BEYOND THE SELF: SOCIAL IDENTITY, ALTRUISM, AND POLITICAL PARTICIPATION

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ABSTRACT

Scholars have recently extended the traditional calculus of participation model by adding a term for benefits to others. We advance this work by distinguishing theoretically a concern for others in general (altruism) from a concern for others in certain groups (social identification). We posit that both concerns generate increased benefits from participation. To test these theories, we use allocations in dictator games towards an unidentified anonymous recipient and two recipients identified only as a registered Democrat or a registered Republican. These allocations permit a distinction between altruism and social identification. The results show that both altruism and social identification significantly increase political participation. The results also demonstrate the usefulness of incorporating benefits that stem from sources beyond material self-interest into rational choice models of participation.

"Avarice, or the desire for gain, is a universal passion which operates at all times, in all places, and upon all persons" (Hume 1742/1991, *Of the rise and progress of the arts and sciences*, 113)

A large body of work, ancient and modern, posits that self-interest is the primal force for political attitudes and behaviors. Although this parsimonious assumption explains many observed political phenomena, it fails to illuminate some of the most important features of political life (Citrin and Green 1990; Mansbridge 1990; Sears and Funk 1991). For example, rational choice scholars have typically approached the problem of political participation by using models based on pure self-interest (Aldrich 1993; Downs 1957/1985; Feddersen & Pesendorfer 1996; Ledyard 1982; Palfrey and Rosenthal 1985). These models encounter a well-known difficulty: although an individual may derive personal benefits from a certain political outcome, the probability that a single act of participation will significantly affect the outcome is very small in large populations. This gives individuals an incentive to avoid the costs of participation and free ride on the efforts of others, producing the well-known paradox of participation.

If self-interest does not motivate political participation, then what does? One possibility is that individuals consider benefits to others, beyond the self, when deciding whether or not to participate. Even Downs, so often portrayed as the archetypal champion of self-interest as a motivating factor political choice, states that a concern for the welfare of others might influence political attitudes and behaviors: "In reality, men are not always selfish, even in politics. They frequently do what appears to be individually irrational because they believe it is socially rational—i.e., it benefits others even though it harms them socially" (1957/1985, 27). Extending the foundation for political choice beyond the self is not an easy task. It forces analysts to confront an important question: when individuals decide whether and how to act, to whom do they refer? On whose benefit will they act?

In this article, we distinguish theoretically two different kinds of other-regarding considerations that influence political participation. Some people are motivated by *social identification*, which creates a desire to improve the welfare of certain groups in society, possibly at the expense of other groups. These individuals will likely participate when they believe that their actions will give them an opportunity to help their preferred group(s). Other people are

motivated by *altruism*, a willingness to pay a personal cost to provide benefits to others in general, regardless of the identity of the beneficiaries. These individuals will likely participate when they believe that their actions will give them an opportunity to make everyone better off. Our core expectation is that altruists and social identifiers will participate more than egoists—that is, individuals who are primarily self-interested.

We test the social identifier and altruism theories of participation using a unique experimental design. Subjects are asked a number of standard questions regarding their socioeconomic status, political attitudes, and participation behavior. They then play three "dictator" games (Forsythe et al. 1994), in which they divide a set of lottery tickets between themselves and an anonymous individual. The recipient is completely anonymous in all three games. However, in two of the games, subjects are informed that the recipient is a registered Democrat or a registered Republican. We use these dictator games to uncover the degree to which each subject is generally concerned about the well-being of others, as evidenced by allocations to the unidentified anonymous recipient, and the degree to which each subject socially identifies with the political parties, as shown by allocations to the Democrat and Republican.

These experiments yield several novel results for behavior in the dictator game and its relationship to political participation. First, we show that behaviors in these dictator games reveal a key characteristic of social identification: a *preference for the in-group versus the out-group*. Democrats and Republicans both give more to the recipient from their own party than the opposing party; independents give more to the anonymous recipient than the partisan recipients, while partisans do just the opposite. Second, behaviors in these dictator games reveal that *strength of social identity* magnifies preferences for the in-group. Subjects who identify themselves as strong Democrats and strong Republicans tend to give much less to the recipient from the opposing party than partisans identifying with weaker affiliations. Third, we uncover a *bias against Republicans*. The Republican recipient tends to receive less than the Democrat or the unidentified anonymous recipient, even when the donor is a Republican. Finally, both *altruism* and *social identity increase political participation*. People who share with an anonymous individual in the dictator game participate in politics more than those who do not

share. People who vary the amount they give depending on the partisan affiliation of the recipient also participate more than those who give (or withhold) the same amount to (from) everyone. These results suggest that other-regarding behavior plays an important role in the decision to participate.

Our work has broad implications for existing scholarship in several fields. Since it is the first examination of the impact of partisanship on dictator game allocations, this work should be of interest to behavioral and experimental economists. It should also be of interest to psychologists and sociologists, since our uniquely-designed dictator game provides a novel means of tapping social identity. Most existing work on social identification does not force individuals to sacrifice their own material well-being in order to affirm support for their in-groups, but in the dictator game, social identifiers must deliberately deprive themselves of personal rewards so that they can affirm the position of someone else in their group. In our design, affirming social identification has a cost. We demonstrate that subjects are in fact willing to bear this cost, and we demonstrate the political consequences of this behavior. Finally, our work should be of interest to political scientists, since we not only introduce an innovation in the measurement of dispositions towards groups and others in general, but we also identify the political implications of these dispositions by using them to predict political participation. Our work therefore allows us to address the literature on rational choice by demonstrating that the core motivational elements of rational choice theory need not rest entirely or solely on self-interest, that other-regarding behavior can and should be taken into account, and that rationality in no obvious or necessary way requires material self-interest to be privileged as the primary motivator in models of political behavior.

SOCIAL IDENTITY, ALTRUISM, AND PARTICIPATION

Traditional rational models of participation based on self-interest posit that individuals receive a benefit B from some political activity if their preferred outcome occurs. However, the participatory acts that yield this outcome are individually costly (e.g., Aldrich 1993; Downs 1957/1985; Feddersen & Pesendorfer 1996; Ledyard 1982; Palfrey and Rosenthal 1985). The sticking point for these models is that a single act of participation usually has only a very small probability P of affecting some political outcome. For example, if the participatory act is voting,

then the outcome can only be changed when there is an exact tie, or when the vote can create a tie. If the participatory act is a contribution of money or time to a candidate or political organization, it may be just one of thousands or even millions of other contributions. Thus, the *expected* benefit of participation *PB* is typically less than the cost *C*, even when populations are not too large and even when the cost of participation is very low.

Riker and Ordeshook's (1968) *D* term seems to offer one solution to the paradox of voting. The *D* term suggests that individuals who participate in politics derive a benefit associated with the act of voting, resulting from satisfying a sense of citizen obligation, affirming their allegiance to the political system or reinforcing their own sense of efficacy. This benefit associated with completing the act of voting is orthogonal to the benefits derived from the policy outcome of the political action. Thus, political participation is an *expressive* act in which the desired policy outcomes are essentially irrelevant in the participation calculus, given how small *P* and *B* are.[1]

The *D* term provides one answer to the paradox of voting, but it is not the only answer. We argue that citizens can consider political action to be *instrumental* not only for themselves but for others as well. Empirical research suggests this to be the case: activists frequently participate in politics in order to enact changes in public policy—that is, they act for instrumental reasons—no matter how "irrational" this motivation seems (Schlozman, Verba, and Brady 1995). Further, activists frequently note that the political stakes of participation affect individuals beyond themselves and their families (Schlozman, Verba, and Brady 1995). That is, they act instrumentally, not just for their own benefit, but for the benefit of others. As such, the policy outcomes of political actions should affect individual decision-making. We explicitly address

[1] Riker and Ordeshook's (1968) approach is decision-theoretic and based on assumption that the *D* term is exogenous. However, two recent attempts to endogenize the *D* term in a game theoretic model show that "ethical" preferences can help to explain turnout even when voters are well informed and fully strategic (Coate and Conlin 2004; Feddersen and Sandroni 2006a, 2006b). These models suggest that voters act as social planners by trying to maximize social welfare, and they gain utility from "doing their part." However, both of these models assume that voters prefer the lowest turnout possible and neither of these models considers the possibility that voters might care about the *distributive* implications of political outcomes that provide benefits to some groups at a cost to others.

the possibility that an individual may care about the impact of policies as these policies apply beyond the self. We do so by incorporating social identity and altruism into the calculus of participation. Note that the benefits associated with altruism and social identification are distinct from those captured by the *D* term. The *D* term can be conceived of as system affirmation or fulfillment of a moral obligation to participate. Moreover, the *D* term is independent of political outcomes—people with a strong sense of social obligation will participate even if they think the act of participating will have no influence on benefits derived from policy outcomes. In contrast, we argue that altruism and social identity will encourage political action in order to benefit others, generally or specifically; altruism and social identity affect *B*.

According to social identity theory, individuals yearn to acquire and maintain a positive self-identity (Tajfel 1981). This sense of self is derived in large part from formal membership with or psychological attachment to social groupings. In contrast with a theory based purely on self-interest, social identity theory suggests that individuals gain utility from affiliating with social groups, from bestowing benefits upon the in-group, and from withholding benefits from the out-group. Social identity theory resonates with Converse's (1964) observation that the fundamental way in which many citizens understand politics is through groups. Social identity theory implies that individuals will make political choices by using specific groups rather than the self as a reference point. Social identity predicts policy preferences (Campbell et al. 1960/1980; Kinder and Winter 2001; Price 1989), and under some conditions, social identity spurs collective action (for a review, see Huddy 2003). So far, however, the literature has not linked social identity with the policy-oriented benefits of participation in an attempt to address the paradox of participation.[2]

We argue that social identifiers may be spurred into political action when they believe that political outcomes will positively affect members of their group. When individuals perceive

[2] One exception worth noting is Uhlaner's (1989) treatment of group members, group leaders, and candidates in her formal model of turnout. She argues that group leaders can manipulate the costs and benefits of voting, e.g., through ostracism of abstainers or social invitations directed at compliers. This approach differs from ours because group leaders manipulate benefits obtained from the act of voting – where the act of voting is still *expressive* and not *instrumental*, and the instrumental functions of voting remain untouched by the actions of group leaders.

political outcomes as distributive – as opportunities to transfer resources from out-groups to their in-group – social identifiers should be more likely to participate than individuals who are self-interested. Moreover, as people identify more strongly with their in-group or more strongly against some out-group, they should experience greater benefits from distributive politics and thus be more likely to participate.

While social identity theory suggests that individuals partition the world into in-groups and out-groups, in a wide range of contexts, human beings have been observed to be motivated by the welfare of others in general (Fehr and Fischbacher 2003; Monroe 1996; Piliavin and Charng 1990). They engage in acts of *altruism*, or "behavior intended to benefit another, even when this risks possible sacrifice to the welfare of the actor" (Monroe 1996, 6). In contrast with social identifiers, altruists do not typically target individuals from certain groups for benefits. Monroe (1996) explains that individuals who are willing to engage in uncommon acts of altruism express a sense of universalism in viewing the human condition. Instead of viewing an individual (and the self, in particular) as tied to specific social groupings, altruists "share a view of the world in which all people are one" (1996, 198). Thus, while social identifiers are more likely to help members of their in-group, altruists are unlikely to discriminate in whom they help.[3]

Scholars have recently incorporated altruism into the traditional calculus of participation model by assuming that each citizen also cares about the benefits that others secure from the preferred outcome (Edlin, Gelman, and Kaplan 2007; Fowler 2006; Jankowski 2002, 2004). Although a single participatory act may have little effect on a political outcome, the number of people who benefit may be quite large. Thus, those who exhibit a sufficient degree of concern for the welfare of others will be willing to engage in costly political participation. Moreover, as people become more concerned for the welfare of others, they should experience greater benefits

[3] Note that we do not address the evolutionary or social origins of altruism and other forms of non-self-interested behavior as has been done elsewhere (e.g., Samuelson 1993). Our primary interest here is in how variation in altruism and social identification predicts political participation.

when political outcomes portend improvements for the welfare of others generally. Thus, altruists will be more likely to participate than individuals who are self-interested.[4]

Political outcomes might be construed by individuals as improving the general welfare and/or as favoring particular social and political groups. Consequently, the decision to participate in politics may be motivated by *both* a desire to make things better for everyone (altruism) and a desire specifically to acquire as many benefits as possible for the in-group (social identification). Thus the benefit from participation may be derived by some combination of self-interest, altruism, and social identity.

FINDING ALTRUISTS AND SOCIAL IDENTIFIERS AMONG DICTATORS

Our study contributes to existing empirical work by adopting an innovative measure of altruism and social identity. Previous attempts to examine the relationship between other-regarding behavior and participation have relied on questions in the National Election Study (NES) pilots. Knack (1992) creates an index of "social altruism" from questions about charity, volunteer work, and community involvement on the 1991 NES Pilot Study and finds a positive relationship between the index and voter turnout. However, the questions used in the index are very close to those used by scholars who argue that organizational involvement (not altruism) enhances political participation (Verba, Schlozman, and Brady 1995). Jankowski (2004) finds a relationship between voter turnout and "humanitarian" norms (i.e., agreement with the statement that "One of the problems of today's society is that people are often not kind enough to others"). These questions certainly reflect expectations about the altruism of *others*, but it is not clear how they relate to the respondent's own willingness to bear costs to provide benefits to others. Typical measures of social identification rely upon self-reports (Kinder and Winter 2001) or are based on group membership (Price 1989).

The above studies rely on respondents' *expressed* preferences for helping others generally, or for identifying with a group. In neither case do respondents actually experience a cost in order to give a benefit to someone else. In contrast, preferences for helping others are *revealed* in what experimental economists call the "dictator game" (Forsythe et al. 1994). In this

[4] For a formalized sketch of how altruism and social identity might be inserted into the classic paradox of voting model, see the online appendix: http://journalofpolitics.org.

game, the experimenter gives player 1 a certain amount of money and then asks the subject to divide that money between herself and player 2.[5] If player 1 is motivated only by her own economic gain, she should keep all the money for herself and allocate nothing to player 2. However, this is not what players normally do. In a survey of dictator game results, Camerer (2003) shows that the mean allocation to player 2 ranges from 10% to 52%. Anonymity conditions tend to decrease the mean allocation, but even in the most anonymous treatments (Hoffman et al. 1994) about 40% of the allocations still exceed 0.

Interpretations of Excess Giving in the Dictator Game

Excess giving in dictator games is a replicable empirical regularity. Scholars offer several explanations for this excess. We adopt the most prominent explanation: altruism—that individuals engage in "other-regarding" behavior. The altruism explanation suggests that dictators give to others because they want to improve the well-being of other individuals, even when doing so impinges on their own material interests. In his thorough overview of dictator games, Camerer notes that "there is some pure altruism" that explains excess giving (2003, 56). For example, in their study of altruism and dictator games, Eckel and Grossman (1996) manipulate the target of the giving; they find that subjects are much more likely to give when the target is the Red Cross. Eckel and Grossman conclude that "altruism is a motivating factor in human behavior in general and in dictator games in particular" (1996, 182).

A companion explanation for excess giving is a taste for fairness; this fairness hypothesis is often discussed interchangeably with altruism, but they are distinguishable from each other. The altruism explanation hinges upon the idea that individuals care about others' welfare. The fairness explanation in its simplest formulation is standards-oriented: an individual cares that the division of goods satisfies some standard of equity (typically, in the standard dictator game, one-half). Further elaborations of the fairness explanation tilt the balance even more towards the self: Fehr and Schmidt (1999) offer an extension of this line of reasoning in suggesting that individuals care about not just equity in outcomes across individuals but also about the absolute

[5] Unlike the ultimatum game (c.f. Hibbing and Alford 2004), the dictator game does not give player 2 an opportunity to accept or reject the offer. In the dictator game, player 2 simply pockets the money that player 1 allocates to her and the game is over.

difference between an individual's allocations vis-à-vis that of other individuals. They specify an asymmetric utility function, where individuals receive the most utility when payoffs are equal, slight (and increasing) disutility from being advantaged when compared to others ("guilt", per Camerer 2003, 102), and sharper (and increasingly sharper) disutility from being disadvantaged compared to others ("envy", per Camerer 2003, 102) . Yet, even after incorporating a sense of fairness, guilt, and envy into account, Fehr and Schmidt still note that, "Altruism is consistent with voluntary giving in dictator and other public good games" (1999, 854).[6,7]

In an ingenious design that compares the altruism and fairness interpretations, Andreoni and Miller (2002) examine choices in a series of dictator games with different payoffs. In some treatments, player 2 is given \$0.20 or \$0.30 for every \$0.10 player 1 allocates. In other treatments, player 1 must allocate \$0.20 or \$0.30 for every \$0.10 player 2 receives. By varying the payoffs, Andreoni and Miller are able to distinguish between individuals who give in order to equalize payoffs (whom they call "Rawlsians") and those who give in order to maximize total payoffs to both players (whom they call "utilitarians"). The results show that about 2/3 of those who incorporate the recipient's utility in their decision can be described as "utilitarians." Thus, while a concern for fairness undoubtedly plays an important role, altruism, or consideration of others' welfare, appears to be the dominant motivation behind giving in the dictator game.

Another explanation for excess giving rests on the notion of reciprocity. Hoffman et al. (1994) and Hoffman, McCabe, and Smith (1996a) argue that excess giving occurs in order to

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[6]Using a similar approach, the Bolton and Ockenfels (2000) Equity, Reciprocity, and Competition (ERC) Model specifies that individuals receive utility from their own level of material standing and from their relative standing compared with others. The core argument, thus, is that individuals do not really care about making others better off; instead, they take their own standing and the relative standing of others into account. However, the ERC still includes the notion of a "social reference point," a standard against which decisions are measured. In dictator games, this social reference point is an equal division of the payouts. The notion of equity, or fairness, has a pivotal place in this formulation. A subtle distinction between the Fehr and Schmidt (1999) and Bolton and Ockenfels (2000) models is that in the former, individuals care about the absolute level of difference between themselves and others, whereas in the latter, individuals care about their relative shares in the allocations rather than absolute differences in these shares (Camerer 2003, 104).

[7] Fehr and Schmidt (1999) note that it is harder to account for behaviors in other games using altruism. This is not a central concern of ours in this paper, as we do not believe that other games provide as appropriate a means of tapping altruism.

satisfy norms of reciprocity. Dictators give to others because future rewards are contingent upon the individual's "social reputation as a cooperative other-regarding person" (Smith 2000, 84). Dictators thus give more than would be expected because they are concerned, in the short run, that appearing "greedy" will decrease the likelihood that they would be invited back for more experiments, or they are concerned in the long run of other negative consequences for themselves. To dispute this reciprocity argument, Johannesson and Persson (2000)manipulate the target recipient in a dictator game, specifying that the recipient is one of the other subjects recruited for the study or a randomly selected individual from the general population. They argue that, "If donations in dictator games are motivated solely by reciprocity, donations should therefore drop to zero with this experimental treatment" (2000, 138). Johannesson and Persson are unable to reject the null hypothesis of no difference between the two groups, which suggests that excess giving in the dictator game cannot be ascribed to reciprocity on its own.

A final explanation for excess giving is that subjects do not understand the game and are just making random allocations. Andreoni and Miller (2002) address this concern by examining within-subject patterns of choices in their series of dictator games with different payoffs. They find that 98% of the subjects make choices that are consistent with the general axiom of revealed preferences across eight treatments, suggesting that most of them understand the game and are not choosing randomly.

These results from the literature on giving in the dictator game suggest that while there are several factors that might explain giving, dictator game allocations may be a good proxy for an individual's concern for the well-being of others. The well-being of others is probably more important to a person who chooses to allocate 20% than one who allocates 0%. In fact, the utility function used in Andreoni and Miller (2002) to explain behavior in the dictator game yields a monotonic relationship between the equilibrium allocation in the dictator game and the weight a player places on the other player's utility. In other words, the more a player cares about the well-being of others, the more she will allocate to the other player in the dictator game.

Tapping Altruism and Social Identity in a Unique Dictator Game

Behavior in dictator games can reveal other-regardingness at a general level (that is, altruism). We can also use dictator games to investigate whether or not individuals exhibit

politically relevant group-based preferences. Past experiments have varied the characteristics of the anonymous recipient with some interesting results. People are more willing to give to charities than an anonymous individual (Eckel and Grossman 1996), to women (Saad and Gill 2001), and to people who have been introduced to them (Bohnet & Frey 1999). In their experiment, Bohnet and Frey manipulate the amount of information provided about the target to the dictator. They find that more information "transforms anonymous, faceless entities into visible, specified human beings, i.e., identifiable victims" (1999, 339). They argue that this pattern of increased giving suggests that, "the more we know, the more we care," (citation from Schelling 1968). Camerer notes that the "identification effect is target specific and is not the result of general sympathy toward others" (2003, 76).

Our design enables us to capture this distinction between concern for others, generally, and a concern for specific groups. We are interested in whether or not people give more to members of one political group than another, or whether they give the same amount to an anonymous individual versus individuals affiliated with groups. By varying information about the political group to which the target recipient belongs, we can uncover the extent to which social identity might drive allocation decisions. In contrast to Bohnet and Frey (1999), we compare giving in the anonymous game with giving to anonymous individuals affiliated with political parties. As a result, we find that there is an important qualification to the observation that decreasing social distance increases giving: it is not just the more you know, but both the more you know plus how you feel about the target. Dictators can, as Camerer notes, show "empathy or contempt" (2003, 76).

We select individuals from partisan groups as target recipients because political parties are among the most relevant groupings in political life. As Campbell, Converse, Miller, and Stokes argue, "the strength and direction of party identification are facts of central importance in accounting for attitude and behavior" (1960/1980, 121). Identification with parties is typically measured with a seven-point Likert scale of subjective identification, although it has also been measured with self-reports on closeness to parties and implicit associations (Huddy 2003). These measures of social identification allow individuals to claim allegiance or closeness to groups, but they do not require individuals to sacrifice anything personally in making such a

claim. Using dictator game allocations as a measure of social identification is a methodological innovation. The dictator game enables us to measure an individual's willingness not only to claim allegiance to a party *but also* to affirm that allegiance by withholding material benefits *from the self* in order to transfer benefits to a different individual who happens to be a member of the in-group. Further, the nature of political competition makes it more socially acceptable for individuals to confer benefits to in-partisans and deny benefits to out-partisans (as opposed, to, say, racial groupings which might invoke social desirability concerns). This social acceptability thus improves our ability to distinguish between self-interested, social-identity-based, and altruistic behavior.

In December 2004, about 350 subjects were recruited from undergraduate political science and sociology courses at a large Western public university to participate in a computer-based survey.[8] Subjects were offered credit towards their course grade to participate in the study; 306 (about 85%) of them elected to do so. Each individual answered a number of standard questions regarding their socioeconomic status, political attitudes, and participation behavior and then played three dictator games.[9] In one game, subjects are told, "You know nothing about this anonymous individual." In the other two games subjects are told, "The only thing you know about this individual is that he or she is a registered Republican [Democrat]." The order of these treatments is randomized and a variable indicating the order is included in the analysis below. Allocations to the anonymous recipient reveal the degree to which each subject cares about the well-being of others generally, while allocations to the Democrat and Republican reveal the extent to which subjects are motivated by social identity.

In a typical dictator game, subjects are given a small amount of money ($5 to $10) and they then give back the portion of the money they choose to allocate to the other player. This

[8] Subjects range in age from 18 to 43 years; the average age is 21. The sample consists of 56% women and 43% minority; it is quite similar to the undergraduate body from which it is drawn (the undergraduate body is 56% female and 51% minority). The median family income is about $80,000 a year. The average subject leans left and Democratic—the modal response to the liberal-conservative seven-point scale is a "2", or "liberal" (30% of the sample), and 57% of subjects identify as Democratic.

[9] For a summary and exact question wording, see the online appendix: http://journalofpolitics.org.

procedure can be very costly for larger samples, so we employ a different technique. Subjects are given ten lottery tickets that each have an equal chance of winning a prize of $100.[10] They are then given two identical opaque envelopes. They are asked to place the tickets they wish to keep for themselves in one envelope and the tickets they wish to share with an anonymous individual in the other envelope. They seal both envelopes, place the envelope designated for the anonymous individual in a locked mailbox under their computer, and then keep the other envelope for themselves. They then type on the computer the number of tickets they kept for themselves.[11] Computers and the locked mailboxes are separated by partitions to protect the anonymity of choices each subject makes. After the study a ticket number for each of the three dictator game prizes was drawn and announced by email to participants.[12] All three prizes were claimed.

PARTISANSHIP AND DICTATOR GAME ALLOCATIONS

We begin with mean allocations for each of the three kinds of recipients. In general, results from the dictator game in this experiment appear to be similar to those of other researchers. Forsythe et al. (1994) specifically compare "with pay" dictator games in which

[10] One important difference between our method and the typical dictator game is the stake size. Note that the expected value of the prize is only $100/N≈$0.33. 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, Forsythe et al. (1994) and 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.

[11] A chi-square test of the distribution of computer responses and the distribution of tickets that were physically placed in the mailboxes suggests that these two distributions are not statistically different.

[12] In many dictator games the recipients are also subjects. This was not true in our experiment – recipients are drawn randomly from the U.S. population, (this is also the case in Johannesson and Persson 2000, who send the allocations to a randomly drawn individual in the Swedish population). Increasing the social distance between the dictator and the recipient should minimize the potential effect of reciprocity, and thus make altruism a more compelling explanation for excess giving (Johannesson and Persson 2000). We did not hand all the envelopes with donated tickets to randomly-chosen individuals. Instead, we waited to see if a donor claimed the prize for a given dictator game. If they did not, then we used random digit dialing to locate an individual and request their name and address (and partisanship for the Republican and Democrat treatments) and mail them the prize.

subjects are given $5 or $10 to divide and "without pay" dictator games in which subjects are asked to make hypothetical choices. They find that more people keep everything for themselves in the "with pay" treatment (30.4% vs. 13.0%) and the mean allocation is lower (22.6% vs. 38.7%). By comparison, subjects in this experiment were even more likely (38.0%) to keep everything for themselves than those in both treatments. However, the mean allocation (29.9%) falls between the two treatments. This suggests that the lottery mechanism used in our design is replicating at least some of the incentives from dictator games that use cash stakes.[13]

Before moving to tests of the relationship between social identity, altruism, and participation, we discuss how social identity manifests itself in the dictator game results. No previous studies have examined the effect of partisanship on dictator game allocations, so we probe this relationship in some detail. Our experimental design provides us with a unique opportunity to test several hypotheses about social identification behavior as it applies to partisanship:

Preference for the in-group over the out-group: Partisan identifiers will be more generous when asked to allocate rewards between themselves and a member of their own party compared with a member of the opposition party. Partisan identifiers will also be more generous to an in-group member compared with someone not in the in-group (the anonymous individual). This implies that Democratic identifiers will give more to a Democratic target than a Republican target, and Democratic identifiers will give more to a Democratic target than an anonymous individual. Likewise, Republican identifiers will give more to a Republican target than a Democratic target, and Republican identifiers will give more to a Republican target than an anonymous individual. Independents will give less to a Democratic target and a Republican

[13] Another way to compare the results of this experiment to the existing literature is by examining the relationship between dictator game allocations and demographic variables. Camerer (2003) notes that most demographic factors have little effect on dictator game allocations, but there are two notable exceptions. Carpenter, Verhoogen, and Burks (2005) find that subjects with higher family incomes tend to give less, while Eckel and Grossman (1998) find that women tend to give more. Our results replicate both findings. Consistent with results from other dictator games, subjects from families with low incomes (below the median) give 6.4% more than subjects from families with high incomes to the anonymous recipient. Further, in this experiment, women give away 6.1% more tickets than men.

target than to the anonymous individual, since partisan targets are more obviously an "out-group" to independents than an anonymous individual would be.

Strength of social identity: The stronger the partisan attachment, the more the in-group should be rewarded and the more the out-group should be deprived. As such, we would expect strong Democrats to give more to a Democratic target than weak Democrats would and strong Republicans to give more to a Republican target than weak Republicans would. Conversely, strong Democrats will likely withhold more from a Republican target than weak Democrats will; strong Republicans will withhold more from a Democratic target than weak Republicans will.

Bias against Republicans: Experimental work suggests that individuals may discriminate against members of different groups when they are choosing whether or not to bear a personal cost to help them. Additionally, considerations of deservingness enter into dictators' decisions. For example, Eckel and Grossman (1996) note that altruism increases when the recipient appears to be more "deserving" or in need of resources (for more on deservingness, see Hoffmann, McCabe, and Smith 1996b and Burrows and Loomes 1994). The Republican Party has typically been associated with business interests and the wealthy, whereas the Democratic Party has typically been associated with the working class and the less-advantaged (Bastedo and Lodge 1980; Campbell et al. 1960/1980; Miller, Wlezien, and Hildreth 1991). These associations imply that, on average, individuals might be less generous towards a Republican target compared with a Democratic target.

Table 1 shows mean allocations in the dictator game by partisanship of the donor and recipient. Notice first that the Republican recipient receives 2.8% less on average than the Democrat from all donors. However, this difference may be due to the larger number of Democrats in the sample. When we take into account the partisanship of the donor, mean allocations tend to diverge along party lines. Subjects who identify themselves as Democrats and Republicans both give about the same amount to the anonymous recipient, but they tend to give more to the recipient from their own party, suggesting in-group favoritism occurs. Notice that the Republican recipient inspires the largest divergence, receiving 6.7% more from Republican donors than Democratic donors, or about a fifth of the mean allocation.

/Table 1 About Here/

Table 2 indicates that both direction and strength of partisanship are significantly related to dictator game allocations. Strong partisans give most to in-party targets, and they give significantly less to the anonymous recipient (Wilcoxon signed rank test, p=0.007) and to the out-party target (p=0.001). Weak partisans show about the same degree of favoritism towards the in-party target, but they show much less hostility towards the out-party target, compared with strong partisans. Weak partisans also show much more generosity towards the anonymous recipient compared with strong partisans. This evidence suggests that strength of partisanship does not necessarily affect generosity towards the in-group, but it does affect punishment of the out-group. The stronger the partisanship, the greater the propensity to withhold benefits from those not explicitly affiliated with the in-group. We also see that independents make distinctions as well – but differently from partisans. Independents are much more inclined to be generous towards an anonymous individual compared with a partisan identifier. This is consistent with our expectation that independents see themselves as a group separate from the major political parties and thus are less generous towards these explicit out-groups compared with the anonymous individual.

/Table 2 About Here/

Recall that a single subject participates in three dictator games, so our design enables us to determine how the partisanship of the target recipient affects the within-subject tendency to give more to some political groups and less to others. About 61.7% of the subjects gave exactly the same amount to the registered Democrat and registered Republican that they gave to the anonymous recipient. The remaining 38.3% of the subjects discriminated across targets, changing their allocation in at least one of the games based solely on information about the partisanship of the recipient. Table 3 shows each of the three possible combinations of within-subject differences in the amount given to the anonymous and partisan recipients and how this breaks down by partisanship of the donor. First, note that the average subject gave somewhat less to the Republican than the Democrat or anonymous donor, yielding additional evidence for an anti-Republican bias in giving. The partisan identity of the donor also seems to have an effect on allocations. Democrats give significantly less to the Republican than the Democrat or anonymous recipient. Republicans give more to the Republican than the Democrat

or anonymous recipient, but the significance of the difference is weak. Once again, the raw data appears to suggest an in-party bias, with the strongest difference in behavior exhibited by Democrats towards Republicans. Finally, people who did not identify themselves as either a Democrat or Republican tend to give less to both the Republican and Democratic recipient. In fact, the mean difference for both is exactly the same at 6.2%, or about one fifth of the mean allocation. Although these differences are only weakly significant, they lend qualified support to the strength of social identification observed above. Partisans tend to receive less from nonpartisans and vice versa.

/Table 3 About Here/

To further assess the effect of partisanship on differences in dictator game allocations, Table 4 presents results from three sets of multiple regressions that also control for demographic factors.[14] The first set of results analyzes partisan discrimination: the extent to which subjects make distinctions between the Republican and Democratic targets. We see that partisan identification has a positive and significant effect on the difference in the amount given to the Republican vs. the Democrat, providing additional evidence for in-group preference and out-group hostility. The direction of partisan identification also has a positive and significant effect on the difference in the amount allocated to the Republican vs. the anonymous recipient. Given that there is no such effect for the difference in giving between the Democrat and the anonymous recipient, these two findings suggest that subjects give less to Republicans than other kinds of recipients and an anti-Republican bias exists.

/Table 4 About Here/

The regressions reveal partisan strength bias: strong partisans give 14% and 16% more than independents do to the Republican and Democratic targets, respectively. These results suggest that strong partisans see themselves as part of two in-groups, rewarding members of their

[14] In Tables 4 and 5 we use interval regression because the dependent variable is truncated at its minimum and maximum value (a player cannot take or give more than she has received from the experimenter and the difference in giving between the two experiments cannot be greater than 1). This estimation method is common in the literature on dictator games (e.g. see Carpenter, Verhoogen, and Burks 2004) and is conducted using maximum likelihood. We scale all variables from 0 to 1 for ease of comparison across coefficients and we report the residual deviance of the model and compare it to the null deviance of a model with a constant.

own party at the expense of the opposing party, and rewarding members of *any* party over those who do not affiliate with a party.

ALTRUISM, SOCIAL IDENTITY, AND POLITICAL PARTICIPATION

Our main expectation is that those who are motivated by altruism and by social identity will participate in politics more than those who are motivated by material self-interest. To test this expectation, we create a seven-point scale of participatory acts, including voting, contributing to a candidate, joining a political organization, donating to a political organization, attending a local board meeting, volunteering for a local board, and protesting.[15]

Participation is a function of the benefits that individuals receive, and benefits can be decomposed into three categories: benefits to the self, benefits to society generally, and benefits to a preferred group. First, the benefits from participation should increase as altruism increases, and second, the benefits from participation should increase as social identification increases. We operationalize the altruism incentive by using the proportion of tickets allocated towards the anonymous target in the dictator game, since this best captures the extent to which individuals are willing to give to others in general.[16] For the social identity incentive, we use a dummy

[15] About 73.4% said they voted in the 2004 general election (compared to official turnout of 81.4% for the city in which the study took place) while 20.6% said they had given money to a candidate. About 36.0% claimed to belong to a political organization but only 24.9% had given money to one. Two questions about local politics show that 19.3% regularly attend board meetings while 25.2% had volunteered at least once to serve in some capacity for a board. Finally, 42.2% said they had participated in at least one political protest. A participation index was created using an equally-weighted sum of responses to each of these seven questions. The average subject participated in 2.41 of these activities, with 12.5% of them never participating in any activity and 2.3% participating in all of them. The correlation between the participation index and the first component of a principal components analysis of these seven activities is 0.981 (±0.004, 95% confidence), suggesting that the index captures the main dimension that these activities share in common.

[16] Alternative specifications such as averaging the allocations for all three dictator games or using a dummy variable for individuals who gave more than the median amount yielded substantively identical results.

variable that is 0 if an individual gives the same amount in all three dictator games, and 1 otherwise, indicating the individual discriminates in giving based on partisanship of the target.[17]

The raw data provide initial support for the notion that both altruism and social identity drive political participation. Those who gave more than the median allocation (30% of their tickets) to the anonymous recipient participated in 2.64 of 7 activities compared to 2.24 activities for those who gave 30% or less. Social identifiers (those who gave different amounts depending on the partisanship of the recipient) participated in 2.74 activities compared to 2.21 for those who gave the same amount to all three recipients. One-sided *t*-tests suggest that both of these differences are significant (p=0.03, p=0.01, respectively).

We begin by estimating a simple model in which the participation index is regressed on the altruism and social identifier variables. This simple model appears in the first column of results in Table 5. Notice that even when we consider both altruism and social identity together in a single model, they continue to be positively and significantly related to participation. Table 5 also shows that when multiple covariates widely thought to affect participation are included in the model, altruism and social identity continue to have a strong and significant effect on participation.[18]

/Table 5 About Here/

To make these results more concrete, subjects who give everything to the anonymous recipient in the dictator game participate in 0.66 more activities than subjects who keep everything for themselves. In other words, altruists appear to be more likely to participate in politics than egoists. Moreover, subjects who change the amount they give based on the

[17] We also included various measures to capture the *strength* of social identification by incorporating the difference of all three allocations into a single variable, such as their variance or standard deviation. These alternative measures yielded substantively identical results, but we use the dummy variable approach here for transparency.

[18] We do not attempt to provide a *comprehensive* explanation of political participation. We aim to add the concepts of altruism and social identity to explanations of participation. Some of the factors that influence participation also influence allocations in the dictator game. In our regression model, we include a series of controls to rule out confounding factors that would bias our estimates of the effects of altruism and social identity (see Verba, Schlozman, and Brady 1995 for a comprehensive treatment of the control variables). Coding and question wording can be found in the web appendix: http://journalofpolitics.org.

partisanship of the recipient also participate in 0.40 more activities than those who give the same amount to each recipient. Thus, social identifiers participate in politics more than individuals who weigh benefits to all groups equally. Since variables in the model are dichotomous or scaled to range from 0 (sample minimum) to 1 (sample maximum), we can roughly compare effect sizes between independent variables by looking directly at the coefficients. Notice that the altruism and social identifier variables have a stronger effect than many other variables thought to be important. Only partisan strength, political interest, citizenship, and letter-writing skills are stronger predictors. Thus, these findings suggest that self-interest is not the only consideration that drives political participation. Rather, regard for others, generally, and regard for specific others, affiliated with groups, both predict participation.

CONCLUSION

While there can be no doubt that much of human behavior is motivated by self-interest, the results in this article suggest that other-regarding behavior may also contribute to political participation. Altruists who want to help others regardless of their group affiliation may have a larger incentive to participate than those who are merely self-interested. However, this will only be true when political outcomes are perceived as generating benefits for everyone—if political outcomes are perceived as being distributive, altruists gain nothing from shifting resources from one group to another. In contrast, social identifiers gain the most from participation when politics is distributive, since this gives them an opportunity to help acquire benefits for their in-group, and better so if this occurs at the expense of out-groups. Since political outcomes are frequently viewed as improving the general welfare as well as posing more generous gains to some groups over others, both altruists and social identifiers ought to participate more frequently than egoists, who are purely self-interested.

Our results show that social identity has an important effect on allocation decisions. Subjects exhibit a preference for the in-group over the out-group. Democrats and Republicans both give more to the recipient from their own party than the opposing party, and independents give more to the anonymous recipient than the partisan recipients, while partisans do just the opposite. These preferences are magnified by the strength of social identity. Subjects who

identify themselves as strong Democrats and strong Republicans tend to give much less to the recipient from the opposing party than other partisans.

We then use the dictator game allocations to test the altruism and social identity theories of participation and find that the evidence supports both theories. People who share with an anonymous individual in the dictator game participate more in politics than those who do not share. People who vary the amount they give depending on the partisan affiliation of the recipient also participate more in politics than those who give the same amount to everyone. Participation in political life is driven by considerations beyond the self.

We use dictator games in a laboratory setting to measure self-oriented, social-identity-oriented, and altruistic dispositions. The primary explanation for giving in dictator games focuses on other-regardingness, and this is the interpretation that we take. However, we note that other interpretations exist: subjects may give in order to fulfill an external standard of fairness, or because they feel it is their "duty" to make donations – that is, they donate in order to comport with some external standard for appropriate behavior. Or, they might give to fulfill norms of reciprocity, or they might give randomly. We think the existing evidence rallies primarily around other-regardingness as an explanation, and hence we interpret our results as such.

Our study, like most studies utilizing experimental economics, examines dictator behaviors among college students. A standard criticism of studies utilizing convenience samples is that these samples are atypical of the general population and any results are thus limited in their applicability to the general public. We note, however, that one must establish that the student sample is atypical from the general population *in ways that are relevant to the study in question* (Sears 1986). Our core contribution is in identifying an innovative way to measure of altruism and social identity and showing the empirical relationship between these measures and political activity. How would our results translate to the general public? Perhaps college students who are in a repeated-interactions environment would display, on average, higher levels of excess giving (to an anonymous individual and to a partisan) than members of the general population. It follows that perhaps the *level* of altruism and social identity may be higher in our convenience sample compared with a representative sample. However, we have no reason to expect that the *relationship* between altruistic and identity-based giving would differentially

predict political participation. Hence, although we acknowledge that our empirical example may hold limited generalizability, we do not dismiss the possibility that these results could be replicated in the general population. (And, in fact, we are in the process of replicating these results in a general population study).

Altruism and social identity are likely to have broader applications beyond political participation, and our innovative measures might serve other researchers' purposes in this regard. At a very general level, altruism and social identity might have implications for individuals' understandings of politics and subsequent beliefs about political processes. Social identifiers may see politics as a competition among groups for governmental outputs, and thus they would favor political processes that would allow groups opportunities to press for their own cases. Altruists may see politics as a forum for the production of policies to improve the public good, and thus they might favor political processes that foster wide participation and dialogue. More narrowly, altruism and social identity could have implications for policy preferences. Altruists may oppose policies that are targeted at specific groups and instead favor policies that are more generally applied, much as humanitarians might (Feldman and Steenbergen 2001). Social identifiers are likely to support policies that disproportionately help their own group; to oppose policies that help other groups; and perhaps to provide the most support for policies that increase the standing of their own group at the expense of other groups.

Finally, the altruism and social identifier theories of participation have important implications for rational choice. The rationality assumption means only that people have preferences that are complete and transitive. Notice that the words "self-interest" appear nowhere in this definition (Jackman 1993). While it is true that most rational models are based on material self-interest, a concern for others need not be excluded from these models. Social identity theory suggests people gain utility by helping their in-group, often at the expense of an out-group. Theories of altruism suggest that people gain utility by providing benefits to others, even when it is personally costly. Rational calculations need not be limited to narrow definitions of material self-interest, especially since such models have failed to explain observable behavior. The evidence clearly suggests that individuals look beyond the self when deciding whether or not to participate in politics.

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TABLES

Table 1. Partisanship and Allocations in the Dictator Game

Donor	*Anonymous Recipient*	*Democrat Recipient*	*Republican Recipient*	*N*
All	29.9%	30.1	27.3	306
Democrat	29.6	31.5	26.0	173
Republican	29.2	29.6	32.7	78
Difference	0.4	1.9	-6.7	
p-value	0.41	0.23	0.02	

Note: p-values reflect probability that true relationship is opposite to the sign of the difference (Wilcoxon signed rank test).

Table 2. Strength of Partisanship and Allocations in the Dictator Game

	Anonymous	*Partisan Recipients*		
Donor	*Recipient*	*In-Party*	*Out-Party*	*N*
Strong Partisan	24.4	31.7	23.3	127
Weak Partisan	34.6	32.0	31.0	124
Independents	32.0	26.7		55

Table 3. Within-Subject Difference in Giving to Anonymous and Partisan Recipients

	Amount Given to Republican Minus Amount Given to Democrat		*Amount Given to Republican Minus Amount Given to Anonymous*		*Amount Given to Democrat Minus Amount Given to Anonymous*	
Donor	*Mean*	*p-value*	*Mean*	*p-value*	*Mean*	*p-value*
All	-2.8%	0.01	-2.2	0.09	0.3	0.28
Democrat	-5.5	0.00	-3.6	0.03	1.9	0.19
Republican	2.8	0.16	4.1	0.10	1.2	0.33
Independent	-2.1	0.32	-6.2	0.19	-6.2	0.05

Note: p-values reflect probability that true relationship is opposite to the sign of the difference (Wilcoxon ranked sign test).

Table 4. Determinants of Within-Subject Differences in Giving in Dictator Games with Anonymous and Partisan Recipients

	Amount Given to Republican Minus Amount Given to Democrat			*Amount Given to Republican Minus Amount Given to Anonymous*			*Amount Given to Democrat Minus Amount Given to Anonymous*		
	Coef.	*S.E.*	*p*	*Coef.*	*S.E.*	*p*	*Coef.*	*S.E.*	*p*
Donor Characteristics:									
Partisan Identification	0.11	(0.05)	0.01	0.12	(0.05)	0.01	0.01	(0.04)	0.42
Partisan Strength	-0.03	(0.06)	0.32	0.14	(0.06)	0.02	0.16	(0.06)	0.00
High Income	0.01	(0.03)	0.41	0.04	(0.04)	0.11	0.04	(0.03)	0.13
Female	-0.05	(0.03)	0.08	-0.07	(0.03)	0.03	-0.02	(0.03)	0.24
White	0.01	(0.04)	0.37	-0.02	(0.04)	0.28	-0.03	(0.03)	0.15
Order Variables:									
Republican First	-0.04	(0.04)	0.15	0.00	(0.04)	0.46	0.04	(0.04)	0.10
Democrat First	-0.04	(0.04)	0.15	-0.04	(0.04)	0.14	0.00	(0.04)	0.47
Constant	0.00	(0.06)	0.48	-0.12	(0.06)	0.03	-0.12	(0.06)	0.01
Log scale variable	-1.28	(0.04)	0.00	-1.24	(0.04)	0.00	-1.38	(0.04)	0.00
Deviance / Null Deviance	-43 / -57			108 / 123			23 / 35		

Note: $N = 300$. Interval regression, where dependent variable is within-subject difference in allocation in the dictator game. All independent variables are dichotomous except the partisan variables which are scaled from 0 to 1. Order variables indicate which dictator game subject played first.

Table 5. Altruism, Social Identification, and Political Participation

	Dependent Variable: Political Activity Index					
	Simple Model			*Model with Controls*		
	Coef.	*S.E.*	*p*	*Coef.*	*S.E.*	*p*
Other-Regarding Variables						
Altruism	0.74	(0.39)	0.03	0.66	(0.29)	0.01
Social Identifier	0.57	(0.24)	0.01	0.40	(0.18)	0.01
Political Variables						
Partisan Identification				-0.46	(0.26)	0.04
Partisan Strength				1.05	(0.34)	0.00
Political Interest				2.66	(0.40)	0.00
Political Information				0.18	(0.34)	0.30
External Efficacy				0.11	(0.50)	0.41
Civic Duty				0.34	(0.25)	0.08
Socioeconomic Status						
High Income				-0.22	(0.20)	0.13
Female				-0.29	(0.18)	0.06
White				0.26	(0.19)	0.08
Citizen				0.85	(0.45)	0.03
Skills						
Give Presentation				0.05	(0.22)	0.41
Write Letter				0.89	(0.19)	0.00
Make Decisions				0.40	(0.21)	0.03
Chair Meeting				0.08	(0.23)	0.36
Constant	1.86	(0.18)	0.00	-2.25	(0.61)	0.00
Log Scale Variable	0.72	(0.05)	0.00	0.36	(0.05)	0.00
Deviance / Null Dev.	1216 / 1226			1081 / 1226		

Note: $N = 300$. Interval regression, where dependent variable is the sum of political activities in which an individual participates (an integer from 0 to 7). All independent variables are dichotomous or scaled from 0 to 1.