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The Social Rewards of Engagement: Appealing to Social Motivations to Stimulate Political Interest at High and Low Levels of External Efficacy

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Abstract:

Political interest is a crucial precursor to political engagement, but little is known about how to stimulate greater interest. The article explores the role social motives have in generating interest. A laboratory experiment is used in which it is possible to manipulate beliefs about the social rewards of political engagement as well as external efficacy beliefs. Across two types of measures for political interest (self-reports and revealed preferences), connecting political engagement with social rewards led to substantial increases in political interest. Moreover, these effects were particularly strong among individuals with low levels of external efficacy. Ultimately, the data provide clear evidence that political interest can be positively stimulated with social rewards mobilisation techniques and that it is rooted in beliefs about the potential motives pursuable through politics. The paper concludes with a discussion of the broader implications of these results for studies of political participation and mobilisation efforts.

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Nearly all conceptions of democracy center on the participation and preferences of citizens (e.g.: Dahl, 1971; Schattschneider, 1960). The importance of participation for both normative and empirical accounts of democratic functioning has inspired numerous explorations concerning the origins of citizen engagement (Campbell et al. 1960; Campbell, 2006; Rosenstone & Hansen, 1993; Verba, Schlozman, & Brady, 1995; Zukin et al. 2006). This research highlights the role played both by contextual factors such as mobilization campaigns (Gerber & Green, 2000; Rosenstone & Hansen, 1993) and dispositional factors such as skills and resources (Verba et al., 1995). Our focus in this study is one of the most important dispositional factors identified by prior research: political interest. Interested citizens are substantially more likely than their disinterested peers to possess knowledge about politics, vote in elections, and perform a wide variety of other political behaviors (Delli Carpini & Keeter, 1996; Milbrath & Goel, 1977; Verba et al., 1995; Zukin et al., 2006). While situational factors play an important role in augmenting the probability with which such outcomes occur, interest plays a critical role in affecting a person's baseline likelihood of engaging with politics. For this reason, understanding the origins of political interest is a critical task for political scientists concerned with explaining citizen engagement.

Political interest has long played a key role in explaining citizen engagement, which raises the interconnected questions of why citizens differ in their interest levels and how greater interest could be stimulated. However, as Prior (2010, p. 747) notes, political scientists "do not understand where political interest comes from and could thus not recommend how to increase it." We will argue that political interest is a judgment concerning the likely outcomes of engagement with politics, with interest developing in a positive direction when individuals connect engagement with valued goals. In demonstrating the validity of this proposition, we take a page from recent work concerning social

motivations and voting (Gerber, Green, & Larimer, 2008, 2010; Panagopoulos, 2010, 2013b; Sinclair, 2012). In particular, we argue that interventions that lead individuals to believe that political engagement is useful for generating and maintaining social relationships will lead individuals to subsequently report greater political interest. Such interventions, in other words, not only directly affect the probability with which a person votes, for instance, but may also make it more likely that they will come to internalize a motivation to do so in the future. We show evidence consistent with this argument using data from a laboratory experiment in which beliefs about the social rewards of political engagement were manipulated. Our results thus shed light on an important, but not fully understood, concept in the political behavior literature.

A second contribution of the present study concerns a potential moderating influence: external efficacy. Much of the work on social motivations and engagement has used field experiments where explorations of potential moderating influences are difficult to carry out. Here, we experimentally manipulate external efficacy beliefs, in both a positive and negative direction, alongside beliefs about the social benefits of engagement. Importantly, we show that connecting political engagement to social rewards appears to be particularly effective at stimulating interest among individuals with low levels of external efficacy while appearing to have little additive effect for those with high levels of efficacy. This suggests that connecting politics with social rewards may not only stimulate greater engagement but also mitigate existing inequities in participation.

We proceed as follows. We will first define political interest and build our argument that connecting engagement with the satisfaction of valued goals, and social motives in particular, should stimulate greater political interest. We will then discuss how such interventions may work across varying levels of external efficacy. We then proceed to describe our study and present our analyses

before concluding with a discussion of both the implications and limitations of the present study for understanding political interest and behavior.

Understanding Political Interest

While political interest has long played a role in predicting participation, studies explicitly focused on explaining interest are rarer. Existing studies have principally focused on the role played by demographic variables and socialization experiences in molding citizen skills and resources (Denny & Doyle, 2008; Fitzgerald & Curtis, 2012; Prior, 2010; Shani, 2009). However, such accounts often do not provide a conceptual theory regarding what interest is beyond a simple description of it being motivational in nature, meaning that existing work does not provide great clarity regarding how it is likely to develop and why it changes. We thus believe it imperative to first define the concept to gain some purchase on the broader question of its origins and stimulation. On this front, we believe that Lazarsfeld et al. (1968, p. 41) captured something fundamental about interest when they write, “being interested is a clearly recognizable experience, as anyone knows who has ever been unable to put down a detective story or been bored to tears at a cocktail party. Given any two activities, we can frequently tell at once which is the more interesting for us.” In this account, political interest is a judgment concerning the desirability of an activity (or domain of activities). It is, in other words, an *attitude* regarding political engagement. As such, we argue that interest can be understood through the lens of psychological research on the formation and nature of attitudes and their relationship to behavior.

Specifically, we suggest thinking about political interest through the lens of an expectancy-value model (Eccles & Wigfield, 2002; Fishbein & Ajzen, 2010). Under this line of thinking, political interest is an automatically generated attitude toward engagement with politics that is predicated on

valenced beliefs regarding the outcomes of engagement and their likelihood of occurring.¹ Interested citizens have come to associate engagement with the realization of valued outcomes through prior direct and vicarious experiences with politics. Over time, these beliefs will tend to grow stronger (i.e. more certain) and thus the individual's resulting level of interest should stabilize, an expectation supported by panel data (Prior, 2010; Shani, 2009). This manner of understanding interest adds something important to the existing literature: a focus on individual's goals and how they align with perceptions of politics to create a sense of value. Existing accounts, as noted above, are principally focused on cost or expectancy and have largely elided the question of perceived value.

The foregoing discussion has a key empirical implication: to change interest one must change a person's beliefs about the likely outcomes of political engagement. Testing this implication requires identifying relevant outcome beliefs to target via intervention. Recent field experimental studies concerning voter turnout suggest a potentially powerful target: the perception that political engagement has *social rewards* (Davenport et al., 2010; Gerber et al., 2008, 2010; Nickerson, 2008; Panagopoulos, Larimer, & Condon, 2014; Panagopoulos, 2010, 2014a, 2014b; Sinclair, 2012).² These studies have focused on both positive and negative social motivations. Individuals animated by a positive social motivation perform an action, such as voting in an election, to generate rewards from network members such as status, honor, pride, and friendship (Addonizio, Green, & Glaser, 2007; Panagopoulos, 2010, 2014a). On the other hand, various studies have focused on the negative side of social motivations wherein individuals are motivated to vote, for instance, so as to *avoid* punishment from their friends and family; here, the key mechanism is social pressure, either explicitly or implicitly communicated,

¹ This definition is consistent with the understanding of interest in the literature on interest in educational settings, where the development of interest in a subject-matter is predicated on perceptions of task value and one's competencies (Hulleman, Godes, Hendricks, & Harackiewicz, 2010; Renninger & Su, 2012).

² While we focus on social motivations and interest, this type of goal certainly does not exhaust the list of relevant ends that may be connected with engagement to stimulate interest. We will discuss this point in greater detail in the conclusion.

from one's peers to act in concordance with social norms (Gerber et al., 2008; Panagopoulos, 2014a; Sinclair, 2012). This literature provides a strong demonstration that social motivations can be appealed to in order to motivate voter turnout.³

Existing field experimental studies of the motivating influence of social motivations have principally focused on voter turnout and so we may question whether such motives can also lead to changes in political interest. Perhaps individuals can be prompted to turn out to receive a reward, or avoid social punishment, but will fail to internalize a long-term motivation to continue performing the action (see, for instance, Panagopoulos, 2013a on the relationship between extrinsic and intrinsic motivations). We suspect that internalization may in fact occur. We focus particularly on the positive motivations identified above and, specifically, the goal of social bonding and esteem.⁴ Recall that we have argued that interest is based on one's perceptions of the outcomes of engagement. When an individual comes to associate engagement with positively evaluated goals, then they will likely form a positive attitude toward, or interest in, performing the activity in the future. This type of social motivation is likely to be positively evaluated and considered important by many citizens regardless of their specific political views given that humans appear to have a basic need for social attachment and esteem, which motivates them to act to maintain already existing valued relationships and in ways to form new ones (Baumeister & Lear, 1995; Ryan & Deci, 2000). Information that leads individuals to

³ Also see work on social motives and donating money and pro-environmental behavior (Bolsen, 2013; Sinclair, 2012).

⁴ What about negative social motivations (i.e. the desire to avoid social pressure and associated feelings of shame through conformity) – is internalization also likely in this case? It is plausibly the case that such interventions would not lead to internalization, i.e. to greater interest, or perhaps have only a weak effect. Negative social motivations carry with them a sense of being compelled to perform an action, which seems quite distinct from having an interest in or *wanting* to perform some action or actions. Work on the development of intrinsic motivations suggests that they are likely to occur when individuals feel they have freely chosen to perform the action rather than when they have been compelled by some other authority to do so (e.g. Ryan & Deci, 2000). Note, furthermore, that the theory of planned behavior, perhaps the most influential expectancy-value model of motivation, maintains separate causal pathways for social pressure (via subjective norms) and attitudes in affecting behavioral intentions and thus behavior (see: Fishbein & Ajzen, 2010). It is possible that negative social motivations could prompt engagement and thus expose people to experiences that foster the perception that engagement serves interest-inducing positive social motivations, but that is a distinct account.

believe that political engagement could serve this motivation should prompt a more positive evaluation of political engagement such that interest will increase. Our first hypothesis is thus:

H1: Information leading to the perception that politics has the social rewards of social bonding and esteem will lead to higher political interest (all else equal).

Social Rewards at Low and High Levels of External Political Efficacy

Voter mobilization efforts that appeal to the social rewards of engagement powerfully stimulate turnout and, we suggest, should do the same for political interest. In other words, individuals will also *internalize* a motivation for engagement due to such an intervention provided they accept the underlying message about the outcomes of engagement. However, we also believe it is important to consider whether such changes, to the extent that they occur, vary in magnitude across population subgroups. In particular, our concern is with whether interventions aimed at stimulating political interest *exacerbate* inequalities in interest by making individuals predisposed to report being interested *more* interested while having no, or little, influence among those predisposed to report a lack of interest. This concern has been raised in the voter mobilization literature by Enos et al. (2014) who find that mobilization campaigns sometimes prompt greater turnout principally among high propensity voters thereby aggravating turnout gaps. A similar outcome may occur vis-à-vis interest insofar as individuals are motivated to square incoming information with their prior beliefs (as in Lodge & Taber, 2006). For instance, if individuals already likely to report an interest in politics are more likely to accept positive and interest-supporting information than those predisposed in the other direction, then it is possible we would see the same type of exacerbation effect demonstrated by Enos et al. In such a case we would still see evidence in confirmation of our broader theory regarding the nature of political interest, but would nevertheless have a reason for pause due to the normatively worrying implications of such a moderated effect of our intervention.

Prior field experimental studies have focused on the differential effects of social motive interventions on high and low propensity voters (Enos et al., 2014; Gerber & Rogers, 2009; Panagopoulos, 2010, 2014a). In the present study we focus on the potential moderating influence of external efficacy, which refers to beliefs concerning the responsiveness of the government. We focus on external efficacy for two inter-related reasons. First, we focus on external efficacy because we wished to independently manipulate these beliefs so as to provide some additional confidence in our claims about the effects of social benefits at varying levels of efficacy. External efficacy is perhaps a more plausible target of intervention than internal or general self-efficacy beliefs as changing these beliefs involves affecting beliefs a person holds about their self-identity (i.e. beliefs individuals are likely to be quite motivated to maintain; see, for instance, Finkel, 1985). Voter propensity scores, meanwhile, are based on actual past behavior which is not quite amenable to experimental change. External efficacy is not the only component of efficacy that matters for engagement propensity, but it is perhaps the best target for our purposes. Second, and importantly, external efficacy is positively correlated with both political engagement and political interest (Finkel, 1985; Karp & Banducci, 2008; Lewis-Beck, Jacoby, Norpoth, & Weisberg, 2008; Rosenstone & Hansen, 1993). External efficacy is not a substitute for these other concepts, of course; one could believe that the government is highly responsive but not participate, or be uninterested in doing so, for failure of possessing a motive for engagement. Rather, external efficacy is a facilitating influence, something that may positively influence engagement through the ‘expectancy’ pathway of expectancy-value theories. In other words, it helps capture something of an individual’s beliefs regarding the likely outcome of engagement (i.e. are they likely to success or failure).

We formally postulate the following two hypotheses. First, observational studies and our theoretical reasoning suggest that external efficacy is positively associated with political interest. This

implies that experimentally inducing a change in efficacy levels, by itself, in a positive or negative direction will have the concomitant change on interest (e.g. positive or negative). Newly efficacious individuals may update their beliefs about the likely consequences of engagement with politics and thus report higher/lower values of interest as a result. Second, we expect that connecting political engagement with social rewards will exert a positive influence on interest at both (experimentally induced) high and low levels of external efficacy. The nature of the social motivation under exploration here—i.e. forming and maintaining social relationships—should be highly valued by individuals regardless of their external efficacy levels. Indeed, we have argued that this type of motivation should be nearly universally valued. This, in turn, suggests that individuals at both ends of the efficacy spectrum should be responsive to this intervention. This supposition also appears to be consistent with some prior explorations of heterogeneity in response to social motives in field experiments, which have found that similar reactions by both high and low propensity voters (Gerber & Rogers, 2009; Panagopoulos, 2010, 2013b).

H2: Changing external efficacy beliefs in a positive direction will lead to higher political interest, while changing them in a negative direction will lead to lower interest (all else equal).

H3: Information leading to the perception that politics has the social rewards of social bonding and esteem will lead to higher interest among both low and high external efficacy individuals (all else equal).

Study Design

Study Procedure and Treatment Conditions

The data for this project stems from a laboratory experiment conducted in the late winter/early spring of 2012. A six condition experimental 1 design was used with study participants randomly assigned across the six resulting groups. A breakdown of the experimental conditions and expectations for each is provided in Table 1. Participants assigned to condition 1 read non-political entertainment

articles and thus serve as a control/baseline condition. Participants assigned to condition 2 read treatment materials that primed positive beliefs regarding the social benefits of political activity, while those assigned to conditions 3 & 4 read treatment materials designed to generate either high (condition 3) or low (condition 4) feelings of external efficacy. Finally, those assigned to conditions 5 & 6 read a combination of the social benefits and efficacy treatment materials (i.e. condition 5 received the social benefits and high efficacy materials). We can thus compare the effects of the social benefits materials at high and low efficacy levels by comparing interest reports made by those in conditions 5 & 6 with those reported in conditions 3 & 4.

[Insert Table 1 Here]

All participants were presented with the same task of reading a series of short articles. The core difference between conditions concerned the substantive content of these materials. While participants assigned to the control condition read non-political articles, those in the treatment conditions read politically themed articles designed to affect social benefits and/or efficacy beliefs. Participants in a treatment condition read six articles in total with each belief manipulation involving three short articles (e.g. participants in the pro efficacy/social benefits condition read three external efficacy treatment and three social benefit articles while participants in the social benefits condition read the same three social benefit articles and three non-political articles). All articles were identified as coming from a recent edition of the New York Times Magazine to maximize mundane realism while edited versions of actual journalistic articles were used to maximize experimental realism (McDermott, 2011).

The first article read by participants was attributed to a fictional professor of political science at another university and briefly discussed the research literature concerning the responsiveness of the government to public opinion and/or the social rewards of political activity. Participants then read edited versions of real journalistic articles, which focused on ‘real-life’ analogues to this purported

research literature. For instance, subjects assigned to the high efficacy conditions read about the successful efforts of citizens using online pressure to combat the Stop-Online Piracy Act legislation while subjects in the low efficacy conditions read about the disconnect between public opinion and policy on issues of marijuana reform (i.e. a lack of governmental responsiveness to public input). Different topics were used for the articles to maintain the mundane realism of the treatment. A description of treatment materials is provided in the online appendix (Appendix OA) while the full text of each article is presented in Appendix OD.

Sample

All participants were students from a large university in the Midwestern United States, were enrolled in political science courses, and participated to fulfill a class requirement; the total N for the study was 255.⁵ While all participants were enrolled in a political science class, these classes included general course requirements for the university and thus the resulting subject pool is comprised of a majority of non-political science majors. The sample is fairly heterogeneous on demographic variables although representative of the university from which the sample was drawn. The majority of participants were white (60%), with a smaller number of Asian (16%), African American (9%), Hispanic (9%), and Other race (6%) participants. Nearly seventy percent of respondents identified with the Democratic Party. Finally, more women participated than men (57% female). The inclusion of a gender variable or a variable for the other demographic variables into the models below has no substantive effect on the conclusions of the study.⁶ We will discuss the implications that the composition of our sample has for interpreting the implications of our study in the conclusion.

⁵ Participants were able to complete an alternative assignment and thus opt out of study participation if they desired.

⁶ See Appendix OB in for randomization checks. Group assignment is well balanced and results are robust to the inclusion of demographic variables as covariates; see Table 2 in-text and analyses performed in Appendix OC. In addition, the analyses provided in Table 1 are also robust to the use of randomization tests, as shown in Appendix OB.

Measures

Political interest was measured on the post-test in two distinct ways. First, interest was measured via two self-report questions, one asking about interest in national politics and the other concerning local politics; all question wordings can be found in Appendix OA. Both questions were ordered from 1 (“none at all”) to 5 (“a great deal” of interest). Participants recorded greater national interest (mean = 3.55) than local interest (mean = 2.89) and the two items are only moderately correlated ($corr = 0.36$). We also include two information choice questions to measure political interest as a revealed preference. First, subjects were asked whether they would like to receive information via email about registering to vote or, if already registered, absentee voting procedures. The inclusion of this latter element was intended to target students who might already be registered to vote. Participants were also asked whether they would like to receive information via email concerning political clubs on campus.⁷ Respondents are coded as equaling one if they opted to receive the information in question.

Participants were also asked on the post-test about their external efficacy and social benefits beliefs in order to test whether the treatment materials influenced these constructs. External efficacy was measured with the two standard questions used by the American National Election Studies to measure efficacy. The first asked respondents whether they thought that people like them had a say in what government does, while the second asked whether they thought that, “public officials care much what people like me think”. Responses were coded so that high responses reflect positive levels of efficacy. The two items were combined into an index by taking the average of responses ($corr = 0.51$).

Participants’ perceptions of the social benefits of political activity were measured via four questions. The questions asked respondents how strongly they agreed/disagreed that political

⁷ Participants were also given the opportunity to select more information concerning academic, pre-professional, religious, and arts clubs on campus.

engagement facilitated getting to know more people, connecting with others, bringing influence among friends/family, and bringing respect among friends/family. A factor analysis of these four items revealed only a single dimension with an eigenvalue over 1, with all four items loading on this dimension. We will use a variable formed from the average of participants response to these four items ($\alpha=0.65$), although using the individual questions would not change the substantive conclusions reached below (see Appendix OC).

Analyses

We structure our analyses as follows. We begin with a manipulation check focused on whether our treatments lead to differences in social benefits and external efficacy beliefs as expected. We then examine Hypotheses 1 and 2 by comparing interest levels across four conditions: the Control, Social Benefits, High Efficacy, and Low Efficacy conditions. We then explore Hypothesis 3 and the question of whether the social benefit treatments had differential effects at varying levels of efficacy. Here, we proceed by regressing our interest variables on variables for treatment condition; in doing so we provide results from models that both omit and include covariates.

Manipulation Check

Table 1 provides group means for the social benefits and external efficacy variables and clearly shows that the treatments had the expected effect on these variables. Efficacy levels are significantly higher among those in the High Efficacy treatment conditions, and lower in the Low Efficacy conditions, than for those in the Control and non-efficacy treatment groups. Meanwhile, there is significantly greater agreement that politics serves social ends among those in the Social Benefits conditions than in the Control and non-social benefits treatment conditions. Importantly, treatment groups that received the same treatment do not differ in terms of the targeted belief variable. In other words, participants in the Low Efficacy/Social Benefits condition do not significantly differ in terms of

their external efficacy from those assigned to the Low Efficacy condition, although the two do significantly differ in terms of their beliefs about the social benefits of engagement. The same pattern emerges when comparing the High Efficacy/Social Benefits and High Efficacy pairing. These results provide a point of leverage for assessing the effects of social motivations at both high and low levels of external efficacy.⁸

Political Interest: Examining H1 & H2 with Self-Reports and Information Choices

In H1, we argued that a social benefits treatment would lead to heightened political interest and Table 1 contains condition means and estimates of average treatment effects and provides initial support for this hypothesis. While the mean level of national and local interest for the control group was 3.02 and 2.60 respectively, the social benefits condition reported means of 3.88 and 3.16. These differences are substantially and statistically significant ($p < 0.01$ and $p < 0.05$). We also see evidence of treatment effects when turning our attention to the two information choice measures. Only 21.43% and 16.67% of individuals in the control group selected the registration/absentee voting and political clubs information respectively. As Table 1 shows, assignment to the social benefits treatment condition is associated with a near doubling of both figures (41.86% and 34.88%). This is evidence of a substantial treatment effect. These results are supportive of Hypothesis 1 and suggest the powerful influence appealing to social motivations can have on reports of political interest.

Meanwhile, In H2 we argued that a high (low) efficacy treatment would lead to more (less) interest. Table 1 also provides empirical support for Hypothesis 2 and particularly for the High Efficacy component of the hypothesis. Individuals in the High Efficacy condition report substantially higher levels of national interest (3.93) and local interest (3.38) than those in the control (both differences

⁸ While in-text we focus on difference of means analyses, in Appendix OC we also regress both beliefs on dummy treatment indicators and their interaction. We find the expected influence of the treatment indicators without strong evidence of an interaction.

significant at $p < 0.01$). The proportion of individuals in this condition selecting the registration/absentee voting (40.48%) and clubs information options (39.02%) is also substantially and statistically greater than what is found in the control group ($p < 0.05$ and $p < 0.06$ respectively). Meanwhile, the inverse patterns emerge when comparing the Low Efficacy and Control conditions as expected. The mean interest reports among those in the Low Efficacy condition are 2.68 (National Interest), 2.14 (Local Interest), 7.14% (Registration/Absentee Voting Info) and 7.31% (Clubs Info). These figures represent a potentially substantial difference in interest reports. However, only two of these comparisons are statistically significant and here only at the less conventional $p < 0.10$ standard.⁹ Part of the reason for this lack of statistical significance may lie in the greater level of variance in interest reports in the Low Efficacy condition, particularly on the national interest measure. Including covariates to these analyses, as done in Table 2 later on and in analyses reported in Online Appendix OC, does appear to increase the precision of our estimates with greater evidence of significant treatment effects emerging. Ultimately, then, there is clear evidence in favor of H2 with regards to the High Efficacy condition and a clear and supportive, albeit uncertain, pattern with regards to the Low Efficacy treatment.

Examining H3 with Regression Analyses

In Hypothesis 3 we argued that the social benefits treatment would have a similar effect among both those with high and those with low external efficacy. Some initial, and disconfirmatory, evidence on this front can be gleaned from Table 1. Participants in the High Efficacy & Social Benefits condition not only report significantly greater levels of interest (regardless of measure) than those in the Control,

⁹ Significance tests in Tables 1 and 2 are two-tailed. However, given that H2 was directional in nature, some texts suggest that a one-tailed significance test may be appropriate (Blalock Jr., 1979). Under this less stringent test we would see greater evidence of significant effects here, particularly on the local interest and registration info measures. Power analyses in Appendix OB suggest that sample size considerations are also cutting into our ability to detect significant effects here.

they also tend to report the *highest* levels of interest across conditions. However, a comparison of the means between the High Efficacy/Social Benefits and High Efficacy treatment groups suggests that the doubling of treatments had little additive effect. Indeed, none of these four comparisons is statistically significant. This can be contrasted with the results from a comparison of the Low Efficacy/Social Benefits and Low Efficacy conditions. First, we can note that individuals assigned to the former condition tend to report interest levels either no different from the control (Local Interest, Voting Info measures) or significantly greater (National Interest, Political Clubs Info measures). This suggests that the positive influence of the social benefits treatment is off-setting and potentially overriding the negative influence of the low efficacy treatment given the latter's trend toward negatively affecting interest. Meanwhile, difference of means tests (for the two interest measures) and difference of proportion tests (for the two information measures) show that the Low Efficacy/Social Benefits treatment group reports significantly higher interest than the Low Efficacy group.¹⁰ This suggests that H3 is not supported and that, if anything, the influence of the social benefits treatment was greater in the *Low Efficacy* case than in the *High Efficacy* group. If so, then this would mean that far from maintaining or exacerbating inequities in interest such interventions might reduce them.

While the preceding analyses provide some suggestive evidence that the effects of the social benefits treatment was greater in the Low Efficacy than the High Efficacy treatment condition, the most appropriate test for this comparison comes from regression models wherein interest is regressed on treatment indicators (Social Benefits: Yes vs. no; Efficacy: High vs. Low) and their interaction.¹¹ We

¹⁰ Specifically: National Interest ($t_{84}=3.90$; $p < 0.01$); Local Interest ($t_{84}=2.24$; $p < 0.05$); Registration/Absentee Voting Information ($z = 1.78$; $p < 0.10$); and Political Clubs Information ($z = 3.21$; $p < 0.01$).

¹¹ We thank our anonymous reviewers for suggesting this analysis. Also note that we have performed an alternative specification wherein interest is regressed on the full set of condition indicators, i.e. Social Benefits (Yes vs. No), Efficacy (None, High, and Low) and their interactions (see Appendix OC). Our conclusions are the same. As noted, these models

provide the results for all four interest dependent variables in Table 2. Note that in Table 2 we include results from two models per dependent variable: one where covariates are omitted and one where covariates are included.¹² To clarify the interaction effects we also provide two figures. In Figure 1, we plot the marginal effect of assignment to the social benefits treatment by efficacy condition. In Figure 2, we plot the predicted value of the dependent variable for the four experimental groups holding covariates at their mean level.

[Insert Table 2 Here]

We begin with Table 2 where we note the following results. First, the coefficient for High Efficacy indicates the emergence of a significant and quite substantial cleavage in interest between those assigned to the High Efficacy and those assigned to the Low Efficacy condition (among those not assigned to receive the social benefits treatment; Brambor, Clark, & Golder, 2006). Individuals in the former case are substantially more interested in politics across all measures. Second, the Social Benefits coefficient indicates a consistent pattern wherein reception of this treatment led to a significant increase in interest among those individuals who also received the Low Efficacy treatment. Finally, the interaction terms suggest some support for the claim that the effects of the social benefits treatment was greater among those assigned to the Low Efficacy condition than among those assigned to the High Efficacy condition. This effect emerges on the National Interest and Political Clubs Measures with effects significant at the $p < 0.05$ mark in three of the four models and at $p < 0.10$ mark for the fourth. However, while the interaction coefficient is negative for the other two measures, in neither case is this effect statistically significant. As Figure 1 shows, the marginal effects of assignment to the social

also tend to report more negative effects for assignment to the Low Efficacy condition that perform better on tests of statistical significance.

¹² Covariates include: age, gender, race, year in school, whether the respondent indicated that they had grown up partially or entirely outside the United States, strength of partisanship, and ideology. Full model results are included in the Supplementary Materials. Missing values on these variables have been imputed; see Appendix OE for details.

benefits condition is over three times as great in the Low than High efficacy group on the local interest measure (i.e. 0.15 vs. 0.024 on the covariate-adjusted local interest graph) albeit with sufficient variance on the two estimates to prevent us from being able to confidently assert statistical significance. Thus, we must be careful with our interpretation of H3; while we have some evidence suggesting differential effects by efficacy level (and thus a narrowing of interest gaps rather than their exacerbation), the Local Interest and Voting Information measures suggest that we cannot claim with certainty that the effect was significantly greater among those with Low than High Efficacy; in other words, two of the tests go against H3 and two of them support it.

[Insert Figures 1 & 2 Here]

While we cannot say with certainty that the effect of the social benefits treatment among those in the Low Efficacy condition was significantly greater than it was among those in the High Efficacy condition, our results do suggest that the effect was *only* significant in the former case as indicated by the difference of means analyses and Figure 1. Why did we not see a significant effect among the High Efficacy group? Figure 2 provides, we think, some suggestive evidence on this front. First, on the national interest, and to a lesser extent the local interest measure, we may have run into some ceiling effects. Note that the marginal values among those in the High Efficacy only grouping (i.e. High Efficacy & No Social Benefits) are quite high; while there is some evidence of a further shifting to the right among those in the High Efficacy & Social Benefits condition, particularly on national interest measure, there is only so far this effect can go given the high starting point. Second, on the information measures, and particularly the voting measure, we do see a shift to the right in the predicted probability of selecting this information source; the failure to find a significant effect here is being driven by the wide confidence intervals for the estimates. Ultimately, these results provide suggestive evidence that

the social benefits treatment was most effective among those in the Low Efficacy condition, although as we have noted this supposition has a good deal of associated uncertainty.

Conclusion

Political interest has played a key role in explanations of political knowledge and behavior for over a half century. However, political scientists still do not fully understand this concept and particularly where it comes from and how it may be changed. In this study we have provided a theory of political interest rooted in psychological models of attitude formation. In particular, we have shown that political interest, at least among our sample and in this particular setting, is responsive to information that fosters a change in belief regarding the likely outcomes of engagement with politics. Individuals exposed to information connecting political engagement with positive social rewards reported substantially greater political interest across two distinct types of measures of interest. Moreover, this effect consistently occurred among individuals with low levels of experimentally induced external efficacy, i.e. among individuals who, absent the social benefits treatment, would have ended up reporting low levels of interest as well. This effect suggests that information identifying a potential motive for engagement can potentially serve as an effective mobilization tool for individuals predisposed to opt out of politics, although our evidence is not fully conclusive on whether such mobilization attempts would narrow interest gaps or merely maintain them. In the remainder of this conclusion, we wish to discuss the potential limitations of our study and end by discussing the implications of our study for the broader question of how political interest develops and changes and also pay attention to some potential limitations of our study.

The evidence we have presented supports the general claim that political interest is response to information about the potential rewards of political engagement. However, ours is a single study with a specific sample in a particular setting and so obviously we must be careful in ascribing too much

generalizability to our results (McDermott, 2011). Here, we would like to note three elements of our study that warrant some caution. First, our information choice measure of interest was intended as a slightly harder test of treatment effects than the self-reports insofar as indicating that you desire more information about a subject entails a greater commitment than simply reporting your interest on a self-report. However, it is nevertheless the case that such reports are only a soft proxy for a change in interest; in other words, the difficulty involved is weaker than if we had included a more time consuming or otherwise costly endeavor. Our significant treatment effects may thus represent maximal effects. Second, our conditions vary both in terms of content and also in the number of treatment articles read (i.e. 6 in the mixture, 3 otherwise). One possibility is that it was the number, rather than the content, driving our results in the mixture conditions. We do not believe this is what occurred given the failure to find significant differences between the Social Benefits (3 articles) and High Efficacy/Social Benefits (6 articles) conditions.

Third, the broader implications one can draw from an empirical study is intimately related to the sample from which one's evidence is generated. Our sample has two specific characteristics that might matter: its youth and its focus on students. The age range of our sample does have implications for the specific types of generalizations that one might wish to draw. For instance, it seems plausible that we would have witnessed weaker treatment effects among an older sample given that political interest crystallizes in young adulthood (i.e. in one's early to mid 20s; Prior, 2010). However, we can make a few points on this front. First, recent empirical work suggests that student samples are not *necessarily* problematic in terms of generalizing to broader populations (Druckman & Kam, 2011; Leeper & Mullinix, 2014). Second, given that our broader goal is on understanding the development, and hence changes over time, of political interest, the fact that interest crystallizes implies that a sample with this age frame is actually the most appropriate one for investigating our hypotheses. Replicating these

results with samples with greater heterogeneity in terms of age would certainly contribute to our knowledge concerning political interest, but we nevertheless believe that the age of our sample members is not overly-problematic.

Of course, this sample does differ in marked ways from youths in general, which may raise the fear that this sample is biased in ways that favor confirmation of hypotheses. For instance, the university in question draws upon a fairly affluent student population. And, of course, the sample involves students, which may raise questions about how non-students react. However, it is unclear why that would make either stimulus more likely to generate confirmatory results. As noted, social motivations are not unique to this sample and have been profitably used on general population samples previously. Characteristics of the school could plausibly lead to a sample that begins the experiment with higher external efficacy than students at other schools, or non-students, but this would suggest that the positive efficacy prime would be weaker due to the higher starting values (i.e. a ceiling effect). While the full testing of a causal theory requires multiple tests in myriad settings for validity to be truly established (Druckman & Kam, 2011), this sample does not appear to be systematically biased in favor of confirmatory effects.

One of the more intriguing results of the study, we feel, is the positive influence of the social benefits treatment on those with low levels of external efficacy. This result has, at the very least, some intriguing practical implications. Individuals who lack external efficacy may nevertheless become engaged when they identify a motive for doing so. Among populations expected (or known) to have low efficacy, pragmatic efforts at generating interest and engagement could thus focus on this motivational dimension of engagement, with social motives a particularly attractive target. For instance, educators or other individuals and institutions who aim to increase interest should situate political engagement experiences in social spaces and promote social engagement and discussion as

much as feasible. This approach harkens back to the heavily social political environment that characterized 19th century politics, at least in the United States (Addonizio et al., 2007; Schudson, 1998). Our results suggest that targeting external efficacy beliefs would have a similarly sized influence as well. However, it may be the case that targeting motivational beliefs, and particularly non-political motives, may be an easier tactic for generating engagement. Individuals already suspicious of politics may be resistant to efforts singularly targeted on politics, while a focus on the social side-effects of engagement may open a door to engagement that escapes this suspicious eye. Ultimately, more sustained attention to how positive changes on both fronts can be stimulated will only yield positive returns for both our understanding of these concepts and for understanding the most effective means of mobilization.

In the present study we have focused on social rewards and how they may be appealed to in order to generate greater interest. However, social rewards are clearly not the only potential motive that could be appealed to in this manner. Lazarsfeld et al. (1968), for instance, highlight cognitive stimulation and the affective response of excitement in the quotation we provide earlier (also see Kam, 2012 on sensation seeking and behavior). Verba et al.'s (1995, ch. 4) survey results concerning the motives of politically active citizens suggests the potential influence of material, civic, and policy gratifications as well (Miller, 2013). Our theory holds that information and experiences that lead individuals to update their beliefs about the connection between political engagement and these other goals, and particularly fosters the belief that politics is instrumental to their realization, would likewise lead to positive changes in interest. Ultimately, we focused on social rewards for a few key reasons. First, by doing so we were able to build off of, and contribute to, a broader literature concerning the role of social motives in generating voter turnout (Gerber et al., 2008; Gerber & Rogers, 2009; Panagopoulos, 2013b; Sinclair, 2012). Second, we also felt that social motives were an especially good

test for our theory. On the one hand, targeting the social motives considered here may be simply easier to carry out than interventions targeting these other goals. While individuals vary in terms of their extraversion, a need for human attachment nevertheless appears to be a human universal (Baumeister & Lear, 1995). On the other hand, individuals clearly differ in terms of their *particular* material self-interests; targeting this belief would thus require identifying a variety of interests and micro-targeting them appropriately. A similar point can be made about the goal of value- or identity-expression. While successfully targeting these goals would also lead to similar changes in political interest, we argue, social rewards appear to stand out as the most efficient target available.

For us, this discussion highlights the importance of paying attention to the motives or goals of individual citizens when attempting to explain not just political interest but also political behavior as well. As Miller and Krosnick (2004) note, existing explorations of political behavior privilege accounts focused on the abilities and resources of citizens, and thus on their perception of the costs of engagement, while shortchanging attention to the motives that animate engagement. This bias toward cost-centered accounts of engagement has been mostly replicated in the rather sparse literature on the antecedents of political interest as well, which has principally focused on the role played by demographic variables (particularly gender), educational attainment, and socialization experiences in molding citizen skills and resources (Denny & Doyle, 2008; Fitzgerald & Curtis, 2012; Prior, 2010; Shani, 2009). We suggest that this focus on resources and skills, while important, is ultimately insufficient to explain interest as they require an account of the motivational forces behind the acquisition of distinctly political skills (e.g. why does one join a political extracurricular during high school in the first place) as well as behind their use (e.g. even if one has civic skills due to non-political organization behavior, why and when does one become motivated to use them politically) as well. We

thus see our study as part of a burgeoning, and important, effort to untangle the motivational bases of engagement (Dawes, Loewen, & Fowler, 2011; Miller, 2013).

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Table 1: Expectations, Interest Reports, Social Benefits and External Efficacy Beliefs

<u>Outcome:</u>	<u>Treatment Conditions</u>					
	(1) Control	(2) Social Benefits	(3) High Efficacy	(4) Low Efficacy	(5) High Eff. & Social Benefits	(6) Low Eff. & Social Benefits
Expectations	Baseline	Interest: + S. Ben: + E. Eff: N.S.	Interest: + Soc. Ben: N.S. E. Eff.: +	Interest: - Soc. Ben.: N.S. Ext. Eff.: -	Interest: + Soc. Ben.: + Ext. Eff.: +	Interest: + Soc. Ben.: + Ext. Eff.: -
Nat. Interest	0.51 (0.18)	0.72 (0.20)	0.73 (0.24)	0.42 (0.32)	0.79 (0.22)	0.66 (0.23)
ATE:		0.21**	0.23**	-0.09 ⁺	0.28**	0.15**
Local Interest	0.40 (0.40)	0.54 (0.23)	0.60 (0.27)	0.29 (0.29)	0.61 (0.32)	0.41 (0.23)
ATE:		0.14*	0.20**	-0.11 ⁺	0.21**	0.02
Voting Info	21.43%	41.86%	40.45%	7.14%	57.14%	20.45%
ATE:		0.20*	0.19*	-0.14	0.36**	-0.01
Pol. Clubs Info	16.67%	34.88%	39.02%	7.32%	47.62%	36.36%
ATE:		0.18 ⁺	0.22*	-0.09	0.31**	0.20*
Soc. Benefits	0.48 (0.18)	0.65 (0.14)	0.53 (0.20)	0.51 (0.15)	0.70 (0.17)	0.63 (0.15)
ATE:		0.17**	0.05	0.04	0.22**	0.16**
Ext. Efficacy	0.47 (0.19)	0.42 (0.25)	0.63 (0.24)	0.31 (0.19)	0.76 (0.24)	0.30 (0.23)
ATE:		-0.04	0.17**	-0.15**	0.30**	-0.16**
Max N =	42	43	42	42	42	44

Notes: Expectations relative to control. Standard deviation is in parentheses. Interest, efficacy, and

social benefits are scaled 0-1 where higher values equal more positive values. ATE derived from OLS

regression (see Table OC3 in the Supplementary Materials). The Max N column provides the

maximum number of observations per outcome variable by group; Table OC8 provides a breakdown of

observations per question per group. ⁺ Sig at $p < 0.10$; * Sig. at $p < 0.05$; ** Sig at $p < 0.01$ (two-tailed tests)

Table 2: Did the Social Benefits Treatment Work Differently by Efficacy Condition?

	(1) National Interest	(2) National Interest	(3) Local Interest	(4) Local Interest	(5) Voting Info	(6) Voting Info	(7) Pol. Clubs Info
Social Benefits	0.236** (0.0554)	0.266** (0.0563)	0.129* (0.0603)	0.152* (0.0622)	1.207+ (0.706)	0.940 (0.723)	1.979** (0.677)
High Efficacy	0.311** (0.0557)	0.337** (0.0574)	0.310** (0.0610)	0.307** (0.0635)	2.179** (0.677)	2.057** (0.698)	2.093** (0.680)
SB * HE	-0.183* (0.0783)	-0.222** (0.0791)	-0.117 (0.0857)	-0.128 (0.0876)	-0.533 (0.833)	-0.288 (0.863)	-1.628* (0.810)
Constant	0.421** (0.0396)	0.354* (0.158)	0.286** (0.0431)	0.258 (0.177)	-2.565** (0.599)	-3.856* (1.590)	-2.539** (0.600)
Observations	168	168	170	170	170	170	168
Adjusted R^2	0.219	0.247	0.174	0.179		0.174	
Pseudo R^2					0.146		0.096
Covariates Included?	No	Yes	No	Yes	No	Yes	No

Notes:

Interest models are OLS regressions, information models are logit regressions. DVs range from 0-1 (National and Local

Interest) or are dichotomous (both info measures). Covariate models use multiple imputation methods for imputing missing

values on covariates; see Appendix OE for more details and Appendix OC for results of covariate controlled models sans

imputation (results are the same). Standard errors are in parentheses; significance tests are two-tailed. + $p < 0.10$, * $p < 0.05$,

** $p < 0.01$

Figure 1: Marginal Effect of Social Benefits Treatment by Efficacy condition

Notes: Markers provide the marginal effect of assignment to the social benefits condition by efficacy group assignment (y-axis); circle markers provide results from models sans covariates, triangular markers provide results from models with covariates. Both 95% and 90% confidence intervals are provided for the estimates.

Figure 2: Predicted Values by Treatment Conditions

Notes: Markers provide either the expected value on the 0-1 interest variable or the predicted probability of a respondent selecting the information options by treatment condition. 95% and 90% confidence intervals are also provided.

Supplemental Materials/Online Appendix

Appendix OA: Description of Treatment Materials and Question Wording

Treatment Materials

See Appendix OD at the end of this document for the full text of the treatment articles.

Below we note the original source location for the article; within the experiment, however, all subjects were informed that the articles came from a recent edition of the New York Times Magazine. Author names for the “What the Evidence Shows” articles are fictional.

Pro Efficacy Treatment Materials

- Representation: What the Evidence Shows By Adam Davidson, Associate Professor, New York University: Article describes recent research which purports to show that the government is highly responsive to public opinion.
- Equal Payback For Lilly Ledbetter by Heidi Brown, New York Times: Article describes how the Lilly Ledbetter Fair Pay Act was enacted after pressure from the mass public
- A New Day of Influence Is Dawning By Eric Limer, The Atlantic Monthly: Article describes successful efforts by the mass public to block the passage of the Stop Online Piracy Act (SOPA) and Protect Intellectual Property Act (PIPA)

Con Efficacy Treatment Materials

- Representation: What the Evidence Shows by Adam Davison, Associate Professor, New York University: Describes recent research suggesting that the government is not responsive to public opinion
- Not That Kind of Smoke-Filled Room. Why doesn’t anyone in Washington take marijuana legalization seriously? By Will Oremus, Slate.com: Describes the disconnect between public polling—which now favors a less harsh stance on marijuana policy—and public policy
- A Disconnect on Taxes and Deficits By Sarah Dutton: Describes a disconnect between mass opinion on taxing the wealthy and public policy on the issue

Social Benefits Treatment Materials

- Participation: What the Evidence Shows by Adam Davidson, Associate Professor, New York University : Articles describe recent research which purports to show that political activity leads to positive social outcomes, such as respect
- Get Politically Engaged, Get Happy? Political activists are more socially connected and happier than the average person. By Lee Drutman: Article describes research by psychologist Tim Kasser of Knox College suggesting that the politically involved are happier due to the social connections said engagement fosters
- *A caucus-goer’s community* .By Eitan D. Hersh, Harvard University: Describes research conducted by Hersh suggesting that Iowa caucus attendees do so for the social experience

Control Articles

- Told to Eat Its Vegetables, America Orders Fries: Discusses attempt to get Americans to eat more vegetables
- The Gimmick Makes the Beer: Discusses new developments in beer delivery technology
- Obsessions With Minutiae Thrive as Databases: Discusses online media databases
- Noise Pollution from SunChips Bags Prompts Change in Packaging: Discusses the controversy over a new, and loud, SunChips bag
- Who's the Teacher? (Mr. Danza): Describes a recent reality television show starring Tony Danza
- Community-Garden Rules Receive a Mixed Reaction: Discusses a community garden in Chicago

Question Wording

Political Interest:

- Interest in National Politics: “How much interest do you generally have in what is going on in national politics?”
- Interest in Local Politics: “Thinking about your local community, how much interest do you generally have in local community politics?”
- Response Options: None at All, Not Very Much, Some Quite a Lot, A Great Deal”

External Efficacy

- How strongly do you agree with the following...
 - People like me don't have any say about what the government does.
 - I don't think public officials care much what people like me think.
 - Response Options: Disagree Strongly, Disagree Somewhat, Neither Agree Nor Disagree, Agree Somewhat, Agree Strongly

Social Benefits Beliefs

- How strongly do you agree with the following...
 - Getting involved with politics is a good way to connect with others in your community.
 - The politically involved know more people than do the politically uninvolved.
 - Paying attention to, and being knowledgeable about, politics will bring you influence with friends and/or family.
 - Someone who is active in politics is likely to be respected by friends and family because of their activity.

Information About Registration/Absentee Ballots

- Procedures surrounding registering to vote and voting via absentee ballot vary by state. These procedures also often change and so it is good to up to date on current requirements. Would you like us to send you information about how this works in your home state? Yes/No

Information about Clubs on Campus

- There exist various clubs operating on campus. Would you like us to send you more information about the following types of clubs and organizations:
 - Political clubs and Organizations. Yes/No
 - Academic Clubs and Organizations Yes/No
 - Arts & Cultural Organizations Yes/No
 - Religious Clubs and Organizations Yes/No
 - Pre-Professional Clubs and Organizations Yes/No

Appendix OB: Randomization Checks & Power Analysis

In this appendix we provide results from randomization checks. In Table OB1, we provide a breakdown of the conditions by demographic characteristic. In Table OB2 we provide results from a multinomial logit model wherein we predict assignment across our six treatment conditions based on respondent demographics. Figure OB1 provides the marginal effect of each variable on the probability of being assigned to each treatment condition. As these results show, there are some deviations. For instance, women appear to be slightly more likely to be assigned to the control group and concomitantly less likely to be assigned to either the social benefits or high efficacy condition. Meanwhile, African American respondents were less likely to be assigned to the control group than white respondents, with a slight (but null) positive shift in the probability of assignment to the High Efficacy condition. Finally, Hispanic respondents were more likely to be assigned to the High Efficacy group and less likely to be assigned to the Low Efficacy condition than white respondents. It is not clear whether these changes should be consequential. For instance, women tend to report lower levels of interest than men and African Americans lower interest than Whites. More women in the control might thus imply a group with lower aggregate levels of interest, but it is possible that the greater numbers of white respondents in this group would offset this pattern. Racial minority groups tend to have lower levels of efficacy than whites; assignment imbalance vis-à-vis Hispanics and Whites might suggest a High Efficacy group with slightly more room for treatment effects than one that was perfectly matched and a Low Efficacy group with less. The latter possibility might suggest one reason why we found some uncertainty with our simple group-level comparisons of the LE and Control group. We also see some variation in assignment probabilities based on year in school, although it is not immediately clear what effect this should have on estimates of interest.

The slight imbalance seen in these analyses provide a justification for including covariates in our models. We do this in Tables OC3 and OC4 in Appendix OC; here, interest is regressed on treatment indicators (Social Benefits: Yes or No; Efficacy: None, High, Low) and covariates. As detailed there, our results for the three treatment types are: (1) The social benefits treatment effects are robust to the inclusion of these covariates; (2) so too are the High Efficacy treatment effects; and (3) including covariates appears to add confidence to our estimates of Low Efficacy treatment effects, with significant ($p < 0.05$ or $p < 0.01$) effects emerging in all cases save the Pol. Clubs info measure. The analyses here, and in Appendix OC, suggest the robustness of the in-text results.

We provide an additional analysis in Figure OB2. We have shown that random assignment was mostly balanced albeit with some deviations; however, we may still want to know whether the conditions were more/less balanced than one could have expected based on chance alone.¹³ To see this, we can compare the log likelihood of our actual multinomial logit model (see Table OB2) to the mean log likelihood taken from simulated assignments. To do so, we simulated 10,000 random assignments

¹³ We thank an anonymous reviewer for highlighting this issue and suggesting these analyses.

for our participants, predicted each of these simulated assignments on the same set of covariates used in Table OB2, and stored the log likelihood from each of these models. Figure OB2 is a histogram of these 10,000 simulations. We provide solid red reference lines in Figure OB2 for the 5%, 25%, 50%, 75%, and 95% percentiles of the distribution. We also provide a black dashed line to represent our observed log likelihood. As Figure OB2 shows, there is a deviation from the simulated median, with the observed log likelihood placed just to the right of the 75% percentile of the distribution. This does suggest a significant deviation, although, as noted, introducing covariates into our models to try and account for some of this deviation does not substantially change our results (and, to the extent that they do, add confidence to our claims).

To further investigate the relationship between randomization and our estimated effects, and in light of the deviation just noted, we conducted a series of Fisher-Pitman randomization (or permutation) tests using the “`fpctest`” command in STATA.¹⁴ In each of the tests, we compare the control group with one other treatment group. The test takes respondents actually assigned to the two conditions in question (i.e. the Social Benefits and Control conditions), simulates all possible permutations of the random assignment between the two and the resulting difference between the means of each simulated pair of groups, with the result being an estimation of p-values for the test of $u_1 = u_2$ (i.e. that the control and treatment group are exchangeable, there was no treatment effect). We present the results from these analyses in Table OB3 below.

Results are highly similar to those presented in text sans control variables included. The higher levels of interest expressed by the SB, HE, and SB&HE groups remain statistically significant (i.e. the p-values indicate evidence against the claim of no difference between the two groups). The only areas of defection from expectation involve the Low Efficacy treatment. The Low Efficacy group reports significantly lower levels of interest than the Control on one measure (Local Interest; two-tailed p-value = 0.06), at least at the less conventional $p < 0.10$ level. This group also reports lower levels of interest on the three other measures, albeit missing significance even by this more relaxed standard although matters are slightly more sanguine using a one-tailed hypothesis test for the National Interest (one-tailed $p = 0.086$) and the Voting Info measure (one-tailed $p = 0.056$). The Social Benefits and Low Efficacy group reports higher levels of interest than the control on the National and Clubs info measures; given the tendency, albeit not always significant, of the Low Efficacy treatment to be associated with reduced interest, this speaks once more as evidence to the influence of the social benefits treatment. In the other two cases (Local Interest and Vote Info), the SB&LE group clearly does not differ from the control ($p > 0.80$). But, again, considering the negative trend with the low efficacy treatment for both measures suggested by the Low Efficacy condition, this implies that the SB treatment is overwhelming the negative influence of the LE treatment.

¹⁴ Kaiser, J., & Lacy, M. G. (2009). A General-Purpose Method for Two-Group Randomization Tests. *The Stata Journal*, 9(1), 70–85.

Finally, in Table OB4 we present the results of power analyses. Here we use our observed data and Stata's power commands to test for whether we have sufficient power to detect results. The tests involved were either a Satterthwaite's t-test (for the self-reports) or a Pearson's chi-squared test, set to test for the sample size needed with 80% power and $p < 0.05$, and using observed means/proportions and standard deviations from the experiment. The power analyses suggest we do have sufficient power on the self-report measures except for the Low Efficacy condition, which would require a larger sample size given the size of the standard deviation observed in that group. [The power analysis also suggests the need for a larger sample size for the LE*SB condition on the local interest as well, but recall that this group was exceedingly similar to the control in terms of means (i.e. 32.59 vs. 2.65)]

In all, the results presented in this Appendix suggest that randomization was broadly successful, addressing deviations via the inclusion of covariates does not change the substantive conclusions of the study, and that results are robust to randomization tests aimed at further addressing these imbalances.

Table OB1: Demographic Characteristics

	Sample	Control	SB	HE	LE	SB*HE	SB*LE
% Female	57.14	66.67	47.62	47.625	50.00	64.29	66.67
% White	60	66.67	62.79	42.86	66.67	59.52	61.36
% African American	9.02	2.38	6.98	11.90	4.76	14.29	13.64
% Asian American	16.08	16.67	16.28	19.05	14.29	14.29	15.91
% Hispanic	9.02	9.52	6.98	19.05	2.38	9.52	6.82
% Other Race	5.88	4.76	6.98	7.14	11.90	2.38	2.27
Mean PID Str.	1.82 (0.91)	1.81 (0.99)	1.84 (0.92)	1.81 (0.86)	1.57 (1.02)	2.05 (0.80)	1.84 (0.81)
Mean Ideology	3.13 (1.41)	3.29 (1.44)	3.05 (1.41)	3.17 (1.34)	3.07 (1.40)	2.83 (1.31)	3.36 (1.54)
% Freshman	28.74	38.10	40.48	28.57	14.29	28.57	22.73
% Sophomore	31.10	23.81	26.19	33.33	35.71	30.95	36.36
% Junior	22.05	23.81	7.14	23.81	14.29	28.57	34.09
% Senior	18.11	14.29	26.19	14.29	35.71	11.90	6.82
% Grew Up Partially/All in Foreign Country	14.29	17.07	18.60	17.07	9.52	11.90	11.63
Max N =	255	42	44	43	42	42	42

Notes: Cell entries are either percentages or mean values (ideology and party id strength); in the latter case, standard deviations are provided in parentheses.

Table OB2: Random Assignment

	HE*SB	LE*SB	SB	HE	LE
Female	-0.346 (0.492)	-0.106 (0.497)	-1.155* (0.492)	-1.201* (0.494)	-0.906+ (0.502)
African American	1.699 (1.146)	1.488 (1.142)	1.583 (1.221)	2.262+ (1.161)	0.710 (1.283)
Asian American	0.230 (0.686)	0.0331 (0.681)	0.458 (0.675)	1.045 (0.669)	0.177 (0.690)
Hispanic	0.103 (0.782)	-0.197 (0.832)	-0.186 (0.847)	1.315+ (0.723)	-1.508 (1.187)
Other	-0.297 (1.343)	-0.205 (1.351)	0.812 (1.096)	1.367 (1.094)	1.730 (1.067)
Ideology	-0.223 (0.176)	0.00679 (0.166)	-0.0835 (0.177)	-0.0678 (0.176)	-0.218 (0.182)
Party ID Str	0.202 (0.281)	0.00645 (0.270)	0.0801 (0.280)	0.0594 (0.277)	-0.345 (0.279)
Sophomore	0.371 (0.599)	0.817 (0.589)	0.208 (0.591)	0.743 (0.606)	1.629* (0.659)
Junior	0.353 (0.598)	0.546 (0.602)	-1.375+ (0.772)	0.222 (0.631)	0.316 (0.732)
Senior	-0.0550 (0.735)	-0.702 (0.917)	0.563 (0.638)	0.275 (0.723)	1.804* (0.704)
Grew Up Partially/All Foreign Country	-0.246 (0.714)	-0.331 (0.721)	0.0826 (0.677)	-0.217 (0.687)	-1.133 (0.806)
Constant	0.236 (1.022)	-0.338 (0.987)	0.616 (1.007)	-0.0684 (1.018)	0.877 (1.030)
Observations	247				
Pseudo R^2	0.086				
LR Chi2(55); Prob > chi2	75.71; 0.0335				
Log Likelihood	-404.69722				

Reference category is the Control group. Standard errors are in parentheses; significance tests are two-tailed.

+ $p < 0.10$, * $p < 0.05$, * $p < 0.01$

Figure OB1: Marginal Effects on Probability of Assignment to Condition

Notes: Markers provide the marginal effect of each sample characteristic on the probability of being assigned to each of the six experimental conditions; estimates have 95% and 90% confidence intervals attached.

Figure OB2: Simulated Assignment Analyses

Table OB3: fptest ATE Results

	S. Benefits	High Efficacy	Control Vs. Low Efficacy	SB&HE	SB&LE
National Interest					
$M_C - M_T$	-0.85991	-0.90476	0.34088	-1.11905	-0.60410
Exact Two-Tailed P	0.00000	0.00000	0.14089	0.00000	0.00210
Exact Lower Tail P	0.00000	0.00000	0.94331	0.00000	0.00040
Exact Upper-Tail P	0.99990	0.99990	0.08609	0.99990	0.99960
Local Interest					
$M_C - M_T$	-0.56755	-0.78571	0.45238	-0.83333	-0.06385
Exact Two-Tailed P	0.00540	0.00100	0.06249	0.00130	0.81652
Exact Lower Tail P	0.00360	0.00030	0.98110	0.00080	0.41516
Exact Upper-Tail P	0.99850	0.99970	0.03020	0.99950	0.67353
Vote Info					
$M_C - M_T$	-0.20432	-0.22358	0.14286	-0.35714	0.00974
Exact Two-Tailed P	0.06139	0.03040	0.11129	0.00120	0.99990
Exact Lower Tail P	0.03360	0.02240	0.98870	0.00070	0.64784
Exact Upper-Tail P	0.98840	0.99450	0.05619	0.99970	0.55784
Clubs Info					
$M_C - M_T$	-0.18217	-0.22358	0.09350	-0.30952	-0.19697
Exact Two-Tailed P	0.08229	0.02830	0.30277	0.00520	0.05379
Exact Lower Tail P	0.04720	0.02060	0.95110	0.00330	0.03620
Exact Upper-Tail P	0.98280	0.99370	0.16038	0.99950	0.98970

Notes: $M_C - M_T$ represents the difference between the control and treatment group; the two self-reports range from 1-5, while the two info measures are dichotomous. Negative values thus indicate that assignment to the treatment group led to an *increase* in interest, while positive values indicate a *decrease* in interest. Cells are shaded by two-sided p value: $p < 0.01$ = tan; $p < 0.05$ = gray; $p < 0.10$ = blue.

Table OB4: Power Analyses

	National Interest	Local Interest	Vote Info	Clubs Info
Control vs...				
HE	N = 30, per group = 15	N = 56, per group = 28	N = 184, per group = 92	N = 124, per group = 62
LE	N = 292, per group = 146	N = 174, per group = 87	N = 186, per group = 93	N = 378, per group = 189
SB	N = 28, per group = 14	N = 88, per group = 44	N = 162, per group = 81	N = 180, per group = 90
HE*SB	N = 20, per group = 10	N = 60, per group = 30	N = 58, per group = 29	N = 70, per group = 35
LE*SB	N = 62, per group = 31	N = 6798, per group = 3393	N = 54786, per group = 27393	N = 156, per group = 78

Notes: Cell entries indicate the estimated sample sizes and N per group required to adequately test for differences in means (self-reports) or proportions (info measures) for $p < 0.05$ with 80% power. Results were obtained using Stata's "power" command and using the observed mean/proportion and standard deviation data from the experiment.

Appendix OC: Supplementary Analyses

Manipulation Check

Our manipulation check in-text focused on group comparisons between our six experimental treatment groups. In so doing, we noted that: “Importantly, treatment groups that received the same treatment do not differ in terms of the targeted belief variable.” In other words, the two sets of efficacy groups (high or low) had similar levels of efficacy but differed in their social benefits beliefs due to variation in treatment reception, while the individuals receiving the social benefits manipulated did not differ on that belief dimension but did differ on the efficacy dimension due to assigned treatment. Table OC1 and Figure OC1 below provide a further test of this statement. Here, we regress the two beliefs on indicators for whether the respondent received the High Efficacy (=1) or Low Efficacy (=0) treatment, a dummy indicator for whether they were assigned to receive the Social Benefits treatment (=1) or not (=0), and their interactions. To aid in interpretation, Figure OC1 plots the results of the interaction term by providing the marginal values (with 95% confidence intervals) for respondents in the four groups. Supporting our claims are the following results: (1) individuals in the low and high efficacy treatment do not differ in terms of their social benefits beliefs (0.52 vs. 0.54); (2) individuals receiving the social benefits treatment are in greater agreement with the claim that politics serves social ends (0.64 and 0.70) and this effect does not vary significantly with efficacy treatment; (3) efficacy reports also significantly vary due to assignment to efficacy condition with overlapping estimates in the combination groups (i.e. efficacy x social benefits).

Meanwhile, in Table OC2, we provide the results from regression analyses of the individual manipulation check variables (i.e. the four individual social benefit beliefs and the two efficacy beliefs). As shown there, reception of the social benefits treatment led to positive and significant effects on the social benefit beliefs outcomes but not the efficacy beliefs. Meanwhile those receiving the High Efficacy (Low Efficacy) treatment reported higher (lower) efficacy on both measures.

Table OC1: Manipulation Check

	(1) Social Benefits (0-1 Scale)	(2) External Efficacy (0-1 Scale)
High Efficacy	0.0186 (0.0370)	0.324*** (0.0496)
Soc. Benefits	0.122** (0.0368)	-0.00866 (0.0490)
High Efficacy # Soc. Benefits	0.0438 (0.0518)	0.137 (0.0697)
Constant	0.518*** (0.0266)	0.315*** (0.0351)
Observations	165	170
Adjusted R^2	0.158	0.436

Results are from OLS regressions; both DV range from 0-1. Respondents in the control condition have been omitted.
Significance tests are two-tailed; standard errors are in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure OC1: Manipulation Check

Table OC2: Manipulation Check (individual items)

	Social Benefits Beliefs			Ext. Efficacy Beliefs		
	(1) Connect	(2) Know More	(3) Influence	(4) Social Respect	(5) Don't Have a Say	(6) Officials don't care
SB	0.138** (0.0516)	0.202** (0.0573)	0.131* (0.0529)	0.194** (0.0520)	-0.0714 (0.0613)	-0.0173 (0.0584)
HE	-0.0655 (0.0519)	0.0595 (0.0573)	0.0592 (0.0529)	0.143** (0.0523)	0.190** (0.0613)	0.149* (0.0587)
LE	0.0792 (0.0525)	0.0775 (0.0576)	0.0176 (0.0529)	-0.00595 (0.0523)	-0.137* (0.0613)	-0.183** (0.0591)
SB*HE	0.100 (0.0731)	-0.0197 (0.0813)	0.0241 (0.0746)	-0.0808 (0.0737)	0.161+ (0.0868)	0.198* (0.0830)
SB*LE	-0.0734 (0.0734)	-0.112 (0.0808)	-0.0184 (0.0742)	-0.00779 (0.0733)	0.0642 (0.0865)	0.00746 (0.0826)
Constant	0.583** (0.0367)	0.429** (0.0405)	0.512** (0.0376)	0.411** (0.0370)	0.446** (0.0434)	0.494** (0.0415)
Observations	252	252	253	255	253	253
Adjusted R^2	0.099	0.079	0.069	0.129	0.238	0.305

Standard errors in parentheses

Results are from OLS regressions. All DV are scaled from 0-1. Standard errors are in parentheses; significance tests are two-tailed.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

Testing H1 and H2 with Covariates Included

In-text, we test H1 and H2 by simply comparing group means between respondents in the HE (etc.) condition with those in the control group sans covariates. Here, we perform two sets of regression analyses. In the first, we regress our measures on indicators for the six conditions. In the second, we regress our dependent variables on dummy treatment indicators (Social Benefits: Yes or No; Efficacy: None, High, Low). We continue to see evidence of a significant treatment effect associated with the SB and HE conditions. In the case of the former, the ATE ranges between 0.095 and 0.187 (see Table OC4); in other words, holding all else constant, individuals assigned to the social benefits treatment are approximately 10-20% more interested in politics than those assigned to the control. Similar effects emerge for the High Efficacy condition. We wish to note one further point. In text, we noted that the relationship between LE group tended to report weaker levels of interest than those in the control, although this was not always statistically significant. Including covariates appears to add some greater certainty to our models, with three of the four comparisons (Nat. Interest, Loc. Interest, and Voting Info) emerging as statistically significant at least at the $p < 0.05$ level and in the expected negative direction. Again, the ATE here is fairly substantially, with exposure to the low efficacy treatment associated with between a 7.5% and 17.9% decline in interest relative to the No Efficacy group.

Note that these covariate-included models are not the imputed data models that now appear in-text, but are instead versions used in an earlier revision of the manuscript. Those models can be found in Online Appendix E.

Table OC3: Testing H1 and H2 with covariates

	(1) National Interest	(2) National Interest	(3) Local Interest	(4) Local Interest	(5) Vote Info	(6) Vote Info	(7) Clubs Info
HE*SB	0.280** (0.0510)	0.263** (0.0521)	0.208** (0.0578)	0.182** (0.0580)	0.357** (0.0957)	0.339** (0.0996)	0.310** (0.0970)
LE*SB	0.151** (0.0507)	0.154** (0.0524)	0.0160 (0.0571)	-0.000398 (0.0580)	-0.00974 (0.0946)	-0.0246 (0.0995)	0.197* (0.0959)
SB	0.215** (0.0507)	0.209** (0.0526)	0.142* (0.0574)	0.102+ (0.0586)	0.204* (0.0951)	0.199* (0.101)	0.182+ (0.0964)
HE	0.226** (0.0510)	0.206** (0.0529)	0.196** (0.0578)	0.145* (0.0589)	0.190* (0.0957)	0.197+ (0.101)	0.224* (0.0976)
LE	-0.0852+ (0.0514)	-0.106+ (0.0538)	-0.113+ (0.0578)	-0.180** (0.0596)	-0.143 (0.0957)	-0.131 (0.102)	-0.0935 (0.0976)
Female		-0.0575+ (0.0322)		-0.0844* (0.0356)		0.0246 (0.0611)	
African American		-0.0329 (0.0558)		0.114+ (0.0622)		-0.0529 (0.107)	
Asian American		-0.0344 (0.0449)		-0.0560 (0.0500)		0.0355 (0.0858)	
Hispanic		0.0361 (0.0542)		0.0263 (0.0603)		-0.0171 (0.104)	
Other		-0.0516 (0.0716)		0.133+ (0.0781)		-0.0230 (0.134)	
Strength of Party Attachment		0.0224 (0.0182)		0.00380 (0.0202)		0.00581 (0.0347)	
Participant Ideology		-0.0106 (0.0116)		-0.0116 (0.0129)		0.00909 (0.0222)	
Sophomore		0.0223 (0.0400)		0.0980* (0.0443)		0.107 (0.0761)	

Junior		0.0675 (0.0440)		-0.00311 (0.0486)		0.0661 (0.0834)	
Senior		0.0828 ⁺ (0.0460)		0.0584 (0.0512)		-0.0672 (0.0878)	
Partially/All Foreign		-0.0500 (0.0474)		-0.0495 (0.0524)		-0.0386 (0.0900)	
Constant	0.506** (0.0361)	0.521** (0.0753)	0.399** (0.0408)	0.473** (0.0837)	0.214** (0.0677)	0.134 (0.144)	0.167* (0.0686)
Observations	253	245	255	247	255	247	253
Adjusted R^2	0.225	0.248	0.148	0.191	0.110	0.083	0.071

Standard errors in parentheses

Results are from OLS models. Significance tests are two-tailed; standard errors are in parentheses.

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

Table OC4: Treatment Effects with Covariates (Testing H1 and H2)

	(1) National Interest	(2) National Interest	(3) Local Interest	(4) Local Interest	(5) Voting Info	(6) Voting Info	(7) Pol. Clubs Info
Social Benefits	0.168** (0.0297)	0.175** (0.0306)	0.0947** (0.0332)	0.105** (0.0336)	0.168** (0.0547)	0.150** (0.0574)	0.187** (0.0559)
High Efficacy	0.145** (0.0364)	0.127** (0.0377)	0.131** (0.0408)	0.111** (0.0416)	0.171* (0.0672)	0.170* (0.0709)	0.175* (0.0686)
Low Efficacy	-0.0741* (0.0364)	-0.0794* (0.0379)	-0.119** (0.0406)	-0.140** (0.0415)	-0.179** (0.0668)	-0.177* (0.0708)	-0.0375 (0.0682)
Female		-0.0648* (0.0319)		-0.0845* (0.0349)		0.0172 (0.0596)	
African American		-0.0191 (0.0563)		0.122+ (0.0621)		-0.0513 (0.106)	
Asian American		-0.0265 (0.0453)		-0.0528 (0.0499)		0.0383 (0.0852)	
Hispanic		0.0567 (0.0544)		0.0398 (0.0599)		-0.0194 (0.102)	
Other		-0.0452 (0.0721)		0.130+ (0.0777)		-0.0133 (0.133)	
PID Str.		0.0245 (0.0184)		0.00521 (0.0202)		0.00494 (0.0345)	
Ideology		-0.00778 (0.0117)		-0.00947 (0.0129)		0.00821 (0.0220)	
Sophomore		0.0231 (0.0405)		0.0964* (0.0444)		0.110 (0.0757)	
Junior		0.0676 (0.0443)		-0.00162 (0.0485)		0.0610 (0.0827)	
Senior		0.0724 (0.0459)		0.0470 (0.0504)		-0.0578 (0.0860)	

Grew Up Partially/All in Foreign Country		-0.0430 (0.0479)		-0.0451 (0.0525)		-0.0405 (0.0896)	
Constant	0.529** (0.0297)	0.526** (0.0716)	0.423** (0.0333)	0.461** (0.0788)	0.233** (0.0549)	0.165 (0.135)	0.164** (0.0559)
Observations	253	245	255	247	255	247	253
Adjusted R^2	0.207	0.229	0.144	0.188	0.116	0.089	0.070

Results are from OLS models. Significance tests are two-tailed; standard errors are in parentheses.

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

Figure OC2: Violin Plot of 6 conditions

Notes: The figure above is a violin plot for the two interest measures; the figures combines a box plot with a kernel density plot. As can be seen, the median value in the Low Efficacy (LE) condition is clearly to the left of all other conditions, including the Control. In addition, there is a clustering here around the lower response options that also signifies the expected treatment effect. However, there is also a fair amount of variance in the LE condition, much more so than in the Control group (particularly on the national interest measure).

Comparing Conditions: Social Benefits, High Efficacy, and Low Efficacy

When analyzing H1&H2 we focused on the influence (relative to control) of assignment to the High Efficacy, Low Efficacy, and Social Benefits conditions. But, what about *their* relationships? In

other words, do they significantly differ? To see this, we performed the same type of randomization test as was performed in Appendix OB. Here, the test is whether the mean interest rating in Condition A and Condition B are the same. The test simulates the difference in means between the possible (simulated) groupings of respondents and generates a two-tailed p-value for the actual difference observed. The results are shown below in Table OC5. Two key results emerge: (1) in no case is there evidence that the difference between the High Efficacy and Social Benefits condition is significant (indeed, in most case the difference in means is very small) and (2) in all cases respondents in the SB and HE conditions report significantly higher levels of interest than those in the LE group.

Table OC5: Randomization Tests for Difference of Means between Exp. Conditions

SB vs. LE		SB vs. HE	HE vs. LE
National Interest			
M – M	-1.20079	0.04485	-1.24564
Exact Two-Tailed P	0.00000	0.9021	0.00000
Exact Lower Tail P	0.00000	0.64784	0.00000
Exact Upper-Tail P	0.99990	0.45145	0.99990
Local Interest			
M – M	-1.01993	0.21816	-1.23810
Exact Two-Tailed P	0.00000	0.33427	0.00000
Exact Lower Tail P	0.00000	0.86591	0.00000
Exact Upper-Tail P	0.99990	0.18248	0.99990
Vote Info			
M – M	-0.34718	-0.01384	-0.33333
Exact Two-Tailed P	0.00020	0.9990	0.00050
Exact Lower Tail P	0.00000	0.54585	0.00020
Exact Upper-Tail P	0.99990	0.63144	0.99990
Clubs Info			
M – M	-0.27567	0.04141	-0.31707
Exact Two-Tailed P	0.00280	0.81742	0.00160
Exact Lower Tail P	0.00230	0.73813	0.00090
Exact Upper-Tail P	0.99960	0.42526	0.99980

Notes: M – M represents differences in means.

Full Model Results: Table 2 in Text

Below are the full model results from the models reported in text in Table 2.

Table OC6: Full Model Results (see Table 2, in text)

	(1) National Interest	(2) National Interest	(3) Local Interest	(4) Local Interest	(5) Voting Info	(6) Voting Info	(7) Pol. Clubs Info	(8) Pol. Clubs Info
Social Benefits	0.236** (0.0554)	0.284** (0.0609)	0.129* (0.0603)	0.185** (0.0655)	1.207+ (0.706)	0.980 (0.742)	1.979** (0.677)	1.554* (0.749)
High Efficacy	0.311** (0.0557)	0.329** (0.0606)	0.310** (0.0610)	0.325** (0.0652)	2.179** (0.677)	2.323** (0.726)	2.093** (0.680)	2.259** (0.794)
SB * HE	-0.183* (0.0783)	-0.228** (0.0833)	-0.117 (0.0857)	-0.144 (0.0897)	-0.533 (0.833)	-0.466 (0.888)	-1.628* (0.810)	-1.596+ (0.932)
Female		-0.0661 (0.0431)		-0.0863+ (0.0462)		0.0373 (0.436)		1.438** (0.468)
African American		-0.0413 (0.0690)		0.118 (0.0749)		0.378 (0.632)		-0.261 (0.627)
Asian American		-0.0461 (0.0606)		-0.0205 (0.0658)		0.422 (0.589)		-1.029 (0.674)
Hispanic		0.0109 (0.0725)		0.0609 (0.0787)		-0.885 (0.700)		0.863 (0.672)
Strength of Party Attachment		0.0231 (0.0251)		- 0.00596 (0.0272)		0.493+ (0.259)		0.498+ (0.269)
Participant Ideology		-0.0176 (0.0160)		-0.0187 (0.0173)		0.180 (0.157)		0.232 (0.155)
Sophomore		0.0233 (0.0554)		0.122* (0.0596)		0.820 (0.517)		0.585 (0.525)
Junior		0.0585 (0.0591)		0.0139 (0.0632)		-0.0874 (0.556)		0.655 (0.570)

Senior		0.127 ⁺ (0.0675)		0.0735 (0.0731)		-1.111 (0.807)		-0.874 (0.888)
Grew Up Partially/All Foreign Country		-0.0550 (0.0669)		-0.0822 (0.0715)		0.515 (0.641)		1.582 [*] (0.692)
Constant	0.421 ^{**} (0.0396)	0.425 ^{**} (0.102)	0.286 ^{**} (0.0431)	0.310 ^{**} (0.111)	-2.565 ^{**} (0.599)	-4.254 ^{**} (1.147)	-2.539 ^{**} (0.600)	-5.299 ^{**} (1.231)
Observations	168	163	170	165	170	165	168	153
Adjusted R^2	0.219	0.233	0.174	0.209				
Pseudo R^2					0.146	0.223	0.096	0.234
Covariates?	No	Yes	No	Yes	No	Yes	No	Yes

Standard errors in parentheses

Interest models are OLS regressions, information models are logit regressions. DVs range from 0-1 (National and Local Interest) or are dichotomous (both info measures). Standard errors are in parentheses; significance tests are two-tailed.

⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$

Marginal Effect of Social Benefits Treatment by Efficacy condition

Notes: Markers provide the marginal effect of assignment to the social benefits condition by efficacy group assignment (y-axis); circle markers provide results from models sans covariates, triangular markers provide results from models with covariates. Both 95% and 90% confidence intervals are provided for the estimates.

Predicted Values by Treatment Conditions

Notes: Markers provide either the expected value on the 0-1 interest variable or the predicted probability of a respondent selecting the information options by treatment condition. 95% and 90% confidence intervals are also provided.

Comparing SB Treatment Effects at High and Low Efficacy (full condition breakdown)

In-text, we test H3 by regressing our DVs on an SB dummy indicator (yes vs. no), an efficacy dummy indicator (high vs. low), and their interaction. Here, we replicate that model but now include respondents in the control; see Table OC for model results and Figure OC3 for a plotting of the interaction terms. Thus, the model is: $SB + EFF + SB*EFF$; the interaction terms indicate whether the SB treatment has differential effects among those assigned to the two efficacy conditions rather than those who did not receive a social benefits treatment at all (i.e. those in the pure control). As above, we continue to see significant effects for the SB, HE, and LE constitutive terms (i.e. individuals who received the SB treatment report significantly greater interest than those who did not and who did not receive the efficacy treatment; individuals who received the HE treatment report greater interest than those who did not and did not receive the SB treatment; and those who received the LE treatment tend to report *weaker* interest than those who did not receive the LE and SB treatments). The interaction terms tend toward insignificance. The SB*HE interaction term is negative in all cases (i.e. the effects of the SB treatment are weaker in the HE case than in the No Efficacy case) and positive (but highly null) in the LE*SB instance.

Table OC7:

	(1) National Interest	(2) National Interest	(3) Local Interest	(4) Local Interest	(5) Voting Info	(6) Voting Info	(7) Pol.Club s Info	(8) Pol. Clubs Info
SB	0.215** (0.0507)	0.209** (0.0526)	0.142* (0.0574)	0.102+ (0.0586)	0.971* (0.487)	1.004+ (0.518)	0.985+ (0.523)	1.453* (0.593)
HE	0.226** (0.0510)	0.206** (0.0529)	0.196** (0.0578)	0.145* (0.0589)	0.914+ (0.490)	0.952+ (0.515)	1.163* (0.523)	1.591** (0.586)
LE	-0.0852+ (0.0514)	-0.106+ (0.0538)	-0.113+ (0.0578)	-0.180** (0.0596)	-1.266+ (0.707)	-1.225+ (0.727)	-0.930 (0.729)	-0.361 (0.769)
SB * HE	-0.161* (0.0720)	-0.152* (0.0750)	-0.130 (0.0815)	-0.0654 (0.0835)	-0.297 (0.658)	-0.429 (0.705)	-0.634 (0.687)	-1.342+ (0.786)
SB * LE	0.0213 (0.0720)	0.0512 (0.0774)	-0.0128 (0.0810)	0.0776 (0.0858)	0.236 (0.858)	0.0777 (0.906)	0.994 (0.855)	0.0142 (0.937)
Female		-0.0575+ (0.0322)		-0.0844* (0.0356)		0.142 (0.326)		0.992** (0.353)
African American		-0.0329 (0.0558)		0.114+ (0.0622)		-0.229 (0.545)		-0.252 (0.546)
Asian American		-0.0344 (0.0449)		-0.0560 (0.0500)		0.212 (0.452)		-0.492 (0.486)
Hispanic		0.0361 (0.0542)		0.0263 (0.0603)		-0.0498 (0.515)		0.923+ (0.519)
Other		-0.0516 (0.0716)		0.133+ (0.0781)		-0.212 (0.784)		-2.434* (1.171)
Party ID Str.		0.0224 (0.0182)		0.00380 (0.0202)		0.0603 (0.186)		0.0126 (0.197)
Ideology		-0.0106 (0.0116)		-0.0116 (0.0129)		0.0481 (0.116)		0.156 (0.120)
Sophomore		0.0223 (0.0400)		0.0980* (0.0443)		0.549 (0.391)		-0.192 (0.400)

Junior		0.0675 (0.0440)		- 0.00311 (0.0486)		0.333 (0.433)		0.247 (0.442)
Senior		0.0828 ⁺ (0.0460)		0.0584 (0.0512)		-0.498 (0.507)		-1.230* (0.595)
Grew Up Partially/All Foreign Country		-0.0500 (0.0474)		-0.0495 (0.0524)		-0.183 (0.470)		0.767 (0.487)
Constant	0.506** (0.0361)	0.521** (0.0753)	0.399** (0.0408)	0.473** (0.0837)	-1.299** (0.376)	-1.797* (0.773)	-1.609** (0.414)	-2.894** (0.867)
Observations	253	245	255	247	255	247	253	245
Adjusted R^2	0.225	0.248	0.148	0.191				
Pseudo R^2					0.110	0.126	0.082	0.171

Standard errors in parentheses

Interest models are OLS regressions, information models are logit regressions. DVs range from 0-1 (National and Local Interest) or are dichotomous (both info measures). Standard errors are in parentheses; significance tests are two-tailed.

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

Figure OC3

Notes: Markers provide the marginal effect of assignment to the social benefits treatment by efficacy treatment group, with 95% and 90% confidence intervals attached.

Table OC8: Number of Observations by Treatment Condition and Measure

<u>Outcome:</u>	<u>Treatment Conditions</u>					
	(1) Control	(2) Social Benefits	(3) High Efficacy	(4) Low Efficacy	(5) High Eff. & Social Benefits	(6) Low Eff. & Social Benefits
Nat. Interest	42	43	42	41	42	43
Local Interest	42	43	42	42	42	44
Voting Info	42	43	42	42	42	44
Pol. Clubs Info	42	43	41	41	42	44
External Efficacy	42	43	42	42	42	44
Social Benefits	41	41	42	39	41	43
Max N =	42	43	42	42	42	44
Expected N; Actual N (Table 2, No Covariates)						
Nat Interest	168; actual = 168					
Local	170; actual = 170					
Voting	170; actual = 170					
Pol Clubs	168; actual = 168					

Appendix OD: Full Text of Treatment Materials

Here we attach the full text of all the treatment articles. We begin by providing an overview of the treatment procedures. Then we produce the articles for the two mixture conditions. We begin with the High Efficacy & Social Benefits condition and then show the Low Efficacy & Social Benefits condition. For the low efficacy condition we only show the low efficacy targeting readings since the social benefits ones will be shown in the HE*SB section. We then conclude with the entertainment articles that were included. We include bracketed information here next to the title of the article to indicate what belief was targeted.

The general order of the treatments was as follows.

		Efficacy		
		High	Low	None
Social Benefits	High	(1) High Efficacy x High Social Benefits	(2) Low Efficacy x High Social Benefits	(3) Social Benefits
	None	(4) High Efficacy	(5) Low Efficacy	(6) Control

Order:

- For Groups 1-2
 - o Introduction to Task
 - o Editor's Introduction
 - o What the Research Shows (Pro Efficacy or Con Efficacy)
 - o 2 Treatment Articles (Pro Efficacy or Con Efficacy)
 - o What the Research Shows (Social Benefits)
 - o 2 Treatment Articles (Social Benefits)
 - o Post-test
- For Groups 3-5
 - o Introduction to Task
 - o Editor's Introduction
 - o What the Research Shows
 - o 2 Treatment Articles
 - o 3 Control Articles
 - o Post-test
- For Group 6
 - o Introduction to Task
 - o 6 Control Articles
 - o Post-test

4: Pro Efficacy	Intro to Task	Editor	Control	Control	Control	Research	Treat 1	Treat 2
5: Con Efficacy	Intro to Task	Editor	Control	Control	Control	Research	Treat 1	Treat 2
1: Pro Eff * Soc	Intro to Task	Editor	Research	Treat 1 (PE)	Treat 2(PE)	Research	Treat 1 (SB)	Treat 2 (SB)
2: Con Eff * Soc	Intro to Task	Editor	Research	Treat 1 (CE)	Treat 2(CE)	Research	Treat 1 (SB)	Treat 2 (SB)
3: Soc Bene	Intro to Task	Editor	Control	Control	Control	Research	Treat 1	Treat 2
Control	Intro to Task	Control	Control	Control	Control	Control	Control	Control

Introduction

[For treatment conditions:] On the next page, you will be presented with a selection of short articles taken from a recent edition of the New York Times Magazine focusing on politics and political engagement. After reading each article, you will be asked some questions {Next Page}

[For control:] On the next page, you will be presented with a selection of short articles taken from a recent edition of the New York Times Magazine. After reading each article, you will be asked some questions {Next Page}

HIGH EFFICACY & SOCIAL BENEFITS TREATMENT GROUP

Editor's Introduction by Hugo Lindgren

The articles contained in this issue provide important insight into two important dimensions of our political system: the effects that citizens can have on policy making and the non-political benefits they can achieve through engagement with politics. Despite what some may believe, a huge amount of research has been conducted that shows the government is responsive to public input and opinion. Reporting by Eric Limer, on loan from *The Atlantic Monthly*, and the New York Times' Heidi Brown provide case studies of responsiveness in action, while Professor Adam Davidson, of New York University, provides an overview of the relevant research. Meanwhile, Eitan Hersh, of Harvard University, and Lee Drutman, also of the New York Times, report on the social benefits of engagement. Professor Davidson also returns to review the research on this matter, where the emergent consensus holds that engagement provides tangible social rewards for the active, including denser social networks and higher life satisfaction. American democracy is not only healthy, due to the high degree of representation it actually offers, but it is also healthy for you.

[next page]

Representation: What the Evidence Shows By Adam Davidson, Associate Professor, New York University [HE TARGET]

Historians and political scientists have given the question of representation by government officials a lot of attention. The consensus that emerges from this research is that the government is very responsive to public opinion. This can readily be observed in a recent string of books on the topic that delve deeply into the issue. Research conducted by Robert Erikson, Michael Mackuen, and James Stimson for their award winning book The Macro Polity demonstrates that policy making responds to public opinion. When the people want more governmental action on an issue, then politicians will provide it, and when this desire for activity wanes so does governmental activity. Research conducted by the political scientists Stuart Soroka and Christopher Wlezien, moreover, demonstrates that the connection between public input and governmental output only increases in strength when attention is limited to issues that the public finds highly important. When the mass public cares about an issue, politicians are particularly likely to govern according to the public's preferences. Finally, research conducted by a variety of scholars, including Larry Bartels of Princeton University and John Griffin of Notre Dame University, shows that ordinary citizens who participate in the political process will have their voices heard. This research is but a snapshot of a much larger body of research that point toward the same conclusion: legislators paying a great deal of attention to the views of ordinary citizens.

[next page]

Equal Payback For Lilly Ledbetter [HE TARGET]

Heidi Brown, New York Times

Her 10-year struggle to close the gender wage gap is now law. And she's still fighting.

The first piece of real legislation Barack Obama signed as the 44th President of the United States helps ensure that workers discriminated on the basis of gender have a fair chance to sue their employers. The Lilly Ledbetter Fair Pay Act is named after a woman who was paid less than her male co-workers at an Alabama tire factory. Ledbetter did not set out to be an activist; she did not even involve herself in politics much. But after the Supreme Court ruled against her, she decided it was time to start.

From an Anonymous Tip-Off to the Supreme Court

In 1979, Ledbetter took a job at the Goodyear Tire and Rubber Company plant in Gadsden, Alabama. At the beginning of her career there, despite being the only woman in her position, Ledbetter was given the same starting salary as her male colleagues. Over the next 19 years she not only gained new skills and experience in her supervisory role, she also helped to train a number of new hires, all men. In 1996 she received a "Top Performer" award for her contribution to the company.

Things changed in 1998. In March of that year, someone left an anonymous note for her listing her salary and that of three of her male colleagues with the same job title as her. The men listed on the paper were drawing monthly salaries 15 percent to 40 percent higher than hers. “The next day I had off, I filed my complaint with the E.E.O.C.”—the Equal Employment Opportunity Commission—“it was a humiliating situation,” she said.

The reason for the disparity, despite having started at the same salary as the others, is that over time she had been receiving smaller raises and bonuses than the men. Ledbetter was not only denied dollars in her paycheck, but also in the company’s contributions to her pension and retirement accounts, which were a percentage of her salary. The cumulative effect of years of this kind of discriminatory pay amounted to hundreds of thousands of dollars in lost wages and benefits.

As in many other companies and organizations in the United States, employees at Goodyear were prohibited from sharing information about their pay with other workers. Without that anonymous tip, Ledbetter would have risked her job in trying to obtain information about any discrimination.

In November of 1998, Ledbetter filed a lawsuit against Goodyear, claiming pay discrimination under Title VII of the Civil Rights Act of 1964 and the Equal Pay Act of 1963. She was initially victorious, but after a series of appeals and countersuits, the case wound its way to the Supreme Court and an apparent defeat for Ledbetter.

Hitting the Hill

Instead of giving up after the Supreme Court’s ruling, Ledbetter used the media attention to campaign for legal changes that would enable discriminated against workers to gain remuneration. Ledbetter visited individual members of Congress to make her case. More importantly, she travelled the country making speeches and recruiting ordinary Americans to spend a little bit of time placing a phone call, letter, or email to their legislator in Washington. Ultimately, the combination of Ledbetter’s public campaign and her supporter’s smaller-scale personal efforts convinced legislators to take action and pass the Lilly Ledbetter Fair Pay Act. The Act reverses the Supreme Court decision and allows an employee to file a charge based on every instance the employee is affected by the application of a discriminatory compensation decision, including each time wages are paid.

In his remarks, the President argued that the bill advanced “one of this nation’s first principles, that we are all created equal and each deserve a chance to pursue our own version of happiness”. Mr. Obama also highlighted the broad public support for the bill. “The American public has been united in support of fair pay and I am proud to sign into law an act that will translate the ideals of the American people into action.” Public opinion polling on the issue showed public displeasure with the Supreme Court ruling that propelled the bill onto the national scene and a large majority indicating support for paying women equally to men for comparable work, a central ideal highlighted by Ledbetter in her fight for the bill’s passage.

Ms. Ledbetter will not see any money as a result of the legislation Mr. Obama signed into law. But what she has gotten is personal satisfaction, as she said in the State Dining Room after the signing

ceremony. “Goodyear will never have to pay me what it cheated me out of,” she said. “In fact, I will never see a cent. But with the president’s signature today I have an even richer reward.”

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**A New Day of Influence Is Dawning [HE TARGET]
By Eric Limer, The Atlantic Monthly**

The blockage last week of SOPA, the Stop Online Piracy Act of 2012, and PIPA, the Protect Intellectual Property Act, was widely heralded as a victory for net neutrality. Perhaps more important, however, was the impressive display of public muscle that led to this victory. The success of the anti-SOPA movement suggests that the promise of online organizing for public pushback against controversial government action is very real.

SOPA and PIPA would have required websites to refrain from linking to any sites “dedicated to the theft of U.S. property,” prevented companies from placing ads on the sites, and would block payment companies like Visa, MasterCard and PayPal from transmitting funds to the sites. The laws’ supporters argued that the measures were crucial for tamping down on the theft of intellectual property, while opponents of the bills argued that they went too far and would have given the government power to effectively censor the Internet and limit free speech. While the bills have been defeated, they will likely not represent the last efforts along these lines given the rapid proliferation of high-speed Internet and changing economic fortunes of media companies.

The most interesting outcome, then, of the SOPA debacle is the massive backlash from the general public and how effective this backlash was in preventing the passage of the bills, especially considering how little effort was involved on a person-by-person basis. The protests largely took the shape of petitions signed online, emails sent to legislators, and personal protests by blogger and websites. Over five million people signed petitions against the bills, according to Google and the website Avaaz.org. At least 350,000 sent emails to their representative in the House and Senate using forms available online; the number is likely much larger as that number only includes emails that were sent via forms provided online. Thousands of bloggers joined the protest by blacking out their blogs entirely. While the effort needed for any single person was quite minimal, there is no denying the effectiveness of this collective response.

The fervor on display during the Anti-SOPA protests was overwhelming. Seasoned organizers might argue that anything done in front of a computer screen is not activism but “slacktivism”; yet behold, the architects of the bill have backed down and vowed to go back to the drawing board. The results of this, and similar efforts, suggest that those in power and watching and that public outrage communicated through these new organizing methods can be effective in influencing policy-making.

The Anti-SOPA protests are not the only recent examples of seemingly small scale individual efforts having a large effect through the online aggregation. Bank Transfer Day, held on November 5th, is another example. According to a recent study by Javelin Strategy and Research, 610,000 people cited Bank Transfer Day as being the reason they switched their funds from big banks to credit unions

between October and December. Such activity was instrumental in putting pressure on the banks to rollback intended fee increases. Another example of this dynamic occurred in response to indications that the Obama White House might choose a less than tough approach to the Wall Street honchos whose investments led the U.S. into a national economic meltdown. A social media backlash hit the Obama administration just before the State of the Union address, and the president surprised his listeners with a commitment to a muscled-up federal task force to be coordinated with the tough-on-banks New York Attorney General Eric Schneiderman.

Attempts to legislate the Internet will not go away. The Internet is a relatively young place and as such is inevitably going to be reined in as the boundaries of authority shift with the meaning of intellectual property. Fortunately, the medium shapes the message, and the millions of signatures, calls and emails to our representatives indicate how the general online public can quite easily organize not just for net neutrality, but for anything.

[next page]

Participation: What the Evidence Shows by Adam Davidson, Associate Professor, New York University [SOCIAL BENEFITS TREATMENT]

Researchers have given a lot of attention to understanding what citizens get out of their engagement with politics, which should not be terribly surprising given the importance of participation for democracies. The consensus that has emerged from this research is that engagement has clear social benefits. Research conducted by the political scientists Donald Green and Alan Gerber, both of Yale University, revealed that the engaged receive a lot of approval from friends, family, and neighbors when they turn out to vote, show an interest in politics, or otherwise participate. These authors argue that turning out to vote, and engaging in other political rituals, acts as a type of social glue that helps maintain relationships in good order. The sociologist Nina Eliasoph, of the University of California at San Diego, discovers something similar in a study of local political groups and public meetings. Someone who shows up at a political meeting, or joins a local group dealing with politics, puts themselves in a position to meet others with similar others, with the result being new friendships and acquaintances. This research is consistent with Robert Putnam's landmark study, Bowling Alone, which explores the social role that involvement in voluntary political organizations play in the everyday lives of citizens. Putnam's data show that periods of time marked by higher political engagement are also marked by higher reports of life satisfaction, more expansive social networks, and lower reports of loneliness and depression. The more active today also appear to derive these benefits from their activity. This research, and many other books and articles like it, show that political activity is actually a important social resource that people can draw upon to root themselves in a community.

[next page]

Get Politically Engaged, Get Happy? [SOCIAL BENEFITS TREATMENT]

Political activists are more socially connected and happier than the average person.

By Lee Drutman

As the United States gears up for midyear elections, getting involved in a campaign might not only be a great opportunity to participate in democracy — it might make you feel better.

Two psychologists — Malte Klar, a practicing psychologist in Germany, and Tim Kasser, professor at Knox College — have found a clear link between political activism, how socially connected someone is, and a person's sense of well-being, and have shown that even a very small engagement with political activism can boost one's sense of vitality.

"Activists live a happier and more fulfilling life than the average person," said Klar, who studied with Kasser for a year.

In order to understand why political activism might improve one's life, it helps to know a little bit about what contributes to one's sense of well-being generally. Traditionally, psychologists have measured happiness in terms of how one is feeling in the moment — whether a person is experiencing pleasant emotions, isn't suffering from unpleasantness and is pretty much satisfied with his or her life. This conception is known as "hedonic" well-being.

But this is only one aspect of feeling good. Equally important, in Klar and Kasser's conception, is "eudaimonia" — a sense of life having purpose and direction. "It's the sense that my life is a good life, not because I have a lot of pleasure, but because life is meaningful, because it feels like I'm striving for a higher purpose," explained Kasser, who has written a book about how hedonic materialism does a poor job of satisfying people's psychological needs.

A third conception of well-being is social well-being, which has received the least attention in the field of psychology literature. "It's more about how am I doing with regard to my relationships with society, how am I connecting with society," Kasser said.

In order to feel good, Klar and Kasser suggest that individuals need to be satisfied in all these areas. And in order to do so, people need to feel autonomous and free, connected and competent.

"Our idea here was that maybe political activism does a good job of satisfying all those needs," Kasser said. "It's pretty rare that people in the U.S. are engaging in political activism because somebody is making them. Usually activism involves engagement with a group, and most groups have short-term goals that make people feel competent."

In order to test the relationships between being politically active and feeling good, Klar and Kasser conducted two surveys asking different sample groups about both their history of and attitudes toward activism and their feeling across a range of well-being indicators.

The big finding, published recently in *Political Psychology*, was that engagement correlated with being happy across the board. Those who engage in political activism feel better, have a greater sense of purpose and have more connection to their community than those who don't. "There definitely appears to be social rewards from getting involved with politics that translate into a greater sense of happiness," argued Klar.

That being an activist causes this, however, is trickier to show. In an attempt to show causality, Klar and Kasser designed a simple experiment. They had students complete a survey about the college

dining service. Half of the surveys covered ethical-political aspects of the food service, asking students, for example, to evaluate different reasons why the cafeteria should offer fair-trade coffee. The other half asked students to evaluate self-oriented aspects, like the price and quality of the food.

Students who had been randomly assigned to the “activist group” reported feeling more vitality after the experiment (vitality is an important component of eudaimonic happiness). Though such a manipulation only gives a small taste of what it is like to be an activist, the fact that even something as minimal as filling out an activist-y survey could increase vitality surprised Kasser.

Similar findings have been reported in research on volunteering activity — there also seems to be pretty substantial evidence that those who volunteer say they are more satisfied with their lives than non-volunteers, have deeper social connections, and some limited evidence that the relationship is causal — i.e., volunteering improves life satisfaction.

So should everybody run out of their therapist’s office and become a political activist? Well, maybe.

“If you know of a cause that feels truly important to you, get informed, get organized and get active,” Klar said. “Activism might not only change your well-being for the better, but also the world.”

[next page]

***A caucus-goer’s community* [SOCIAL BENEFITS TREATMENT]**

We think of caucus-goers as unduly politically active. But the data suggests they care far more about something closer to home.

By Eitan D. Hersh, Harvard University

With its endless primetime debates, strange delegate rules, and state-by-state sequential elections, the Presidential nomination season stimulates both intrigue and dismay at the peculiarities of the U.S. election system. And for those of us who reside in states where casting a primary ballot is procedurally identical to casting a general-election ballot, the caucus system seems particularly odd. What kind of person is willing to spend several hours on a winter night voting in a public setting and listening to neighbors bicker about politics?

The evidence from past elections suggest that caucus attendees are different from primary voters, but not because they have a stronger commitment to politics. Rather, caucus-goers are outliers because they tend to be more engaged in community endeavors, like volunteering and school committee work, compared to primary voters.

Following the 2008 nomination battles, I analyzed public opinion surveys to determine how politically extreme caucus-goers are as compared to primary voters. The 2008 election was a useful year to study because both parties held competitive contests in most states – a rare circumstance that enables us to study the nomination process using national survey data. Unsurprisingly, caucus attendees and primary voters were both more engaged in politics than non-participants. But something else was evident: caucus attendees did not stand out in their political activism compared to primary voters, a finding consistent with several earlier studies of nomination elections as well.

Though caucus attendees were not extreme political activists in 2008 compared to primary voters, they were extreme community activists. Consider a question from the National Election Study asking if individuals attended a school or community meeting in the last year. Primary voters were 16 percentage points more likely to attend a meeting than primary abstainers. But caucus-goers were *29 points more likely* to attend a meeting than caucus abstainers. Questioned whether they did any community work in the last year, primary voters were 17 percentage points more likely to answer affirmatively than primary abstainers while caucus-goers were 33 points more likely to answer affirmatively than caucus abstainers.

The reason for this might be that caucuses, and likely other types of political activity such as public meetings and protests, provide other reasons for, and benefits from, participation beyond trying to elect one's favored candidate or influence policy. Compared to primaries, the public setting of the caucus attracts people who are not foremost concerned with expressing a political opinion, but voters who want to see the spectacle and be seen doing so. The caucus is an *event*. Moreover, it is a public event (often accompanied by potluck snacks!). Caucuses, remember, take place mostly in rural states in the dead of winter; they provide a rare opportunity in the calendar for neighbors to gather and reconnect. And there's also a potential social cost for abstaining – if your neighbor is an activist who asks you to attend, and you're a no-show, you'll have to answer for it in the morning.

Take church as an analogy. Just as some people attend church for God's sake, some attend caucuses for democracy's sake. But as with church, a whole lot of people attend for the community and for the donuts that follow the main event. Caucuses are not the only type of political event where this is the case; I have found similar results in studies looking at participation in other political events and either forums, from local city council meetings to volunteering for political parties or causes. The engaged end up making connections in their community that they find meaningful and the prospect of these new relationships helps motivate later engagement.

Those of you who are unnerved by the caucus system might like to reevaluate. Different election rules can surely incentivize some citizens to show up and others to abstain, but from what we can tell, the time and burden of participating in caucuses is not disproportionately borne by extreme political activists. Rather, caucuses seem distinctive because social benefits and social costs inspire community-oriented citizens to attend in high numbers. Their participation might affect election outcomes, but hardly in ways that seem obviously extreme or undemocratic.

LOW EFFICACY TREATMENTS (FOR LOW EFFICACY, LOW EFFICACY&SOCIAL BENEFITS GROUPS)

Representation: What the Evidence Shows by Adam Davison, Associate Professor, New York University

Historians and political scientists have given the question of representation by government officials a lot of attention. The consensus that emerges is one of that supports the view that representation on the part of American governmental officials is much less substantial than many would like. This consensus can be emerged in a string of recent and important books on this subject matter. Research conducted by political scientists Warren Miller and Donald Stokes, for instance, shows that the voting behavior of legislators is essentially unrelated to the preferences of their constituents as revealed by public opinion surveys. This gap has been relatively consistent over time, as research by political scientist David Karol shows. While some critics of public opinion polling fear that politicians will pay *too much* attention to their results and govern by fiat, Karol's research shows that the increasingly frequent use of public opinion polling since the late 1930s has not increased the representativeness of governmental activity. Studies of representation suggest that not all citizens are poorly represented, however. Recent studies conducted by Larry Bartels and Martin Gilens of Princeton University offer rich evidence that the preferences of the wealthy are much more likely to find support in the halls of power than those of the middle or working class. A careful summation of the available research on this subject matter suggests that American legislators would only pass the bar on matters of representation if it were lowered to knee level.

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Not That Kind of Smoke-Filled Room [LOW EFFICACY TREATMENT] Why doesn't anyone in Washington take marijuana legalization seriously? By Will Oremus

Potheads had high hopes for President Obama's Google+ hangout on Monday. The Web superpower had invited citizens to submit questions for the president via YouTube, and it encouraged people to vote on the questions they'd like Obama to answer in a live video chat. The results: 18 of the 20 most popular questions were about marijuana policy.

The top vote-getter came from retired LAPD officer Stephen Downing, who said he's come to see the country's drug policies as "a failure and a complete waste of criminal justice resources." Pointing to a recent Gallup poll that showed, for the first time, a majority of Americans in support of marijuana legalization, he asked Obama, "What do you say to this growing voter constituency that wants more changes to drug policy than you've delivered in your first term?"

Nothing, as it turned out. The question wasn't among those selected by Google.

That's a bummer for the weed lobby but par for the course in Washington, where legalization remains a nonstarter despite fast-growing public support. In 1969, 12 percent of Americans thought pot should be

legal. That percentage grew to the mid-20s by the late 1970s, passed 30 percent in 2000, and hit 40 percent in 2009, according to Gallup. A surprising October poll showed support at 50 percent, with just 46 percent against.

While voters have mellowed out, their representatives in Congress haven't. A legalization bill was introduced in Congress last year for the first time, but few expect it to even come up for a vote. When Obama did field a marijuana question in a YouTube chat last year, he laughed at it. "I don't know what this says about the online audience," he chortled. Why won't the president, or anyone else in Washington, take marijuana policy seriously?

A primary reason for lawmakers' reticence is that, for decades, the most visible advocates of looser weed laws have been, well, weed smokers—and what serious politician wants to be associated with a bunch of stoners, man? Earlier this decade, wealthy liberals like George Soros and Peter Lewis recognized that problem and shifted the debate to medical marijuana, giving the movement a more sympathetic public face: an ailing grandmother rather than a dreadlocked coach potato. Several states have since passed medical marijuana laws, but they don't address the bigger issue at play here. It's recreational users, not glaucoma patients, whose money fuels the illicit drug trade that finances criminal gangs.

That's why Angell's group, Law Enforcement Against Prohibition, has taken a different approach. It enlists cops and ex-cops to testify to the societal impacts of the failed drug war, pushing decriminalization and legalization as prudent policy solutions. It's an appeal to reason, not compassion. Downing, the former LAPD cop who asked the YouTube question, is a LEAP board member. The support his video got testifies to his message's broad appeal with the public, if not with legislators.

While Angell believes reform is just a matter of time, many more observers of Washington believe otherwise. Asa Hutchinson, the former Arkansas congressman who led the Drug Enforcement Administration under George W. Bush, told me that, despite the changes in public attitudes, he doesn't see a big difference in how the debate is playing out in Washington today as compared to 10 years ago. Part of the problem is the incentive elected officials have to not let potential opponents appear tougher on crime than they are, regardless of actual public attitudes on the specific issue. And for all the efforts of groups like LEAP, there's still the Cheech and Chong factor. Psychologist and U.C.–Berkeley law professor Robert MacCoun, argued that pot's place in pop culture makes it hard for even generally supportive people to take the issue seriously. Given those two factors, it seems likely that drug policy will lag far behind public attitudes and only change when support is near unanimity, which won't occur for some time yet.

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A Disconnect on Taxes and Deficits [LOW EFFICACY TREATMENT]

By Sarah Dutton

The past year has featured a contentious debate over how to deal with record federal deficits and increasing national debt. This debate has largely centered on how much money to cut from the federal budget, and where to do the cutting, and whether to increase taxes, and on whom. At the heart of this

controversy, however, lies a disconnect between public opinion and elite consensus concerning taxation. While the public has consistently indicated a desire for higher taxes on the wealthy, if not the middle class, actual tax policy over the past two decades has seen several large tax cuts lowering the tax rates paid by the most well-off and passed with bi-partisan majorities in Washington.

The latest CBS News poll shows a two-thirds majority of Americans support raising the taxes of households with incomes of \$1,000,000 or more - which President Obama and some Democrats in Congress have proposed. Support for the "millionaire's tax" rises as high as 83 percent among Democrats, and while 54 percent of Republicans oppose it, four in ten think tax increases for these upper income households are a good idea.

Even more affluent Americans support raising taxes for millionaires: 60 percent of those with incomes of \$100,000 or more think that should be done.

At the same time, just 25 percent of Americans overall think doing so will lead to more jobs, which has been a priority for the public for many months.

Whether the goal is to reduce the federal budget deficit, provide health insurance for those without, or even for no specific reason, there is a history of support in public opinion polls for higher taxes for the most affluent Americans.

In general, polls have shown that many Americans think the rich just don't pay their fair share in taxes. A CBS News/New York Times Poll conducted in 1985 found 69 percent felt that "people who have more money than you" were paying too little in taxes - while they themselves were paying their fair share (51 percent) or even too much (45 percent).

Three years later, 63 percent said they thought federal income tax rates should be increased for people whose income was \$100,000 or more (27 percent said tax rates should not be raised). Most also have supported tax increases for the wealthy when told that the money raised would pay for specific policies. More recently, in 2008, 62 percent said they supported tax increases for those making \$250,000 a year in order to provide health insurance to those without it (33 percent said it was a bad idea).

In a 2009 CBS News/New York Times poll in which tax increases for wealthier households were proposed in order to improve access to health care and provide tax cuts for those with lower incomes, 74 percent supported the idea (23 percent did not). More recently, majorities have said that taxes for households with incomes of \$250,000 or more should be raised in order to lower the nation's budget deficit.

And in early 2008, before the economy went into recession, 58 percent thought it was a good idea to raise taxes for the wealthy in order to pay for "new government programs and tax cuts for those making less money."

Public opinion, as revealed by these surveys, has been rather consistent on the topic of taxing the wealthy. Tax policy during this time period, however, has not strongly reflected these preferences.

While recent proposals by the Obama administration and the Democrats to enact higher taxes on the wealthy, this proposal is not likely to pass and would reverse over two decades of bi-partisan tax cuts on the wealthy.

Entertainment Articles

Told to Eat Its Vegetables, America Orders Fries [ALSO CONTAINED IN THE SINGLE TREATMENT ARTICLES]

It's been a busy week for vegetables.

The baby-carrot industry tried to reposition its product as junk food, starting a multi-million advertising campaign whose defining characteristics include heavy metal music, a phone app, and a young man in a grocery cart dodging baby-carrot bullets fired by a woman in tight jeans.

On the East Side of Manhattan, crates of heirloom vegetables with names like Lady Godiva squash were auctioned for \$1,000 each at Sotheby's, where the wealthy are more accustomed to bidding on Warhols and Picassos than turnips and tomatoes.

Both efforts, high and low, are aimed at the same thing: getting America to eat its vegetables.

Good luck. Despite two decades of initiatives, stricter government dietary guidelines, record growth of farmers' markets, and the ease of products like salad in a bag, Americans still aren't eating enough vegetables.

This month, the Centers for Disease Control and Prevention issued a comprehensive nationwide behavioral study of fruit and vegetable consumption. Only 26 percent of the nation's adults eat vegetables three or more times a day, it concluded. (And no, that does not include French fries.)

These results fell far short of objectives set by the federal government a decade ago. The amount of vegetables Americans eat is less than half of what government officials had hoped. Worse, it has barely budged since 2000.

"It is disappointing," said Dr. Jennifer Foltz, a pediatrician who helped compile the report. She, like other public health officials dedicated to improving the American diet, concedes that perhaps simply telling people to eat more vegetables isn't working.

"There is nothing you can say that will get people to eat more veggies," said Harry Balzer, the chief industry analyst for the NPD Group, a market research company.

This week, the company released the 25th edition of its annual report, "Eating Patterns in America." The news there wasn't good, either. For example, only 23 percent of meals include a vegetable, Mr. Balzer said. (Again, fries don't count, but lettuce on a hamburger does.) The number of dinners prepared at home that included a salad was 17 percent; in 1994, it was 22 percent.

The nation has long had a complicated relationship with vegetables. People know that vegetables are good for you. But they're a lot of work. In refrigerators all over the country, produce often dies a slow, limp death because life becomes too busy.

As in past attempts to revive the vegetable, none of this will necessarily be enough to change a clear aversion to eating vegetables.

“Eating vegetables is a lot less fun than eating flavor-blasted Doritos,” said Marcia Mogelonsky, a senior analyst for Mintel, a global marketing firm. “You will always have to fight that.”

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The Gimmick Makes the Beer [ALSO CONTAINED IN THE SINGLE TREATMENT CONDITIONS]

They say that everyone needs a gimmick. And in a sense, it’s true. A gimmick doesn’t necessarily have to be something normally thought of as “gimmicky,” i.e. a gimmick could be something genuinely useful or practical, but still something that differentiates a product from the rest of the crowd and creates interest and thereby sales.

But of course, with large multinational corporations, gimmicks usually are just what we think of as gimmicks – yes, they set their products apart from the crowd, but they do pretty much... well, nothing.

Take brewing giant MillerCoors. Coors Light already has its own gimmick, the “cold activated” cans on which the image of mountains turns blue when the beer inside is as “cold as the Rockies.” And now, thanks to a 1.7% sales drop, a new product differentiation campaign is going to be hitting markets this month – well, several, actually.

Perhaps the most interesting - and arguably the most inane - is the new Vortex Bottle being introduced for Miller Lite. According to a report from Brandweek, the MillerCoors rep told distributors that the bottle has specially designed grooves inside the neck that “create a vortex as you’re pouring the beer,” and said that the brand’s goal is to “create buzz and excitement and give consumers another reason to choose Miller.” No explanation of how the “vortex” created by the grooves improves the beer in any way; I’d postulate that the grooves serve to stir up turbulence as the beer is poured, but I see no way that such action would improve an already overly-fizzy beer.

In addition to the Miller Lite Vortex Bottle, the company is also debuting the Miller Home Draft, as well as 16-ounce aluminum bottles and a Cold Activated Window 12-pack for Coors Light.

The new marketing campaigns the company is launching, as well as the aforementioned product packaging. Despite efforts such as the “Bet on Taste,” these corporations know that their products are so similar that pouring millions into advertising and gimmicks and lowering prices is the only way to market to consumers, and that establishing consumer loyalty is paramount.

Luckily, craft beer continues to gain a larger presence in the market, and even giants like MillerCoors, with their “Crafting a Better Beer” campaign for Blue Moon Belgian White Ale, are starting to take notice by realizing that consumer tastes are changing and that putting quality over advertising actually can sell. Craft beer continues to expand in the marketplace, even though the vast majority of small brewers in America have little or even no advertising capital. The beer really does tend to sell itself.

Gimmicks are used in the craft beer world, of course, but usually they take one of several understated forms – a slogan, a nice label, or, in so many cases, the use of quality ingredients and practices. These are the things that differentiate craft beer from its competitors.

Obsessions With Minutiae Thrive as Databases

Managing a database doesn't exactly sound like a path to fame and fortune - more like a path to a role in a company's technology department. But the market has been kind to the visionaries who began to collect information online in the 1990s.

Before Internet experts spoke of crowd sourcing, or of the crowd's wisdom, these database creators thought to harness an enthusiastic worldwide public to pursue seemingly impossible quests, like developing a catalog of all movies or of all recorded music. And over time, as those quests seemed more achievable, big entertainment companies came calling, recognizing the value of having access to the minutiae of their business.

That, in a nutshell, is the story behind two early online standouts, IMDB, the Internet Movie Database, and CDDDB, a database of CDs now known as Gracenote, each with big corporate parents. IMDB is part of Amazon, which acquired it in 1998. And Gracenote was acquired by Sony 10 years later.

As the Internet gives consumers greater choice, the thinking goes, there will be greater need for context and guidance. Both databases have just redesigned their Web sites and announced significant milestones. But for their many similarities, they are taking different paths: IMDB is trying to increase its public profile on the Internet, while Gracenote is moving further behind the scenes.

IMDB began in 1990 as an outgrowth of a Usenet group, an online meeting place that was popular before the World Wide Web changed the online experience. Compiling the contributions of fans who kept lists of films, actors' careers, the plots of movies and TV shows, the group became a Web site, growing to something that approaches comprehensiveness, even in an area as changeable as the movie and TV business. The database has more than three million cast and crew members and more than 1.5 million entertainment programs.

Though IMDB now has a large staff of writers and editors, "the vast majority of contributions still come from the users," Col Needham, the chief executive and founder of IMDB, said in a telephone interview.

"One of the things that has changed is the profile of who has contributed that content," he said. Instead of fans, contributors tend to be "people in the industry, or their agents, publicists, people from the production companies."

This month, for its 20th anniversary, IMDB is revamping its Web site to emphasize streaming videos.

The predecessor of Gracenote, CDDDB, began in 1998 as an attempt to use the Internet to create a comprehensive list that would tell people what tracks were on albums. Unlike IMDB, which benefited from a legion of obsessive movie and TV fans, CDDDB obtained its contributions more indirectly.

The conversion of CD music into MP3 files gave CDDDB its niche. The digital information on CDs was only musical; it did not identify tracks by title or artist. Gracenote came up with a way to collect and supply that information to people creating MP3 files.

If, however, you happened to have a CD that was unknown to the database, you would naturally enter the information for your own use as you were converting it into an MP3, and thus add more information to the collective knowledge.

Stephen White, senior vice president for product and content management, said the company would challenge people to stump the database. On Sept. 9, Gracenote announced that it had just received its one-billionth submission - information about the album "My Father Will Guide Me Up a Rope to The Sky" by Swans.

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Noise Pollution from SunChips Bags Prompts Change in Packaging

Frito-Lay is preparing to quietly sack its "green" but noisy SunChips bag.

Roughly 18 months after Frito-Lay, with great fanfare, launched a biodegradable SunChips bag made from plant material that was billed as 100% compostable, the company is yanking the noisy material from the packages of five of six SunChips flavors immediately.

The company is returning them to their former bags that can't be recycled - but won't wake the neighbors - while it works frantically to come up with a new, quieter eco-friendly bag.

It is louder than "the cockpit of my jet," said J. Scot Heathman, an Air Force pilot, in a video probing the issue that he posted on his blog under the headline "Potato Chip Technology That Destroys Your Hearing." Mr. Heathman tested the loudness using a RadioShack sound meter. He squeezed the bag and recorded a 95 decibel level. A bag of Tostitos Scoops chips (another Frito-Lay brand, in bags made from plastic) measured 77.

After an uproar of complaints from consumers SunChips has decided to bring back traditional, non-plant-based bags:

While there was a huge amount of enthusiasm surrounding the launch of our compostable SunChips bag, we've also received feedback regarding how the new packaging has affected the consumer experience, including its noise. In response, we're taking steps to improve our 100 percent compostable bag in order to address your concerns. We have several new compostable package options in the works that look promising and look forward to introducing the next generation compostable bag to consumers in the near future.

While some SunChips will continue to be available in the loud bag, consumers will be able to buy chips in the traditional plastic packaging again.

Brad Rogers, The North American Frito Lay manager of sustainable packaging, said that "it is definitely a different sound than the conventional packaging that we would typically utilize. It's kind of a louder, higher-pitched noise."

The bag was widely ridiculed and derided. Soon, there were new Facebook groups: "Nothing is louder than a SunChips bag" and "I wanted SunChips but my roommate was sleeping..." among them.

Frito-Lay spokesman Chris Kuechenmeister said it wasn't a failure for the company. "We broke new ground," he argues.

For Rogers and his colleagues, it's back to the drawing board. "There's no such thing as the perfect package," Brad Rogers said. "We always knew that anything that we introduced was never going to be

exactly perfect, because there is no such thing as the perfect package. But what we could do is bring something to market, measure that response, and then work to improve it and make it better.”

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Who's the Teacher? (Mr. Danza) [ALSO CONTAINED IN THE SINGLE TREATMENT CONDITIONS]

It's a bad time for public schools, but a good time to examine how far they have declined - rage over the state of American education is suddenly all the rage.

A scathing documentary, “Waiting for 'Superman,’” is gaining traction in movie theaters and in the news. NBC News this week held an education summit that included an interview with President Obama, who among other things explained why he sent his daughters to private school.

Into this combustible mix falls “Teach: Tony Danza,” a reality show on A&E that follows Mr. Danza, who starred in “Taxi” and “Who's the Boss?,” as he tries out a new career as a 10th-grade English teacher in Philadelphia.

It sounds like a joke.

And that is certainly how some students at Northeast High School take it on his first day in school, as Mr. Danza stumbles for words. One smart-aleck asks, “Has anyone told you that it was funny for you to be teaching an English class?”

But “Teach: Tony Danza” is not meant to be a self-parodying romp like “The Osbournes” or “Tommy Lee Goes to College.” And it's not a voyeuristic horror show like “Intervention” or “Hoarders,” two other A&E programs. Instead, this seven-part series positions itself as something of a public service, and in some ways it is. By using a celebrity as a Trojan horse, “Teach” offers an engaging and intimate look at just how complicated and difficult teaching can be at a large, urban public high school.

Mr. Danza, enthusiastic and well intentioned, starts out as his own worst enemy. The series is about students, but is more informative about actors and how needy, self-absorbed and fragile even the tough ones can be. Mr. Danza is at times more childish than his pupils, clowning in the halls for attention, weeping with frustration and self-doubt, and greeting parents and other teachers like a politician running for office. Teachers and students alike keep telling him that he talks too much, but that just makes him want to talk about himself even more.

Mr. Danza explains that he had considered a teaching career in college (he has a bachelor's degree in history education from the University of Dubuque), but instead took up boxing and then acting. Now that he is on the brink of 60, he saw the teaching stint - and reality show - as his chance to give something back. Mostly, he takes up all the oxygen with his insecurities and eagerness to please.

The Northfield High community is not easily pleased, though, and Mr. Danza is cut very little slack. On his first day, he is summoned to the administration office by the assistant principal, Peggy DeNaples, who scolds him for failing to sign in.

“Mr. Danza, look at the clock,” she snaps. “Your day begins at 7:38.” When he stammeringly tries to explain that he didn't know about the sign-in rule, she cuts him off: “Why didn't you? You went to orientation, we had new teachers come in, we explained everything.”

Students don't care much about his celebrity status, partly because they are too young to have seen his shows. Asked whether he recognizes Mr. Danza, one replies, "Wasn't he, like, in 'Cheers'?"

In some ways this series serves as a response to "Waiting for 'Superman,'" a film that condemns teachers' unions for fighting change and resisting efforts to reward excellence and to hold teachers accountable for bad results. Mr. Danza's struggle - and he does work tirelessly - underscores just how hard it is to be adequate, let alone excellent.

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Community-Garden Rules Receive a Mixed Reaction

To protect the city's sparse greenery over the years, Chicagoans have climbed trees, wagged freshly picked beets and carrots in the faces of politicians and barricaded themselves inside gardens.

Hoping to avoid another such battle, the Daley administration on Monday released new rules that it framed as a means of preserving the city's 282 community gardens. But the response from garden advocates was mixed, and some said they wanted clearer guarantees that the garden lots would not be turned over to developers.

The rules, which go into effect next month, will replace a 2002 agreement with the state attorney general's office that offered firm pledges of protection to 198 gardens. That agreement expires on Friday.

The new guidelines include a more explicit pledge that gardens would be preserved if the groups running them were in good standing. To qualify, organizers must keep the gardens well maintained, operate for 20 hours each week and open their gardens to the public. They also require the city to attempt to help find a new group of gardeners if lots are neglected.

Gardeners had urged the Parks and Recreation Department, which has oversight of community gardens, to follow the spirit of the 2002 agreement and grant permanent protection to the lots. But the department said its powers were limited, and it argued that it was necessary to have some leverage in case a garden was not properly maintained.

At a news conference in a Pilsen vegetable garden on Monday, city officials said the new regulations would help preserve community gardens.

"If we didn't have the best rules, then we had a potential of a state of chaos and threat," said Pilsen Alderman Daniel Solis. "Now we have the best rules, so we have a foundation and a sense of calm and protection."

Many advocates, including Mr. Solis, had criticized an early draft of the regulations as feeble and ambiguous. After more than 100 gardeners, some dressed as flowers, insects and vegetables, protested the draft regulations at a raucous hearing last month, the city pledged to re-examine them.

The new rules are the latest attempt to address the concerns of gardeners, who have emerged as a vocal force since previous efforts by the Daley administration to build housing complexes over garden spaces. Many of the gardens are about a third of an acre in size, often sandwiched between buildings.

Benjamin Shepard, a social worker who has volunteered with Time's Up!, said he was disappointed that the city devoted so much space in the regulations to detailing the process for relocating gardens.

“I’m not seeing preservation here; I’m not seeing permanence here,” Mr. Shepard said. “We need a full commitment from the city to protect these spaces.”

But Karen Washington, president of the nonprofit group New York City Community Garden Coalition, said in a statement that it appeared the concerns of gardeners had been addressed. Mr. Solis said the rules released Monday “go as far as they can possibly go,” but noted that a new mayor could easily repeal them. He said he would explore ways of offering permanent protection to gardens, including possibly setting up land trusts or long-term leases.

Appendix OE: Imputation and Models-In Text

In Appendix OC, we report results from models both with and without covariates. Unfortunately, the presence of missing data on several covariates leads to dropped values and thus a difference in the number of observation between the two types of model. To address this issue, results in-text now report results from imputed datasets. Covariates included in these models are: race, ideology, where the student grew up (all in US, partially/fully outside US), grade in school, gender, party attachment, and their openness-to-change values. Missing data exists on all of these variables save for race and ideology. To address this issue, we use STATA's multiple imputation command to impute the missing values on these variables. We use "mi impute chained" for the following variables (with models used to predict missing variables in parentheses): grade in school (ologit), party closeness (ologit), gender (logit), where the student grew up (logit), party closeness (ologit), and openness (OLS). We also include the race of the student, their ideology, and a six-category variable for treatment condition as these variables do not have missing data; 10 imputed data sets were created. The covariate-adjusted models in text use these imputed datasets. Table OE1 provides the full model results.

An alternative strategy would have been to simply include dummy variables for the binary variables where data was missing to capture those with missing data and to impute mean data for the continuous variables. We provide results using this method in Table OE2. The problem is that, while this leads to the use of all observations in the OLS models predicting national and local interest, the missing data categories are nevertheless dropped in the logit models predicting the information choice outcomes. Ultimately, the substantive conclusions are the same across the varying types of models (dropped observations, fully imputed, and missing variable dummies).

Table OE1: Full Model Results (Imputed Data; See Table 2 in-text)

	(1) Nationa l Interest	(2) Nationa l Interest	(3) Local Interest	(4) Local Interest	(5) Voting Info	(6) Voting Info	(7) Pol. Clubs Info	(8) Pol. Clubs Info
SB	0.236** (0.0554)	0.266** (0.0563)	0.129* (0.0603)	0.152* (0.0622)	1.207+ (0.706)	0.940 (0.723)	1.979** (0.677)	1.811** (0.703)
HE	0.311** (0.0557)	0.337** (0.0574)	0.310** (0.0610)	0.307** (0.0635)	2.179** (0.677)	2.057** (0.698)	2.093** (0.680)	2.194** (0.724)
SB*HE	-0.183* (0.0783)	- 0.222** (0.0791)	-0.117 (0.0857)	-0.128 (0.0876)	-0.533 (0.833)	-0.288 (0.863)	-1.628* (0.810)	-1.651+ (0.864)
Gender		-0.0681 (0.0414)		- 0.0829+ (0.0459)		-0.288 (0.863)		1.100** (0.422)
Participant Grew Up Partially/Entirel y Outside US		-0.0528 (0.0624)		-0.0746 (0.0677)		0.398 (0.560)		0.822 (0.553)
Year in School		0.0346+ (0.0196)		0.00516 (0.0218)		-0.214 (0.196)		0.0346 (0.194)
Str. Of Party Attachment		0.0200 (0.0240)		-0.0104 (0.0271)		0.417+ (0.249)		0.540* (0.251)
Openness to Experience		0.0119 (0.0250)		0.0298 (0.0279)		0.0509 (0.250)		0.278 (0.251)
Ideology		-0.0191 (0.0152)		-0.0208 (0.0170)		0.244+ (0.147)		0.256+ (0.144)

Race (1 = Non-White, 0 = White)		-0.0405 (0.0421)		0.0394 (0.0468)		-0.103 (0.413)		-0.354 (0.412)
Constant	0.421** (0.0396)	0.354* (0.158)	0.286** (0.0431)	0.258 (0.177)	-2.565** (0.599)	-3.856* (1.590)	-2.539** (0.600)	- 6.278** (1.675)
Observations	168	168	170	170	170	170	168	168
Adjusted R^2	0.219	0.247	0.174	0.179		0.174		
Pseudo R^2					0.146		0.096	0.169
Covariates Included?	No	Yes	No	Yes	No	Yes	No	Yes

Notes:

Interest models are OLS regressions, information models are logit regressions. DVs range from 0-1 (National and Local Interest) or are dichotomous (both info measures). Covariate models use multiple imputation methods for imputing missing values on covariates. Standard errors are in parentheses; significance tests are two-tailed. ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$

Table OE2: Alternative Imputation Results

	(1) Nationa l Interest	(2) Nationa l Interest	(3) Local Interest	(4) Local Interest	(5) Voting Info	(6) Voting Info	(7) Pol. Clubs Info	(8) Pol. Clubs Info
SB	0.236** (0.0554)	0.272** (0.0610)	0.129* (0.0603)	0.185** (0.0653)	1.207+ (0.706)	0.864 (0.740)	1.979** (0.677)	1.714* (0.727)
HE	0.311** (0.0557)	0.341** (0.0598)	0.310** (0.0610)	0.324** (0.0640)	2.179** (0.677)	2.191** (0.719)	2.093** (0.680)	2.194** (0.744)
SB*HE	-0.183* (0.0783)	-0.230** (0.0833)	-0.117 (0.0857)	-0.146 (0.0894)	-0.533 (0.833)	-0.307 (0.885)	-1.628* (0.810)	-1.577+ (0.892)
Female		-0.0665 (0.0430)		- 0.0919* (0.0462)		0.125 (0.429)		1.104* (0.441)
Gender: Missing		-0.0990 (0.192)		-0.228 (0.208)		0 (.)		0 (.)
Non-white		-0.0386 (0.0434)		0.0510 (0.0469)		0.00821 (0.427)		-0.270 (0.427)
Sophomore		0.0235 (0.0548)		0.111+ (0.0590)		0.926+ (0.510)		1.118* (0.523)
Junior		0.0554 (0.0595)		0.0133 (0.0638)		0.140 (0.548)		0.862 (0.554)
Senior		0.112+ (0.0666)		0.0612 (0.0720)		-0.927 (0.789)		-0.188 (0.759)
Partially/All Foreign		-0.0541 (0.0639)		-0.0872 (0.0676)		0.529 (0.590)		0.962+ (0.580)

	)	)						
Grew Up: Missing	-0.0322 (0.187)	-0.190 (0.203)	0 (.)	2.021 (1.519)				
Lean	0.0392 (0.0825)	-0.0691 (0.0894)	1.911 (1.210)	0.855 (1.003)				
Weak	0.0360 (0.0792)	-0.0630 (0.0856)	1.984 ⁺ (1.177)	1.042 (0.962)				
Strong	0.0815 (0.0889)	-0.0477 (0.0963)	2.508 [*] (1.252)	1.946 ⁺ (1.044)				
Party Attach: Missing	0.0392 (0.273)	-0.546 ⁺ (0.296)	0 (.)	0 (.)				
Ideology	-0.0167 (0.0162)	-0.0185 (0.0176)	0.222 (0.157)	0.244 (0.154)				
Openness	0.0139 (0.0259)	0.0295 (0.0280)	-0.0306 (0.258)	0.256 (0.257)				
Constant	0.421 ^{**} (0.0396)	0.366 [*] (0.167)	0.286 ^{**} (0.0431)	0.238 (0.181)	-2.565 ^{**} (0.599)	-5.417 ^{**} (1.939)	-2.539 ^{**} (0.600)	-6.872 ^{**} (1.837)
Observations	168	168	170	170	170	165	168	165
Adjusted R^2	0.219	0.216	0.174	0.193				
Pseudo R^2					0.146	0.212	0.096	0.205

Standard errors in parentheses

⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$