively takes into account the outcome of elections. Such a model is also more consistent with a view of politics in which groups of people fight over power and resources, rather than a view in which parties simply

play out a competition in front of unconnected and solitary citizens who think only of benefits to themselves.

I present a model of turnout in which the decision to vote depends on the difference in regard that an individual has for the supporters of various political parties and for the benefits that will accrue to them given some election outcome. Similar models have been proposed (see Fowler, 2006; Fowler and Kam, 2007; Edlin, Gelman and Kaplan, 2007). My model differs from these in a few subtle respects. First, in contrast to Fowler and Kam, I allow for the presence of more than two parties and do not demand that voters be evenly divided between them.<sup>5</sup> Second, in contrast to Edlin and colleagues, I do not emphasize a feedback mechanism to explain habitual voting.<sup>6</sup> My model clearly owes its fundamental intuition and implications to these prior models, especially in its focus on material rather than emotional outcomes (as opposed to Glazer, 2008). However, it adds to these models, both theoretically and in the empirical tests below, by allowing the size of various groups to vary. If it can be shown that the probability of turnout varies not only with differing concern for groups of people but with variation in the size of these groups, then an even more convincing case can be made for other-regarding motivations for voting.

As with the classical model of voter turnout, the model assumes that there are costs to voting,  $C$ , which individuals consider in the decision to vote. While these costs are often small, they are not nil. Individuals face costs, for example, in determining where and how to vote and in learning about parties and issue positions. Additionally, as with the classical model, voters consider the benefits to themselves. But they discount these benefits by the probability of their vote being decisive for their preferred party. However, unlike the classical model, this model assumes that voters also care about benefits to others, specifically the benefits that are realized by supporters of the winning party. The more they care about those supporters in contrast to supporters of other parties, the more likely they are to vote in an election.

Formally, the model assumes that two sets of benefits exist. First, benefits to self:  $B_S$ . Second, benefits to the supporters of the winning party:  $B_0$ . In real terms, both sets of benefits could include changes in tax laws that favour the supporters of the winning party more than the losing party, on average. They could similarly include new spending measures (or cuts) which disproportionately favour (harm) the supporters (opponents) of the winning party. The important point to be noted here is that these benefits need not be construed in terms of patronage but rather in terms of the larger programmatic differences in spending which occur between parties of various stripes (for example, Blais et al., 1993). By omission, the model thus assumes that no generalized benefits exist for all members of society given the election of some party over another (as opposed to Fowler and Kam, 2007).<sup>7</sup>

The model further assumes that voters do consider  $P$ , the probability of casting a deciding or tying vote. As Fowler notes (2006), in any election in which the outcome is uncertain this term generally equals  $1/N$ . The model also incorporates the concern or *affinity* of an individual for supporters of their own party,  $\alpha_{aff}$ , and *antipathy* for supporters of other parties,  $\alpha_{ant}$ . These terms are subscripted to indicate an individual's preferences for different partisans, beginning with the highest level of concern and moving to the lowest. Finally, the model assumes that voters conceive of the election in terms of a competition between citizens who support their party, who make up some share of the population ( $n_1$ ), and those who support other parties, who make up other shares of the population ( $n_2...n$ ). Accordingly, I assume that  $n_1 + n_2 + \dots + n_n$  is approximately equal to one. Whereas the decision to vote in a classical model depends on  $D + PB > C$ , in this model an individual votes if:

$$P \left( B_S + \alpha_{aff,i} B_O N n_i + \sum_{i=2}^n \alpha_{ant,i} B_O N n_i \right) > C, \tag{1}$$

which rearranges as:

$$PN \left( \frac{B_S}{N} + \alpha_{aff,i} B_O n_i + \sum_{i=2}^n \alpha_{ant,i} B_O n_i \right) > C, \tag{2}$$

As  $P$  is approximately equal to  $1/N$ , then the  $PN$  term drops away.<sup>8</sup> Benefits to self,  $B_S$ , are similarly rendered very small by  $N$  and thus should not be expected to have an effect on the decision to vote. However, as the benefits to others,  $B_O$ , are not discounted by  $P$  or  $N$ , then this can be a sufficient motivator to vote in the face of costs. Intuitively, voters care about the benefits incurred by others, and these benefits add up to a non-trivial sum when a group is sufficiently large. The model thus effectively reduces to:

$$\left( \alpha_{aff,i} B_O n_i + \sum_{i=2}^n \alpha_{ant,i} B_O n_i \right) > C, \tag{3}$$

Since one individual's vote can confer a non-trivial benefit on a whole group of people and deny the benefit to other groups, those voters who care about the utility of others can now be motivated to vote. This is true even in the face of  $C$ .<sup>9</sup> As the difference in their concern for others increases, for instance, as  $\alpha_{aff}$  increases and/or  $\alpha_{ant}$  increases, then voters should become more likely to vote. But this increase should be conditional on the size of the groups for whom they have antipathy or affinity. Substantively, if politics is a competition between groups than those who see one group as more deserving of an election's spoils than others will be more likely to vote, especially as those groups grow in size. Antipa-



thy and affinity, then, should explain some of the decision to vote. I next describe a behavioural experiment designed to test this proposition.

#### 4. Survey and Research Design

My study relies on an online survey of some 2035 respondents conducted by a commercial public opinion research firm in Canada in May 2007. The respondents are broadly but certainly not perfectly representative of the population. The survey contained conventional questions about political participation and political preferences but also included a series of dictator games from behavioural economics aimed at revealing affinity and antipathy towards other partisans. Below, I describe the survey, the survey participants and the variables drawn from the survey.

##### 4.1. Survey

The survey was conducted online. Subjects were required to login to the survey using a unique identification. This allows me to call up previously entered demographic information from those who have completed prior surveys. Those completing the survey for the first time were asked a series of screening questions, including whether they voted in the most recent federal election and their partisan identification. Subjects answered several questions about recent news exposure, their attention to federal and provincial politics, and their views on federal and provincial politicians. Subjects then completed an unrelated eight-item module on empathy. They were next presented with the dictator game battery. Following this, they were presented with questions concerning their support for public spending, their past charitable giving, their views of the public service and their views of recent political events. The final effective sample was 2035 respondents.<sup>10</sup>

##### 4.2. Subject profiles

Compared to a university-based convenience sample, the online survey methods affords a large number of respondents and comparatively representative population, particularly in regards to age, education and income. Compared to a telephone survey, it allows us to present subjects with more complex or complicated questions, such as the dictator game questions used to measure affinity and antipathy, while not sacrificing the advantages of a broadly representative sample. It should be noted, however, that the sample does not perfectly resemble one that is randomly drawn.

Table 1 shows the characteristics of the sample and compares them to the *2006 Canadian Election Study*, a RDD telephone survey. The aver-



TABLE 1  
Sample Demographic and Political Characteristics

Variable	Current % or Mean (SD)	CES % or Mean (SD)
Age	49.7 (13.5)	50.8 (16.5)
French	18.2%	22.3%
Female	49.1%	52.7%
Household Income		
<\$40000	24.0%	36.7%
\$40000 to \$60000	20.8%	20.5%
\$60000 to \$80000	17.7%	16.4%
>\$80000	37.4%	26.4%
Education		
High School or less	14.8%	37.6%
Some College	29.9%	25.6%
Some University	55.2%	36.9%
Conservative ID		
Weak	13.1%	11.5%
Strong	7.3%	6.3%
Liberal ID		
Weak	17.4%	15.5%
Strong	6.0%	6.5%
NDP ID		
Weak	8.6%	5.4%
Strong	3.1%	2.9%
BQ ID		
Weak	3.4%	5.6%
Strong	3.6%	2.1%
Total Party ID	62.5%	55.8%
Voted	91.3%	90.5%
Affinity	7.25 (7.94)	
Antipathy 1	3.83 (5.99)	
Antipathy 2	4.48 (6.97)	
Margin	0.18 (0.14)	
Newspaper	0.61 (0.38)	
TV News	0.71 (0.34)	
Internet News	0.16 (0.18)	
N	2035	4057

age respondent in the Internet sample is slightly younger ( $t = 2.60, p < .00$ ). There is also a lower incidence of French respondents ( $\chi^2 = 13.93, p < .00$ ) and female respondents ( $\chi^2 = 7.06, p < .00$ ) in the Internet sample. Finally, the Internet sample appears both wealthier ( $\chi^2 = 123.55, p < .00$ ) and more educated ( $\chi^2 = 349.76, p < .00$ ).

In addition to the socio-demographic differences, the Internet sample also appears to be more politically engaged. It exhibits a higher incidence of both weak and strong Conservative identifiers, weak Liberal

identifiers, weak and strong NDP identifiers, and strong Bloc Quebecois identifiers. Overall, the Internet sample has a higher incidence of those who identify with a party than the CES sample ( $\chi^2 = 24.99, p < .00$ ).

The most glaring difference between the sample and the general population is the incidence of turnout (it is 91.4 per cent in the Internet sample, 90.5 per cent in the CES post-election survey, but only 64.7 per cent in the population). The panel is quite clearly overpopulated by those who claim to have voted in the last federal election. Because vote is our dependent variable, this imbalance cannot be ameliorated by a control variable. To address this, I weight the data according to the actual rate of turnout in the 2006 federal election. As a result, my regressions rely on control variables to account for differences on sociodemographic variables and party identification, and a weighting to address the over-reporting of voting (for a similar approach, see Blais et al., 2004).<sup>11</sup>

#### *4.3. Antipathy, affinity, and other variables*

To begin with standard variables, survey questions were used to capture respondent demographics as well as party identification. Furthermore, respondents were asked how many days a week they read the newspaper and watch television news. They were equally asked how many hours a week they spend reading Internet news. For interpretive ease, all variables are recoded from 0 to 1. Question wordings are available in appendix A.

Antipathy and affinity are measured through a series of dictator games (see Camerer, 2003), the properties of which are discussed in more detail below. In addition to a regular \$500 draw for survey participation, respondents were told that they were eligible to win up to four prizes of \$100 at the end of the survey. In the case of one prize, they were asked how much of it they would share, should they win, with an anonymous individual about whom they knew nothing. For the other three prizes, they were similarly asked how much they would be willing to share with an anonymous individual about whom they knew nothing except which political party the respondent typically supported (Conservative, Liberal or NDP; in the case of Quebec residents, Conservative, Liberal or Bloc Quebecois). The presentation order of the anonymous recipients was randomized. Question wording for the dictator games is available in appendix B.

The comparison of these amounts can give us important information about the level of antipathy and affinity individuals have for supporters of other parties. For example, if an individual indicated she would give \$50 to a Conservative but nothing to a Liberal, then we may say she has more antipathy for Liberals than a respondent who gave the same amount to partisans of both parties. Alternately, we could say she has

more affinity for Conservatives. When these variables are weighted by the size of each party in a respondent's province, then we have direct measures of the effects of antipathy and affinity as described in our theoretical model. I leave further discussion of the operationalization of these specific variables to section 6.

In the past, dictator games have been used to measure other-regarding behaviour, whether altruism, social identification or fairness (see Fowler, 2006; Fowler and Kam, 2007; Whitt and Wilson, 2007). The question remains as to whether they can be used to measure antipathy and affinity for other partisans. I argue that differences in partisan allocations in a dictator game are just such evidence of antipathy and affinity towards other partisans. That is, an individual who is willing to allocate \$50 to a supporter of the Conservative party shows more affinity for such supporters than a person who allocates \$40. Similarly, that individual can be said to have more antipathy for Liberals if he allocates \$0 than if he allocates \$10. This is particularly true because they are displaying a real difference in their concern for others, and because the display of this concern comes at a real cost. Behaviour in the dictator game thus closely resembles that which we would expect according to social identity theory and the preference for some groups over others (see Greene, 2004; Tajfel, 1978). It can similarly be construed as a measurement of "social distance" between respondents and other partisans (Hoffman et al., 1996).

The use of behavioural economics games in political science and especially in voting behaviour research is rather unconventional. As a result, several reasonable objections can be anticipated (see Benz and Meier, 2008: 2–3). First, one could contend that subjects do not understand the play of the game and instead make allocations more or less randomly. However, Andreoni and Miller (2002) and Dawes and colleagues (2008) have shown through the manipulation of payoff functions that individuals do understand the game and do not simply make up allocations as they go along. Instead, their allocations are consistently transitive and reflective of their preferences. Second, it could be argued that the small stakes of the games mean that individuals would play differently if the stakes were higher. Most research, however, suggests that subjects play consistently provided the stakes are real (as they are in our game) (for example, Camerer and Hogarth, 1999; Carpenter et al., 2005; but see also Cherry et al., 2002). Third, it can be argued that despite consistent play, behaviour in dictator games does not correspond to the real world equivalents we wish to measure. Benz and Meier (2008), however, report strong evidence of the correlation between dictator game allocations to anonymous individuals (taken as a measure of altruism) and charitable giving, among other actions (for a longer review, see Loewen, 2008). Accordingly, I am confident behaviour in these games *reveals* respondents' concern for others.

These objections aside, the dictator game has substantial advantages over, for example, asking subjects to state how they feel about other partisans (see Greene, 2004). First, stated opinions are arguably more subject to social desirability than revealed preferences in a dictator game, precisely because the former are virtually costless to make. Dictator game allocations ask subjects to put their dollars where their hearts are. Second, while asking subjects to allocate money may seem like an abstract task, it is likely one that subjects can undertake with more consistency and meaning than, for example, trying to translate their preferences for some partisans over others onto a 7-point Likert scale or onto a 0–100 thermometer. Indeed, the dictator game is desirable because it asks subjects to demonstrate their affection for some groups over others at a cost to themselves, and it does so in quantities that a subject can readily understand.<sup>12</sup>

### 5. Antipathy, Affinity, and Party Identification

Table 2 demonstrates the different allotments of partisans in the dictator games. The differences in these allocations suggest that the dictator game does uncover affinity and antipathy between political supporters, as subjects give more to co-partisans than they do to rival partisans. Moreover, they are likely to give more to those who are not identified with a party than those who are identified with another party. For example, the first row in Table 2 shows that weak Conservative identifiers give \$21.20 to other Conservatives on average, while they give only \$12.50 and \$12.70 to Liberal and New Democratic respondents, respectively. These differences become more stark when we consider the allocations of strong Conservative identifiers. These individuals on average give other Conservatives \$26.70, while they give Liberal and New Democratic respondents only

TABLE 2  
Partisanship and Average Allocations in the Dictator Game

Donor/Recipient	Anon.	Cons.	Liberal	New Dem.	Bloc Que.	N
Weak Conservative	20.7	21.2	12.5	12.7	2.9	311
Strong Conservative	22.3	26.7	10.6	10.2	19.3	168
Weak Liberal	23.6	16.3	23.4	19.5	8.8	414
Strong Liberal	24.0	11.3	28.5	15.7	15.9	143
Weak NDP	23.1	11.7	18.3	28.8	14.5	188
Strong NDP	23.4	13.2	19.1	33.8	13.5	70
Weak BQ	20.6	12.7	12.2		20.7	80
Strong BQ	19.5	12.1	11.4		29.1	82
Non-Partisan	22.4	15.3	16.7	16.6	16.7	896

\$10.60 and \$10.20 respectively. A similar pattern obtains for New Democratic, Bloc Quebecois and Liberal partisans. They allot more money to their co-partisans than to other partisans, and these differences are larger for strong partisans than for weak. This pattern only fails to obtain with regards to the allocations of strong Liberals and strong Conservatives to Bloc partisans.

Those who do not identify with a political party—more than a third of our sample—appear to give less to partisans compared to anonymous individuals. On average, non-partisans give \$22.40 to anonymous recipients (partisans give about the same on average). They conversely give between \$15.30 and \$16.70 to partisans. Taken together, all of these results suggest that the allocations in the dictator game are consistent with respondent partisanship or non-partisanship.<sup>13</sup>

Table 3 demonstrates the within-subject differences in allocations. Each cell presents the average within-subject differences by donor. For example, the cell in the upper left demonstrates the average difference in allotments to Conservatives and Liberals by Conservative donors. I then use a Wilcoxon sign-rank test to determine the significance of this finding. As a consequence of being non-parametric, the Wilcoxon does not assume that the quantities being compared are normally distributed as with a conventional t-test. The test reports a probability that the direction of the real difference in scores is the opposite of that observed. Accordingly, the p-values in parentheses represent the probability that the difference exhibited is in fact in the other direction (Wilcoxon, 1945).

An examination of these results finds that, as with the observations in Table 2, within-subject allocations are consistent with partisanship. Conservatives allocate significantly more to Conservatives than Liberals, more to Conservatives than New Democrats, more to Conservatives than to Bloquistes, and more to Conservatives than anonymous individuals. Moreover, they give more to anonymous individuals than to any other partisans. As importantly, they make no distinction between Liberal and New Democratic recipients. Liberal, New Democratic and Bloc identifiers make similarly consistent allocations, allocating their co-partisans significantly more money than other partisans and non-partisans.

A final observation is warranted. Fowler and Kam (2007) find that participants in their experiments exhibit a bias against Republicans. A similar bias against Conservatives is exhibited in these data. Non-partisan recipients give significantly less to Conservatives than to New Democrats or Liberals. New Democrats similarly give less to Conservatives than to Liberals, and Liberals give less to Conservatives than to New Democrats. Two possible sources of this Conservative bias both support a view of politics as a struggle between different groups of partisans. Non-Conservatives may exhibit less concern for Conservative partisans because they believe they are unfairly enriched by the current Conserva-

TABLE 3  
 Within-Subject Differences in Dictator Game Allocations (Wilcoxon Sign-Rank Differences)

Donor	Con-Lib Mean ( $\rho$ )	Con-NDP Mean ( $\rho$ )	Con-BQ Mean ( $\rho$ )	Lib-NDP Mean ( $\rho$ )	Lib-BQ Mean ( $\rho$ )	Con-Anon Mean ( $\rho$ )	Lib-Anon Mean ( $\rho$ )	NDP-Anon Mean ( $\rho$ )	BQ-Anon Mean ( $\rho$ )
Conservative	11.4 (.00)	11.4 (.00)	13.3 (.00)	-0.4 (.63)	4.6 (.02)	2.0 (.00)	-9.4 (.00)	-9.5 (.00)	-10.1 (.00)
Liberal	-9.7 (.00)	-4.0 (.00)	5.4 (.00)	6.6 (.00)	11.1 (.00)	-8.7 (.00)	1.0 (.02)	-5.5 (.00)	-10.8 (.00)
New Democrat	-6.4 (.00)	-18.0 (.00)	-1.4 (.95)	-11.1 (.00)	0.9 (.68)	-11.0 (.00)	-4.6 (.00)	6.3 (.00)	-3.0 (.97)
BQ	0.6 (.27)		-12.9 (.00)		-13.5 (.00)	-7.7 (.00)	-8.2 (.00)		5.2 (.00)
Non-Partisan	-1.4 (.02)	-1.5 (.01)	0.0 (.80)	-0.0 (.37)	1.2 (.62)	-7.1 (.00)	-5.7 (.00)	-6.0 (.00)	-4.6 (.01)

tive government. They could also exhibit less concern because they believe that, as a group, Conservatives are less in need of the support of others, consistent with a view of Conservative supporters as well-off financially. These explanations are not exclusive, and both support the view that citizens approach politics with clear distinctions between groups of partisans, differences that translate into varying levels of concern.

### *5.1. Why antipathy and affinity are not just party identification*

Given the preceding results, it can be objected that rather than measuring affinity and antipathy towards other partisans, the dictator game allocations are simply a different measure of partisan identification. Three pieces of evidence militate against this contention. First, many partisan identifiers give nothing to their co-partisans: 30.1 per cent of Conservative identifiers, 36.6 per cent of Liberal identifiers 27.7 per cent of NDP identifiers and 36.8 per cent of Bloc identifiers give nothing to their fellow partisans. Second, most non-partisans allocate money to one or more co-partisans. Indeed, only 41.3 per cent of non-identifiers allocate nothing to all other partisans. Together, these findings suggest that partisan identification is neither sufficient nor necessary to display differing levels of concern for the partisans of other parties. Third, as the models presented below in Tables 4 and 5 show, when measures of affinity and antipathy are added to a turnout model with party identification, all variables remain significant and the marginal effects of partisan identification remain unchanged. Indeed, as the models below demonstrate, I obtain stronger results when I model the decision to turnout as a function of concern for others, as suggested by our theoretical model. Taken together, this evidence suggests that I am tapping into feelings that, while related to the traditional measure of partisan identification, are not one and the same. Instead, they reach into another element of partisanship, particularly that which involves the feelings of partisans towards other partisans and not just formal parties (see also Green et al., 2002; Greene, 2004).

## **6. Antipathy, Affinity and Turnout**

My contention is that those who display higher amounts of antipathy towards the supporters of other parties and higher amounts of affinity for supporters of their party should be more likely to vote than those who do not make a distinction between the supporters of various parties. They should also be more likely to vote as the size of these groups increases. Finally, this effect should be independent of other predictors of the decision to vote, such as education, income, gender, attention to media and partisan identifications.



TABLE 4  
Antipathy, Affinity and Turnout (Logistic Regression)

	Model 1			Model 2			Model 3		
	Coef.	S.E.	$\rho$	Coef.	S.E.	$\rho$	Coef.	S.E.	$\rho$
Affinity				0.03	0.01	0.01	0.03	0.01	0.01
Antipathy 1				-0.03	0.02	0.09	-0.02	0.01	0.04
Antipathy 2				0.01	0.01	0.63			
Margin	0.46	0.40	0.24	0.47	0.40	0.23	0.47	0.40	0.24
Liberal ID	0.85	0.21	0.00	0.81	0.21	0.00	0.82	0.21	0.00
Conservative ID	1.41	0.23	0.00	1.34	0.24	0.00	1.34	0.24	0.00
NDP ID	0.80	0.24	0.00	0.74	0.24	0.00	0.74	0.24	0.00
Bloc ID	3.34	0.60	0.00	3.33	0.60	0.00	3.34	0.60	0.00
Age	2.23	0.29	0.00	2.23	0.29	0.00	2.22	0.29	0.00
Education	0.70	0.14	0.00	0.68	0.14	0.00	0.68	0.14	0.00
Income	0.76	0.14	0.00	0.76	0.14	0.00	0.76	0.14	0.00
French	-0.16	0.16	0.30	-0.12	0.17	0.47	-0.14	0.16	0.36
Female	-0.45	0.11	0.00	-0.50	0.11	0.00	-0.44	0.11	0.00
Newspaper	0.55	0.15	0.00	0.57	0.15	0.00	0.57	0.15	0.00
TV News	0.61	0.16	0.00	0.60	0.16	0.00	0.60	0.16	0.00
Internet News	-0.42	0.28	0.11	-0.50	0.28	0.08	-0.49	0.28	0.08
Constant	-2.01	0.22	0.00	-2.05	0.23	0.00	-2.05	0.23	0.00
LR $\chi^2$	410.65			417.68			417.45		
LR 2 > 1, $\rho = 0.07$									
LR 3 > 1, $\rho = 0.03$									
N 2035									

Table 4 presents results from three logistic regressions. The first presents a standard model in which the decision to vote is regressed on different party identifications, sociodemographic factors, three measures of news consumption, and the closeness of the race in the respondent's constituency. In keeping with many prior research findings (for example, Leighley and Nagler, 1992a, 1992b; Strate et al., 1989), older, more educated and wealthier citizens are all more likely to vote. Likewise, those who identify with a political party are more likely to have reported casting a ballot (Huckfeldt and Sprague, 1992). While females appear less likely to vote, and Internet news consumption has no effect on the turnout decision, all other variables conform to a standard account of turnout (for a similar turnout model using Canadian data, see Blais et al., 2002).

The second and third models add measures of affinity and antipathy. Affinity is the largest amount of money allocated to a partisan recipient (measured \$0 to \$100) times the vote share of that recipient's party in the respondent's province in the 2006 federal election (measured 0 to 1). In keeping with the model specified above, this weights affinity by

TABLE 5

Predicted probability of turnout given different levels of affinity, antipathy, and party vote share

Allocation	Vote 15%	Vote 30%	Vote 45%
Affinity = 0	0.67	0.67	0.67
Affinity = 25	0.68	0.70	0.72
Affinity = 100	0.73	0.79	0.84
Antipathy = 0	0.71	0.71	0.71
Antipathy = 25	0.70	0.68	0.67
Antipathy = 100	0.65	0.58	0.50

Probabilities are generated from Clarify. All other variables are held at their means.

the size of the recipient group. The first measure of antipathy is the second largest amount of money allocated to a partisan recipient times the vote share of that recipient's party in the respondent's province in the same election. The second measure of antipathy likewise takes account of the third largest partisan allocation and weights this by the respective vote share. Logically, then, these variables become larger when a respondent has more concern for a recipient *or* the recipient's party increases in size in a province. If these variables predict turnout as expected from the model, then the coefficient on affinity should be positive and the coefficients on antipathy should be negative.<sup>14</sup>

In the second model, we include both measures of antipathy. When modeled in this way, affinity has the expected positive and significant coefficient. However, only the first antipathy variable is significant and just weakly so ( $p = .09$ ). As the two measures of antipathy are highly correlated ( $r = .85$ ), I include only the first in the third model. In this instance, affinity continues to strongly and significantly predict turnout and the antipathy measure also significantly predicts turnout in the expected direction. Finally, a likelihood ratio test suggests that this third model contains more information than the first ( $\chi^2 = 6.79, p = .03$ ). It also suggests that the second model adds no information to the third ( $\chi^2 = 0.23, p = .63$ ). Accordingly, it appears that affinity and antipathy matter for the decision to vote, though it is in a more limited case for antipathy.

To understand the size of these effects, Table 5 shows the average predicted level of turnout for three levels of affinity and antipathy and three different provincial vote levels for the party of the target recipient. As the table shows, the effects of Affinity are increasing both in group size and generosity. For example, when an individual's target party commands 15 per cent of the vote in a province and they move from giving \$0 to supporters of this party to the mean amount (\$25), their probability of voting increases about a percentage point. But if the target party rep-

resents 45 per cent of the population, this increase in affinity drives a five percentage point increase in the probability of turning out. When we consider the movement from a complete lack of Affinity (an allocation of \$0) to a state of maximum affinity (\$100), we see that the increase in turnout ranges from 6 percentage points (at 15 per cent group size) to 17 percentage points (at 45 per cent group size). This, then, is a substantively large effect. The effects of Antipathy are similarly large. A move from a complete lack of antipathy (in which you give \$100 to the supporter of another party) to complete antipathy (in which you give nothing) is six percentage points at 15 per cent group size. It rises to 21 percentage points when group size reaches 45 per cent.

How do these effects compare to other variables in the model? In short, they are comparatively large. For example, the average effect of moving from no partisan identification to a strong identification is 18.5 percentage points. The difference in the probability of voting between the youngest and the oldest respondent is some 37.8 percentage points. The effect of moving from minimum to maximum income is 13.8 percentage points. The same movement in education leads to a 12.4 percentage point increase in the probability of voting. Controlling for other factors known to substantially affect voter turnout, then, concern for others appears to have an important effect on voter turnout.<sup>15</sup>

## 7. Discussion and Conclusion

I have presented an explanation of turnout that was captured in a simple decision theoretic model and demonstrated empirically using a series of dictator games embedded in an online survey. Moreover, these results were shown to be robust to a number of conventional controls. These results lend support not only to my account, but also the similar accounts of Fowler (2006), Fowler and Kam (2007), and Edlin and colleagues (2007).

This model of turnout is more fulsome than one that relies on traditional conceptions of party identification or duty. It recognizes that party identification is about more than a preference for one party over another. Instead, it is membership in a social group. Moreover, it recognizes that senses of obligation to others are likely to drive decisions to participate, especially when the stakes of participation increase. The fulsomeness of this model, then, comes from taking a broader view of partisanship and a view of duty that is not blind to instrumental outcomes.

These findings have important implications for our study of politics and the decision to participate in politics. The results support the view of politics as a competition between groups in which individuals are concerned not only with their own well-being, but also the well-being of

others. On the positive side of the ledger, this is an encouraging result for those who desire a politics that is typified by civic concern and not just by pure self-interest. Indeed, these results suggest that many people participate in elections because they care about others.

These findings are not entirely positive, however. Looking at these results from the perspective of antipathy, we see that as a preference for some citizens over others increases, some individuals are more likely to vote. By extension, this means that if groups of partisans can be made more polarized and more distrusting of one another, then their likelihood of participating should increase. In short, if politics is more negative, then voter turnout could be expected to increase. This does not necessarily recommend negative politics, but it does call into question the view that greater voter participation is necessarily a virtue. Indeed, it supports a much older view that high turnout is not necessarily indicative of civic engagement but of conflict (Berelson et al., 1954).

Whether one takes these results as positive or negative, the sum result is that a better model of turnout incorporates individuals' concern for others. Elections are not contested by parties that appeal to a disaggregated collection of atomized individuals. Rather, they are contested by parties who compete for the support of groups of voters. In doing so, they often portray the supporters of other parties in an unfavourable light. As the story goes, an election win for an opposing party is thus likely not only to perhaps make aggregate welfare worse off, but especially to comparatively enrich those who gave the party their support. According to this conception of elections, the views individuals hold of those supporting other parties matter. As their concern for those who support other parties differs from their concern for those in their own party, they become more likely to vote. Of all the explanations for turnout, then, we should have increased affection for those that incorporate other-regarding preferences.

## Notes

- 1 This is especially true if we conceive of class membership as a specific instance of a group membership (see, for example, Evans, 1999; Hout et al., 1993, for accounts of the enduring importance of class).
- 2 All the following quotes are drawn from the 2006 Canadian federal leaders' debate, according to the transcript of the Canadian Press (2006).
- 3 In this respect, politicians also have an incentive to overstate the size of the group of voters they represent. The larger the group to which a voter belongs, the more individuals who will benefit from an election win. This perhaps explains the tendency of voters to overestimate the chances (and thus size) of the parties which they support (see, for example, Bartels, 1988; Blais and Bodet, 2006).
- 4 These variations likewise cannot be explained by discounted benefits.
- 5 Fowler and Kam's assumption of equally sized parties can be seen in both their appendix in which they formally specify their model and in their analysis in which they evenly weight dictator game allocations.

- 6 This element could be added to the model. However, it could not be tested with data at just one time point. Accordingly, I leave it from the model, resting only with the elements that can be tested directly.
- 7 In "Appendix C: Further Results," I demonstrate that general altruism or concern for others, as measured in dictator game allocations to completely anonymous individuals, adds no information to the model. Moreover, it does not affect the general findings of antipathy and affinity mattering for the decision to vote.
- 8  $N * (1/N) = N/N = 1$ .
- 9 We could add into the left-hand side of the model terms for duty, party identification or some individual utility derived from voting regardless of the outcome. We could similarly add a negative cost term to reflect the cost of shame for a group member who does not vote. All of these factors could explain variation in the baseline probability of any individual voting. This is a case for including relevant control variables in an empirical model. However, as these variables are not central to the model presented here, I leave them out of the formal discussion.
- 10 The sample is limited by three factors. First, I eliminate those who have not indicated whether they voted in the 2006 federal election. Second, I eliminate those whose constituency is not identified. Finally, I eliminate those for whom values are missing on income and education.
- 11 To address the higher frequency of voters, I weight my sample to reflect national (rather than provincial or regional) rates of turnout. I make no corrections within demographic groups. Accordingly, voters receive a weight of 0.708 and non-voters a weight of 4.08. I have also estimated a rare events logit (King and Zeng, 2001) for each model with corrections for the frequency of the dependent variable, but no McCullagh and Nelder correction or variance cluster correction. In the case of each model in Table 4, the substantive results remain the same.
- 12 A related criticism is that the game does not allow subjects to give more than \$100 or to take money away from subjects. This is true and likely leads to some censoring. But this criticism applies equally to any scale with endpoints, such as a ratings thermometer or a Likert scale.
- 13 It is possible that some respondents make allocations inconsistent with their preferences, first by allocating the most to supporters of a party with which they do not identify. I find that 4.1 per cent of respondents meet this condition. They are retained in the analysis. Substantive results do not change if they are excluded. Partisan respondents could similarly give more to anonymous individuals than to supporters of their party. This is the case with 9.9 per cent of partisans, or 6.6 per cent of the entire sample. When these individuals are excluded from the analysis, substantive results again remain the same. Furthermore, in "Appendix C: Further Results," I test whether generally higher allocations to anonymous individuals significantly alter the effects of affinity and antipathy. As can be seen in that appendix, they do not. Accordingly, I am confident that these results hold and that they apply to the vast majority of the population.
- 14 As greater allocations to the supporters of other parties indicate less antipathy, we should expect turnout to decrease as this variable increases.
- 15 In "Appendix C: Further Results," I present two other specifications of affinity and antipathy and show how these likewise predict voter turnout.

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## Appendix A: Question Wording and Variables for Affinity, Antipathy, and Political Participation

**Affinity** is the maximum allocation to a partisan (\$0–100) multiplied by the vote share (0–1) of that partisan's party in respondent's province in the 2006 federal election.

**Antipathy 1** and **Antipathy 2** are the second- and third-highest allocations to partisans (\$0–100) multiplied by the respective vote share (0–1) of that partisan's party in the respondent's province in the 2006 federal election.

**Partisan identifications** are variables reading 1 when a respondent identifies as a strong identifier of a party, 1/2 when then identify as a moderate identifier, and 0 otherwise. Identification is determined with the question "Thinking about federal politics in Canada, generally speaking, do you usually think of yourself as Liberal, Conservative, NDP, or none of these?" Those who identified a party then received the standard follow-up: "And, generally speaking, how strongly do you think of yourself as a (party)?"

**Income** is a four-category variable measuring household income in the last year. It is rescaled from 0 to 1. Values are <\$40000 (0), \$40000 to \$60000 (1/3), \$60000 to \$80000 (2/3) and >\$80000 (1).

**Age** is a six-category variable measuring age group. It is rescaled to 1. Values are 18–24 (0), 25–34 (1/6), 35–44 (2/6), 45–54 (3/6), 45–54 (4/6), 55–64 (5/6), 65 and older (1).

**Education** is a three-category variable measuring highest level of education. It is rescaled from 0 to 1. Values are high school or less (0), at least some college (1/2), and at least some university (1).

**Female** is a dummy variable reading 1 if a respondent is a female and 0 otherwise.

**Unemployed** is a dummy variable reading 1 if a respondent is currently unemployed and 0 otherwise.

**Newspaper** and **TV News** both measure the number of days in a week the respondent accesses news through that medium. The variables are rescaled from 0 (0 days per week) to 1 (7 days per week).

**Internet News** measures the number of hours a respondent spends on the Internet reading news in a given week. The minimum and maximum responses are rescaled 0 to 1.

**Voting** is a dummy variable reading 1 when respondents indicate having voted in response to the question: "In talking to people about elections, we find that they are sometimes not able to vote because they're not registered, they don't have the time, or they have difficulty getting to the polls. Did you happen to vote in the last federal election?"

**Max-Min** is the maximum allocation to a partisan less the minimum allocation. The variable is rescaled from 0 to 1.

**Max-Mean** is the maximum allocation to a partisan less the mean of allocations to other partisans. The variable is rescaled from 0 to 1.

## Appendix B: Dictator Game Instructions

*The complete English text of the dictator game experiment is below. For respondents in Quebec, the Bloc Quebecois is substituted for the New Democratic Party:*

In addition to our normal \$500 cash prize for completing the survey, we will be drawing four other prizes at the end of this survey. One person in this study will be randomly chosen to receive each prize.

In each draw, the prize is \$100. Should you win any of the draws, your answer to the questions below will determine the amount of each prize that you receive. Remember that your answer is completely anonymous.

(1) Below, you will see two boxes. In the first box, enter how much of a \$100 prize you would keep if you won one of the additional draws. In the other box, indicate how much you'd like to give away to an any-

ymous individual who will also be randomly chosen. You know nothing about this anonymous individual.

You must choose how to divide the \$100 between yourself and the anonymous individual. You may keep all, none, or some of the money—the decision is up to you and will be completely anonymous. The total of the two boxes must add up to \$100. Once you have made your decision, please hit next.

(2) Below, you will see two boxes. In the first box, enter how much of a \$100 prize you would keep if you won one of the additional draws. In the other box, indicate how much you'd like to give away to an anonymous individual who will also be randomly chosen. You know nothing about this anonymous individual except that they support the Conservative Party.

You must choose how to divide the \$100 between yourself and the anonymous individual. You may keep all, none, or some of the money—the decision is up to you and will be completely anonymous. The total of the two boxes must add up to \$100. Once you have made your decision, please hit next.

(3) Below, you will see two boxes. In the first box, enter how much of a \$100 prize you would keep if you won one of the additional draws. In the other box, indicate how much you'd like to give away to an anonymous individual who will also be randomly chosen. You know nothing about this anonymous individual except that they support the Liberal Party

You must choose how to divide the \$100 between yourself and the anonymous individual. You may keep all, none, or some of the money—the decision is up to you and will be completely anonymous. The total of the two boxes must add up to \$100. Once you have made your decision, please hit next.

(4) Below, you will see two boxes. In the first box, enter how much of a \$100 prize you would keep if you won one of the additional draws. In the other box, indicate how much you'd like to give away to an anonymous individual who will also be randomly chosen. You know nothing about this anonymous individual except that they support the New Democratic Party

You must choose how to divide the \$100 between yourself and the anonymous individual. You may keep all, none, or some of the money—the decision is up to you and will be completely anonymous. The total of the two boxes must add up to \$100. Once you have made your decision, please hit next.

*The order of questions 1–4 was randomized.*

### Appendix C: Further Results

In this appendix, I present results from three different models to demonstrate the robustness of the results presented above. The first model considers the results when a measure of general altruism is included in the final empirical model presented in Table 4. Because that model relies on allocations in the dictator game to measure antipathy and affinity, it is possible that the model is simply tapping general altruism. However, the results in the first column of Table 6 (Altruism Model) suggest that is not the case. If altruism is measured as the allocation to a completely anonymous individual and added to the model, it has an insignificant effect. However, the effects for antipathy and affinity remain. Moreover, according to a likelihood ratio test, it adds no more information to the model than model 3 in Table 4 ( $p = 0.86$ ).

The second and third models present specifications of affinity and antipathy which are not corrected for the size of target groups. The first, Max-Min, is the difference between the maximum allocation to a partisan less the minimum allocation to a partisan, rescaled 0–1. The second, Max-Mean, is the difference between the maximum allocation to a partisan less the mean allocation to all other partisans, rescaled 0–1. So, if a

TABLE 6  
Further Results/Robustness Checks (Logistic Regression)

	Altruism Model			Max-Min			Max-Mean		
	Coef.	S.E.	$\rho$	Coef.	S.E.	$\rho$	Coef.	S.E.	$\rho$
Affinity	0.02	0.01	0.02						
Antipathy 1	-0.03	0.01	0.04						
Altruism	0.00	0.01	0.87						
Max-Min				0.68	0.27	0.01			
Max-Mean							0.79	0.33	0.02
Margin	0.46	0.40	0.25	0.52	0.40	0.19	0.51	0.40	0.20
Liberal ID	0.82	0.21	0.00	0.81	0.23	0.00	0.81	0.21	0.00
Conservative ID	1.34	0.24	0.00	1.36	0.24	0.00	1.35	0.24	0.00
NDP ID	0.74	0.24	0.00	0.73	0.24	0.00	0.72	0.24	0.00
Bloc ID	3.34	0.60	0.00	3.39	0.60	0.00	3.39	0.60	0.00
Age	2.22	0.29	0.00	2.21	0.29	0.00	2.21	0.29	0.00
Education	0.68	0.14	0.00	0.67	0.14	0.00	0.77	0.14	0.00
Income	0.76	0.14	0.00	0.77	0.14	0.00	0.77	0.14	0.00
French	-0.14	0.16	0.39	-0.17	0.16	0.30	-0.17	0.16	0.30
Female	-0.45	0.11	0.00	-0.46	0.11	0.00	-0.45	0.11	0.00
Newspaper	0.57	0.15	0.00	0.55	0.15	0.00	0.56	0.15	0.00
TV News	0.60	0.16	0.00	0.59	0.15	0.00	0.59	0.16	0.00
Internet News	-0.50	0.29	0.08	-0.49	0.28	0.08	-0.49	0.28	0.08
Constant	-2.05	0.23	0.00	-2.05	0.22	0.00	-2.04	0.22	0.00

N = 2035

respondent gave \$50 to a Conservative, \$40 to a Liberal and \$30 to a New Democrat, then Max-Min would read 0.2  $((\$50-\$30)/100)$ . Max-Mean would read 0.15  $((\$50-(\$40 + \$30)/2)/100)$ . Obviously, these two measures are closely related ( $r = .95, p = .00$ ). As can be seen in Table 6, these variables perform as expected, that is, as the difference between antipathy and affinity increases, the probability of turnout also increases. Taken together, these results suggest that the principal results of the paper are robust to the inclusion of a measure of general altruism. Moreover, they are not driven only by group size.