Examining the Relationship between Social Network Disagreement, Social Network Sophistication, and Trust in Government

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Abstract

When the trust between a government and its people is broken, democracy has difficulty functioning – low levels of trust can have negative consequences for society. In this thesis, I investigate the relationship between social networks and the American public's trust in government. I focus on informal political discussion and knowledge in interpersonal networks, as deliberation has been highlighted as a potential remedy for some problems in society. I expect exposure to disagreement within informal political discussion to promote higher levels of trust, and exposure to political knowledge to suppress trust; I also investigate the related concepts of efficacy using the 2008-09 American National Elections Studies Panel Study, I find some support for these expectations, and discuss the implications for American democracy.

Introduction

A free democratic society requires the people to trust that the government acts on their behalf. Trust in government relates to many outcomes of interest: it influences the American people's choice of candidates, rates of participation, and policy preferences, as well as their support for government involvement in their lives, their compliance with the law, and their opinions of the separate governmental branches (Gershtenson, Ladewig, & Plane 2006, 882). In young democracies "when public officials violate the rule of law and engage in corruption, public cynicism and distrust are likely results and threaten to undermine citizens' commitments to democratic ideas" (Mishler and Rose 2005, 1062). This can cause instability in the political systems of these countries. Even in contexts with well established democracies, distrust can have significant impacts – as was observed during the 1990s in New Zealand, where the declining trust in government brought about serious political changes (Dalton 2005, 134).

Of course, scholars worry about this in the United States as well. Putnam (1995) famously linked various changes in American society to declines in social capital (please see below); others have made the connection between low levels of trust and antiincumbent and third party support (Chanley, Rudolph, and Rahn 2000, 240). Investigating trust in government is a pressing matter as evaluations of the "U.S. federal government have grown increasingly negative in recent decades" (Chanley, Rudolf, & Rahn, 2000, 239). In this study, I look into the factors that predict people's trust in government, focusing on the role of social networks.

Some social influence research in political science focuses on how ordinary citizens engage in political deliberation through everyday discussion and conversation. In

political science, political discussion and influence in social "networks are now assumed to be a central part of the explanation of political dynamics in a wide range of phenomena" (Heaney and McClurg 2009, 732). Deliberative democracy theory forms the theoretical backbone of a great deal of empirical political discussion research (Eveland, Morey & Hutchens 2011, 1085).

Deliberative democracy is a "normative theory that suggests ways in which we can enhance democracy and criticize institutions" through political discussion among citizens (Chambers 2003, 308). Within this work, a great deal of research investigates disagreement in political conversation. According to Diana Mutz, people who are exposed to disagreement in political conversations are more likely to understand the rationale behind opposing viewpoints and are more likely to be politically tolerant (Mutz 2006, 84).

Building upon her findings for tolerance, I explore whether disagreement has similar consequences for trust. Are those who are exposed to more disagreement more likely to have higher levels of trust? I also explore whether the level of sophistication present in political discussion influences a person's trust, and the relationships between these concepts and the related concept of efficacy.

In this context, "sophistication" refers to the political knowledge of the people with which a person discusses politics, in addition to people's own knowledge about politics. To gather information people "communicate, they argue, and they accumulate political information through an ongoing process of social interaction" (Huckfeldt 2001, 426) instead of independently gathering information about politics. Does a person's level of political knowledge influence their level of trust in government? Do people trust

government more or less if they are more knowledgeable about how it operates? Research has shown that knowing the influence of special interests, disagreement, and the dysfunction in Congress leads to lower levels of trust. According to Hibbing and Theiss-Morse, part of the reason that people do not trust the government is that seeing disagreement in politics is interpreted as an "absence of productivity" (Hibbing and Theiss-Morse, 2002, 122). When people know more about the political process they see politicians as "susceptible to special interest influence not just because they are weak but because it is in their financial interest" (Hibbing and Theiss-Morse, 2002, 122). The knowledge people bring into political discussion and importantly, the knowledge that they are exposed to from others via networks might influence how much they trust government.

In the following sections, I begin by examining the idea of trust. After a discussion of definitions (and a review of trust research), I move on to political discussion, noting the empirical research into political discussion, disagreement and sophistication.

Trust in Government

In answering whether political discussion and knowledge influences trust, the first task is to define the concept of political trust (and distinguish it from related concepts). Trust in government involves a variety of aspects - sometimes these are combined into an overall evaluation of trustworthiness. According to Levi and Stoker the accepted definition of trust is a relational concept such that an "individual making herself vulnerable to another individual, group, or institution that has the capacity to do her harm or to betray her" (Levi and Stoker 2000, 476).

General political trust is "composed primarily of evaluations of public officials, political institutions, and satisfaction with public policies" (Mangum 2012, 3). However, trust is rarely generalized and is usually limited to "specific domains" (Levi and Stoker 2000, 476). For example, a person might differentiate their evaluations of different institutions versus politicians. People may also trust some institutions with specific policies and responsibilities, but not others. For example, a person can trust Congress to fund a powerful army but not to make reasonable tax laws. An important part of trust in government is how well it lives up to the expectations of the people (Mangum 2012, 3). Political trust can mean how much confidence a citizen has that incumbents will carry out their desired policies. It can also mean how confident they are that politicians will govern honestly, how confident that the political process works, and how benevolent the government seems to be.

While I am looking into how disagreement and sophistication influence trust in government, an important related concept that motivates this thesis – but that I distinguish from trust - is social capital. Social capital is often defined broadly, and might be thought of as including trust. Putnam calls it the "features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (1995, 66). Civic engagement is also related to interpersonal trust, because people who are not civically engaged "are likely to feel a lack of political influence, which causes feelings of powerlessness that fuel cynicism and distrust toward political and social leaders, the institutions of government, and the regime as a whole" (Keele 2007, 244). In addition to trust, I examine how networks influence internal and external efficacy. Internal efficacy refers to how much one feels they can influence the

government; external efficacy refers to how responsive one feels government is to them (Finkel 1985, 892). One reason to examine how social networks – i.e., interpersonal interactions – predict trust in government, and patterns of efficacy is that trust in government has been linked to *interpersonal trust*. In fact "interpersonally distrusting citizen projects his or her misanthropic tendencies onto government" (Keele 2007, 244). In other words, aside from the work of Mutz and colleagues, there seems to be a natural connection between social factors and trust in government.

Political distrust can have both positive and negative influences on society. An important aspect of a working democracy involves the idea of legitimacy. If people distrust the government for a long period of time, they "may challenge its legitimacy and, ultimately, its very existence" (Erber and Lau 1990, 236). The evidence for this claim comes from how trust influences support for democratic ideas and for the regime. Mishler and Rose looked into both of these areas in a study concerning Russia, which is in a "continuing transition from an authoritarian past" (Misher and Rose 200-5, 1052). The authors explore whether interpersonal trust and institutional trust had any influence on regime support in Russia and found that the "direct effect of institutional trust on support (beta = .04) is small and not statistically significant, as is the direct effect of interpersonal trust on support for the current regime (beta = -.02)" (Mishler and Rose 2005, 1064). While Mishler and Rose found that interpersonal trust has no influence on the support of democratic ideals, they found that institutional trust had moderately positive influence on support for democratic ideals (Mishler and Rose 2005, 1066). In contrast Chu et al. found that trust was more important for the support for democratic ideals. When considering many different influences on democratic legitimacy, "trust in democratic institutions and

the free and fair voting process does the most to encourage popular approval of the way that democracy works" (Chu et al. 2008, 84). The amount that trust comparatively mattered to support for democratic ideals was influence by socioeconomic status and by regional differences (Chu et al. 2008, 81-82).¹

While instability in other countries is the most dramatic consequence of distrust in government, in the United States we can see lower political participation rates due to distrust (Erber and Lau 1990, 236). There has been a lot of research into the types of participation that are influenced by trust. In an examination of "NES data over time, Luks (1998) finds that in no election were the distrusting more likely than the trusting to vote, but they were more likely to engage in other forms of electoral participation in the late 1980s and 1990s" (Levi and Stoker 2000, 487). Mishler and Rose found that higher institutional trust "contributes significantly to political involvement," along with social capital that has a "moderate but significant effects on political involvement" (Mishler and Rose 2005, 1068). Social capital and trust in government can act similarly on people's actions.

Both conservatives and liberal politicians suffer under low trust levels. Liberals need "people to trust the government to support more government" (Hetherington and Husser 2012, 312). Specifically, Democrats need high political trust levels to create new or expanded social support programs. A Democratic regime would have trouble increasing taxes for a larger social security program if the people did not believe that the government would use the new tax money appropriately. Political trust is also required

¹ This is a possible reason why Mishler and Rose found trust to be not that important to support of democratic ideals because the study only looked into Russia.

for conservative (i.e., generally Republican) goals such as a strong active foreign policy and a strong military (Hetherington and Husser 2012, 313).

Participation is perhaps the most obvious victim of distrust. Why would someone vote if they do not believe that they government will be responsive to the will of the voters? The common hypothesis is that political cynics – or people low in trust – would reject "conventional or 'conformist' modes of political participation such as voting, lobbying, writing letters to members of Congress, and campaigning for political candidates" (Citrin 1974, 979). Instead, they would be more likely to support "noncustomary, sometimes illegal, activities such as participating in sit-ins or riots, or organizing for revolution" (Citrin 1974, 979). This makes sense when we consider the radical actions and large decline in political trust during the 1960's and 1970's. However, Citrin found that distrust in government has no independent influence on support for, or involvement in non-customary participation (Citrin 1974, 982). Citrin also found people who distrust government do not have different conventional participation levels than high trust individuals (1974, 982). Studies into social capital have found that "the proportion of Americans saying that most people can be trusted fell by more than a third between 1960, when 58 percent chose that alternative, and 1993, when only 37 percent did" (Puntam 1995, 72) – this corresponds with a decline in civic engagement. In the following sections, I briefly discuss various explanations for different levels of political trust. While each of these has helped us understand trust, I then explain why it is important to research how political discussion and disagreement exert influence.

Explanations for Trust in Government

Long-term political distrust by people can be an "indicator of dissatisfaction with

the quality of life they are experiencing" (Miller 1974, 951). This means that if people's economic situation is extremely dire, people distrust government. Research has shown that economic evaluations are "a leading cause of trust: when citizens are dissatisfied with economic performance, distrust of government ensues, but when prosperity abounds, so will trust" (Keele 2007, 242). This is in line with one of the main aspects of trust: people's expectation of the government. People expect the government to ensure a strong economy and opportunities for good standard of living.

Another measure of trust in the literature is based on the argument that trust in government is partly determined by the "distance between the individual's own policy preference and the policy alternative that he identified with a particular party" (Miller 1974, 965). Miller finds the effect of trust – thought of in terms policy alternatives – is really more important than that of partisanship.² His study indicates that incidents causing dissatisfaction with a government or party's policies also decrease trust in government. An example of this is seen in the effects of the Vietnam War where Miller attributes the sharp decrease in trust in the government to President Nixon's policies towards the war (Miller 1974, 969).

Another explanation for the declines in trust is an increase in education. Between 1958 and 2000, the number of people with some level of education increased from 20% to 49% (Dalton 2005, 143). And, that in the "late 1950's and early 1960s, better-educated Americans were more trustful of government" than less educated Americans (Dalton

² Miller ruled out partisanship because there was a "close similarity between the group mean cynicism value for Republicans (2.28) and white Democrats (2.50)" (Miller 1974, 965). He found that when trust was measured during a Republican administration "Republicans were, on the whole, less dissatisfied than Democrats" in the policies of the administration (Miller 1974, 965). His data also showed that people whose policies were completely in line with their parties were more trusting of the government than independents (who were dissatisfied with both parties) (Miller 1974, 968).

2005, 140). As the population became more educated, by the same route, trust in government should have increased. However, this relationship between education and trust switched completely. Those who are more educated trusted government less than those less educated. Hakhverdian and Mayne contend that the "effect of education on institutional trust is not uniform across countries, but rather depends on the context in which citizens are nested" (Hakhverdian and Mayne 2012, 745). The context that the authors talk about is the amount of corruption in each country. The highly educated in highly corrupt countries are more distrustful of institutions than those with less education; the opposite is true for low corruption countries.

Generational change is another explanation given by Dalton for declines in trust in government. In a study he found that "older and more trustful citizens are gradually being replaced by younger and more cynical individuals" (Dalton 2005, 145). Each preceding generation started out more distrustful than the previous one. While this might be due to a number of variables, the results show that preceding generations had different trends of trust as they aged, which does point to some relationship between generational change and trust. Dalton looked at four generations' changes in trust in government over their lifetimes and found that earlier generations' trust grew as they aged – the younger generations trust levels have decreased as they aged (Dalton 2005, 144).³

³ In addition to the starting trust levels of each generation, change has also occurred in how the generations interact with trust over their life spans. The younger generations lower starting levels of trust also spurred major student movements in the 1960's and 1970's which were the "first radical critiques of democracy" (Dalton, 2005, 144). Dalton does not explain why each generation is different than the previous one in terms of their changing trends in trusting government. A confounding variable that would challenge Dalton's theory is that disappointing government policies such as the Vietnam War, the Watergate scandal, and the turnoil of the civil rights movement could change people's opinions across generations. In a study looking at how Vietnam influenced trust across two generations, Gregory Markus found that over a time period between 1965 and 1973, "cynicism levels increased significantly for members of both generations regardless of previous orientations" (Markus 1979, 349). In other words, Dalton is not considering the influence of an event that changes attitudes across generations. Also technology has increased the visibility

Social Networks and Trust in Government

Improving democracy through political discussion in social networks is a key argument in studies of deliberative democracy. Deliberative Democracy Theory is a normative theory that has become more empirical as its claims have been tested. Deliberation is "debate and discussion aimed at producing reasonable, well informed opinions in which participants are willing to revise preferences in light of discussion, new information, and claims made by fellow participants" (Chambers 2003, 309).

There are two kinds of political discussions: informal and formal. Formal discussion takes place within the limits of certain rules and settings – for example town hall meetings, congressional debates, and political speeches. Informal political discussion takes place in "everyday life and social interaction outside of the political realm" (Eveland, Morey & Hutchens 2011, 1083). Informal discussion is the focus of in the present study, though I first briefly discuss the literature on formal deliberation, as it informs the work on informal deliberation/discussion.

Formal Deliberation

Deliberation is a way for opposing parties to understand each other. While participation is often thought to be the most important aspect of democracy (and specifically, the act of voting), Deliberative Democracy theorists believe that deliberation itself is also extremely important for a healthy democracy. That is to say that although participation is the actions that make a democracy, deliberation is the collective thought process of a democracy. The theory posits that deliberation is a way of coming to collective decisions in the midst of conflict as deliberation allows differing parties to

of the government and increased the availability of information – both of which could have decreased the starting trust levels of the younger generations.

"criticize one another's proposals and reasons and are open to being criticized by others" (Young 2001, 672). A central aspect of democracy is the ability to compromise and come to a singular decision. These agreements also occur due to deliberation, and are not the "result of threat or force" (Young 2001, 672). The idea that deliberation is a peaceful way of coming to a decision is important for democracy, because it keeps one group from feeling they were forced into a collective policies. This relates to the notion that the "decisions it produces are more legitimate," because deliberation is better at reflecting the preferences of the populations than participatory democracy alone (Thompson 2008, 498). Legitimacy should increase if all the other arguments hold true – in turn, it makes sense to think that trust would also be strengthened through deliberation.

A minor argument in this literature is that discussion increases the education of the participants (Cooke 2000, 948). Discussion is a way for opposing parties to understand each other, and this new understanding is an effective transfer of new information, which educates both parties. Another proposed benefit of deliberation is that it creates a sense of community among the participants. This is because "participants are forced to think of what could count as a good reason for all others involved in, or affected by, the decisions under discussion" (Cooke 2000, 950). In a deliberative discussion the participants are perspective taking. That is, the parties place themselves in each others shoes and thus creates a greater sense of connectedness by removing their 'otherness.' A more harmonious environment makes for a more productive and healthy democracy. Since a working community requires trust, if discussion does improve democracy (as predicted), it should also improve political trust.

Informal Deliberation/Discussion in Networks

Disagreement during an informal discussion is to be expected and researchers have looked into how it influences attitudes, viewpoints, tolerance, and participation. Deliberative Democracy Theory claims that deliberation will increase awareness of one's own reasons for holding a viewpoint, increase awareness of an opposing viewpoint, and increase tolerance of others. In Diana Mutz's book *Hearing the Other Side*, she found that while engaging in cross-cutting or contentious discussion does lead to an increase in understanding others' rationales for their viewpoint, it did not increase people's understanding of their own rationales (Mutz 2006, 72). She also found that "people's awareness of rationales for others' views should be most predictive of political tolerance" (Mutz 2006, 77). This result was limited by people's cognitive capacity for perspective taking. Mutz concludes that disagreement does have beneficially effects on legitimacy and tolerance. She also notes that "although trust has not been directly examined here, it goes hand in hand with homogeneity of views" (Mutz 2006, 87); this encourages me to look into the benefits of disagreement on trust.

It is important to note that disagreement is not always a positive influence on democracy. According to Mutz, disagreement also harms democratic society by decreasing the rates of participation. She attributes this decline in participation to two different aspects of the human psyche: social accountability and ambivalence. Mutz found "that people entrenched in heterogeneous social networks retreat from political activity mainly out of a desire to avoid putting their social relationships at risk" (Mutz 2006, 123). People do not want to alienate friends by actively taking part in politics – they fear insulting their friends with opposing views. Also, those that engage in more political disagreement become more ambivalent about politics, which has negative effects

on participation. However, there is some disagreement about this finding. Another scholar contends that if someone has likeminded individuals in their social network, despite having a heterogeneous social group they have enough support to encourage their participation in politics (Bello 2012, 791). Participation levels among those that had disagreement in their conversations compared to those that did not might provide evidence for either hypothesis.

Like disagreement in conversation, political sophistication has been researched to determine if it has positive influences on democracy. When researchers are looking into the sophistication of discussion, they are looking at the expertise or political knowledge of the participants in the social network. Specifically researchers are interested in how this knowledge is being transferred between individuals, because people are limited in their information gathering abilities and "interpersonal networks help circumvent these individual limitations" (McClurg 2006, 739). If the knowledge that is being transferred by those who are more knowledgeable is less favorable to the government, does this mean that sophistication will have a suppressing influence on trust? Previous research has found that that "knowledge even showed to have a suppressing effect on trust, though this relationship was not significant" (Grimmelikhuijsen 2009, 181).

Unlike with disagreement, McClurg argues that sophistication will increase political participation. The benefits to less knowledgeable individuals, from getting information from knowledgeable individuals, includes "access to information that helps people recognize and reject dissonant political views, develop confidence in their attitudes, and avoid attitudinal ambivalence, thereby making participation more likely" (McClurg 2006, 737). The rejection of dissonant political views might work the same as

disagreement on political trust. That is, it might make people recognize that extreme views on how trustworthy the government is less acceptable to people. However, increasing someone's confidence in their attitudes might make someone more adamant about their mistrust in government. McClurg's analysis found that the overall most important benefit to participation from expertise in networks was that it "counteracts the negative effect of disagreement on ambivalence" (McClurg 2006, 748).

Expectations

The literature on social influence leads me to the my first, central hypothesis: Following Mutz's (2006) work on disagreement and tolerance, I expect to find a positive relationship between the amount of disagreement a person encounters during political discussion, and her level of trust in government.

Chamber's describes deliberation as "debate and discussion aimed at producing reasonable, well informed opinions in which participants are willing to revise preferences in light of discussion, new information, and claims by fellow participants" (Chambers 2003, 309). Following this, I argue that when encountering disagreement in social networks, people will come to a more rational consensus on governmental trustworthiness. One of the main goals of deliberative democracy is that "the legitimacy of outcomes (understood as justification to all affected) ideally characterizes deliberation" (Chambers 2003, 309). When people feel as if they have reached a more legitimate decision after a discussion, it is reasonable to expect that they might have more trust in the actors involved in the policy. Mutz found that disagreement has a strong relationship with understanding the rationales for opposing views (2002, 116). In addition she found that closer relationships between participants with opposing viewpoints and a

greater understanding of those viewpoints predicts tolerance (Mutz 2002, 119). Following these connections, I expect people who encounter interpersonal political difference – even after controlling for other factors – to be more trusting of government.

My second central hypothesis is that *sophistication in networks will have a negative relationship with trust.* The logic for this expectation comes from the research on political knowledge and sophistication, whether examined at the individual or network level. Knowing too much about the political process has been shown to decrease governmental approval ratings. One of the reasons that Hibbing and Theiss-Morse explain why the Supreme Court has higher approval ratings than Congress is because "congressional procedures are very open," while the Supreme Court is not transparent in its decision-making (Hibbing and Theiss-Morse, 2002, 99). Seeing disagreement in politics makes people think that there is an "absence of productivity" (Hibbing and Theiss-Morse, 2002, 122). When people see that their elected leaders are not being productive they do not trust them to perform their jobs. I expect that people who are more knowledgeable will pay more attention to the actions of the government and will pick up on more actions; this will lower their trust levels (though for evidence supporting the opposite expectation, see Mishler and Rose 2005: 1068).

The sophistication of a network is determined by the expertise of its members. If the expectation is that knowledge decreases trust, then people residing in networks that have high levels of political knowledge may be additionally influenced to distrust government. This is because "political discussion is an efficient way to minimize the information costs of political engagement" (Huckfeldt 2001, 426), and allows people to retrieve political information more easily; this may be especially true for those that are

not politically knowledgeable. People are susceptible to being unduly influenced by these biased experts because of the "the cognitive shortcuts people employ in politics often fail to help people develop opinions and attitudes that are similar to what they would possess if they were themselves experts" (McClurg 2006, 740).

Another reason why sophistication might have a suppressing effect on trust is because talking with political experts makes people "identify, reject, and understand the relevance of dissonant political information exchanged in their networks" (McClurg 2006, 740). This might work against the potential "benefits" of disagreement with respect to trust. McClurg points out that by identifying dissonant political information, people "reduce ambivalence about and increase confidence in their political views" (McClurg 2006, 740). If people already have a distrustful attitude towards government they might become more resolute and more vocal in their feelings. This would show up in my analysis as lower trust levels among people who engage discussion with the politically sophisticated.

Other Expectations

While trying to isolate the effects of my main independent variables to test my hypotheses, I will be controlling for additional factors. For several of these, I have expectations grounded in the literature. For example, based on the research on trust, I expect that the strength of partisanship will have a positive relationship with it. While partisans of any stripe are distrustful of government, independents who find that neither party has the ability to solve social problems are the most distrustful of government (Miller 1974, 968). Age should have a positive relationship with trust due to the findings that "over time older and more trustful citizens are gradually replaced by younger and

more cynical individuals" (Dalton 2005, 145). Finally, education should have a negative relationship with trust – this is based on Dalton's study, which found that "over time the trust levels of the better-educated decrease at a steeper rate, and in relative terms trust levels increase among the lesser-educated" (Dalton 2007, 140).

Data and Methods

My analysis examined data from the 2008-2009 ANES study. The study was conducted over roughly one year between January 2008 and September 2009. Participants were gathered through random-digit-dialing, which means that random telephones numbers are dialed, and those who answered are asked if they want to participate in the study. Participants were paid ten dollars for each 30-minute monthly survey they had taken online. Of the twenty-one surveys waves taken, only ten were chiefly concerned with politics. Across the waves, 1,420 of 2,665 completed the surveys. The study is quite large and included a wide range of topics about politics. In this study I am mainly concerned with looking at the trust in government (and efficacy) items, the section on social networks, and the political knowledge items. I will also control for key variables including strength of partisanship, gender, age, education, and income.

In the ANES study there was only one trust item included. This was used in six different waves and reads as:

How often does the federal government do what most Americans want it to do?

(Always, most of the time, about half the time, once in a while, or never. / Never, once in a while, about half the time, most of the time, or always.)

This item serves as the dependent variable in my analysis. Three of the waves were before the 2008 general election, and three were after the general election. These waves

include: February 2008, September 2008, October 2008, November 2008, May 2009, and July 2009.

The main independent variables measure characteristics of political discussion. The September 2008 wave included a complete battery of items that measure different aspects of social networks (this is, "a network battery"). The first item asks whether the participants had discussed government or the election in the previous six months. The next question measures the size of their social networks – respondents were asked to write down the names of people with which they discuss politics. The battery includes many demographic questions about these named individuals. I use two items to measure how much disagreement is present in people's social networks. The first is:

In general, how different are (NAME)'s opinions about government and elections from your own views? (Extremely different, very different, moderately different, slightly different, or not different at all? / Not different at all, slightly different, moderately different, very different, or extremely different?)

The second question is:

Generally speaking, does (NAME) probably think of (himself/herself) as a Democrat, Republican, independent, or something else? (follow-ups are asked to measure partisanship of network members on 7 points)

I create two different measures of the average amount of disagreement in a person's discussion network, The first measures the average amount of disagreement a person encounters, using the overall amount of opinion difference in the network (from the first question). The second measures the average amount of disagreement a person has in her network – this is based on how much of the network differs from the

respondent in partisanship. I use two different measures of disagreement, as some research has found that different measures of disagreement have different relationships with things (Klofstad, Sokhey and McClurg 2013).

The other key item I use indirectly measures how knowledgeable the members of their social networks are:

What is the highest degree or level of school (NAME) has completed? While not a perfect measure, the question implies knowledge in political discussion, as people who are more educated tend to know more about politics (Highton 2009).

Preliminary Analysis

Descriptive Statistics

Scores of trust, external efficacy, and internal efficacy range between 1 (low) to 5 (high). Across 4 waves in the ANES survey, the mean trust levels among panel respondents remains the same, at around 2.44 (see table 1); the average trust level is low, but close to the midrange of trust (which is not as low as would be expected give previous research). The mean scores for external efficacy measures also range from 1 to 5; the external efficacy measures are also quite similar to each other across waves, and fall in the low middle range (2.48) of possible external efficacy levels (see table 1). The same is true for internal efficacy, but the means (2.66) were slightly closer to the median trust level than trust or external efficacy (see table 1).

Table 2 shows the means of my key independent variables (i.e., the social networks items), and my control variables. Respondents' network size ranges from zero to three with the average being (2.28); people tended to have large political discussion networks (at least given the range of the measure). The average sophistication (formal

education) of the discussion networks is high (8.61), given a scale between 0 and 14 categories of formal education. The average the amount of overall disagreement (1.79) within the social networks was low, given that the range of disagreement runs from 0 (all network members are not different from the main respondent) to 5 (all the network members are very different from the main respondent). Average partisan disagreement encountered in networks of subjects (0.29) was low, given the range from 0 to 1. This number means that, on average, a respondent's discussion network was about 1/3 disagreeable in terms of partisanship.

Correlations

The first analyses I present are a series of correlations (please see table 3). All of the major independent variables are highly correlated with one another. The relationship between network sophistication and overall disagreement is positive (r=0.76) and statistically significant (p=0.00). The relationship between network sophistication and partisan disagreement is positive (r=0.40) and statistically significant (p=0.00). Overall disagreement and partisan disagreement have a positive (r=0.57) relationship that was statistically significant (p=0.00).

All the dependent variables are also highly correlated with one another. The correlation between trust and external efficacy is positive (r=0.49) and statistically significant (p=0.00). Overall trust and internal efficacy has a positive (r=0.42) statistically significant relationship (p=0.00), as do both efficacies with one another (r=0.45; statistically significant relationship, p=0.00).

Simple regressions

Before I discuss my main models, I first perform simple regressions involving each of the dependent variables, and the two of the major dependent variables capturing social network characteristics.

Dependent Variable: Trust

In table 4 I investigate if there is a relationship between sophistication, overall disagreement, and trust (see table 4). Sophistication has a positive and statistically significant (p=0.00) relationship with trust, though the effect is quite small. The direction of this relationship does not support my hypothesis that sophistication would have a suppressing effect on trust. Overall disagreement had a negative and statistically insignificant effect (p=0.97), which also does not support my (first) hypothesis.

In the second model, I investigate the relationship between sophistication, partisan disagreement and trust, looking at two key independent variables at the same time (see table 4, right columns). Again sophistication seems to predict more trust in government, with a positive and statistically significant relationship (p=0.00). As with overall disagreement, partisan disagreement had a net negative and statistically insignificant (p=0.17) effect on trust (which does not support hypothesis one).

Dependent Variable: Internal efficacy

The first model examines whether there was an effect between network sophistication, overall disagreement, and internal efficacy (please see table 5). The level of network sophistication again predicts an increase in individuals' feelings of internal efficacy, with a positive and statistically significant (p=0.00) – if small – effect. Overall disagreement does not appear to have an effect on feelings of internal efficacy, as the coefficient is negative, small, and statistically insignificant (p=0.78).

The second model repeats the logic of Table 4; it investigates whether there are effects on internal efficacy if sophistication and the other measure of disagreement – partisan disagreement – are modeled together (see table 5, right columns). Sophistication continued to have a positive and statistically significant (p=0.00) effect on internal efficacy. Unlike overall disagreement, partisan disagreement did have a statistically significant (p=0.00) effect on internal efficacy, despite it being negative. This shows that partisan disagreement has a suppressing effect on internal efficacy, which is contrary to expectations.

Dependent Variable: External efficacy

The first external efficacy model tests sophistication and overall disagreement (please see table 6). As in the case of the previous models for trust and internal efficacy, network sophistication has a positive and statistically significant (p=0.00) effect on external efficacy – feelings of external efficacy, or how responsive a person thinks the government is to them – increases with increases in sophistication in participant social networks. Overall disagreement had a negative and (just barely) statistically insignificant (p=0.11) effect on external efficacy.

The second model investigates the effects of sophistication and partisan disagreement on external efficacy (please see table 6, right columns). Sophistication again had a positive and statistically significant (p=0.00) effect. Partisan disagreement displays a similar effect on external efficacy as it did in the case of internal efficacy – it has a negative and statistically significant effect (p=0.01) on external efficacy.

Multivariate Analysis

In the previous models, I was looking at the effects of one key independent variable, while controlling for the other. But to better isolate the relationships between my independent variables and dependent variables, I now control for additional variables. Specifically, I control for six variables that could have effects on the dependent variables: age, gender, income, education, knowledge, and strength of partisanship.

Dependent Variable: Trust

In the first model specification I tested sophistication and overall disagreement with the control variables (please see table 7). With this model I find that the effect of sophistication on trust disappears. The effect remains positive, but is almost zero, and becomes statistically insignificant (p=0.62). This result does not confirm my hypothesis that sophistication would have a suppressing effect on trust. The effect of overall network disagreement on trust is negative, but statistically insignificant (p=0.43). This shows that overall disagreement did not positively influence trust in government, contrary to expectations. Strength of partisanship and political knowledge are important factors to control for, they are the only controls to have statistically significant relationships with trust in government.

In the second model I test sophistication and the other measure of disagreement – partisan disagreement – with the additional control variables (see table 7, right columns). In this model, sophistication's effect on trust remains positive but becomes statistically insignificant (p=0.13). The effect of partisan disagreement on trust becomes positive but remains statistically insignificant (p=0.93). Both of these results do not support either

hypothesis. Again political knowledge and partisanship have positive and significant effects on trust.

Dependent Variable: Internal Efficacy

The first model examines whether sophistication and overall network disagreement influences internal efficacy (see table 8) – recall that variable captures the idea of whether a person feels that they can influence the government. The effect of network sophistication on internal efficacy in government remains positive, but is not statistically significant (p=0.37). Overall disagreement's effect on internal efficacy is quite small; it is positive but not statistically significant (p=0.74). The only major control variable that is significant in this model is strength of partisanship, which has a positive and sizable effect.

In a familiar pattern, the second model tests whether sophistication and partisan disagreement have any effect on feelings of internal efficacy (see table 8, right columns). The effect of sophistication on internal efficacy is positive and statistically significant (p=0.02). The negative, insignificant (p=0.06) effect for partisan disagreement differs from the significant result of the simple regression (Table 5). Strength of partisanship continues to be a positive and sizable variable.

Dependent Variable: External efficacy

The first multivariate model predicting external efficacy investigates the effects of sophistication and overall disagreement (see table 9). The effect of sophistication on external efficacy remains (p=0.09), but becomes even smaller. Overall disagreement remained negative and statistically insignificant (p=0.78) when controlling for other

independent variables. Gender, education, and partisanship were all major significant variables in this model, each having positive and significant effects.

The second model tests whether sophistication and partisan disagreement have any effects on external efficacy (see table 9). In this model (2), sophistication works in the same way as in the previous model (1) but with a statistically significant (p=0.02) relationship. However, the control variables eliminate the previous relationship observed between partisan disagreement on external efficacy (Table 6). The effect of partisan disagreement remains negative, but dramatically changes to become statistically insignificant (p=0.45).

Discussion

From my initial, descriptive results, I found a strong connection between trust, internal efficacy, and external efficacy – Something that is expected, as these things are sometimes talked about together (Erikson and Tedin 2011). Across the different waves of the survey, the means for each concept were quite similar/stable, and the measures were highly correlated with each other. Given the connection between all the three variables in previous literature, and the connection in my results, it is no surprise that there are many similarities in each of these dependents variable's patterns of relationships with disagreement and sophistication.

Do social networks influence trust? Initially, in my analysis I saw that network sophistication actually had the opposite effect on trust than expected. Being around people who know a lot about politics – a sophisticated network – seemed to increase an individual's trust in government. The effect was small, but statistically significant. This was seen in both reduced models, which varied in which disagreement measure they

included. However, this relationship disappeared when political knowledge and strength of partisanship were added as controls. The effect of strength of partisanship was seen across all models that included controls, and political knowledge had a sizeable, positive and statistically significant influence on trust in government as well. This implies that in my initial, reduced model the (small) effect of sophistication was partly due to how much knowledge an individual's possesses. The effects of this control variable in itself undermines my assumption that political knowledge suppresses trust – recall that this was the basis for second hypothesis on network sophistication.

Network sophistication involves the transfer of political knowledge within a discussion. Given this, more knowledgeable individuals should increase the trust of the less knowledgeable individuals. However, to better measure this process, we would need to run a different type of study. While useful, the ANES data are only measuring how much sophistication is in the network (and even this is by proxy of education), and not the impact of sophistication on less knowledgeable participants. A future study could be set up as an experiment, where several group of friends are first measured on their knowledge and trust in government, where participants have different levels of knowledge and trust, and where all are directed to participate in political discussion. After the discussion the participants would again be measured about their political knowledge and trust in government. This might give us more confidence in the relationships between discussion, sophistication, and trust in government than the survey data presented in this thesis.

In the reduced models of trust, both measures of network disagreement had no influence over trust (though partisan disagreement was close). These initial results refuted

my expectation that disagreement would increase trust in government. In the models with additional controls, both measures of disagreement continued not to have an effect on trust. While I saw some differences with respect to how disagreement is measured, this was not all that important for the trust results. From these models, we can argue that interpersonal disagreement does not increase trust in the same way that the literature suggests that it increase tolerance (Mutz 2006) (that said, I find no evidence that disagreement decreases trust, which could be considered a positive).⁴

In both reduced models predicating internal efficacy, network sophistication had positive and significant effects (just as it did with trust). The models with additional controls have some similarities and differences with the trust models. In the first model, sophistication becomes statistically insignificant; in the model with the measure of network partisan disagreement, network sophistication remains significant. Unlike in the case of trust, controlling for political knowledge has no significant effect on internal efficacy, but strength of partisanship does remain significant. This shows that while the two concepts of trust and internal efficacy are related, different variables affect them differently. The effect of average overall network disagreement is not a significant. In the reduced model partisan disagreement had a significant effect on internal efficacy but in the controlled model the effect became insignificant.

⁴ It may seem like an oversight not to include a measure of network size in my analyses. I did not include my network size variable as a control, because the key network variables (sophistication and disagreement) are network averages. These measures already control for size when they are created. This can be seen by correlating network size with network sophistication and disagreement – they are extremely high and statistically significant (see table A.1).

Network sophistication again had significant, positive effects in the case of external efficacy (see both reduced models – table 6). Just as in the case of internal efficacy, network sophistication became insignificant in the controlled model including partisan disagreement. In both the reduced and controlled models, overall disagreement did not influence external efficacy, or how responsive a person said the government was to a person like herself. Interestingly, the effect of partisan disagreement disappeared in the controlled model – this says that different social factors predict internal versus external political efficacy.

Looking at other control variables, strength of partisanship again had strongly positive effects on external efficacy, while women tended to have higher external efficacy levels than men. Education also seems to positively impact external efficacy, which is interesting paired with previous research stating that education negatively impacts trust (in my analysis, education was not an important factor for trust and internal efficacy). Of course, this might also show that external efficacy is different enough from trust that education works differently.

For all three outcomes, with full controls, age does not have any effects. This suggests that age was not as important to trust as was expected.

Future Research

Across all dependent variables, I found that strength of partisanship was a major variable – one that should be controlled for. The strong positive effect of partisanship supports my hypothesis about its impacts. Partisanship in this study was scaled from no to high identification with any party (that is, strength of partisanship). It makes sense to think that the relationships between partisanship and the dependent variables is due to the

amount of involvement in politics that partisans have in compared to independents. If partisans are more involved in politics they might believe that their actions have a greater impact on the government. They also might trust their party's leaders more, so they might believe that the government is more responsive to the people. In addition, these individuals might also have more political knowledge than non-partisans. Since political knowledge also had a relationship with the outcomes, more work should be done sorting out the two effects. A future study could investigate partisanship and trust in more detail, as strength of partisanship seems to be among the most important independent variables in my analyses.

One omission in my analyses is that I did not include a measure of participation, nor a measure of ideology within the controlled models. This was an oversight on my part and should be investigated in a future study. I am unsure of how participation would impact trust, but this should be examined given the Citrin research discussed above. A future study should include ideology to determine if it has effects on top of partisanship – this could be looked at in terms of strength, or in directional terms. This is, does being a liberal or conservative impacts trust, internal efficacy, and external efficacy?

Another analysis that could be conducted with the 2008-09 ANES survey I would involve testing whether the different waves of trust, internal efficacy, and external efficacy have the same results as the wave 9 measures. Since the ANES survey was given out before and after the 2008 election, it would be interesting to do more with time. The key independents variables would be used in the same way as in the present analysis, as they were only asked in wave 9 (September, 2008).

In appendix B, I include a survey that I drafted as a supplement to the ANES analysis. Due to time limits, I did not run it for this study. However, I believe for a future study it would provide better measures of trust than the ANES. The ANES only has one question about trust and two questions about efficacy (one capturing internal efficacy, and one capturing external efficacy). As discussed in the literature review, trust is a multifaceted concept. The one question the ANES asks only concerns a small part of what trust entails. With the eight questions in the appendix I could create a general trust measure that might better capture the concept of overall trust in government. I would also be able to test specific areas of trust, and investigate if my independent variables interact with them differently with different parts of this overall measure.

Conclusions

Political discussion continues to be heavily researched – this is done to determine its benefits on democracy, and to understand how it influences people's attitudes. In this study I add to this growing field by determining how sophistication and (types of) disagreement in social networks influence trust in government, which is a key aspect of a healthy democratic society. Declining trust in government has potentially negative impacts on our democracy. For this reason alone, we should investigate how we can improve trust, and the related ideas of internal and external efficacy. Social networks represent part of the explanation for trust and efficacy, and by extension, are one of the avenues that could be used to increase trust in government. While this study did not support either of my expectations for how sophistication and disagreement would impact trust, the findings indicate that there are social components to these ideas. More research is needed to better understand the relationship between interpersonal disagreement, sophistication, and trust and efficacy.

Appendix A

Items from the American National Election Study 2008-09 Panel used in the analysis

Trust in Government (dependent variable)

[W2J1]

How often does the federal government do what most Americans want it to do?

- 1. Always
- 2. Most of the time
- 3. About half of the time
- 4. Once in a while
- 5. Never

Note: This item is asked (identically) in waves 2, 9, 10, 11.

Internal Efficacy (dependent variable)

[W9J2]

How much can people like you affect what the government does?

- 1. A great deal
- 2. A lot
- 3. A moderate amount
- 4. A little
- 5. Not at all

Note: This item is asked (identically) in waves 2, 9, 10, 11.

External Efficacy (dependent variable)

[W9J1]

How much do government officials care what people like you think?

- 1. A great deal
- 2. A lot
- 3. A moderate amount
- 4. A little
- 5. Not at all

Note: This item is asked (identically) in waves 2, 9, 10, 11.

Political Discussion/Social Networks (key independent variables)

[W9ZD1]

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?

- 1. Yes, did talk _____
- 2. No, did not talk _____

[W9ZD2]

What are the **first names** of the people who you talked with about government or elections during the past six months?

Please be sure not to type the same name for two different people. If two people have the same name, please be sure to type two different names below, like "John" and "John Junior" or "older John" and "younger John."

- 1. Name _____
- 2. Name _____
- 3. Name _____
- 4. Name _____
- 5. Name _____
- 6. Name _____
- 7. Name _____
- 8. Name _____

[ZD12]

Generally speaking, does (NAME) probably think of (himself/herself) as a Democrat, Republican, Independent, or something else?

- 1. Democrat____
- 2. Republican____
- 3. Independent____
- 4. Something else____

[ZD14]

Would (he/she/he or she) call (himself/herself/himself or herself) a strong Democrat or a not very strong Democrat?

- 1. Strong____
- 2. Not very strong____

[ZD15]

Would (he/she/he or she) call (himself/herself/himself or herself) a strong Republican or a not very strong Republican?

- 1. Strong____
- 2. Not very strong____

[ZD16]

Does (he/she/he or she) think of (himself/herself/himself or herself) as closer to the Democratic Party, the Republican Party, or neither of these?

- 1. Closer to the Democratic Party____
- 2. Closer to the Republican Party____

3. Neither

[W9ZD9]

[REPEAT FOR THE FIRST THREE NAMES MENTIONED IN ZD2.]

In general, how different are (NAME)'s opinions about government and elections from your own views?

- 1. Extremely Different ____
- 2. Very Different
- 3. Moderately Different ____
- 4. Slightly Different
- 5. Not different at all

[W9ZD17]

FILL NAME BELOW WITH NAME FROM ZD2. REPEAT THE QUESTION FOR THE FIRST THREE NAMES MENTIONED IN ZD2.]

How interested is (NAME) in information about what's going on in government and politics? Extremely interested, very interested, moderately interested, slightly interested, or not interested at all?

- 1. Extremely interested _____
- 2. Very interested
- 3. Moderately interested
- Slightly interested _____
 Not interested at all ____

Other (key) Controls

Political Knowledge

[W2U2]

Do you happen to know how many times an individual can be elected President of the United States under current laws? *Type the number*

[W2U3]

For how many years is a United States Senator elected – that is, how many years are there in one full term of office for a U.S. Senator? *Type the number* years

[W2U4] How many U.S. Senators are there from each state? *Type the number____*

[W2U5]

For how many years is a member of the United States House of Representatives elected—that is, how many years are there in one full term of office for a U.S. House member?

*Type the number*____years

[W2U6]

According to federal law, if the President of the United States dies, is no longer willing or able to serve, or is removed from office by Congress, the Vice President would become the President.

If the Vice President were unable or unwilling to serve, who would be eligible to become president next?

- 1. ____Chief Justice of the Supreme Court
- 2. ____Secretary of State
- 3. Speaker of the House of Representatives

[W2U6]

What percentage vote of the House and the Senate is needed to override a Presidential veto?

- 1. ____A bare majority
- 2. _____Two-thirds
- 3. _____Three-fourths

Ideology

[W2K1]

When it comes to politics, would you describe yourself as liberal, conservative, or neither liberal nor conservative?

- 1. Liberal
- 2. Conservative
- 3. Neither liberal nor conservative _____

[W2K2]

IF LIBERAL: Would you call yourself very liberal or somewhat liberal?

- 1. Very Liberal
- 2. Somewhat Liberal

[W2K3]

IF CONSERVATIVE: Would you call yourself very conservative or somewhat conservative?

- 1. Very Conservative _
- 2. Somewhat Conservative _____

[W2K4]

IF NEITHER LIBERAL NOR CONSERVATIVE (i.e. if K1=3 or K1=-7); Do you think of yourself as closer to liberals, or conservatives, or neither of these?

- 1. Closer to liberal
- 2. Closer to conservatives
- 3. Neither of these

Partisanship

[W9L1] [W9L2]

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an independent, or what?

- 1. Republican
- 2. Democrat
- 3. Independent
- 4. Something else ____

[W9L5]

Would you call yourself a strong [Democrat/Republican] or a not very strong [Democrat/Republican]?

- 1. Strong [Democrat/Republican]
- 2. Not very Strong [Democrat/Republican]

[W9L6]

Do you think of yourself as closer to the Republican Party or to the Democratic Party?

- 1. Closer to the Republican Party
- 2. Closer to the Democratic Party
- 3. Neither

Education

[W2W5]

What is the highest degree or level of school you have completed?

- 1. No schooling completed _____
- 2. Nursery school to 4^{th} grade
- 3. $5^{\text{th}} \text{ or } 6^{\text{th}} \text{ grade}$ 4. $7^{\text{th}} \text{ or } 8^{\text{th}} \text{ grade}$ 5. $9^{\text{th}} \text{ grade}$
- 6. 10th grade
- 7. 11th grade _____
 8. 12th grade no diploma _____
- 9. high school graduate high school Diploma or the equivalent (GED]
- 10. Some college, no degree
- 11. Associate degree

Bachelor's degree _____
 Master's degree _____
 Professional or Doctorate degree _____

Appendix B: Proposed Survey Instrument/Items

Demographics

Are you male or female?

- 1. Male
- 2. Female
- 3. Decline to state

How old are you?

What is the highest level of education you have completed?

- 1. Less than high school
- 2. Some college
- 3. Associates degree
- 4. Bachelors degree
- 5. Masters Degree
- 6. PHD/Professional Degree (JD or MD)

What is your income or if you are a dependent what is you parent's income?

- 1. Less than \$10,000
- 2. \$10,000-\$19,999
- 3. \$20,000-\$29,999
- 4. \$30,000-\$39,999
- 5. \$40,000-\$49,999
- 6. \$50,000-\$59,999
- 7. \$60,000-\$69,999
- 8. \$70,000-\$79,999
- 9. \$80,000-\$89,999
- 10. \$90,000-\$99,999
- 11. \$100,000-\$149,999
- 12. More than \$150,000

What is your combined household income?

- 1. Less than \$10,000
- 2. \$10,000-\$19,999
- 3. \$20,000-\$29,999
- 4. \$30,000-\$39,999
- 5. \$40,000-\$49,999
- 6. \$50,000-\$59,999
- 7. \$60,000-\$69,999
- 8. \$70,000-\$79,999
- 9. \$80,000-\$89,999
- 10. \$90,000-\$99,999

- 11. \$100,000-\$149,999
- 12. More than \$150,000

What is your race?

- 1. White
- 2. White, non-Hispanic
- 3. African-American
- 4. Hispanic
- 5. Asian-Pacific Islander
- 6. Native American
- 7. Other
- 8. Decline to answer

Are you registered to vote?

- 1. Yes
- 2. No

In the past 6 years how many national elections have you voted in?

- 1. 0
- 2. 1
- 3. 2
- 4. 3

How often to do participate in campaigns, town meetings, take part in protests, and/or lobby or write politicians?

- 1. Never
- 2. Almost never
- 3. Sometimes
- 4. Often
- 5. Very often

Which statement describes your partisanship the best?

- 1. Strong Democrat
- 2. Democrat
- 3. Weak Democrat
- 4. Independent
- 5. Weak Republican
- 6. Republican
- 7. Strong Republican

Trust

How much do you trust the federal government in general?

- 1. Not at all
- 2.
- 3.
- 4. Somewhat
- 5. 6.
- 7. Completely

How much do you trust Congress in general?

- Not at all
 2.
- 3.
- 4. Somewhat
- 5. 6.
- 7. Completely

How much do you trust the Supreme Court in general?

Not at all
 A. Somewhat
 Somewhat
 Completely

How much do you trust the Executive branch in general?

- Not at all
- 3.
- 4. Somewhat
- 5.
- 6.
- 7. Completely

How often do politicians carry out the peoples' desired policies?

- 1. Never
- 2.
- 3.
- 4. Sometimes
- 5.
- 6.
- 7. Always

How honest are politicians?

- 1. Not at all
- 2.
- 3.
- 4. Somewhat
- 5. 6.
- 7. Completely

How benevolent is the federal government?

- 1. Not at all
- 2.
- 3.
- 4. Somewhat
- 5.
- 6.
- 7. Completely

Do you believe the American political process works?

- 1. Not at all
- 2.
- 3.
- 4. Somewhat
- 5.
- 6.
- 7. Completely

What policy makes you distrust the government the most?

What government process makes you distrust the government the most?

Political Discussion

How often do you discuss politics per week?

- 1. 0
- 2. 1
- 3. 2
- 4. 3
- 5. 4
- 6. 5 7. 6
- 8. 7 or more times

• monthly

How often does disagreement arise in your political discussions?

- 1. Never
- 2. Almost never
- 3. Sometimes
- 4. Almost always
- 5. Always

What are the general political leanings of your social network?

- 1. Mostly Democrats
- 2. Mostly Independents
- 3. Mostly Republicans

How detailed/sophisticated/complex/nuanced are your political discussions?

- 1. Not at all
- 2.
- 3. Somewhat
- 4.
- 5. Extremely

Political Knowledge

Do you know how many times an individual can be elected President of the United States under current laws?

How many years are there in one full term of office for a U.S. Senator? years

How many U.S. senators are there from each state?

How many years are there is one full term of office for a U.S. House member? _____years

According to federal law, if the President of the United States dies, is no longer willing or able to serve, or is removed from office by Congress, the Vice President would become the President. If the Vice President was unable or unwilling to serve, who would be eligible become president next?

1. Speaker of the House of Representatives

- Secretary of the State
 Chief Justice of the Supreme Court

What percentage vote of the House and the Senate is needed to override a Presidential veto?

- 1. A bare majority
- 2. Two-thirds
- 3. Three-forths

Table A.1

Correlatio	Correlations between Key Variables and Network Size										
	Sophistication	Disagree	Disagree	Know	External	Internal	Trust				
		(overall)	Partisan		efficacy	efficacy					
Network	0.91	0.74	0.38	0.22	0.09	0.10	0.08				
Size	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
External	External efficacy, Internal Efficacy, and Trust data is taken from wave 9										
Data take	Data taken from ANES 2008-2009 survey										

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			Та	able 1					
Means of Trust, Ext	ernal ar	nd Int	ernal Effic	acy					
	Trus	t		Exte	ernal e	efficacy	Inte	Internal Efficacy	
	Mea	n	Obs	Mea	n	Obs	Mea	an	Obs
Wave 2	2.41		1447	2.37	1	1445	2.6	l	1447
Wave 9	2.43		2733	2.44	ŀ	2737	2.69)	2736
Wave 10	2.39		2689	2.40)	1356	2.59)	2692
Wave 11	2.53		2664	2.69)	2665	2.75	5	2664
Min/Max	1	5		1	5		1	5	
Data taken from AN	IES 200	8-20	09 survey						

Tables

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Table 2	2
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		141010 =							
Means of Independent Variables									
	Mean	Obs	Min	Max					
Network size	2.28	2656	0	3					
Disagreement (overall)	1.79	2633	0	5					
Sophistication	8.61	2584	0	14					
Disagreement Partisan	0.29	2633	0	1					
Age	50.78	4240	18	90					
Education	3.36	3222	1	5					
Income	12.23	3187	1	19					
Partisanship, wave 9	2.95	2733	0	6					
Know	4.01	1298	0	6					
Data taken from ANES 2	2008-2009 su	rvey							

Correlations between Key Variables									
	Sophistica	Disagree	Disagree	Know	External	Internal	Trust		
	tion	(Overall)	Partisan		Efficacy	Efficacy			
Sophistica	1								
tion									
Disagree	0.76	1							
(overall)	0.00								
Disagree	0.40	0.57	1						
Partisan	0.00	0.00							
Know	0.26	0.21	0.12	1					
	0.00	0.00	0.00						
External	0.11	0.06	-0.00	0.04	1				
Efficacy	0.00	0.00	0.83	0.13					
Internal	0.09	0.07	-0.04	0.06	0.45	1			
efficacy	0.00	0.00	0.05	0.06	0.00				
Trust	0.10	0.07	0.01	0.13	0.49	0.42	1		
	0.00	0.00	0.51	0.00	0.00	0.00			
External eff	icacy, Interna	l Efficacy, a	and Trust da	ta is taker	n from wave	9			
Data taken f	from ANES 2	008-2009 su	irvey						

Table 3

Table 4										
Trust in Govt. (reduced models), OLS Regression Estimates										
	Model 1			Model 2						
Variables	Coeff.	Std. error	p-value	Coeff.	Std. Error	p-value				
Sophistication	0.01	0.00	0.00	0.02	0.00	0.00				
Disagreement	-0.00	0.02	0.97							
(Overall)										
Partisan				-0.06	0.04	0.17				
Disagree										
Model	N=2580 Ac	N=2580 Adj. R ² =0.01 N=2580 Adj. R ² =0.01								
Statistics	F=12.06(0.	F=12.06(0.00) $F=13.00(0.00)$								

Table 4

			Table 5						
Internal Efficacy in Govt. (reduced models), OLS Regression Estimates									
	Model 1			Model 2					
Variables	Coeff.	Std. error	p-value	Coeff.	Std. Error	p-value			
Sophistication	0.02	0.01	0.00	0.03	0.00	0.00			
Disagreement (Overall)	-0.01	0.03	0.78						
Disagreement Partisanship				-0.26	0.06	0.00			
Model	N=2582 Ac	N=2582 Adj. R ² =0.01 N=2582 Adj. R ² =0.01							
Statistics	F=10.43(0.	F=10.43(0.00) $F=18.95(0.00)$							

Table 5

	l'adie 6									
External Efficacy in Govt. (reduced models), OLS Regression Estimates										
	Model 1			Model 2						
Variables	Coeff.	Std. error	p-value	Coeff.	Std. Error	p-value				
Sophistication	0.03	0.01	0.00	0.03	0.00	0.00				
Disagreement (Overall)	-0.04	0.02	0.11							
Disagree Partisanship				-0.15	0.06	0.01				
Model	N=2581 Ac	N=2581 Adj. R ² =0.01 N=2581 Adj. R ² =0.01								
Statistics	F=17.87(0.	F=17.87(0.00) $F=20.35(0.00)$								

Table 6

Table /										
Trust in Govt. (controlled models), OLS Regression Estimates										
	Model 1	·		Model 2						
Variables	Coeff.	Std. error	p-value	Coeff.	Std. error	p-value				
Sophistication	0.00	0.01	0.62	0.01	0.02	0.13				
Disagreement	0.02	0.03	0.43							
(Overall)										
Disagreement				0.01	0.07	0.93				
Partisanship										
Age	0.00	0.00	0.85	0.00	0.01	0.85				
Gender	-0.06	0.04	0.18	-0.06	0.04	0.17				
Income	0.01	0.01	0.17	0.01	0.01	0.19				
Education	-0.00	0.02	0.93	-0.00	0.02	0.89				
Knowledge	0.04	0.02	0.01	0.05	0.02	0.01				
Partisanship	0.09	0.02	0.00	0.09	0.02	0.00				
Model	N=1132 Ad	lj. R ² =0.04 F	=6.38(0.00)	N=1132 A	dj. $R^2 = 0.04$					
Statistics				F=6.30(0.0	0)					

Table 7

l able o											
Internal efficac	Internal efficacy in Govt. (controlled models), OLS Regression Estimates										
	Model 1		•	Model 2							
Variables	Coeff.	Std. error	p-value	Coeff.	Std. error	p-value					
Sophistication	0.01	0.01	0.37	0.02	0.01	0.02					
Disagreement	0.01	0.04	0.74								
(Overall)											
Disagreement				-0.19	0.10	0.06					
Partisanship											
Age	0.00	0.00	0.45	0.00	0.00	0.37					
Gender	0.07	0.06	0.27	0.06	0.06	0.34					
Income	-0.01	0.01	0.28	-0.01	0.01	0.25					
Education	0.04	0.03	0.24	0.03	0.03	0.29					
Knowledge	0.02	0.02	0.41	0.02	0.02	0.39					
Partisanship	0.19	0.03	0.00	0.18	0.03	0.00					
Model	N=1133 Ad	lj. R ² =0.05 F	=8.16(0.00)	N=1133 A	dj. $R^2 = 0.05$						
Statistics				F=8.61(0.0)0)						

Table 8

External Effica	External Efficacy in Govt. (controlled models), OLS Regression Estimates									
	Model 1			Model 2						
Variables	Coeff.	Std. error	p-value	Coeff.	Std. error	p-value				
Sophistication	0.02	0.01	0.09	0.02	0.01	0.02				
Disagreement	-0.01	0.04	0.78							
(Overall)										
Disagreement				-0.07	0.09	0.45				
Partisanship										
Age	0.00	0.00	0.31	0.00	0.00	0.29				
Gender	0.13	0.05	0.01	0.13	0.05	0.02				
Income	0.00	0.01	0.65	0.00	0.01	0.66				
Education	0.07	0.03	0.02	0.07	0.03	0.02				
Knowledge	-0.00	0.02	0.85	-0.00	0.02	0.84				
Partisanship	0.12	0.03	0.00	0.12	0.03	0.00				
Model	N=1132 Ad	lj. R ² =0.05 F	=7.73(0.00)	N=1132 A	dj. $R^2 = 0.05$					
Statistics			-	F=7.80(0.0	0)					

Table 9