DOES DISCUSSION GROUP COMPOSITION AFFECT POLICY PREFERENCES? RESULTS FROM THREE RANDOMIZED EXPERIMENTS

Cynthia Farrar
Donald P. Green
Jennifer E. Green
David Nickerson
Steven Shewfelt

Yale University

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Abstract: We report the results of three randomized experiments designed to assess whether participants' political attitudes are affected by the demographic attributes and pre-discussion opinions of their discussion-mates. The experiments took place during three multi-site Deliberative Polls in 2004 and 2005. Participants discussed current political issues within 330 groups of approximately 10 people apiece. Because the composition of the group was determined randomly within each location, the demographic and ideological complexion of the discussion groups varied randomly. This paper examines the effects of randomly-varying group composition on political opinions expressed after daylong discussion. We find only sporadic evidence of group composition effects. These results run counter to – or at least qualify – a substantial body of theory and laboratory evidence on the influence of group discussion.

Keywords: deliberation, group effects, persuasion, conformity, group discussion

DOES DISCUSSION GROUP COMPOSITION AFFECT POLICY PREFERENCES? RESULTS FROM THREE RANDOMIZED EXPERIMENTS

Social psychological inquiry into the effects of group deliberation is periodically invigorated by dark assessments of group dynamics. In the wake of Asch's (1948) classic demonstration that pressures to conform distorted some subjects' factual reports, scores of articles have examined the nature and consequences of group discussion (see reviews in Isenberg, 1986; Lamm & Myers, 1978; Myers, 1978; Myers, 1982). Much if not all of this work lies outside political science, and, unfortunately, political scientists have tended to show little interest in it.[1] Within the last five years, however, the behavioral science of group dynamics has been brought to the fore as political scientists have turned their attention to public deliberation.

As researchers examine the way in which the public grapples with policy questions in the context of intensive group discussions, the dark side of group dynamics has again attracted attention. Schkade, Sunstein, and Kahneman (2000) found that deliberation tends to impel juries to increase the sums of money that they award in damages. Mendelberg and Karpowitz (forthcoming) contend that the jurors studied by Schkade et al. were influenced by their discussion mates. Reanalyzing the Schkade et al. data, they find that jurors were more likely to favor large awards when random assignment placed them into groups that contained a large proportion of people whose demographic characteristics and pre-deliberation preferences made

[1] Political scientists have long been interested in testing game theoretic propositions about legislative behavior (for a summary of this literature, see Green and Shapiro 1994, chapter 6). This literature, however, differs from the psychological literature on group dynamics in two important respects. First, the experimental literature on committees focuses on voting outcomes rather than persuasion. Second, the issues that experimental subjects confront are abstract and involve monetary payoffs; game theoretic studies tend to avoid the kinds of substantive topics that seem to generate risk-accepting behavior by groups.

them prone to award large amounts. To Mendelberg and Karpowitz this finding implies that in deliberative settings, individuals with minority views or profiles operate at a double disadvantage. Not only are their views unlikely to prevail in majority decisions, but minorities will also be pushed into altering their stances by pressures to conform to norms set by majorities.

The central empirical proposition underlying this argument is the idea that the views one expresses after group deliberation are influenced by the pre-existing views of one's discussion-mates. Put a person into a room with a lopsided majority of conservatives to discuss an ideologically-charged issue, and her post-discussion opinions will be more conservative than would be the case with a differently-constituted group. Notice that this phenomenon could occur for two very different reasons: (1) a desire to win social acceptance from the members of the group (Goethals & Zanna, 1979; Myers, 1978; Myers, Bruggink, Kersting, & Schlosser, 1980) or (2) exposure to the persuasive information or arguments that they convey (Baron & Roper, 1976; Luskin, Fishkin, & Jowell, 2002; Myers & Bach, 1974; Vinokur & Burnstein, 1978). In the latter case, group discussion persuades the individual to adopt a new position on an issue; in the former case, expressed issue stances are likely to reflect momentary acquiescence to group pressure rather than long-lasting opinion change. Regardless of which mechanism is at work, the central claim is that the composition of the discussion group changes the views expressed by those who participate in it.

This essay tests group effects using three large-scale field experiments in which the ideological complexion of one's daylong discussion groups was the result of random assignment. We begin by describing our experimental design and comparing it to previous social psychological studies of group discussion. In order to situate our study within the extensive literature on group effects, the first section distinguishes between active and passive persuasion

designs: active designs disseminate a specific message to one experimental group but not another; passive designs, such as the one used here, treat the group members' existing attributes or attitudes as the stimulus. Next, we describe the first two multi-site Deliberative Polls within which our experiments were carried out and the survey measures used to gauge opinion change. We then present the experimental results, which show sporadic but weak evidence of change in the wake of group discussion. To test the robustness of these results, we present the findings of a third experiment in which certain structural elements are randomly varied, such as the size of the discussion groups, the role played by the moderator, and the public revelation of preferences through a straw poll. We conclude by discussing the implications of our findings for future research on the effects of group context.

Active versus Passive Experimental Designs

The extensive literature on the effects of group discussion may be usefully divided into two categories. Many studies use what we shall term an *active* design: they compare the post-treatment opinions of those who participate in a particular type of discussion with those who discuss a placebo topic or do not participate in a discussion. In this design, the experimenter actively insinuates a specific message into group discussion and examines its effects. This type of design can be implemented by confederates articulating a particular position (as in the Asch experiment) or by directing subjects to consider particular arguments (Myers & Bishop, 1970).

By contrast, studies conducted by political scientists (Luskin et al., 2002; Mendelberg & Karpowitz, forthcoming) use a *passive* design: rather than manipulate the content of the discussion, the experiment randomly varies the demographic attributes or ideological predispositions of the discussion groups.[2] By randomly assigning discussion partners, the

[2] Because passive designs rely on randomly-generated variation in group composition as the experimental stimulus, the number of subjects in the experiment bears a somewhat counter-intuitive relationship to the experiment's

passive design exposes some people to discussion groups in which people with a distinctive ideological or demographic profile predominates. Several social psychological experiments use a variant of the passive design in which discussants are assigned to groups in ways that create specific configurations of group opinion. Myers and Bishop (1970), for example, measure subjects' level of prejudice and randomly assign them to discuss a prejudice-related issue or a placebo issue with other likeminded subjects. Similarly, Druckman (2004) and Druckman & Nelson (2003) randomly assign subjects to groups but vary the kinds of materials to which they are exposed.

The two designs answer somewhat different research questions. The active design assesses whether information and arguments diffused in a specific way in a group setting influence individuals' knowledge and preferences. The answer appears to be yes, (e.g. Druckman & Nelson, 2003; Druckman, 2004) although the evidence is somewhat equivocal as to the magnitude of these effects. In a series of experiments, Vinokur & Burnstein (1978) demonstrated that individuals are persuaded by new information when it is the majority group position and particularly when it is presented via well-constructed arguments from credible sources. Asch-like mock jury designs in which a juror is asked to pass judgment after other jurors have expressed their opinions show that people are susceptible to group influence, although these effects are not large (Davis, Kameda, Parks, Stasson, & Zimmerman, 1989; Goethals & Zanna, 1979). The passive design, on the other hand, examines whether individuals typically move each others' opinions as the result of discussion. Instead of generating arguments or staging support for a particular viewpoint, the experimenter simply lets exponents

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statistical power. Ironically, the larger the discussion groups, the smaller the expected range of variation in group composition. Thus, the power of the design depends not so much on the size of each discussion group as the number of discussion groups. In this regard, the Mendelberg & Karpowitz (forthcoming) study, which used more than 500 discussion groups of approximately six discussants apiece, dwarfs all previous experiments.

of certain positions make arguments on their own behalf.[3] This design does not test the effects of any specific argument or source but instead examines the extent to which individuals gravitate toward the majority opinion held within their discussion groups.

The two recent studies that use a passive experimental design present intriguing evidence of discussion-group effects. Mendelberg and Karpowitz (forthcoming), as noted above, found that an individual's preferred damage award was influenced by her fellow jurors' demographic attributes (age, race, income, education, and gender). Luskin et al. (2002) find that post-deliberation opinions about crime were affected by discussion-mates' pre-deliberation opinions.[4] Luskin et al. characterize these effects as "modest" (p.141, 143), although significant discussion effects surface in half of the analyses they conduct. The present study represents a much larger replication of the Luskin et al. study, with many more discussion groups, topics, and experimental variations.

Model

In order to estimate the effects of discussion, we use a regression[5] model in which each individual's post-deliberation opinions represent a function of three kinds of independent variables: (1) the individual's pre-deliberation opinions, (2) the mean of the pre-deliberation opinions of the other discussants in the group, and (3) dummy variables marking the sites within which random assignment took place. The model is:

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[3] The background briefing materials that were sent to Deliberative Poll participants did structure the discussion topics and arguments, and in that sense our experiment does have something in common with past studies using an active design.

[4] Interpretation of the Luskin et al. (2002) results is complicated by the fact that these researchers predict post-deliberation opinion using the pre-discussion mean of the entire discussion group, including the opinions of the respondent. This specification has the potential to introduce a slight bias in favor of finding discussion effects. Reanalyzing their data, we excluded the respondent from the pre-discussion mean and found results that were substantively identical to what Luskin et al. report.

[5] Because the dependent variables discussed below are survey items that present respondents with a series of ordered categories, we use ordered probit rather than linear regression to generate the results presented in the tables. Linear regression is used here for clarity.

$$y_{i,t} = b_0 + b_1 y_{i,t-1} + b_2 \frac{1}{n_k - 1} \sum_{j, j \neq i}^{n_k} y_{j,t-1} + \gamma_s D_s + u_{i,t},$$

where $y_{i,t}$ represents the post-discussion of individual i, $y_{i,t-1}$ represents each individual's pre-discussion opinion, and $y_{j,t-1}$ represents the pre-discussion opinion of individual i's discussion mate j within discussion group k. The D_s denote dummy variables for each of the sites (less one). These dummy variables are included to account for the fact that random assignment occurred within sites but not across them. Unobserved causes of post-deliberation opinion are denoted $u_{i,t}$. The key parameter in this model is b_2, which represents the effect of the average group member's opinion. The null hypothesis is that $b_2 = 0$, or the group's location has no effect on the individual. The alternative is that $b_2 > 0$, which implies that the more conservative the group's pre-deliberation opinions, the more conservative the individual's post-deliberation opinion. Because the average opinions of one's discussion-mates are randomly assigned,[6] our experiment provides a consistent estimate of b_2, regardless of whether other covariates are included in the model. However, we include $y_{i,t-1}$ as a covariate because, by reducing the disturbance variance, it improves the precision with which b_2 is estimated. The standard errors of all of the models presented below are estimated using the robust-cluster option available in STATA 9, with discussion group as the cluster.

It should be noted that the "group's location" can be measured in various ways other than a simple average. In the course of preparing this analysis we examined a number of alternatives, such as the median, mode, and proportion of discussion-mates who place themselves on the same "side" of an opinion scale as the respondent. We have also looked at

[6] We confirmed that the group averages to which individuals were randomly assigned bore no systematic relationship to their pre-deliberation scores or demographic attributes by regressing group averages on these pre-deliberation variables and site dummies. As expected, an F-test fails to reject the null hypothesis that pre-deliberation variables have no effect on the assigned group averages ($p > .10$).

operationalizations of group location that count the number or proportion of people who took an extreme position during the pre-discussion interview, on the grounds that these people were especially likely to defend their point of view during the course of deliberation. It turns out that all of these variants produce similar substantive conclusions about the magnitude and statistical significance of b_2.[7]

Data

The first of three experiments was conducted on January 24, 2004 as part of a Deliberative Poll[*] sponsored by MacNeil/Lehrer Productions and a variety of local partners. The research design was developed by Yale's Institution for Social and Policy Studies (ISPS) and the Stanford Center for Deliberative Democracy (CDD). The Poll assembled over 700 individuals in 10 different communities around the country. The participants were recruited from a random sample by the Berkeley Survey Research Center. They answered a short telephone pre-survey and were offered a $75 stipend to attend a local deliberation. Those who agreed to participate were sent a background briefing document prepared by MacNeil/Lehrer Productions, which provided factual information and a balanced account of various perspectives on the two issues being discussed. Approximately 150 individuals were recruited at each site, about half of whom actually attended.

The short pre-survey administered to all respondents prior to the day's discussion included demographic questions and party affiliation, as well as questions related to the two

[7] Another variant on this approach is to model the group's demographic attributes rather than its pre-discussion opinion. Following Mendelberg and Karpowitz, we include a series of variables measuring mean levels of age (years), education (rating scale of educational attainment), gender (percent male), and race (percent white). In order to assess the robustness of our results, we estimated the regression model first including all of these group measures in a single equation and second including just one of these demographic attributes, with similar results. For the sake of brevity, the tables we present include all of the group level measures, as in Mendelberg and Karpowitz (forthcoming, Tables 2-5).

[*] Deliberative Polling™ is a registered trademark of James S. Fishkin.

foreign policy issues under discussion: national security, with a focus on Iraq, and economics, with a focus on free trade. Invitation to participate in the Poll in no way depended on the content of a respondent's answers to these questions. The much longer survey administered to all participants at the end of the day's deliberation included the pre-survey questions on the issues. The analysis of group effects pursued here focuses on the seven questions posed in both the invitation-time survey and the post-deliberation survey.

A week before the event, the Survey Research Center randomly assigned those who had agreed to attend to 10 groups at each site. Because not everyone who agreed to come actually attended, the groups varied in size, but randomly; very small groups were consolidated, so the total number of groups was fewer than 10 at every site.[8] Participants were not permitted to choose or switch groups. Thus, within each site, every individual participant was randomly assigned a set of discussion-mates.

The same two foreign policy issues were discussed at all sites. The moderators were randomly assigned to discussion groups and were given the same instructions. The elements of the day's schedule included:

- *Introductory session*: A short video on each of the topics was shown.
- *Morning discussion*: A moderated small-group discussion on one of the two topics. Half of the sites discussed national security in the morning and the other half discussed economic issues in the morning. At the end of the discussion of the issue, groups

[8] On the day of each Poll, a protocol was in place to randomly assign people who turned up unexpectedly. A few groups have been excluded from consideration here because, as planned, a local broadcast partner created a discussion group in each site composed of people who were profiled in advance. These groups are excluded from analysis because they were not subject to random assignment.

identified questions to be posed to a panel of experts. They also completed a mid-point survey on both issues.[9]

- *Afternoon discussion*: A moderated small-group discussion on the topic (foreign or domestic policy) not covered in the morning. The afternoon discussion followed the same format as the morning discussion.
- *Expert panel*: An opportunity for groups to pose their questions to a balanced panel of "experts" and advocates representing a variety of different perspectives on the issues.
- *Post-survey*: A brief post panel discussion and completion of a post-survey covering both topics, and including the same questions as asked on the pre-and mid-survey as well as a number of other questions. These surveys were identical across sites (except that a few sites included local questions, which are excluded from this analysis).

The second and third experiments are replications of the initial January 2004 experiment with the addition of some experimental variations. Both were hosted and designed by the same national and for the most part the same local partners. The second experiment was conducted on October 16, 2004 and featured a larger number of sites and participants, and modification of the topics and survey questions (and some localization on the economic issue). The third replication experiment, conducted in October 2005, varied several aspects of the Deliberative Poll format and will be discussed separately in the experimental variations section.

During the weeks leading up to the October 2004 Poll, a fresh set of participants was recruited from a random sample of the adult population in each site.[10] The issues under discussion in October 2004 were, again, national security, with a focus on the war on terror, and

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[9] One site (Nebraska) followed this basic format, but did not administer a mid-point survey.

[10] 15 by the Guild Group Incorporated, and one each, in their own regions, by Louisiana State University's Public Policy Research Lab and University of Nebraska-Lincoln's Bureau of Sociological Research.

economics, with a focus this time on American jobs in the global economy. Sites were given the opportunity to localize the economic discussion and to prepare locally-focused background materials and survey questions to supplement the national ones.

Table 1 presents an overview of the sample sizes in each Poll. The 10 sites in January hosted a total of 85 groups. The 17 sites in October 2004 hosted a total of 152 groups. The 16 sites in October 2005 hosted 60 groups on the education topic and 53 groups on the healthcare topic. The sheer number of groups ensures that their ideological complexion varies considerably within each site. Our inspection of group locations for each site and issue confirmed that average pre-survey opinions varied substantially across groups for each of the issues. Figure 1 illustrates the variation of pre-survey opinions on a sample question.

[INSERT TABLE 1 AND FIGURE 1]

Table 2 provides a demographic description of the January and October 2004 samples. By comparison to the typical group deliberation laboratory experiment, which involves undergraduate subjects, the experiments reported here use a subject pool that more closely resembles the general population. On some demographic dimensions, such as age and gender, the Polls look similar to the 2004 American National Election Study (NES). The Polls contain a somewhat larger proportion of non-Hispanic whites, reflecting the demographic profile of the deliberation sites. The sharpest contrast between the Deliberative Poll samples and the NES sample is that the former has a much higher proportion of college graduates. This may give the results special relevance to better educated segments of the society that have higher-than-average rates of college education.

[INSERT TABLE 2]

Survey Measures

Table 3 presents the question wording, response options, and descriptive statistics for the six January questions that appeared on both the pre- and post-surveys. Table 4 presents corresponding information for the eight questions asked in October 2004 pre- and post-surveys. On the key question of whether the war in Iraq will prove to be worth the cost, the average response nudged (insignificantly) from 3.1 to 3.2 on a five-point scale ranging from agree strongly (1) to disagree strongly (5). The January issues that showed the greatest change concerned the evaluation of the North American Free Trade Agreement (NAFTA), which became somewhat more favorable, and the question of whether free trade means more jobs, which moved in a *less* sanguine direction. Even less aggregate movement is evident in the October 2004 Poll. Mean opinions changed trivially and in no consistent ideological direction.

[INSERT TABLE 3 AND 4]

From the standpoint of discussion effects, the one pattern in Tables 3 and 4 that warrants comment is the tendency for variation in opinion to narrow in the wake of deliberation. Although participants were not encouraged to come to consensus on the issues they discussed and did not vote publicly on resolutions, the standard deviation declines among five of the six items asked in January, among seven of eight items asked in October 2004, and among five of 11 education questions and among seven of nine healthcare questions in October 2005 (see Appendix Tables 1 and 2). Thus, while the means remained stable over time, the spread of opinion around the means declined. Whether this pattern reflects the work of group influence or some other phenomenon (e.g., increased familiarity with the survey questions) is addressed more directly by means of the regression analysis presented in the next section.

Experimental Results

Tables 5 and 6 present a series of ordered probit regressions in which the main predictor is the pre-discussion average group opinion on each issue. Table 5 presents results for the survey items that involve economics issues such as NAFTA, free trade, and tax cuts. Table 6 presents the corresponding ordered probit regressions for foreign affairs issues, which directly or indirectly pertain to the invasion of Iraq. Appendix Tables 3 and 4 present results from the October 2005 poll. Table A3 involves survey items related to education policy and spending. Table A4 presents the results on survey questions about government involvement in healthcare policy. In each of the tables, the variable called "Group Average" represents the average score of the discussion group (not counting the respondent) prior to deliberation. The effect of this variable is expected to be positive – people assigned to groups that scored higher in the pre-survey should, ceteris paribus, emerge with higher post-deliberation scores.

[INSERT TABLES 5 and 6.]

Looking first at the effects of Group Average reported in Table 5, we find positive coefficients in two of five regressions on economic issues. Only one regression generates a significantly positive coefficient; in this case it appears that the discussion groups' pre-deliberation opinion did affect the way participants in the October Poll thought about the issue of punishing American companies that export jobs. On the other hand, we see little evidence of group effects on the other October question dealing with protectionism and none at all concerning the issue of the Bush tax cuts. Thus, it does not appear to be the case that October participants exerted an unusually strong group influence over one another, and we see no effects in January in this issue domain. Overall, opinions about economic issues seem weakly responsive to the opinions of discussion-mates.

Table 6 shows slightly more evidence of group effects, although support for the hypothesis of persuasion through passively-occurring variation remains sporadic. In January, we find statistically significant, positive effects in two of the four foreign policy items. Interestingly, the two items for which we see significant group effects are the two most salient aspects of the foreign policy issue under discussion, namely, whether the Iraq invasion will prove to be worth the cost and whether the US should invade countries that pose a threat, regardless of whether our allies support such an invasion. More esoteric questions, such as whether the Iraq invasion is at cross-purposes with the war on terror or whether the US should share control of Iraq in return for more military and economic support, show weak effects. This pattern was not replicated in October. Regardless of the centrality of the issue, the apparent effects of the Group Average scores are negligible.

In the earlier experiments conducted using a Deliberative Poll format, information was determined to be the main contributor to opinion change (Luskin et al. 2002). Utilizing the political knowledge survey questions on the October 2004 poll, we repeated the regressions above (Tables 5-6) on individuals who had little political knowledge as assessed by their ability to answer information questions on the midpoint surveys and post surveys. Group discussion had little effect on these individuals. These regressions were repeated on the subset of individuals with high levels of political knowledge as well as those who learned over the course of the event. Again, we find little evidence of group effects on any of these subsets of individuals.

Experimental Variations

The fact that there is only modest evidence for group effects is perhaps an artifact of the Deliberative Poll format. The Deliberative Poll is explicitly designed to promote balanced and

meaningful exchange of views within a diverse group. To explore the possibility that elements of the format are constraining group effects, ISPS varied the format in a third Deliberative Poll carried out in October 2005. Three experimental variations were conducted: the group size was reduced across the board, a straw poll was instituted on survey items in one site, and the moderator role was varied.[11]

Appendix Tables 1 and 2 present the descriptions of the October 2005 surveys. The tables indicate that there was relatively little directional movement in survey responses after the day's discussion. In addition, as Appendix Tables 3 and 4 show, there is even less evidence for group effects in the October 2005 poll.[12]

To test whether group size matters, the format of the October 2005 poll was altered to achieve greater variation in the size of groups at the polling sites. Group sizes in the October 2005 study ranged from two to 17, with a standard deviation of 2.81. The effects of group size on discussion were assessed by fitting an interaction term (group size * group average opinion) to the original model. Five of the 20 questions yielded statistically significant coefficients for the interaction term, of which three were positive and two were negative. This evidence suggests that group size does not moderate the effects of pre-survey group opinions.

In order to test if group effects are dampened because participant responses to survey questions are not explicitly discussed, we created an experimental condition in which preferences were explicitly revealed to group members in the New Haven site of the October 2005 poll. In

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[11] The third experiment took place on October 22nd and 29th, 2005. Unlike the prior Deliberative Polls, some of the participants were recruited from individuals who had been contacted for past *By the People* events. In this round, sites chose either healthcare or education as their discussion topics. Each site used the national background materials and surveys on the topic as well as local ones they themselves designed. Only the national surveys are included in this study.

[12] Only two of 20 items achieve statistical significance—one is positive and one is negative. The negative coefficient suggests that individuals moved away from the pre-deliberation group discussion average on the question of whether government should allow citizens to make their own healthcare choice. Six of 20 coefficients on regression items are positive.

each of the groups, a public straw poll was given on a question that asked them to choose one from among eight strategies for school improvement. The 23 groups at the New Haven site were randomly assigned to the treatment and control conditions. At the end of the day of discussion, each group moderator (in the treatment groups) asked for a show of hands on one of the local survey questions. The post-discussion surveys were then administered to group participants. Each person's specific answers to the survey question were publicly revealed by a show of hands before taking the final survey. In the control group, the order was switched so that the post-discussion surveys were taken before the straw poll.

If it is true that group members must know specific responses of their group members for group effects to be present, then we would expect that a chi-square difference of means test would reveal significant differences between the two groups. However, a chi-square test shows that there is no statistically significant difference between the post-survey responses in treatment and control groups. ($\chi^2(5)=2.90$). Having precise knowledge of group member preferences does not appear to affect the opinions of individual group members.

To test the impact of moderator style, moderators at the New Haven site of the October 2005 poll were divided into two groups and trained to carry out the moderator role somewhat differently. Moderators in the control condition received the standard Deliberative Poll training which emphasizes the importance of actively promoting involvement by all participants. In the treatment condition, moderators were trained to err on the side of not intervening in group discussion. The "active" (control condition) and "passive" (treatment condition) moderators were then randomly assigned to the groups. Both sets of moderators were told not to express their own views, so the crucial difference between the two types is their level of involvement in regulating the discussion.

Table 7 shows the ordered probit results of the treatment and control conditions. Very minimal effects are observed: one of five of the coefficients in the treatment group achieves statistical significance and none in the control group do. These data provide at most faint support for the hypothesis that the role of the moderator dampens group average effects.

[INSERT TABLE 7]

Discussion

Ordinarily, experimental results are presented in ways that come down squarely in favor of or in opposition to a working hypothesis. In our case, the results are modulated. Across the 34 regressions presented in the three experiments (Tables 5-6, A3-A4), we obtain positive coefficients in 14 equations. One of the negative coefficients is significant, while four of the positive coefficients are at the .05 level. The largest effects that we observe suggest that each one-point shift in the discussion group's average score shifts the respondent's post-deliberation score by .27 probits. Given that the standard deviation of group means in our experiment tended to be roughly half a scale point, gravitational pull toward one's discussion group exerts a rather weak force. Overall, our results are consistent with the hypothesis that individuals do in some circumstances hew to the views expressed by their discussion-mates; at the same time, these results also suggest that this chameleon-like tendency is often subtle or nonexistent.

How can these null results be reconciled with the Asch paradigm on conformity? Lab experiments on group effects conducted in the 1970s have supported the Asch hypothesis that group influence shapes the opinions that individuals express (see a review of the literature in Myers and Lamm, 1976). It has been argued, however, that the results Asch found were an artifact of the era in which the studies were carried out. Replications of the Asch experiment suggest that the effect has dwindled in recent years (Bond & Smith, 1996). However, more

recent work on the effects of priming would also suggest that attitudes are fairly flexible (Iyengar, 1991; Levy, 2002; Sunstein, 2000; Tversky & Kahneman, 1981; Zaller, 1992, but also see Druckman, 2004).

Why do the conformity effects seen in Asch and other active-design experiments not surface in the present large-scale passive-design study of group influence? One possibility is that the unacknowledged distinction between active and passive design is itself explanatory. Several studies on vote ordering in juries (also passive designs) show modest group effects that are comparable to our own findings (Davis, Stasson, Ono, & Zimmerman, 1988; Davis et al., 1989). It remains to be determined whether passive designs – the norm outside the lab, in political discussions – all show comparably minimal and mixed impact on conformity, and if so, why.

A second possibility is that the specific context and structure of the Deliberative Poll is dampening or neutralizing Asch-like effects. The number of possible explanatory variables is limited. As described above, the present experiment tested several: group size, moderator role, and public voting.

Group size

If a conformity mechanism is at work, we would expect to see group effects in smaller groups. Group size may affect the presence of group effects via the two potential mechanisms mentioned earlier: information or conformity. In the classic Asch experiments, group conformity decreased when individuals had one compatriot in the group. Asch found that a subject's resistance to group influence depended on whether s/he found at least one likeminded ally in the group. In smaller groups, it is less likely that individuals will find likeminded compatriots.

Prior Deliberative Poll experiments (Luskin et al., 2002) suggest that exposure to information generates opinion change. One would expect that larger groups expose each individual to a greater variety of viewpoints and information. On the other hand, it may be information quality rather than information quantity that matters (Goethals and Zanna, 1979). A smaller group setting allows individuals the opportunity to fully express their views and the motivations that underlie them. Our results suggest that these competing hypotheses balance out; we find no consistent relationship between group size and group effects.

Public disclosure of views

The format of the Deliberative Poll encouraged each individual to express their views under the guidance of a group moderator. In jury or committee settings, committees deliberate prior to an open vote; during a Deliberative Poll, however, individuals discuss issues under the supervision of a moderator and opinions on issues are recorded on private surveys. It is therefore possible that this format prevents the revelation of preferences.

Experimental evidence from the 1960s and 1970s provides evidence that preferences must be directly revealed if they are to result in group effects. Madaras and Bem (1968) show that group members move in the socially preferred direction when survey items are specifically discussed, but do not move at all on non-discussed items. This holds even when the non-discussed questions are substantively very similar to discussed questions. And Myers (1978) and Goethals and Zanna (1979) show that the preferences of group members must be clearly revealed in order for group effects to occur. It would seem that the value of discussion in the group, then, is to provide information about how group members' values and opinions apply to specific questions. However, we find no evidence that public revelation of preferences affected the expression of opinions.

Moderator role

In the Deliberative Poll format, the moderator's job is to structure a balanced discussion among all participants. Reticent members are encouraged to speak up and verbose participants are reined in. In real-life deliberative situations, moderators rarely exist. It is possible that the lack of group effects that we observe is the result of the moderator's role of encouraging respect for all opinions. As shown above, however, we find no evidence that moderators with active or passive roles impact whether or not we observe group effects.

It is also possible that actively moderated groups are unlike real world discussion because they prevent the domination of discussion by members of privileged socio-economic, racial, or gender statuses. Interestingly, research on the "fairness" of group discussion suggests that in unmoderated groups, white males are found to have an effect on how participants rated the equality of discussion (Fulwider, 2006). Unequal discussion could favor dominant socio-economic members, much as they are believed to be favored in other types of deliberations (Mendelberg & Karpowitz, forthcoming). Fulwider's study compares moderated and unmoderated discussion groups. He discovered that participants in unmoderated groups found the discussion to be less equal. In our replication, we found no difference in the perceived discussion fairness in treatment and control groups as measured by evaluation questions included in the post-event survey. The presence of an active moderator has little impact on constraining or inducing shifts to the group opinion through any observable mechanism, including fairness.

Other elements?

What other features of the Deliberative Poll might be inhibiting group effects? Possibilities include: rigorous exposure to countervailing views because of the relative heterogeneity of all the groups; the provision of balanced background materials and the opportunity for participant

questioning of a panel representing diverse points of view; the character of the topics; the absence of a requirement to reach a decision/come to consensus.

a. Diverse discussants and points of view

The subjects of active-design experiments – including the Asch studies — tend to be students, a homogeneous group that may be more subject to group influence. The field experiment studied here, based as it was on random invitation within a defined geographic area, yielded a substantially greater absolute heterogeneity on a variety of demographic and attitudinal variables than most lab experiments.[13] The heterogeneity of the pool and random assignment to groups meant that all individuals were confronted by diverse viewpoints. However, the jury group studied by Mendelberg and Karpowitz was also drawn randomly from the general population, yet in the jury setting they found significant group effects.

In the Deliberative Polling context, a variety of public policy perspectives were also represented by background materials and a panel of experts. All of the groups in our study would therefore qualify as 'counter-framing' or 'cross-cutting' in the sense used by Druckman in his demonstrations that exposure to different 'framing' arguments through deliberation reduces the impact of any one of those arguments (Druckman & Nelson, 2003; Druckman, 2004). Consistent with the idea that the presentation of balanced arguments dampens group effects, a number of studies on group polarization have shown that individuals are likely to become more moderate in a group when surrounded by a variety of viewpoints (Myers & Bach, 1974; Vinokur & Burnstein, 1978).

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[13] Active research designs that differentiate among vectors of change, or probe the character of views that apparently remain unchanged, are difficult to implement in the civic contexts that characterize field experiments. Transparency and uniformity of experience are appropriately prized by sponsors of deliberative democracy initiatives. Random variation across sites in a multi-site deliberation is therefore likely to be more appropriate and viable than variation within site.

Although acquisition of knowledge is believed to be the main mechanism at work in the Luskin et al. experiment (2002), our lack of group effects despite the observed learning indicates that learning may not always be enough to change one's opinion. A study by Kuklinski, Quirk, Jerit, Schwieder, & Rich (2000) shows that in order for attitude change to be achieved, new information is not enough. Individuals must have their beliefs confronted directly.

It may be that the structure and the make-up of the deliberations studied here dampen group influence precisely by promoting this kind of confrontation in all groups. We had expected to find that people gravitate towards the pre-discussion group mean, but instead, they gravitate towards the post-discussion mean. In other words, people's views converge, but this convergence is not predicted by the pre-discussion mean.

Continually presenting different points of view through discussion within a heterogeneous group and reference to balanced background reading materials may well minimize group influence. Within the deliberative sites, policy opinions tended to become less dispersed over the course of deliberation. It may be that the real effect of deliberation is to crystallize an individual's issue positions. This alone would reduce the variance—variability would be diminished not because of the weight of opinion in the group but because individuals solidify their positions through discussion.

b. Topics

In Asch-type studies, subjects are not rendering a judgment on issues about which they have strong prior views or personal commitments. Individuals in the Asch experiments may have been more readily influenced by group members because they lacked a personal stake in the issue at hand. Asch hypothesized that political attitudes would be more susceptible to influence since they are less certain than a simple line judgment test. The results here indicate that

political attitudes are actually more rather than less sturdy, perhaps reflecting the importance of the issue to participants. The greater personal relevance of the topics may also be one reason why the results of the Deliberative Polls differ from the jury discussions studied by Mendelberg and Karpowitz (forthcoming). In the January and October 2004 polls, the issues discussed were the main issues of the campaign: the war in Iraq and the economy. The presidential campaign may have enhanced this effect: by the time participants convened in October 2004, three weeks before the election, they had grown resistant to small group pressures. In 2005, healthcare and education ranked among the most widely cited problems of national significance. Individuals may have solidified their issue positions and felt confident in their own views.

Conclusion

After several years of experimentation, we have found little evidence that group composition influences post-discussion attitudes. This persistent finding, which holds across a range of experimental variations and for subgroups defined by political knowledge, suggests that the expectations of the Asch literature do not apply to the Deliberative Poll setting. The weak effects that we observe in our experiments may say as much about the special features of the Deliberative Poll as they do about information exchange and the pressures of conformity. Deliberative Polls strive to provide balanced background materials and encourage open-mindedness. Our experimental results at the very least demonstrate that it is possible to construct an environment for the exchange of information and ideas that does not induce group composition effects.

Although we have considered a range of experimental modifications to the basic Deliberative Poll format, the next step in this line of research is to design experimental variations that depart even more radically from the standard format. The objective is to isolate the factor

that differentiates our results from those of Mendelberg and Karpowitz (forthcoming), which are based on a methodologically similar paradigm but involve mock juries and award damages. It would be interesting if the active ingredient that mitigates group effects were something as simple as background materials provided to respondents during the week prior to group discussion or respondents' ability to pose questions for experts on both sides of an issue. Such a result would suggest that group pressures are not an inherent feature of political dialogue but are readily enhanced or mitigated by aspects of the context within which discussion occurs.

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Table 1
Attendance Figures By Site

January 2004			October 2004			October 2005 Education			October 2005 Healthcare		
City	**Number of Groups[a,b]**	**Total Subjects[b]**	**City**	**Number of Groups[a,b]**	**Total Subjects[b]**	**City**	**Number of Groups[b]**	**Total Subjects[b]**	**City**	**Number of Groups[b]**	**Total Subjects[b]**
Baton Rouge	7	62	Albuquerque	9	99	New Haven	22	145	Bowling Green	12	53
Green Bay	10	86	Baton Rouge	7	55	Kearney	12	131	Muncie	5	40
Kansas City	5	52	Boise	9	118	Albuquerque	10	76	Kansas City	7	62
Kearney	10	85	Charlottesville	10	133	Rochester	6	50	Los Angeles	11	64
Minneapolis	6	58	Cleveland	10	109	Saint Louis	10	103	Pittsburgh	10	54
Pittsburgh	10	82	Detroit	9	77				Charlottesville	4	36
Rochester	9	74	Houston	8	66				Seattle	4	34
San Diego	9	59	Kansas City	10	107						
Sarasota	9	85	Lexington	8	69						
Seattle	10	78	Lincoln	9	104						
			Miami	8	62						
			New Haven	9	99						
			Pittsburgh	9	102						
			Rochester	10	109						
			Saint Louis	10	92						
			San Diego	9	72						
			Seattle	8	86						
Total	**85**	**721**	**Total**	**152**	**1559**	**Total**	**60**	**505**	**Total**	**53**	**343**

Notes

[a] Each site began with 10 groups, but in some cases, small groups were merged before deliberation began.

[b] Groups that were filmed and had random assignment corrupted for media purposes were removed from the analysis and are not reflected in this table. Their presence or absence from the data does not affect the results.

Figure 1
Pre-Discussion Opinion Variation by Site

Table 2
Demographic Percentages

January 2004					October 2004				
City	Mean age	Women	College Graduates	Non-Hispanic White[a]	City	Mean age	Women	College Graduates	Non-Hispanic White[a]
Baton Rouge	51.4	54.8	54.8	79.0	Albuquerque	55.8	57.0	70.0	73.0
Green Bay	52.3	50.0	46.5	91.9	Baton Rouge	46.4	59.3	49.2	59.3
Kansas City	49.2	59.6	65.4	84.6	Boise	50.8	45.3	47.0	83.8
Kearney	47.5	51.8	41.2	97.7	Charlottesville	51.0	56.9	75.4	86.9
Minneapolis	50.7	56.9	70.7	94.8	Cleveland	49.8	56.0	58.0	85.0
Pittsburgh	51.0	42.7	59.8	78.1	Detroit	49.0	51.5	51.5	72.0
Rochester	49.2	54.1	60.8	79.7	Houston	51.1	60.7	76.5	58.8
San Diego	50.5	50.9	62.7	88.1	Kansas City	52.5	59.6	67.6	83.8
Sarasota	60.3	49.4	62.4	92.9	Lexington	50.6	49.3	54.5	87.0
Seattle	47.6	55.1	62.8	83.3	Lincoln	49.2	57.7	51.9	94.2
					Miami	55.0	52.5	66.7	65.0
					New Haven	53.8	44.9	71.0	79.4
					Pittsburgh	52.6	66.1	64.0	82.9
					Rochester	52.1	52.3	69.7	83.5
					Saint Louis	53.4	51.2	58.6	80.5
					San Diego	54.7	57.1	69.0	70.7
					Seattle	49.9	46.7	65.2	75.0
Sample Average	51.0	52.5	58.7	87.0	Sample Average	52.5	53.9	62.8	79.4
NES 2004[b]	47.3	53.5	29.9	72.3	NES 2004[b]	47.3	53.5	29.9	72.3

Notes

[a] Answer choices were: Hispanic, African-American, Asian, Non-Hispanic White, and Other. Those who answered "refused" were dropped from the analysis.

[b] From the 2004 National Election Survey. Answers for NES are self-reported except for gender, which was reported by the interviewer.

Table 3
January 2004 Deliberative Poll
Descriptive Statistics

Question Wording		Observations[a]	Mean[b]	Standard Deviation[b]
By the time we leave Iraq, the results will have been worth the cost in lives and dollars.[c,e]	Pre-deliberation	701	3.1	1.6
	Post-deliberation	713	3.2	1.5
The US should share its control of Iraq with other countries or the UN in return for their sharing more of the military and financial burden.[c]	Pre-deliberation	699	1.8	1.3
	Post-deliberation	708	1.8	1.1
In general, the US should be willing to invade other countries we believe pose a serious and immediate threat, even if we don't have a lot of international support.[c]	Pre-deliberation	701	3.5	1.6
	Post-deliberation	706	3.4	1.5
The war in Iraq has got in the way of the war on terror. [c,e]	Pre-deliberation	699	2.9	1.6
	Post-deliberation	708	2.8	1.5
What kind of impact would you say NAFTA has had so far on the American economy?[d,e]	Pre-deliberation	538	3.5	1.2
	Post-deliberation	657	3.1	1.1
On the whole, free trade means more jobs, because we can sell more goods abroad.[c,e]	Pre-deliberation	674	2.8	1.4
	Post-deliberation	707	3.1	1.3

Notes:

[a] Number of individuals engaging in discussion across all cities.

[b] Excludes those who answered "haven't thought much about that" from the group average.

[c] Answer choices are: 1-agree strongly, 2-agree somewhat, 3-neither agree nor disagree, 4-disagree somewhat, 5-disagree strongly.

[d] Answer choices are: 1-helped a lot, 2-helped somewhat, 3-has not had much effect, 4-hurt somewhat, 5-hurt a lot.

[e] In difference in means t-test using individual as the unit of analysis, change is significantly different from 0 at the p=0.05 level H_o:mean (post-discussion mean - pre-discussion mean) = mean(difference)=0; H_a: mean(difference)$\neq$ 0.

Table 4
October 2004 Deliberative Poll
Descriptive Statistics

Question Wording		Observations[a]	Mean[b]	Standard Deviation[b]
We must not hesitate to invade other countries when we think they pose a serious threat, even when we are not completely sure.[c,e]	Pre-deliberation	1456	3.7	1.2
	Post-deliberation	1490	3.8	1.4
We must not hesitate to invade other countries when we think they pose a serious threat, even if we do not have ally support.[c]	Pre-deliberation	1462	3.3	1.6
	Post-deliberation	1490	3.3	1.5
The U.S. should be willing to intervene in the affairs of other countries to make them more democratic.[c]	Pre-deliberation	1473	3.9	1.3
	Post-deliberation	1491	3.9	1.2
By the time we leave Iraq, the results will have been worth the cost in lives and dollars.[c,e]	Pre-deliberation	1415	3.7	1.6
	Post-deliberation	1480	3.8	1.5
The war in Iraq has gotten in the way of the war on terror.[c,e]	Pre-deliberation	1462	2.6	1.7
	Post-deliberation	1491	2.4	1.5
Protecting existing American jobs and industries is more important than lowering prices and creating new jobs through free trade.[c,e]	Pre-deliberation	1416	2.6	1.4
	Post-deliberation	1482	2.7	1.3
American companies should be penalized for moving jobs to other countries.[c]	Pre-deliberation	1484	2.4	1.5
	Post-deliberation	1494	2.5	1.3
The Bush administration tax cuts should be made permanent.[c,e]	Pre-deliberation	1435	3.5	1.7
	Post-deliberation	1476	3.6	1.6

Notes:

[a] Number of individuals engaging in discussion across all cities.

[b] Excludes those who answered "haven't thought much about that" from the group average.

[c] Answer choices are: 1-agree strongly, 2-agree somewhat, 3-neither agree nor disagree, 4-disagree somewhat, 5-disagree strongly.

[d] In difference in means t-test using individual as the unit of analysis, change is significantly different from 0 at the p=0.05 level H_o:mean (post-discussion mean - pre-discussion mean) = mean(difference)=0; H_a: mean(difference)$\neq$ 0.

Table 5

Effects of Group Composition on Post-treatment Policy Views Concerning Economic Issues
(Ordered Probit Estimates)

	January 2004		October 2004		
	NAFTA Impact?	Free trade means more jobs?	Protect US Jobs?	Penalize overseas US companies?	Permanent Bush tax cuts?
Pre-Deliberation Score	0.49*	0.31*	0.34*	0.56*	0.69*
	(0.04)	(0.03)	(0.02)	(0.02)	(0.02)
Group Average[a]	-0.10	0.11	-0.02	0.19*	-0.02
	(0.09)	(0.08)	(0.06)	(0.07)	(0.06)
Observations[b]	632	697	1480	1492	1474
Number of Discussion Groups	85	85	152	152	152
Log Likelihood	-787.24	-963.17	-2106.99	-1862.08	-1538.17

* significant at 5% one-tailed test, robust clustered standard errors in parentheses

Notes

[a] Results control for the city in which the poll takes place. Pre-deliberation scores for those who answer "haven't thought much about that" are set to that individual's group mean pre-deliberation score. Observations in which the respondent answered "haven't thought much about that" in the post-deliberation survey are excluded.

[b] Number of individuals engaging in discussion across all cities.

Table 6

Effects of Group Composition on Post-treatment Policy Views Concerning Security Issues (Ordered Probit Estimates)

	January 2004				October 2004				
	Iraq worth cost?	Share Control?	Invade without support?	Iraq in way of war on terror?	Invade if not sure?	Invade without allies?	US intervene to make democratic?	Iraq worth cost?	Iraq in the way of war on terror?
Pre-Deliberation Score	0.49*	0.38*	0.57*	0.50*	0.54*	0.46*	0.40*	0.58*	0.54*
	(0.03)	(0.04)	(0.03)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Group Average[a]	0.20*	-0.04	0.24*	0.08	-0.04	-0.01	-0.09	-0.02	0.00
	(0.07)	(0.10)	(0.09)	(0.07)	(0.07)	(0.06)	(0.07)	(0.06)	(0.06)
Observations[b]	703	701	696	703	1488	1488	1489	1478	1489
Number of Discussion Groups	85	85	85	85	152	152	152	152	152
Log Likelihood	-924.40	-755.06	-818.88	-918.62	-1664.35	-1920.88	-1858.83	-1630.86	-1705.87

* significant at 5%, one-tailed test, robust clustered standard errors in parentheses

Notes

[a] Results control for the city in which the poll takes place. Pre-deliberation scores for those who answer "haven't thought much about that" are set to that individual's group mean pre-deliberation score. Observations in which the respondent answered "haven't thought much about that" in the post-deliberation survey are excluded.

[b] Number of individuals engaging in discussion across all cities.

Table 7

Effects of Group Compostion on Policy Views by Moderator Type

(Ordered Probit Estimates)

October 2005 New Haven Local Surveys

	Passive Moderators				
Pre-Deliberation	0.29**	0.91**	0.42**	0.37**	0.95**
Score	0.10	0.16	0.05	0.05	0.26
Group Average	0.07	0.13	0.20**	0.00	-0.35
	0.23	0.27	0.07	0.08	0.40
Observations	62	60	57	54	60
	Active Moderators				
Pre-Deliberation	0.29	1.88**	0.27**	0.30**	0.49*
Score	0.16	0.35	0.06	0.07	0.24
Group Average	-0.21	0.64	-0.07	-0.03	-0.46
	0.19	0.65	0.11	0.1	0.31
Observations	57	57	52	52	57

Robust standard errors in parentheses

* significant at 5%; ** significant at 1%

Table A1
October 2005 Education
Descriptive Statistics

Question Wording		Observations[a]	Mean[b]	Standard Deviation[b]
Students are often given the grades A, B, C, D, or FAIL to denote the quality of their work. Suppose the public schools themselves, in your community, were graded in the same way. What grade would you give your community's public schools? [c]	Pre	461	2.54	1.03
	Post	466	2.59	1.11
How about the public schools in the nation as a whole? What grade would you give the public schools nationally? [c]	Pre	460	2.98	0.80
	Post	460	3.01	0.78
In your opinion is there too much emphasis on standardized testing in the public schools in your community, about the right amount, or not enough emphasis? [d, i]	Pre	435	1.64	0.71
	Post	454	1.51	0.67
To what degree do you think your elected representatives in Washington share your priorities for how to improve education? [e]	Pre	435	4.74	2.08
	Post	388	4.73	2.12
To what degree do you think your elected state representatives at the state capital share your priorities for how to improve education? [e]	Pre	402	5.02	2.14
	Post	410	5.11	2.13
From what you know or have heard about the No Child Left Behind Act, do you approve or disapprove of it or couldn't you say? [f, i]	Pre	464	3.26	1.41
	Post	460	3.37	1.46
How much would you say that the amount of money spent by a public school affects the quality of education it provides? [g]	Pre	487	1.85	0.80
	Post	474	1.83	0.75
Large classes do not have much effect on student performance. [h]	Pre	489	3.88	1.41
	Post	477	3.73	1.46
The first priority of government should be to help the worst off. [h]	Pre	487	2.62	1.28
	Post	470	2.55	1.33
The first priority of government should be to make the whole country prosper. [h]	Pre	485	2.27	1.19
	Post	468	2.22	1.20
The first priority of government should be to let people make their own choices. [h]	Pre	486	2.16	1.11
	Post	474	2.09	1.07

Notes

[a] Number of individuals engaging in discussion across all cities.

[b] Excludes those who answered "couldn't say" or "haven't thought much about that" from the group average.

[c] Answer choices range from 1-A to 5-F.

[d] Answer choices are: 1-not enough, 2-the right amount, 3-too much.

[e] Answer choices are scaled from 0 to 10: 0=Completely different priorities,10- completely the same.

[f] Answer choices are: 1-approve strongly, 2-approve somewhat, 3-neither approve nor disapprove, 4-disapprove somewhat, 5-disapprove strongly.

[g] Answer choices are: 1-A great deal, 2-somewhat, 3-very little, 4-hardly at all.

[h] Answer choices are: 1-agree strongly, 2-agree somewhat, 3-neither agree nor disagree, 4-disagree somewhat, 5-disagree strongly.

[i] In difference in means t-test using individual as the unit of analysis, change is significantly different from 0 at the p=0.05 level H_o:mean (post-discussion mean - pre-discussion mean) = mean(difference)=0; H_a: mean(difference)$\neq$ 0.

Table A2
October 2005 Healthcare
Descriptive Statistics

Question Wording		Observations[a]	Mean[b]	Standard Deviation[b]
To what degree do you think your elected representatives in Washington share your priorities for how to improve health care? [c]	Pre	256	4.45	2.12
	Post	272	4.38	2.06
To what degree do you think your elected state representatives at the state capital share your priorities for how to improve health care? [c]	Pre	243	4.37	2.11
	Post	271	4.54	1.99
How effective or ineffective would this be at controlling health care costs? Increasing co-pays and deductibles for consumers. [d, g]	Pre	311	3.21	1.28
	Post	318	3.06	1.26
How effective or ineffective would this be at controlling health care costs? Relying on managed care through HMOs. [d]	Pre	301	3.16	1.25
	Post	311	3.09	1.27
How effective or ineffective would this be at controlling health care costs? Limiting government funds for healthcare. [d]	Pre	305	3.89	1.26
	Post	312	3.76	1.21
How effective or ineffective would this be at controlling health care costs? Increasing government control of/involvement in healthcare. [d]	Pre	320	2.78	1.42
	Post	320	2.73	1.34
The first priority of government should be to help the worst off. [e]	Pre	325	2.47	1.30
	Post	324	2.40	1.30
The first priority of government should be to make the whole country prosper. [e]	Pre	329	2.35	1.32
	Post	323	2.34	1.28
The first priority of government should be to let people make their own choices. [e]	Pre	332	2.12	1.12
	Post	324	2.06	1.03

Notes

[a] Number of individuals engaging in discussion across all cities.

[b] Excludes those who answered "couldn't say" or "haven't thought much about that" from the group average.

[c] Answer choices are scaled from 0-completely different priorities to 10-completely the same.

[d] Answer choices are: 1-yes, slightly more, 2-yes, significantly more, 3-no.

[e] Answer choices are: 1-very effective, 2-somewhat effective, 3-neither effective nor ineffective, 4-somewhat ineffective, 5-very ineffective.

[f] Answer choices are: 1-agree strongly, 2-agree somewhat, 3- neither agree nor disagree, 4-disagree somewhat, 5-disagree strongly.

[g] In difference in means t-test using individual as the unit of analysis, change is significantly different from 0 at the p=0.05 level H_o:mean (post-discussion mean - pre-discussion mean) = mean(difference)=0; H_a: mean(difference)≠ 0.

Table A3
Effects of Group Composition on Education Views
(Ordered Probit Estimates)
October 2005

	Grade for community schools	Grade for public schools	Level of emphasis on standardized testing	Washington politicians share your priorities?	Local politicians share your priorities?	Approve of No Child Left Behind Act?	Amount of money affect education quality?	Large classes have effect on students?	Government should first help worst off?	Government should first make whole country prosper	Government should first let people make own choices
Pre-deliberation	0.61*	0.58*	0.65*	0.24*	0.26*	0.46*	0.48*	0.26*	0.39*	0.48*	0.38*
Score	0.07	0.07	0.09	0.04	0.03	0.05	0.08	0.05	0.06	0.05	0.04
Group Average [a]	-0.17	0.07	-0.02	-0.07	-0.04	0.27*	0.08	-0.07	-0.05	-0.07	-0.25*
	0.12	0.16	0.18	0.06	0.07	0.13	0.15	0.1	0.13	0.14	0.08
Observations [b]	464	458	452	386	408	458	472	475	476	466	472
Number of Discussion Groups	85	85	85	85	85	85	85	85	85	85	85
Log Likelihood	-542.49	-483.79	-374.96	-757.08	-801.85	-599.31	-472.67	-628.75	-647.75	-590.63	-579.25

* significant at 5%, one-tailed test, standard errors in parentheses

Notes:

[a] Results control for the city in which the poll takes place. Pre-deliberation scores for those who answer "haven't thought much about that" are set to that individual's group mean pre-deliberation score. Observations in which the respondent answered "haven't thought much about that" in the post-deliberation survey are excluded.

[b] Number of individuals engaging in discussion across all cities.

Table A4
Effects of Group Composition on Healthcare Views
(Ordered Probit Estimates)
October 2005 Poll

	Washington politicians share your HC priorities?	Local politicians share your HC priorities?	Increase co-pays and deductibles?	Rely on managed care through HMOs?	Limit government funds for healthcare?	Increase government involvement in healthcare?	Government should first help worst off?	Government should first make whole country prosper	Government should first let people make own choices
Pre-deliberation score	0.32*	0.26*	0.44*	0.47*	0.31*	0.26*	0.45*	0.61*	0.50*
	0.03	0.05	0.06	0.04	0.05	0.04	0.06	0.05	0.06
Group Average [a]	0.02	-0.04	-0.18	-0.01	-0.12	0.00	-0.15	0.16	0.15
	0.08	0.05	0.09	0.17	0.12	0.08	0.08	0.13	0.11
Observations [b]	269	267	314	305	309	317	321	320	320
Number of Discussion Groups	53	53	53	53	53	53	53	53	53
Log Likelihood	-495.14	-510.54	-414.53	-385.43	-413.89	-447.06	-418.03	-395.85	-354.47

* significant at 5%, one-tailed test, standard errors in parentheses

Notes:

[a] Results control for the city in which the poll takes place. Pre-deliberation scores for those who answer "haven't thought much about that" are set to that individual's group mean pre-deliberation score. Observations in which the respondent answered "haven't thought much about that" in the post-deliberation survey are excluded.

[b] Number of individuals engaging in discussion across all cities.