

Summer 2011

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Recommended Citation

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http://opensiuc.lib.siu.edu/pn_wp/62

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**Disagreeing About Disagreement:
How Conflict in Social Networks Affects Political Behavior**

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Abstract

At the center of debates on deliberative democracy is the issue of how much real deliberation citizens experience in their core social networks. These “disagreements about disagreement” come in a variety of forms, with scholars advocating significantly different empirical approaches (e.g., Huckfeldt et al. 2004; Mutz 2006), and coming to significantly different substantive conclusions. We tackle these discrepancies by investigating the effect of conceptual and measurement differences on key findings relating interpersonal political disagreement to political attitudes and behaviors. Drawing on the 2008-2009 ANES panel study, we find evidence that different measures of disagreement have distinct effects when it comes to individuals’ preferences, patterns of engagement, and propensities to participate. We discuss the implications of these findings for the study of social influence; as interpersonal disagreement can mean different things and does not have easily characterized effects, scholars should exercise caution when making pronouncements concerning its empirical and democratic consequences.

Paper prepared for presentation at the 4th annual meeting of the Political Networks Conference, June 14-18, 2011. A previous version of this paper was presented at the 2010 meeting of the Midwest Political Science Association.

As suggested by Lasswell's (1936) classic definition of politics – who gets what, when, and how – conflict is inevitable in any political process. Yet conflict also seems to be the part of politics most disliked by average citizens. At best, they may find disagreement among elites distasteful (Hibbing and Theiss-Morse 2002), and with friends uncomfortable (Ulbig and Funk 1999). At worst, disdain stemming from clashing points of view may lead to withdrawal from the public sphere, diminishing the relationship between citizens and policy-makers (Mutz 2006).

In the realm of political behavior, a recent revival of interest in disagreement stems from normative theories of political deliberation that promote a different view of how representative democracy functions effectively. Though liberal democratic theories emphasize the need for individuals to be educated and civically engaged in order to be politically active, deliberative theories focus on collective processes and the exchange of viewpoints. While theoretical discussion of deliberative democracy is lively and well-developed, empirical scholarship on the mass public has focused principally on the question of the behavioral impact of political disagreement.

In short, the consequences of everyday political disagreement remain unclear. Some research indicates that disagreement between citizens makes those in the minority less likely to vote in line with their underlying partisanship (Huckfeldt and Sprague 1988; Sokhey and McClurg n.d.), that it increases opinion ambivalence (Mutz 2002), and that it decreases political participation (McClurg 2006a; Mutz 2002; 2006). Other research suggests that such findings are overstated either because they are conditional on other attributes of social networks, or are nonexistent (Huckfeldt et al. 2004; McClurg 2006b; Nir 2005). Clarity about what produces such divergent results is needed so we can better assess how political conflict between individuals affects the quality of citizenship. It is in this intellectual context that we revisit what is meant by "everyday political disagreement," that we

reconsider how to measure it in the real world, and that we reassess its implications for empirical analyses, and ultimately, democratic practice.

We begin by focusing on two analytical problems that shape our current understanding of interpersonal political disagreement. One revolves around the inadequate conceptualization and measurement of the core concept; common measurement practices have emerged without sufficient attention having been given to defining disagreement, to developing adequate measures for different definitions, and to examining the impact that alternative measurements have on models used to evaluate behavioral consequences. A second set of challenges center on difficulties in making causal inferences (e.g., Klobstad 2007, 2011). Though a growing body of work demonstrates that political discussion effects are real, care must be exercised as most of the data available for testing theoretical claims are cross-sectional in nature, and therefore susceptible to methodological problems such as endogeneity, reciprocal causation, and selection bias.

In the sections that follow, we tackle interpersonal disagreement with an eye toward both problems. In doing so we aim to bring new perspective to current practices and order to previous results. We employ two measures of disagreement that occupy different points on what we view as the range of definitions of political disagreement. One is a general measure of how different people see the views of their network members as being from their own views, and the second is based on the perceived partisanship of network members. Using propensity score matching to address confounding factors, we examine how both measures relate to civic engagement, the strength of political preferences, and basic participation in a national sample of Americans from the 2008-2009 American National Election Studies Panel Survey. Our findings suggest that care should be exercised when making blunt pronouncements; the supposedly dire consequences of disagreement are muted when we carefully address concerns about conceptualization and inference. It is only what we will call the “most severe” disagreements that appear to hold behavioral consequences, and

even these are restricted to the strength of political preferences, rather than political engagement or political participation.

Everyday Political Disagreement

Everyday political disagreement refers to conversations where individuals are exposed to viewpoints that are different from their own. Such exchanges are particularly important for understanding political behavior, because without the possibility of learning new information or views there is little opportunity for social communication to alter past patterns of behavior. Put another way, disagreement drives social influence (McPhee 1963; Sprague 1982). Political disagreement is also important because it may help us understand how individual preferences translate into citizen inputs into the political system. When there is no exchange of views between citizens, the lines of debate are hard and fast, and potentially inhibit compromise among representative officials. That is, preferences are relatively fixed, and the ability of governments to provide representation becomes largely a function of institutional design (Dahl 1963). Yet when there is some exchange of views between citizens, public representation becomes a matter not just of how we aggregate preferences through institutions, but of how the public reacts to different viewpoints and adjusts its own behavior.

For example, if conflicting views create intolerance for others' preferences, it can delegitimize governing elites who do not share the ideas of majorities. Or, if conflict causes some groups of voters (e.g., majority opinion holders) to express their opinions more insistently and to participate more than others groups (e.g., minority opinion holders), then government may be more responsive to some groups than others (Noelle-Neuman 1993). Of course, it is also possible that disagreement affects preferences themselves, suggesting that what is in the public's interest is a

dynamic phenomenon that changes as we deliberate, potentially leading to "better" public opinion and policy outputs (e.g., Fishkin 1995).¹

Accordingly, there is acute interest in how much disagreement occurs between citizens in their everyday lives. Yet in what has become a hallmark of this literature, even the basic question of how much disagreement exists between citizens is itself contested. For example, Huckfeldt et al. (2004) have argued that disagreement is the modal condition in the American electorate (based upon average network size and various probabilities of disagreement between any two members). Conversely, Mutz (2006) makes an argument for low levels of disagreement. She notes that not only are levels of disagreement between dyads very low in national probability samples, but that levels of communication in those dyads are also exceptionally low. In short, despite examining similar data, Mutz and Huckfeldt and colleagues draw largely opposite conclusions.

Another significant line of debate focuses on the consequences of disagreeable social interactions. For example, Mutz's seminal contributions (2002a, 2002b, 2006) on "cross-cutting discussion" suggest that while disagreement leads to better understandings of and tolerance for different viewpoints, it leads to lower levels of political participation. Otherwise stated, her suggestion is that disagreement in social networks leads people to deliberate, but not participate. Yet even while she makes this argument forcefully, there are indicators that the choice between deliberative and participatory democracy is perhaps not so stark. Some scholars report that disagreement is either positively or statistically insignificantly related to participation (e.g., Nir 2005); others suggest that the influence of disagreement is variable, subject to other elements in a person's network (e.g., Djupe, Sokhey, and Gilbert 2007; McClurg 2006a), or the broader social context in which it occurs (McClurg 2006b; Noelle-Neuman 1993).

¹ See Delli Carpini et al. (2004) for a thorough review of the empirical deliberation literature.

What explains such inconsistent findings? To a certain extent they may be the consequence of different bases of evidence and varying theoretical predilections. However, we argue that two analytical problems—i.e., the inconsistent conceptualization of disagreement, and the potential biases involved in estimating effects with cross-sectional, ego-centric data—are the likely culprits. Simply put, we argue that “what one sees,” to some degree, depends on what one thinks constitutes disagreement. With more attention to concept and analysis, we can better understand when disagreement presents opportunities for learning, and at what point it becomes a barrier to civic engagement.

Analytical Problems in the Study of Political Disagreement

Conceptualizing Disagreement

Almost all political science studies of everyday political disagreement employ measures that focus on some aspect of discussion occurring across lines of political difference. However, this is where agreement about disagreement ends. The basic theoretical question is as follows: at what point do political conversations become disagreeable and start affecting political behavior? This point is illustrated by contrasting the measures used in two of the most -cited studies in the contemporary field: Huckfeldt, Johnson, and Sprague's (2004) *Political Disagreement*, and Mutz's (2006) *Hearing the Other Side*. Defining the underlying concept of disagreement is not the main thrust of either study, yet their different measurement strategies reflect distinct theoretical predilections that bracket the potential range of conceptual definitions that could be used to derive measurements of disagreement. By bringing such predilections to the forefront, we can bring order to this literature and make further progress in understanding the role that political disagreement plays in American civil society.

Huckfeldt et al. measure disagreement as discord in the vote choice of a respondent and her discussant. In this approach, a person who prefers one presidential candidate encounters

disagreement even if their discussant prefers no presidential candidate. There are many conceptual benefits to such a measurement approach; it is anchored in political preferences, it is about an individual's perceptions of their communication environment, and we have a very good sense of what the disagreement is about. At the same time, this measurement may be more appropriately conceived of as measuring the *absence* of agreement rather than the presence of disagreement. In turn, this may overstate the importance of social exchanges with low political salience; that is, exchanges that do not really create the pronounced opportunities for learning that are central to theories of disagreement and deliberative democracy. In this sense, the underlying concept emphasizes a measure that is anchored in preferences that are relatively concrete, but exchanges that have minimal conflict, and thus may not always be perceived clearly or judged to be salient by the parties in the exchange (Huckfeldt and Sprague 1988; Mutz and Martin 2001).²

Mutz seeks to measure survey respondents' perceptions of how much they disagree with their named discussants. Specifically, her approach is to create an index of disagreement that combines information from a variety of survey questions, including shared vote preferences, shared

²The accuracy of individuals' reports of their discussants is a perennial concern when using ego-centric network data (as we do in our analyses). However, it is worth noting that while biased perception exists, studies that collect data from the focal respondent and her discussants have found that individuals are *not* highly inaccurate in their estimates of others' levels of expertise (Huckfeldt 2001) or political orientations. Also, Fowler et al. (2011) remind us that Huckfeldt and colleagues (e.g., 1987; 2000) report about 80% of respondents as accurately identifying the political preferences of named discussants. Per our arguments, it is also worth considering that perceptions, regardless of their degree of accuracy, might be more important than reality when it comes to understanding the consequences of socially-supplied disagreement for political behavior (Mutz and Martin 2001).

partisan preferences, general perceptions of disagreement, general perceptions of shared opinions, and levels/frequencies of disagreement. The strength of this measure is that it does not rely solely on vote choice for determining whether disagreement may exist; it instead focuses on the respondents' explicit recognition of disagreement during social exchanges. Another potential strength is that this approach measures exposure to disagreement by including the frequency of political discussion in the index, rather than assuming that disagreement is not reliant on frequency of interaction. Unlike the Huckfeldt et al. measure, this one is weighted towards more intense disagreements.³ As a consequence, we argue that Mutz's approach potentially overlooks what we see as the more common, but less intense, discussions in which differing viewpoints are exchanged.

[FIGURE 1 ABOUT HERE]

These two approaches give us insight into the deeper theoretical problem surrounding everyday political disagreement. If we imagine a hypothetical conversation between two people, we could classify any political discussion they have as falling between two possible endpoints: complete agreement or complete disagreement about politics.⁴ From this, we can then begin to think about separating such a space between conversations best characterized as being agreeable or disagreeable,

³This is particularly true when we consider that most social network survey questions solicit information on family and close friends, or people with whom individuals are likely biased against thinking that they "disagree" in any general sense. Since people have incentives to downplay levels of conflict among their family and friends, it is likely that these conversations must be salient if they are willing to admit that there is disagreement (Conover et al. 2002; Mutz and Martin 2001).

⁴The discussion here considers disagreement as an isolated, one-dimensional concept. We acknowledge that this is a simplistic, if useful, assumption. Future work should consider other content dimensions (as well as degree and frequency of social communication). We are grateful to an anonymous reviewer for insightful comments on this matter.

as illustrated in Figure 1. The point at which an analyst decides to separate (or sort political discussions as being agreeable versus disagreeable) can lead to different categorizations of conversations. Within this conceptual space there are significant differences in the underlying points of view between discussants, and in the degree to which differences are recognized and registered as significant. We contend that these fundamental differences have led to confusion over the amount, causes, and consequences of everyday political disagreement.

To clarify, let us return to our earlier example: we view the approaches of Huckfeldt and colleagues and Mutz as leaning towards different points on this conceptual space. An approach based on the logic of the Huckfeldt et al. measure allows for disagreement to occur in any exchange where agreement is absent (albeit in the context of voting), but does not require the respondent to see preferences as being a source of disagreement. Alternatively, a conceptualization based on the priorities of the Mutz measure is more likely to weigh intense and persistent disagreements more heavily – that is, disagreements that are strong enough to be readily recognizable to individuals.

Both measures capture political differences between people, but the nature of conversations that they capture (and their consequences) may vary dramatically. For example, while the Huckfeldt et al. measure would suggest that widespread opportunities for learning something about politics exist (because of the absence of agreement), the more intense political disagreements of the Mutz measure probably border on outright conflict, and are therefore less likely to occur. Additionally, intense disagreement may inhibit learning, as people seek to avoid personal relationships that put conflict front-and-center (e.g., Festinger 1957). Overall, then, we expect measures at different points of this continuum to hold varied implications for the frequency of political disagreement, and for behavioral outcomes.

We pursue this line of argument by looking at two measures that hold different spots within our hypothetical discussion space: a partisanship difference measure and a general disagreement

measure. Our examination focuses on the extent to which these measures provide us with similar or divergent pictures of how disagreement influences political behavior. Our goal is not to provide a “right” or “wrong” approach per se, as either measure could be meaningful in different research contexts. Instead, we seek to demonstrate that the choice of how to define disagreement holds important consequences for our understanding of the concept.

Disagreement and Causal Inference

Researchers looking at political disagreement have been explicitly interested in consequences for political behavior. However, as membership in social networks (and in particular, disagreeable networks) is not forced upon individuals, social relationships are partly the product of individual choices. The implication of this is that any observed correlations between political behavior and political discussion are analytically suspect. This is particularly true for cross-sectional data, where temporal separation between “cause” and “effect” cannot be leveraged.

Klofstad (2007, 2011) elaborates on this analytic bias (see also Fowler et al. 2011), outlining three identification problems in social network research. The first is the problem of *selection bias*, where discussion and disagreement in networks is driven by individuals’ political preferences and behaviors (i.e., individuals who embed themselves in disagreeable networks could be systematically different from those who surround themselves with agreeable discussants). The second is the problem of *reciprocal causation*, where disagreement may affect political behavior, but feedback exists from those behaviors back to disagreement. Last is *spurious* causation, where factors that lead to political behaviors – e.g., partisan intensity and/or educational level – also lead to the structure of a social network and certain levels of discussion.

Political scientists have adapted to these biases with a combination of experimental design (Klofstad 2007; Nickerson 2008) and statistical techniques (Klofstad 2007, 2011). Here we employ propensity score matching (see Ho et al. 2007 for a discussion), a statistical procedure used to

impose experimental control on observational data, to address several of these analytical hurdles facing the literature. Below we discuss the data, measures, and this methodological tack in more detail.

Data and Method

Our evidence comes from the January 2009 release of the 2008-2009 American National Election Studies (ANES) Panel Survey (ANES 2009).⁵ This data set contains information collected at six different points in time over the course of 2008: January, February, June, September, October, and November. A nationally-representative sample of respondents was recruited to participate over the telephone, and completed each questionnaire over the Internet. Individuals without Internet access were supplied with a free web browsing device. Respondents received a \$10 incentive for each completed questionnaire (additional information on how this study was conducted is available in DeBell et al. (2009)).

Independent Variables: Two Measures of Political Disagreement

In the September, 2008 questionnaire, respondents were asked to identify the members of their political discussion network through a “name generator” procedure (see Klobstad et al. 2009 for details on similar procedures; also see Knoke and Yang (2008) for more information on ego-centric data structures). Specifically, respondents were first asked, “During the last six months, did you talk with anyone face-to-face, on the phone, by email, or in any other way about government or elections, or did you not do this with anyone during the last six months?” Those responding in the affirmative (N = 1225) were asked to name up to four individuals with whom they engaged in such

⁵ “Note that the 2008-2009 ANES Panel Study is entirely separate from the 2008 ANES Time Series study, which was conducted using the traditional ANES method of face-to-face interviews before and after the 2008 election. Although there are a few questions common to both studies, the samples and methods are different” (DeBell et al. 2009, p. 5).

discussion. Respondents were then asked a series of follow-up questions about each named discussant.

Consistent with our previous discussion of the concept, we operationalize exposure to interpersonal political disagreement in two ways. One measure is based on the respondent's perception of how much disagreement is occurring in his or her network (hereafter referred to as "general disagreement"). For each discussant, respondents were asked, "In general, how different are [DISCUSSANT NAME]'s opinions about government and elections from your own views: extremely different, very different, moderately different, slightly different, or not at all different?" We first summed the disagreement scales for each member of the discussion network (i.e., we created a measure of the total amount of perceived disagreement in the network). The final general disagreement scale was then created by dividing the sum of the disagreement scales by the number of discussants mentioned by the respondent; this is done in order to make the scale comparable for respondents with differently-sized networks. We use this measure to represent general political disagreement, or disagreement that would be evident to all parties involved. As such, it would be placed on the right side of the hypothetical discussion space presented in Figure 1.

Our second measure of disagreement is based on the respondent's report of the partisan leanings of her discussants (hereafter referred to as "partisan disagreement"). This measure is based on the standard ANES battery of questions producing a 7-point partisanship scale running from "Strong Democrat" to "Strong Republican." To construct the partisanship-based disagreement scale we subtracted the mean partisanship score of the discussion network (to calculate this we took the sum of the identification scores for all discussants in a network, and divided by the number of discussants mentioned by the respondent) from the respondent's own partisanship score. Again, the mean of the network is used in order to make the scale comparable for respondents with differently sized networks. This yields a measure where both larger positive and negative numbers indicate

greater levels of partisan disagreement between the respondent and his or her discussants. As such, we use the absolute value of this measure as the final scale, where larger values indicate greater levels of disagreement. We use this measure to represent what we call the partisan approach to political disagreement, where people have different views but do not necessarily experience high degrees of conflict; it would be placed on the left side of the hypothetical discussion space presented in Figure 1.

Dependent Variables: Political Preferences and Behaviors

In the following analyses, we examine the relationship between exposure to interpersonal political disagreement and a number of different measures of political preferences and behavior. Each dependent variable was gathered in waves of the panel survey subsequent to when the network data were collected in September, 2008. This temporal separation between the independent and dependent variables (with disagreement measured prior to the dependent variables) increases the precision of our analysis.

Our first set of dependent variables captures the strength of respondents' political preferences. One variable measures how certain respondents were about their 2008 presidential vote choice in October of 2008. Respondents were first asked to predict their vote choice, after which they were asked, "How sure are you of that: extremely sure, very sure, moderately sure, slightly sure, or not sure at all?" A second variable measures the strength of respondents' partisanship in November of 2008; it is based on the standard ANES self-identification question that yields a 7-point scale running from "Strong Democrat" to "Strong Republican." Strength of partisanship is operationalized by "folding" the 7-point scale into a 4-point scale that runs from "Independent" to "Strong Partisan." Finally, we also examine the relationship between disagreement and strength of ideology, based on the standard ANES self-identification question that yields a 7-point scale running from "Very Liberal" to "Very Conservative." As with strength of partisanship, strength of ideology

is operationalized by transforming the 7-point scale into a 4-point scale that runs from “Moderate” to “Strong Ideologue.”

Our second set of dependent variables is concerned with how civically engaged respondents were over the course of the 2008 election. One measure captures media use in October, 2008 by summing the number of days per week that respondents used television, radio, the Internet or newspapers for news consumption. A second measure gauges how interested respondents were in politics during November, 2008 based on the question, “How interested are you in information about what’s going on in government and politics: extremely interested, very interested, moderately interested, slightly interested, or not interested at all?” We also examine two measures of political efficacy in November of 2008. The first measures external efficacy based on the question, “How much do government officials care what people like you think: a great deal, a lot, a moderate amount, a little, or not at all?” The second taps internal efficacy: “How much can people like you affect what the government does: a great deal, a lot, a moderate amount, a little, or not at all?”

Finally, we also examine two measures of political engagement and participation. The first gauges how frequently, overall, respondents engaged in political discussion in November, 2008, based on the question, “During a typical week, how many days do you talk about politics with family or friends?” It is important to note that unlike the more detailed, ego-centric discussion network questions administered in September, 2008, this variable is a much simpler indicator of how actively respondents were engaged in political dialogue (it is also important to note that the ego-centric network questions did *not* measure the frequency of political discussion between the respondent and her named discussants). Last but not least, we look at voter turnout in the 2008 election, as self-reported in the November, 2008 wave of the panel.

Method: Data Preprocessing

In order to strengthen our inferences, we address the various analytical biases discussed earlier by preprocessing the ANES data with a “matching” procedure (e.g., Dunning, 2008; Ho, King and Stuart, 2007a; Ho, King and Stuart, 2007b). Under this procedure the effect of being exposed to political disagreement is more accurately measured by comparing the attitudes and behaviors of survey respondents who are similar to one another, save the fact that one was exposed to interpersonal disagreement and the other was not; in other words, the idea is that the researcher imposes some degree of “experimental” control on what is observational data. By comparing the attitudes and behaviors of similar individuals who were and were not exposed to disagreement, we can be more confident that any observed difference in attitudes and behaviors between them is unrelated to the factors that the respondents were matched on, and as such, is a consequence of being exposed to disagreement instead of some confounding factor.⁶ More details on how this procedure was conducted are included in the appendix.

⁶ Matching is less precise than a controlled experiment because the procedure does not account for unobserved differences between individuals who were and were not exposed to disagreement (e.g., Arceneaux et al. 2006; Sekhon 2009). However, an extensive set of pre-treatment covariates were used in the matching procedure (see Tables 1 and 2), increasing the likelihood that any meaningful covariates of political disagreement are accounted for in the analysis. Moreover, unobserved differences between individuals who were and were not exposed to political disagreement are likely to correlate with observed differences, and as such are accounted for by proxy in the matching procedure (Stuart and Green 2008). As such, given that a true experiment is an extremely difficult (if not impossible) research design to execute for this research question, matching (in concert with panel data) is arguably a next best alternative.

Results⁷

Who Is Exposed to Disagreement?

Before examining the effect that different conceptualizations and measures of disagreement have on political preferences and behaviors, to motivate the matching procedure and gain some purchase on the social processes affecting respondents, we first examine what types of individuals are exposed to disagreeable dialogue. Tables 1 and 2 present variables that correlate with exposure to disagreement in political discussion networks; again, these variables were collected in waves of the ANES Panel Study that occurred *before* the network battery was administered (i.e., “pre-treatment”). Disagreement is dichotomized at the mean for each of the distinct disagreement scores, where above the mean indicates a disagreeable network (the treatment), and below the mean indicates an agreeable network (the control).

[TABLE 1 ABOUT HERE]

Table 1 displays the various covariates of *general* disagreement in one’s political discussion network. Specifically, the percentages demonstrate that for this measure, women are less likely to be embedded in disagreeable networks than men. Individuals in general-disagreeable networks are also less partisan/ideological, and have weaker attitudes about the Republicans and Democrats. However, while their weaker preferences might signal political disengagement, individuals in these types of networks consume more news media, are more knowledgeable about politics, are more likely to have donated money to a political or social organization, are more likely to have attended a meeting about political or social matters, and are more likely to have recruited someone else to attend such a meeting. As such, the data suggest that individuals in disagreeable networks,

⁷ All results exclude individuals who did not report having any political discussants (N = 312, or 20% of the 1567 cases in the data set).

conceptualized in terms of general disagreement, are more politically engaged, but more agnostic about their political leanings when compared to individuals in agreeable networks.

[TABLE 2 ABOUT HERE]

Table 2 examines the correlates of exposure to our second measure, *partisan* disagreement. In contrast to Table 1, these data show that individuals embedded in networks marked by this type of disagreement have *stronger* political preferences than individuals in agreeable networks. As in Table 1, however, these data also indicate that individuals in partisan-disagreeable networks are more likely to have engaged in civic activities.

The results in Tables 1 and 2 suggest that individuals who are exposed to disagreement, regardless of type, tend to be more civically engaged and active compared to individuals in more agreeable networks. However, the data also suggest that general disagreement and partisan disagreement are capturing different forms of disagreement, experienced by different types of people. In short then, the results indicate that individuals who perceive general disagreement have weaker political preferences, while individuals who experience disagreement measured by a lack of shared partisan preferences have stronger political preferences. The differences between these two measures of disagreement are reinforced by the fact that the two measures are negatively correlated ($r = -.09$, $p < .01$ across the full scales; $r = -.014$, $p < .61$ for the dichotomized treatments), and that the average level of general disagreement (mean=.50) is significantly greater than that of partisan disagreement (mean=.41) ($t=4.55$, $p < .01$). Overall, the two conceptualizations of disagreement appear to be rooted in at least somewhat divergent sources/social processes.

The Relationship between Disagreement and Political Preferences and Behavior

The remaining tables present multivariate analyses of the relationship between exposure to the two conceptualizations of interpersonal political disagreement, and various measures of political preferences and behavior. To address the analytical biases described previously, each of these

analyses incorporates the matching data preprocessing procedure. The precision of the analysis is also increased by the inclusion of a number of control variables that are known to be correlated with political preferences and behavior: demographic characteristics, strength of political preferences, past patterns of political behavior, and civic engagement. Each of these variables was measured months before respondents reported whether they were or were not exposed to disagreement, allowing us to assess the effect of exposure to political disagreement while controlling for “who the respondent was” at the “pre-treatment” stage.

Strength of Political Preferences

In Table 3 we begin our analysis by estimating the relationship between exposure to disagreement and strength of political preferences. For purposes of comparison, for each dependent variable results are presented side-by-side for general disagreement and partisan disagreement.⁸ The data in the first two columns show a negative relationship between exposure to disagreement and being certain about one’s impending vote choice for president, regardless of which measure is employed. Substantively, for example, individuals who perceived general disagreement in their social network are estimated to be thirteen percentage points less likely to be “extremely” certain about their vote choice (a decrease from 72% among those who did not perceive general disagreement, to 59% among those who did so).⁹ Partisan disagreement is estimated to have

⁸ In this effort we focus on the main “treatment” effects for the different measures of disagreement. We thank an anonymous reviewer for pointing out the possibility of modifiers on the treatments (i.e., interactive effects with the measures of disagreement), and plan to explore this further in subsequent work.

⁹ Substantive interpretations of coefficients are estimated holding all other factors in the model at their means. These estimates were derived using the “setx” and “sim” procedures in the “Zelig” package for R (Imai et al. 2007a and b).

decreased the likelihood of a respondent being “extremely” certain about her vote choice by a more modest five percentage points (a decrease from 68% among those not in disagreeable partisan networks, to 63% among those in disagreeable partisan networks).

[TABLE 3 ABOUT HERE]

The next four columns in Table 3 display the relationship between disagreement and strength of partisan and ideological preferences, respectively. The data show that while we cannot detect a systematic relationship between exposure to partisan disagreement and strength of political preferences, we find a significant negative relationship for general disagreement.¹⁰ Substantively, individuals who perceive general disagreement in their social network are estimated to be twelve percentage points less likely to be “strong” partisans (a decrease from 50% among those who did not perceive disagreement, to 38% among those who did perceive disagreement); they are estimated to be four percentage points less likely to be “strong” ideologues (a decrease from 20% among those who did not perceive general disagreement, to 16% among those who did perceive such disagreement).

The difference between the two disagreement measures is important. Across all three dependent variables, we see that social interactions that are significant enough to register as general disagreements have important consequences for the strength of preferences held by individuals. Partisan disagreement, which we have theorized as the milder form of disagreement (wherein we believe that learning occurs, but that disagreement is less likely to be marked by conflict) has either non-existent or less-pronounced consequences for vote certainty and preferences. When we

¹⁰ Substituting measures of partisan and ideological strength collected in October, 2008 (instead of November 2008) produces comparable results, with the exception of the relationship between general disagreement and ideological strength; the coefficient is negative, but not statistically significant at conventional levels ($b = -.14$, $s.e. = .08$; $p = .11$).

remember that these results give us at least some leverage on who respondents were prior to the “treatment,” given the panel nature of the data, the implication is significant: stronger, more conflictual interactions can lead people away from rock-solid political views. Simply interacting with people who do not share your partisan preferences may not weaken preferences or devotion to them, even if (as we assume) they do create opportunities for political learning.

Civic Engagement

Table 4 presents the estimated relationship between the two disagreement measures and various measures of civic engagement. The first two columns of the table show that while we are unable to detect a relationship between general disagreement and news media usage, individuals in partisan-disagreeable networks consumed less news media on the eve of the 2008 election. Substantively, this relationship between exposure to partisan disagreement and media use is actually rather modest – individuals embedded in such social networks only consumed six percent less media content (the equivalent of about a one-point decline on the 28-point consumption scale).

[TABLE 4 ABOUT HERE]

The next two columns of Table 4 show a negative relationship between general disagreement and interest in politics; we do not detect such a relationship with partisan disagreement.¹¹ Substantively, however, the effect of general disagreement on political interest is rather meager. For example, individuals who perceived general disagreement in their social network are estimated to be only two percentage points less likely to be “extremely” or “very” interested in politics (a decrease from 76% among those who did not experience general disagreement, to 74% among those who did).¹² We

¹¹ The October, 2008 measure of political interest produces comparable results.

¹² If we substitute the October measure of political interest for the November, 2008 measure, the result is statistically insignificant ($b = .12$, $s.e. = .08$; $p = .13$).

also note that in results not presented here, neither measure of disagreement is related to external or internal political efficacy.

Overall Level of Political Discussion and Voter Turnout

Finally, we examine the effect that political disagreement has on the rate of overall political discussion and voter turnout. The first two columns demonstrate that general disagreement predicts less frequent instances of overall political discussion; we do not detect a systematic relationship with partisan disagreement.¹³ Substantively, the relationship between general disagreement and political discussion is quite small; individuals who perceived general disagreement in their social network were only five percent less talkative about politics with their friends and family (a decrease from 3.8 days per week among those who did not perceive general disagreement, to 3.6 days per week among those who did perceive disagreement). Importantly, in the last two columns of Table 5 we do not detect *any* relationship between either approach to interpersonal political disagreement and turnout in the 2008 election – a result that speaks to the democratic dilemma highlighted by Mutz (2002; 2006).

[TABLE 5 ABOUT HERE]

Discussion and Conclusion

Over the past decade, scholars have produced a considerable amount of work on the empirical consequences of political disagreement; this includes examinations of both political preferences and behaviors. Upon closer inspection, we see that this literature has a rather shaky foundation; there are legitimate differences of opinion—sometimes explicit, often implicit—about what disagreement is and about how to best measure it. There are, in short, serious disagreements about disagreement.

¹³ The October, 2008 measure of overall political discussion produces comparable results for general disagreement, but not for partisan disagreement ($b = -.07$, $s.e. = .03$; $p = .03$).

In this paper, we take a step back to highlight two analytical biases regarding disagreement. Having re-conceptualized the range and theoretical premises of existing measures (see Figure 1), we examine two measures of disagreement that reflect different points within the possible conceptual space, and provide robust inferences with contemporary, nationally-representative panel survey data. Our initial analysis demonstrates that the choice of measures matters: while the more civically engaged among us are more likely to experience both types of political disagreement, those individuals who are exposed to general political disagreement tend to have weaker political preferences, while those who experience partisanship-based interpersonal political disagreement tend to have stronger political preferences. And, in pointing out these differences, we find that networks with disagreement salient enough to register as “general disagreement” seem to cut at the foundations of many important behaviors. Conversely, disagreement based on the absence of agreement (i.e., partisan disagreement) rather than the overt presence of conflict has no such impacts, despite the fact that other research demonstrates it to be an important covariate for a wide array of behaviors (e.g., Huckfeldt et al. 2004; Huckfeldt and Sprague 1995).

Table 6 summarizes the distinct effects that these conceptualizations of disagreement have across the 9 political outcomes considered in the paper. Having pre-processed our data to account for a host of confounding factors – and using identical specifications for each set of models – we find that estimates of the relationship between the two measures of disagreement and various behavioral outcomes do not match on direction 1/3 of the time; they do not match in terms of their statistical significance/insignificance over 1/2 of the time. Moreover, even when the two measures do match in terms of directionality and statistical significance, they do not match in terms of the size of their effects. For example, we find that general disagreement has a much larger effect when it comes to decreasing vote certainty relative to partisanship-based disagreement.

[TABLE 6 ABOUT HERE]

One finding alluded to previously that is particularly noteworthy in-light of the recent debate over disagreement is the relationship between exposure to disagreement and voter turnout. While Mutz (2002; 2006) argues that disagreement leads to decreased participation (through mechanisms of ambivalence and social accountability), we find no evidence of such a relationship after accounting for the factors that potentially select people into certain types of micro-social environments. Moreover, not only are the estimates non-significant across both measures of disagreement, but we find that general disagreement predicts casting a vote (positive coefficient), while partisanship based disagreement predicts the opposite (negative coefficient).

Taken together, our results reaffirm the growing body of work suggesting that networks do produce real political effects, independent of other factors. At the same time, however, they remind us of a fundamental lesson that has largely escaped the study of political networks in the mass public: how we conceive of and measure political phenomena matters. Different types of disagreement not only reflect different social processes (Tables 1 and 2), but appear to have different effects when it comes to individuals' political preferences, their patterns of political engagement, and their likelihoods of political participation. Disagreement does not have simple, easily characterized effects, and therefore may not be a double-edged sword for democratic practice. In turn, this suggests that our focus should not be on keeping the good parts of disagreement (i.e., those that produce tolerance) while changing or ameliorating the bad (i.e., those that suppress participation). Rather, we should modify the often-asked question of who experiences disagreement, to consider who experiences what kinds of disagreement.

Appendix

For this analysis, a “full matching” procedure was used (Gu and Rosenbaum, 1993; Hansen 2004; Ho, King and Stuart, 2007a; Ho, King and Stuart, 2007b; Rosenbaum, 1991; Stuart and Green 2008). The procedure was conducted using the “MatchIt” package for R (Ho, Imai, King and Stuart, 2007a; Ho, Imai, King and Stuart, 2007b), which makes use of the “optmatch” package (Hansen, 2004). The ANES Panel Survey data set is tailor-made for matching because subjects were surveyed about various attitudes and behaviors in waves of the panel (January, February, and June, 2008) that occurred *before* they were asked about their political discussion network (September, 2008). Each of the pre-treatment variables that correlated with a given measure of exposure to disagreement (see Tables 1 and 2) were included in the matching procedure.

The full matching procedure involved three steps. First, study subjects were classified as either having been “treated” or “untreated” with disagreement. Respondents who were exposed to an above-average amount of disagreement were classified as having been treated, while those who were exposed to a below-average amount of disagreement were classified as untreated/controls.¹⁴ Second, the variables included in the matching procedure were used to estimate a score of one’s propensity to be exposed to disagreement (Hansen, 2004; Ho, King and Stuart, 2007a; Ho, King and Stuart, 2007b). Third, at least one untreated subject was matched to at least one treated subject based on how close the propensity scores were between treated and untreated subjects (i.e., a process of creating “subclasses,” where more than one treated subject could be matched to an untreated subject, and vice-versa). Each untreated subject was only matched to one treated subject, and vice-versa (i.e., matching without replacement). Also, after a subject was initially matched he or she could

¹⁴ For the average level of general disagreement, this resulted in the classification of 633 treated subjects, and 622 untreated subjects. For partisan disagreement, this resulted in the classification of 517 treated subjects, and 738 untreated subjects.

have been moved and matched to a different subject before the procedure concluded in order to improve the overall similarity between the treated and untreated subjects in the data set (i.e., the process is “optimal” not “greedy”). This process was conducted separately for each of the disagreement treatments (i.e., both general and partisan).

The results of the matching procedure were incorporated into the analysis by weighting the regression models – models on general disagreement used the weights from the matching procedure for the general disagreement “treatment,” and models on partisan disagreement used the weights derived from the matching procedure for the partisan “treatment.” All treated subjects were given a weight of 1. Untreated subjects were assigned a weight equal to the number of treated subjects in the subclass that they were assigned to, divided by the number of untreated subjects in the subclass that they were assigned to. For example, an untreated subject who was assigned to a subclass with 10 treated subjects and 1 untreated subject was assigned a weight of 10, while an untreated subject who was assigned to a subclass with 1 treated subject and 10 untreated subject was assigned a weight of .10. Consequently, an untreated subject who is similar to many treated subjects is given more weight in the analysis than an untreated subject who was similar to only a few treated subjects. Otherwise stated, applying this weight causes the regression models to pay more attention to untreated subjects who are similar to treated subjects, and less attention to untreated subjects who are dissimilar to treated subjects – this makes the analysis a better comparison between the treated and untreated subjects than if the data were not weighted.

[TABLE A.1 ABOUT HERE]

The results presented in Table A.1 illustrate how the matching procedure increased the similarity, or “balance” (Ho et al. 2007a and 2007b), between subjects who did and did not engage in the types of disagreement. The first row in the table shows the overall improvement in similarity between treated and untreated subjects, as measured by the subject’s estimated propensity to be

exposed to disagreement (i.e., the propensity score created by the matching procedure). Overall, the similarity in the propensity to be exposed to disagreement between the “treated” and “untreated” increased by around 100 percent as a result of the matching procedure. The remaining rows of the table show the summary statistics from “QQ plots.” QQ plots are two-dimensional graphs which plot the empirical distribution of a variable among treated subjects on one axis against the empirical distribution of that same variable among untreated subjects on the other axis. The closer this plotted line is to the 45-degree line on the graph, the closer treated and untreated subjects are to being perfectly balanced on that variable. The results in Table A.1 show that the median, mean and maximum distance of the propensity score QQ plot from the 45-degree line were all greatly improved due to the matching procedure.

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Figure 1. A Hypothetical Discussion Space Representing Approaches to the Measurement and Conceptualization of Political Disagreement

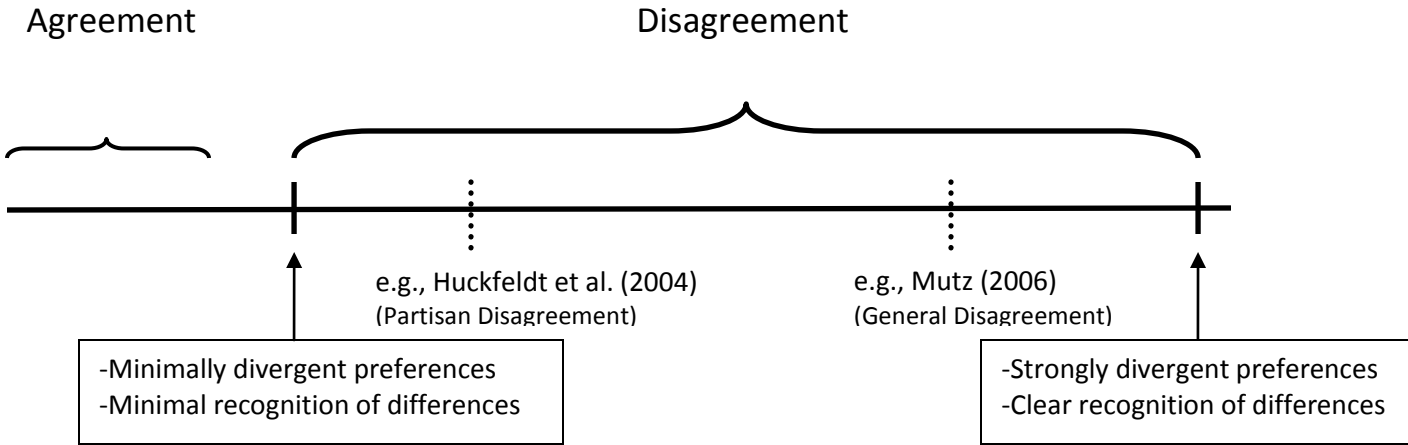


Table 1: Who is Exposed To Disagreement? (General Disagreement)			
	Type of Network (09/2008)		Difference
	<i>Agreeable</i>	<i>Disagreeable</i>	
Gender (Female)	59.9%	52.4%	-7.5% (t = 2.66, p < .01)
Strength of Partisanship (01/2008)	3.1	2.9	-.2 (t = 5.31, p < .01)
Strength of Ideology (01/2008)	2.7	2.6	-.1 (t = 2.02, p = .05)
Strength of Likes/Dislikes About Democrats (01/2008)	2.7	2.4	-.3 (t = 4.15, p > .01)
Strength of Likes/Dislikes About Republicans (01/2008)	2.6	2.3	-.3 (t = 4.72, p > .01)
Media Use (01/2008)	15.1	15.8	+.7 (t = -2.01, p = .05)
Political Knowledge (02/2008)	4.0	4.3	+.3 (t = -3.28, p < .01)
Has Ever Given Money to Organization Concerned with Political or Social Issue (06/2008)	62%	68%	+6% (t = -2.72, p = .08)
Has Ever Attended a Meeting About Political/Social Concerns (06/2008)	54%	61%	+7% (t = -2.72, p = .01)
Has Ever Invited Someone to a Meeting About Political/Social Concerns (06/2008)	29%	34%	+5% (t = -2.00, p = .08)

Source: 2008-2009 ANES Panel Study

Note: The disagreement measure is a dichotomy, whereby agreeable networks are those with below average levels of political disagreement, and disagreeable networks are those with above average levels of disagreement (see the discussion of the matching procedure in the Appendix).

Table 2: Who is Exposed To Disagreement? (Partisan Disagreement)			
	Type of Network (09/08)		Difference
	Agreeable	Disagreeable	
Strength of Partisanship (01/08)	2.7	3.4	+ .7 (t = -12.82, p < .01)
Strength of Ideology (01/08)	2.6	2.8	+ .2 (t = -3.80, p < .01)
Strength of Likes/Dislikes About Democrats (01/08)	2.4	2.7	+ .3 (t = -5.25, p = > .01)
Strength of Likes/Dislikes About Republicans (01/08)	2.3	2.6	+ .3 (t = -3.88, p = > .01)
Ever Joined a Protest, Rally, Demonstration (06/08)	28%	33%	+5% (t = -1.82, p = .08)
Has Ever Distributed Political Information or Advertisements (06/08)	32%	37%	+5% (t = -1.71, p = .09)

Source: 2008-2009 ANES Panel Study

Note: The disagreement measure is a dichotomy, whereby agreeable networks are those with below average levels of political disagreement, and disagreeable networks are those with above average levels of disagreement (see the discussion of the matching procedure in the Appendix).

	Vote Certainty (10/08)		Strength of Party ID (11/08)		Strength of Ideology (11/08)	
	General Disagreement	Partisan Disagreement	General Disagreement	Partisan Disagreement	General Disagreement	Partisan Disagreement
Exposed to Disagreement (09/08)	-.32** (.12)	-.16* (.09)	-.21*** (.07)	.02 (.08)	-.20** (.08)	-.06 (.11)
Demographics						
Gender (Female)	.02 (.10)	.11 (.10)	.13 (.08)	.17** (.08)	-.001 (.07)	-.10 (.10)
Age	.003 (.003)	> -.001 (.003)	-.003 (.01)	-.004 (.003)	-.006 (.003)	-.003 (.004)
Race (Non-White)	.11 (.14)	-.03 (.15)	.08 (.14)	.05 (.15)	-.19 (.13)	-.19 (.17)
Education	.02 (.05)	.04 (.06)	-.04 (.05)	-.04 (.05)	-.03 (.04)	-.03 (.04)
Income	-.003 (.01)	-.006 (.01)	-.01 (.01)	-.003 (.01)	.008 (.01)	.02 (.01)
Strength of Preferences (01/08)						
Strength of Partisanship	.21*** (.05)	.34*** (.05)	.87*** (.05)	.86*** (.07)	.23*** (.05)	.26*** (.06)
Strength of Ideology	.20*** (.04)	.21*** (.05)	.22*** (.05)	.21*** (.05)	.64*** (.04)	.63*** (.06)
Direction of Preferences (01/08)						
Partisanship (Democrat- Republican)	-.01 (.02)	-.005 (.02)	-.01 (.02)	-.005 (.02)	.03 (.02)	.02 (.02)
Ideology (Liberal- Conservative)	-.06*** (.02)	-.09*** (.02)	-.04 (.03)	-.04 (.02)	.05* (.02)	.04* (.02)
Past Patterns of Political Behavior						
Voted in 2004	-.23 (.19)	-.15 (.14)	.31 (.18)	.46** (.18)	.22 (.17)	.15 (.16)
Civic Engagement						
Political Interest (01/08)	.18*** (.05)	.20*** (.04)	.09* (.05)	.12* (.06)	.12*** (.04)	.10* (.05)
Political Knowledge (02/08)	.06* (.04)	.03 (.03)	-.03 (.04)	-.07 (.04)	.08* (.04)	.03 (.05)
Akaike's Information Criterion (AIC)	2644	2366	2473	2115	2773	2763
N	1225	1225	1225	1225	1225	1225

*p < .10, **p < .05, ***p < .01 (standard errors in parentheses)
Model Type: Ordered Probit (Imai et al. 2007c)
Note: Estimated cut points are not presented.
Source: 2008-2009 ANES Panel Study

	Media Use (10/08)^a		Political Interest (11/08)^b	
	General Disagreement	Partisan Disagreement	General Disagreement	Partisan Disagreement
Exposed to Disagreement (09/08)	-.33 (.42)	-.90** (.36)	-.12* (.07)	-.14 (.10)
Demographics				
Gender (Female)	-.48 (.39)	-.65 (.47)	.08 (.10)	.13 (.10)
Age	.08*** (.02)	.08*** (.01)	.01* (.003)	.01* (.003)
Race (Non-White)	.08 (.49)	.34 (.49)	.28** (.13)	.10 (.10)
Education	-.05 (.27)	-.14 (.19)	.02 (.07)	.02 (.05)
Income	.18*** (.05)	.16*** (.05)	.01 (.01)	.01 (.01)
Strength of Preferences (01/08)				
Strength of Partisanship	.22 (.20)	.30 (.28)	.08 (.05)	.13*** (.05)
Strength of Ideology	-.11 (.21)	-.21 (.26)	.11*** (.04)	.10* (.06)
Direction of Preferences (01/08)				
Partisanship (Democrat-Republican)	-.07 (.10)	-.11 (.07)	-.03 (.02)	-.01 (.02)
Ideology (Liberal-Conservative)	-.06 (.13)	-.14 (.10)	-.05* (.02)	-.05** (.02)
Past Patterns of Pol. Behavior				
Voted in 2004	1.24 (.88)	1.29 (.84)	.44** (.17)	.31 (.24)
Civic Engagement				
Political Interest (01/08)	1.45*** (.22)	1.42*** (.24)	.73*** (.05)	.76*** (.07)
Political Knowledge (02/08)	.58*** (.14)	.64*** (.19)	.03 (.03)	.02 (.05)
Intercept	.47 (1.63)	1.63 (1.53)	---	---
Adjusted R²	.21	.22	---	---
Akaike's Information Criterion	---	---	2730	2657
N	1225	1225	1225	1225
*p < .10, **p < .05, ***p < .01 (standard errors in parentheses)				
Model Type: ^a Ordinary Least Squares (Imai et al. 2007d); ^b Ordered Probit (Imai et al. 2007c); ^c Poisson (Imai et al. 2007e)				
Note: Estimated cut points are not presented.				
Source: 2008-2009 ANES Panel Study				

	Political Discussion (11/2008)^a		2008 Voter Turnout^b	
	General Disagreement	Partisan Disagreement	General Disagreement	Partisan Disagreement
Exposed to Disagreement (09/2008)	-.06*(.03)	-.02 (.04)	.32 (.27)	-.32 (.24)
Demographics				
Gender (Female)	.06 (.04)	.07** (.03)	.38 (.26)	.45 (.33)
Age	> .001 (.001)	> .001 (.001)	.02 (.01)	.02* (.01)
Race (Non-White)	-.01 (.06)	-.03 (.09)	-.02 (.30)	-.14 (.41)
Education	.003 (.02)	.03 (.02)	.22 (.16)	.23* (.13)
Income	.02*** (.004)	.01** (.01)	.02 (.04)	.04 (.04)
Strength of Preferences (01/2008)				
Strength of Partisanship	.02 (.02)	.07*** (.02)	.06 (.15)	.07 (.14)
Strength of Ideology	.02 (.02)	.02 (.02)	.22 (.17)	.20 (.16)
Direction of Preferences (01/2008)				
Partisanship (Democrat- Republican)	-.01* (.007)	-.01** (.01)	-.09 (.06)	-.08 (.06)
Ideology (Liberal-Conservative)	-.01 (.01)	-.01 (.01)	-.05 (.08)	-.03 (.08)
Past Patterns of Political Behavior				
Voted in 2004	.12 (.08)	.11 (.09)	2.11*** (.51)	1.79*** (.51)
Civic Engagement				
Political Interest (01/2008)	.25*** (.02)	.24*** (.04)	.21 (.14)	.30** (.13)
Political Knowledge (02/2008)	.03*** (.01)	.03 (.03)	.14* (.08)	-.02 (.10)
Intercept	-.16 (.14)	-.34** (.14)	-3.21*** (.90)	-2.82*** (.88)
Akaike's Information Criterion (AIC)	5158	5157	639	596
N	1225	1225	1225	1225

*p < .10, **p < .05, ***p < .01 (standard errors in parentheses)
Model Type: ^aPoisson (Imai et al. 2007e); ^bLogistic (Imai et al. 2007f)
Source: 2008-2009 ANES Panel Study

Table 6: Summary of Findings by Types of Political Outcomes		
	<u>Treatment</u>	
<u>Outcome</u>	<i>General Disagreement</i>	<i>Partisan Disagreement</i>
<i>Strength of Political Preferences</i>		
Vote Certainty	Negative*	Negative*
Strength of Party Identification	Negative*	Positive
Strength of Ideology	Negative*	Negative
<i>Civic Engagement</i>		
Media Use	Negative	Negative*
Political Interest	Negative*	Negative
External Efficacy	Negative	Negative
Internal Efficacy	Positive	Negative
<i>Other Participatory Activities</i>		
Political Discussion	Negative*	Negative
2008 Turnout	Positive	Negative
Source: 2008-09 ANES Panel Study Note: *=statistically significant finding All results come from models estimated on matched data. Please see the appendix for details.		

Table A.1: Improvement in Balance Between Treated and Untreated Cases		
	Average General Disagreement	Partisan Disagreement
Overall	99.6%	100.0%
QQ Plot Summary Statistics		
Median	95.3%	96.7%
Mean	93.3%	95.5%
Max	85.3%	91.7%
<u>Source: 2008-2009 ANES Panel Study</u>		