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Andrew Therriault
New York University, therriault@nyu.edu

Joshua Aaron Tucker
New York University

Ted Brader
University of Michigan - Ann Arbor

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Cross-Pressures and Political Participation

Andrew Therriault
New York University

Joshua A. Tucker
New York University

Ted Brader
University of Michigan

ABSTRACT**:** Early researchers of political behavior coined the term *cross-pressures* to describe conflicting influences on individuals' political preferences, and suggested that cross-pressured citizens were less likely to participate in politics. In recent years, there has been a resurgence of interest in the relationship between cross-pressures and participation, but a lack of consensus about both the measurement of cross-pressures and their mechanisms has led to a wide array of conflicting results. We aim to bring clarity to this debate by comparing these various measures and mechanisms side-by-side, in order to better understand which pathways show the greatest potential in linking cross-pressures with participation. We consider the effect of both *social cross-pressures,* which stem from interactions with others in one's social network, and *issue cross-pressures,* which arise from holding policy preferences across issues that do not fall along traditional ideological lines. We employ data from the 2000 US presidential election to ascertain how best to quantify each type of cross-pressures, then evaluate which proposed mechanisms show the most promise for explaining the connection between cross-pressures and participation. We find that, when modeled appropriately, both issue and social cross-pressures are associated with decreased participation. Our evidence most strongly supports the notion that both types of cross-pressures make individuals more indifferent between candidates and thus less motivated to participate, but also suggests that the potential social costs involved in more public forms of participation play a role in individuals' calculations as well.

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1. Introduction

Researchers have long been curious about the relationship between the myriad political influences facing citizens and their subsequent effects on participation. The term "cross-pressures" was used in early studies of political behavior to refer to an individual's experience of conflicting (rather than reinforcing) influences across a range of salient considerations. Bereleson and colleagues pointed to the example of Republican-identifying voters in 1948: those who agreed with Truman's stances on most issues—and could thus be considered cross-pressured—reported substantially lower interest in the outcome of that year's election (1954, p. 27). These early studies found that cross-pressured citizens were less enthusiastic about politics, more uncertain about their vote preferences, and less likely to participate than those citizens who were subject to reinforcing political influences.

Despite these findings, the study of cross-pressures waned in the following decades, in large part due to the inability of subsequent researchers to replicate these results. Only when the study of social networks became prominent did the question receive renewed attention. More specifically, a multitude of more recent studies have attempted to discern the role of cross-pressures in one's social networks – defined here as interacting with people in one's social network that may have conflicting partisan preferences – in determining political participation, but these have also produced a diverse set of conflicting results: some find a negative effect, others no effect, and a few even suggest a positive effect of being cross-pressured on participation. Much of the blame for this inconsistency can be attributed to the lack of a common approach to conceptualizing, measuring, and using social cross-pressures in studies of participation. As such, the results of these analyses are difficult to compare with one another, and as a consequence there is no more consensus now about the effects of cross-pressures than there was half a century ago.

In addition, studies of cross-pressures in social networks concentrate on one particular type of cross-pressures – *social cross-pressures* – and one particular mechanism through which these cross-pressures exert their effects: conflicting influences from one's personal contacts. Returning to the earlier studies of political behavior reminds us of another possible type of cross-pressure, in which an individual's policy preferences across various issues push her in opposite directions politically. Such *issue cross-pressures* are distinct from social cross-pressures, but have received comparatively little attention in recent years. One important exception is Hillygus and Shields (2008), who demonstrate that voters subject to issue cross-pressures are more likely to cross party lines when voting. As this suggests that such voters may not hold strong preferences for one party over another, it follows that their incentives to participate in elections could well be weaker than those of their less cross-pressured peers.

Our aim in this paper is two-fold. First, we assess the extent to which being cross-pressured – either by dint of the partisan proclivities of one's social networks or by holding conflicting policy attitudes – reduces political participation. In this paper, we concentrate largely on voting in elections, but the theoretical arguments we draw out are by and large relevant (with some appropriate caveats discussed below) to questions of political participation writ large. Second, we aim to clarify the potential mechanisms through which cross-pressures—both social and issue—may influence political participation, and to test these propositions empirically. To do so, we draw on a unique data set, the 2000 American National Election Study, which both queried respondents about the political proclivities of their social networks and contained a panel component.

We find strong support for our primary hypothesis that both social and issue cross-pressures lower voter turnout. Unlike previous studies, however, we also contrast different forms of both social and issue cross-pressures. Of the types of issue cross-pressures we examine, we find that holding conflicting positions from the positions held by one's preferred political party (e.g., a pro-

choice Republican) is actually a much stronger predictor of reduced participation than simply holding conflicting opinions generally (e.g., some liberal and some conservative opinions). In terms of social cross-pressures, we find that the overall level of political heterogeneity in one's social network has a more consistent effect on depressing participation than the level of political disagreement an individual has with his or her social network.

One pathway through which the effects of cross-pressure are felt most clearly is indifference. We find more modest support for a second proposed pathway: the frequency with which one discusses politics. We do confirm that reduced discussion frequency is associated with lower interest and knowledge, both of which are related to reduced turnout, but – contrary to expectation – we find little evidence that cross-pressures reduce the frequency of political discussion.

We proceed in the following manner. In Section 2, we briefly summarize the history of the study of cross-pressures, including our assessments of why interest in the topic initially declined and the consequences of the manner in which it has currently been reinvigorated. In Section 3, we lay out a theoretical schema for thinking about the effects of cross-pressures on political behavior, as well as the mechanisms through which these effects may be felt. Section 4 then lays out the specific hypotheses we will test in this paper, noting how exactly they fit into the framework provided in the previous section. In Sections 5 and 6, we present our empirical analyses of the effects of cross-pressures on turnout. In Section 7, we briefly expand our analysis to other forms of participation, allowing us to demonstrate some of the nuance that can be brought to bear through our theoretical framework. Section 8 concludes with ideas for future research.

2. A Brief History of "Cross-Pressures"

The question of cross-pressures played a central role in many of the seminal studies in political behavior, including *The People's Choice* (Lazarsfeld et al 1944), *Voting* (Berelson et al 1954),

and *The American Voter* (Campbell et al 1960), yet largely vanished in subsequent years. This development was primarily a result of disappointing empirical evidence: not only did other studies fail to confirm these findings with new data (Pool et al 1965), but the original relationships found by the Columbia researchers were shown to be spurious (Horan 1971; see Knoke 1990 and Mutz 2002 for reviews). Moreover, the methodological approach of these early researchers—using the intersections of salient demographic groups to identify voters as subject to either reinforcing or conflicting pressures—was ill-suited to fit the more advanced multivariate analytical techniques employed by their successors.

Beginning in the late 1970s, however, there was a rapid growth in scholars' curiosity about the relationships between social influence and political participation (Huckfeldt 1979). A vast number of studies looked at the effect of interest, knowledge, and mobilization on participation (see for example Delli Carpini and Keeter 1996, Putnam 2000, and Verba et al 1995), but fewer have addressed cross-pressures specifically. Most of the research into this latter question has employed data on social networks—using individuals' self-reported interpersonal connections to estimate the conflicting or reinforcing nature of the influences to which she is subject.

Within this context, there are a wide array of theories about how social cross-pressures work, along with an equally large number of ways to conceptualize and quantify them. Among the more prominent views:

- Exposure to dissonant views of candidates could undermine individuals' certainty about their choices, and thus discourage them from acting on those preferences (Mutz 2002, Jang 2009, Scheufele et al 2006).

- In order to avoid conflict, individuals avoid discussing politics in mixed social settings, resulting in lower levels of interest and knowledge (Huckfeldt et al 2004, Jang 2009, McClurg 2006).

- Reduced discussion on account of cross-pressures may also affect the costs and benefits of voting directly, as social interaction can serve to educate citizens about how to participate as well as reinforce norms of participation (Leighley 1990, McClurg 2006).

- Individuals may avoid more overt forms of participation so as not to be held accountable for those actions by others who may disapprove (Mutz 2002).

In these studies and others, cross-pressures in individuals' social networks tend to be measured in one of two ways: (a) estimating the heterogeneity of the network by looking at the level of partisan disagreement *among discussants* named by the individual, or (b) estimating the level of partisan disagreement *between the individual and her discussants*. Likewise, the potential mechanisms through which these social cross-pressures act can be sorted into two broad categories: (a) those which affect individuals' party or candidate preferences, and (b) those which affect the level of discussion individuals are exposed to, thereby altering the costs or benefits of participation.

One other interesting distinction in the effects of cross-pressures that comes out of this line of research is the idea that forms of political participation can be further sub-divided. Mutz (2002, p.846), for example, breaks down participation into "confrontational participation", such as working on an actual campaign, and "non-confrontational participation", such as donating money to a candidate (an essentially private action).[1] Thus we might suspect that cross-pressures – and especially social cross-pressures – could have one sort of effect on the types of public participation that are more likely to invite conflict, and a different sort of effect on more private and less confrontational forms of participation.

With all of these different hypotheses about the forms and mechanisms of social cross-pressures (see Scheufele 2006 et al for an extensive review), it is little surprise then that the results found by scholars have been inconsistent. Null or perverse results (i.e., that social cross-pressures *increase* participation) may be due to ignoring other potential mechanisms. Nir (2005), for example, finds no effect for social cross-pressures, but does so using a model which controls for political interest, knowledge, and other forms of engagement; if these variables are mechanisms *through* which

[1] Of course, in some cases campaign donations are available as a matter of public record, but at the very least the public nature of this behavior is limited if not actually anonymous.

social cross-pressures operate, then the null result when these cross-pressures' mediatiors are controlled for means little. More generally, the failure of many studies to acknowledge the broader range of possible mechanisms has made reconciling their findings a substantial challenge.

Adding to this confusion, moreover, is that some measures of social cross-pressures are highly-correlated with potentially confounding factors such as network politicization (Eveland & Hively 2009, Huckfeldt et al 2005, Huckfeldt 2007, La Due Lake & Huckfeldt 2002). Some of these relationships result from the measurement process itself—respondents vary in their ability and willingness to identify others' positions (Huckfeldt 2007), for reasons which may also be related to participation—but others are natural features of social networks. As Huckfeldt and his coauthors note, as the size of one's political network increases, the heterogeneity and levels of disagreement the individual is exposed to are likely to increase for purely statistical reasons (2005, p.499). Since more politicized social networks imply greater political involvement and thus higher participation, omitting measures of network politicization would lead to significant bias.

It is also dangerous to lose sight of the distinction between correlation and causation in studies of social networks and participation. There is much ongoing debate about the role of selection in such studies; while we know that individuals associate with politically like-minded peers (Huckfeldt et al 2004, McClurg 2006, Mutz & Martin 2001, Mutz & Mondak 2006, Theiss-Morse & Hibbing 2005), it's not clear how much of this is intentional or significant to our research (Huckfeldt et al 2005, Klofstad et al 2009). But more broadly, it is important to question the direction of any observed relationship between social networks and political behavior. A person with a heteregeneous network would be found to participate less, for example, if she (a) actually participated less often because of the network's heterogeneity (through reduced discussion or some other mechanism), (b) associated with a diverse group of peers because politics was not very important to her, or (c) guessed her peers' preferences at random because she did not know enough

about politics in general or about their preferences specifically, for reasons which also cause lower participation. A number of other relationships could also exist in this example, but only under the first relationship would cross-pressures *cause* a change in participation. With this in mind, humility is paramount in any attempt to study participation and social networks using observational data.

Finally, it is worth noting what is an essentially odd disconnect between two very large literatures in the field of political science that has had important consequences for the study of what we are calling here *issue* cross-pressures. Namely, political science has a richly developed literature on the effect of policy preferences on voting behavior (ie., spatial models of voting; see for example Downs 1957; Osborne 1995), as well as a substantial literature on the determinants of electoral turnout (Aldrich 1993; Powell 1986; Jackman 1987). Somewhat surprisingly, there is very little discussion of the effects of issue preferences on turnout, at least outside of the realm of formal models (Fiorina 1976, Uhlaner 1989; see Dhillon and Peralta 2002 for a broader review of such models). Reinvigorating the study of the effect of issue cross-pressures on political participation, therefore, could help to rectify this gap.

3. Cross-Pressures: A Conceptual Framework

In this section, we put forward a simple framework for concisely organizing what it is we mean by "cross-pressures". The result is essentially a two by three schema, drawing first on the distinction between *social* and *issue* cross-pressures, and then on three different potential sources by which individuals become aware of these cross-pressures (or the lack thereof): purely internal mechanisms; through interactions with peers; or through cues from elites. While of course all three of these processes may be going on simultaneously, it is still useful to separate them conceptually so we can present a complete picture of the nature and origins of cross-pressures.

First, *social* cross-pressures are those that emerge from *membership in particular social groups*, or what we commonly refer to as the "demographic characteristics" of an individual. If one's various group memberships point one in a similar direction politically (e.g., an evangelical non-union member in the United States, and both of these groups favor the Republican party), then we conceive of an individual as having low social cross-pressures. If one's group memberships push one in different directions politically (e.g., an evangelical union member in the United States), then one is more socially cross-pressured. In contrast, *issue* cross-pressures are those that emerge from holding *positions on issues* that push one in different directions politically. In the following section, we will present two different ways to conceptualize being pushed in different directions politically, but the basic idea remains the same: the more one's issue preferences point to support for the same political party, the fewer issue cross-pressures one faces.[2]

Second, we consider the process by which individuals become aware of whether or not they are cross-pressured. This process may come about purely through *introspection*: someone can sit alone in their apartment and realize that as a union member (or supporter of abortion rights) they want to support the Democratic Party but that as an evangelical (or supporter of lower taxes) they want to support the Republican Party. Alternatively, as has been the emphasis of the social networks literature, individuals may become aware of being cross-pressured through *conversations with personal contacts*. To take the previous example, perhaps our respondent hears pro-Republican messages from friends at church (or from people who share her opposition to high taxes) but pro-Democratic messages from fellow union members (or from people who share her support for abortion rights). Finally, an individual may become aware of being cross-pressured because of *messages from elites*. To turn again to our evangelical union member, it is possible that the a national

[2] Although not a focus of this current paper, it is worth noting that while social cross-pressures can certainly cause issue cross pressures to arise, the reciprocal relationship is much less likely (although not impossible) to hold.

religious leader (or Grover Norquist) is providing pro-Republican messages, but the head of the AFL-CIO (or Cecile Richards) is providing pro-Democratic messages.[3]

Taken together, we have essentially six different ways that individuals can come to feel cross-pressured. To be very clear, the purpose of this paper is *not* to test all of the effects of all six different forms of being cross-pressured; to cite one obvious example, we are not in this paper presenting any data on how people respond to elite cues regarding partisan preferences. Instead, our purpose here is to provide a comparative analysis of the two forms of cross-pressures that have figured most prominently in the literature: the social cross-pressures that are made relevant by interactions with individuals in one's social networks, and issue cross pressures. The purpose of the schema outlined in this section is to provide a common framework for discussing these different sources of cross-pressures both here and hopefully affair. Viewed through the lens of schema, we should be clear about what are *not* doing in the analysis to follow. We explore the effect of having different partisan preferences from other individuals in one's social-networks on the premise that the heterogeneity of partisan proclivities in one's social-network is at least a part a function of the nature of one's social group memberships, but we do not test for this relationship directly. Instead – as has been the case with the social networks literature generally – we simply examine reinforcing or conflicting opinions within one's social network, regardless of the demographic composition of that network. Similarly, we examine here whether one's issue preferences lead one in reinforcing or conflicting directions politically, but we set aside for now the manner in which one comes to realize that these issue preferences are indeed mutually antagonistic or reinforcing in their relationship to the positions of political parties. While important steps for future research, these tasks are beyond the scope of the current paper.

[3] Grover Norquist is a renowned anti-tax activist and president of Americans for Tax Reform; Cecile Richards is the current president of Planned Parenthood.

4. Pathways to Participation

To assess the effects of cross-pressures on turnout – and the degree to which these cross-pressures work through the mechanisms suggested in existing studies that we laid out in Section 2 – we begin with the classic model of rational turnout introduced by Downs (1957) and further developed by Riker and Ordeshook (1968). In this model, there are three important components through which cross-pressures may influence the likelihood of participation:[4]

- the perceived difference in utilities from each candidate's election
- the costs of participation for the individual
- the benefits to the individual from the act of participation itself

Viewing the products of cross-pressures through these lenses, we propose the five potential pathways seen in Figure 1. While not an exhaustive set of theories (e.g., see Section 3), they do cover a wide swath of the hypotheses tested in previous research.

[INSERT FIGURE 1 HERE]

In the first pathway, conflicting policy preferences lead to greater indifference between candidates on the part of the individual, and this indifference decreases the likelihood of participation by lowering its instrumental and expressive benefits.[5] In the second pathway, individuals receive conflicting signals from discussants in their social networks: while some provide reasons to like candidate A and dislike candidate B, others tell the individual why she should dislike A and support B. The result is similar to that of pathway 1, with the individual becoming more indifferent and thus less likely to participate. In the context of the framework provided in the

[4] The omitted component of this model—the probability of being pivotal—is less obviously related to cross-pressures. While a connection may well exist (for example, if mixed networks were taken as a signal of higher competitiveness), it is not prominent in the existing literature on cross-pressures.

[5] It is worth noting here that some researchers prefer the concept of ambivalence (Lavine 2001) to that of indifference. Ambivalence differs because it incorporates a second dimension of attitudes toward candidates: the strength of individuals' feelings. We prefer the simpler approach of using indifference for its more straightforward connection to models of turnout, and also because it is easier to quantify. Moreover, one recent study (Yoo 2010) suggests that indifference is more important in determining participation. While the two concepts produce highly-correlated measures, we acknowledge that they are not ultimately equivalent, and the results herein should be interpreted accordingly.

previous section, the first pathway is an example of introspective issue cross-pressures, while the second pathway is an example personal contact driven social cross-pressures.

The third group of pathways is more intricate, with two intermediate steps connecting cross-pressures with participation. In each case, individuals whose acquaintances vary in their political preferences refrain from discussing politics in order to avoid social conflict. This reduced level of discussion leads to three potential outcomes. First, the dearth of political discussion may leave the individual less engaged and interested in politics generally; because of this decrease, she does not gain as much satisfaction from the act of participation, and is thus less likely to do so. In the next case, individuals who discuss politics less frequently may not be exposed to information about politics (such as who is running and how to participate) that would minimize the costs of participation. Finally, when political discussion is rare, this may lead to a decrease in the likelihood that an individual will be encouraged to participate by a peer. Such efforts at mobilization can both decrease the costs of participation (with the peer providing information or other support) and increase its benefits (by establishing a social norm). Again, these pathways represent effects from personal contact driven social cross-pressures, but working through a different proposed mechanism than those in the second pathways.[6]

To test these alternative pathways, we first begin by comparing various alternatives for measuring issue and social cross-pressures. As noted earlier, two general approaches are taken for estimating social cross-pressures: one in which the political heterogeneity of the social network is used, and another which calculates the level of political disagreement between the individual and her peers. We take a similar approach to estimating issue cross-pressures, estimating both the level of

[6] Readers will not that in our effort to engage the extant literature, we are simply slotting existing theoretical arguments from Section 2 into the framework we developed in Section 3. Our goal here is to test support for these existing theoretical propositions, and therefore we consciously do not engage all of the possible ways in which people can become aware of being cross-pressured laid out in Section 3. More specifically, there is no analysis in this paper of the effect of elite cuing regarding cross-pressures on political participation. This would be excellent subject for future research, but for now remains outside the existing literature on the effects of cross-pressures on participation.

conflict among the individual's policy preferences across issues, and the inconsistency of these preferences with the individual's overall candidate preference. Within each category, we evaluate the usefulness of the two measures side-by-side to determine which shows the most promise (i.e., the best of the two issue cross-pressure measure *and* the best of the two social cross-pressure measures) a predictor of behavior.

We then introduce, one at a time, the mediating variables (such as indifference and discussion frequency) proposed in Figure 1. This allows us to better understand the degree to which the explanatory power of each measure of cross-pressures can be attributed to its correlation with each mediating variable. While this approach does not provide conclusive evidence on the causal direction of each relationship (as is also the case in most other studies employing observational data), the presence or absence of such correlations allows us to ascertain the *plausibility* of each proposed pathway.

5. Policy Preferences, Social Networks, and Voter Turnout

Our first analysis aims to determine the best way to model each type of cross-pressure. To do this, we look at the effectiveness of various measures in predicting participation. We use voter turnout as our primary form of participation because it is the most common and straightforward form, and has certainly received the most attention in previous research. The "best" way to model cross-pressures can vary across different types of participation, however. As such, we will repeat this analysis for other actions later in this paper.

We employ data from the 2000 American National Election Study. This data set is unique for two reasons. First, it includes a special module which asked respondents to identify up to four individuals with whom they discuss politics, and then to indicate (among other things) whom they believe each discussant voted for in the presidential election that year. This allows for measures of

social cross-pressures to be constructed which closely mirror those used in previous studies with earlier data sets. The other important feature of this data is that the ANES recontacted the same respondents during the 2002 and 2004 election cycles to create a multi-year panel. We use the 2002 and 2004 data in a subsequent section to investigate how the effects of social cross-pressures may percolate over time.

In Table 1, we present the results of models predicting voter turnout in the 2000 presidential election. This table shows only the coefficients for our measures of cross-pressures, but the models also control for an extensive set of demographic variables as well as for the competitiveness of the presidential election in each respondent's state.[7] Potential mediating variables such as interest and indifference are introduced in subsequent models but not included in those presented in Table 1.

[INSERT TABLE 1 HERE]

The first column in Table 1 presents the coefficients for two alternative measures of issue cross-pressures. The first measure, internal policy conflict (IPC), is calculated by looking at the respondent's policy preferences across 14 distinct issues.[8] For each issue, a respondent's policy preference is categorized as favoring Bush, favoring Gore, or neutral. We divide the absolute difference between the numbers of pro-Bush and pro-Gore preferences by the number of non-neutral preferences offered, and then subtract this quantity from 1.[9] The resulting measure ranges from 0 to 1, with 0 indicating that all non-neutral policy preferences favor the same candidate, and 1 indicating equal numbers of policy preferences favoring each candidate.[10]

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[7] These control variables are: age, education, income, gender, race, length of residency, religious denomination, and presidential vote margin. Full results available from authors upon request.

[8] These issues are: defense spending, government-run healthcare, job guarantees, affirmative action, welfare, foreign aid, social security, tax cuts, abortion, gays in the military, gun control, school vouchers, English as the official language of the US, and environmental regulation. The coding of each issue by partisan preference (e.g., pro-gun control = D; anti-gun control = Republican) can be found in Appendix I (XXX – Need to add XXX).

[9] Every respondent identified at least one non-neutral preference, so there were no cases where the calculations of IPC and PVC resulted in divide-by-zero errors.

[10] Thus, IPC = 1 - |(DemPrefs – RepPrefs)/(DemPrefs + RepPrefs)|.

The second measure, policy-vote conflict (PVC), uses the same policy preferences but also accounts for respondents' candidate preferences.[11] PVC is calculated as the ratio of the number of policy preferences favoring the non-preferred candidate to the number of non-neutral policy preferences offered by the respondent. The resulting measure also ranges from 0 (indicating that all non-neutral policy preferences favor the preferred candidate) to 1 (indicating that all non-neutral policy preferences favor of the non-preferred candidate.)[12]

These two measures are of course highly correlated; they differ in that two respondents with the same set of policy preferences but opposite candidate preferences would receive different PVC scores but identical IPC scores.[13] But looking at the results presented in Table 1, it is clear that PVC is a better predictor of voter turnout: both have negative coefficients, but the coefficient for IPC is much smaller and not significant, while the coefficient for PVC is highly significant. When the IPC is dropped from the model (as shown in column 2), the coefficient for PVC grows even stronger; whatever predictive power IPC offered, much of it is retained in the second model through its correlation with PVC. This suggests that, going forward, issue cross-pressures can be largely accounted for using only one variable to measure them: the conflict between issue preferences held by the respondent and issue preferences associated with the respondent's preferred party.

In the third column, the same procedure is repeated for two measures of social cross-pressures. Social network heterogeneity (SNH) is calculated in a similar manner to IPC, with the numbers of discussants (out of up to four named by the respondent) believed to support Bush and

[11] Candidate preference is determined using a multi-step process. For respondents who reported voting, this is simply vote choice. For nonvoters, we use the results the question asking whom the respondent would have voted for had they turned out. For respondents who do not declare a major-party candidate preference in response to these questions, we then assign preferences based on whether the respondent gave a higher feeling thermometer score to Bush or Gore. Finally, those whose preferences could still not be ascertained (less than 2% of respondents) were assigned to candidates based on their party identification (or, for independents, their leanings); the few respondents (<1% of the total) who still were not assignable at this point were omitted from the analysis.
[12] Thus, PVC = DemsPrefs/(DemPrefs + RepPrefs) if VotePref = Bush, RepPrefs/(DemPrefs + RepPrefs) otherwise.
[13] The only exception would occur if these respondents held equal numbers of pro-Bush and pro-Gore policy preferences, in which case they would both receive IPC scores of 1 and PVC scores of 0.5.

Gore substituted for the numbers of policy preferences favoring each candidate in the numerator, and the total number of discussants used in the denominator. As such, respondents who report that all of their discussants supported a single candidate receive SNH scores of 0, while those who report equal numbers of supporters for each candidate receive SNH scores of 1.[14] Social network disagreement (SND) is calculated as the number of discussants who supported the respondent's non-preferred candidate; thus respondents who did not report any discussions with people with conflicting candidate preferences receive SND scores of 0, while those reporting the maximum number of conversation partners all supporting the non-preferred candidate receive scores of 4.[15]

For the model shown in column 3, we get a paradoxical result: SND significantly *increases* turnout. If we believe the cross-pressures should lead to lower turnout, not higher, this suggests the presence of omitted variable bias. The most likely explanation for this is that, as previously noted, disagreement has been shown to be highest among highly politicized social networks (those in which individuals discuss politics with a large number of people). And indeed, when social network politicization (SNP) is controlled for in the model shown in column 4, this paradoxical result disappears. [16] In this model, SNH has a highly-significant negative coefficient (though much diminished in magnitude from that of the previous model), while the coefficient for SND is almost 0. This suggests that the best way to model social cross-pressures is with SNH; what matters to turnout is not whether the respondent agrees or disagrees with her peers but whether those in her social network agree or disagree with each other. The model presented in column 5 omits SND from the equation, leaving the coefficients for SNH and SNP largely unchanged.

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[14] Thus, SNH = 1 - |(DemDiscs – RepDiscs)/AllDiscs|.

[15] Approximately 26% of respondents failed to name any discussants in their networks, which makes SNH calculation impossible. As this most likely says more about their survey-taking attitudes than about their networks, these respondents are assigned the median value for SNH; any bias that results from this choice will largely be accounted for when the size of respondents' political networks is controlled for below.

[16] SNP is measured as the number of discussants listed by the respondent whose candidate preferences the respondent could identify—in other words, the size of the respondent's *political* (as opposed to social) network.

The next step is to combine both issue and social cross-pressures in a single model. The results in column 6 include all of the measures described above, to ensure that the interplay between issue and social cross-pressures does not undermine the results in previous models. This concern is shown to be unfounded: PVC, SNH, and SNP all retain highly significant coefficients in the correct directions, while IPC and SND still appear insignificant to the model. Thus, in column 7, we exclude the latter measures, producing the results which will be used as a baseline for testing the hypothesized pathways through which cross-pressures may impact turnout.

Finally, before proceeding to the next analysis, we offer estimates of the size of each effect in Figure 2. This figure plots estimates of the likelihood of turnout for individuals if they were subject to various levels of cross-pressures across the distributions of PVC and SNH, holding all other variables at their actual values. It is clear that the potential impact of cross-pressures is substantial: the estimated difference in the likelihood of turnout between those at the highest and lowest levels of issue cross-pressures is about 18%. The difference between those subject to the highest and lowest social cross-pressures is only about a third of that size, but we should be wary of comparing the relative importance of each type of cross-pressures. Given the difficulty of estimating social cross-pressures from survey questions which ask only about four discussants at most, a great deal of measurement error is to be expected, and as such the estimates of social cross-pressures' effects shown here may be smaller than they are in actuality. Nonetheless, we believe the estimates shown in Figure 2 are useful for demonstrating that the magnitudes of these effects are indeed substantively meaningful.

[INSERT FIGURE 2 HERE]

6. Mechanisms of Cross-Pressures

The next step in understanding the relationship between cross-pressures and participation is to investigate the potential mechanisms for cross-pressures' effects. We do this by analyzing how the predictive power of our measures of issue and social cross-pressures is affected by the introduction of mediating variables (Baron and Kenny 1986, Judd and Kenny 1981). Recall the pathways presented in Figure 1: for a given pathway to be plausible, the introduction of a mediating variable (such as indifference for pathways 1 and 2) should result in (a) a coefficient for the mediator which is significant in the predicted direction and (b) a coefficient for the cross-pressure measure which is smaller in magnitude than the coefficient produced when the mediator is omitted.[17]

We note once again that this procedure does not conclusively establish a causal relationship. But for such a causal relationship to be plausible, we should expect to see the predicted effects of introducing mediating variables; this procedure can thus be used to rule out less viable alternatives. Our models are therefore specified in such a way that presumes the relationships between variables to operate in the hypothesized direction, and we are careful to note when we suspect that a particular relationship could have a spurious component. These scenarios are kept to a minimum, however, because our analysis is specifically designed to follow each pathway through each of its iterations, allowing us to parse out the real effects of cross-pressures from any spurious correlations between participation and the measures used to develop our estimates of cross-measures.

The results of this analysis are presented in Table 2. Column 1 repeats the coefficients produced in the final model of the previous table, with the same cross-pressure measures included (and still controlling for network politicization) but no mediating variables. These results serve as the baseline with which other models may be compared. In column 2, we test the plausibility of

[17] The cited works also include a more mundane third criterion for mediation: that the correlation between the original and mediating variables is as predicted. For example, this criterion requires (with regard to the first pathway) that higher issue cross-pressures be associated with greater indifference. Though not shown here for brevity, our analysis looked at these relationships as well. In the results that follow, we explicitly address the cases where this criterion is not met; for the cases which do meet the two primary criteria, the third is also satisfied.

pathways 1 and 2 from Figure 1. This is done by introducing to the model measures of indifference between presidential candidates (calculated by subtracting the absolute difference in respondents' thermometer scores for Bush and Gore from the maximum possible difference, then rescaling these values from 0 to 1). The indifference measure receives a highly significant negative coefficient as predicted—individuals who are more indifferent between the candidates are less likely to turn out to vote. We also see that the introduction of this variable diminishes the coefficients of both PVC and SNH, each by about 15%. Both criteria for indifference being a viable mediator of each type of cross-pressure are met, so this analysis suggests that both pathways 1 and 2 are plausible explanations for how cross-pressures may influence participation.

[INSERT TABLE 2 HERE]

In column 3, our model adds a measure of political discussion frequency to the baseline model, testing the first component of pathways 3A, 3B, and 3C (the prediction that social cross-pressures lead to reduced political discussion). The coefficient for the discussion variable is as predicted—increased discussion correlates with increased turnout at a highly significant level—but the second criterion is not met. Rather than diminishing the effect of SNH (relative to that seen in column 1) as we would expect, controlling for discussion actually *strengthens* the predictive power of social cross-pressures, with the coefficient of SNH increasing in magnitude by about 20% (from -0.48 to -0.58). This paradoxical result suggests that SNH is not correlated with reduced discussion as predicted, calling into question the first part of pathways 3A through 3C. Indeed, as the graph in Figure 3a demonstrates, the relationship between SNH and discussion frequency does not show the expected monotonic pattern.[18] (For comparison, Figure 3b shows the relationship between both types of cross-pressures and indifference, which is as predicted.)

[18] The statistics presented in this and subsequent figures for respondents at each level of cross-pressures are generated by modeling the dependent variable (discussion frequency in Figures 3a and 4, indifference in 3b) as a function of the same set of demographics used to model participation and the specified measure of cross-pressures (SNH or IPC; SNH

[INSERT FIGURE 3 HERE]

This result casts doubt upon the validity of the first steps proposed in pathways 3A, 3B, and 3C. The same phenomenon holds once indifference is controlled for along with discussion frequency, as shown in column 4. In response to this surprising finding, we considered the possibility that perhaps there might a lagged effect between social cross-pressures and discussion frequency. This seemed particularly apropos of the changing context in the United States between 2000, which was not a remarkably polarizing election, and 2004, by which point the country had become mired in two wars, the economy had gone stagnant, and the animosity for George W. Bush among Democrats had reached stratospheric levels. Perhaps, then, an individual who had a lot of friends that supported a different presidential candidate in 2000 might be more hesitant to talk about politics in 2002 and 2004 than she had been in the halcyon days of 2000.

Figure 4 therefore shows relationship between SNH in 2000 and discussion frequency in 2000, 2002, and 2004.[19] This graph presents the discussion frequency of the groups with high and low social cross-pressures, relative to that of the middle group (who showed the lowest discussion frequency in 2000, as we saw in Figure 3a).[20] The 2000 estimates reimagine those shown in Figure 3a: as in the previous graph, both the low- and high-SNH groups were estimated to discuss politics 14% more than their medium-SNH peers. Between 2000 and 2002, however, the highly cross-pressured group showed the steepest decline in discussion frequency; their 14% higher discussion rate relative to the middle group became just over 5%, and they now showed distinctly lower discussion frequency than the low-SNH group. Continuing to 2004, this pattern held once more:

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models also control for network politicization). The cross-pressures measures used in these models are categorical, sorting respondents into top, middle, and bottom thirds of each distribution; the results are then used to estimate the average level of discussion or indifference across the population were every respondent's cross-pressures at the given level (high, medium, or low).

[19] We unfortunately lack the data to calculate SNH in subsequent years because the ANES did not repeat the Social Network questions.

[20] We choose to present the relative differences in discussion frequency rather than absolute levels because the year-to-year differences in overall levels of discussion (especially in 2002, as midterms always generate less excitement than presidential elections) made the differences between levels in each year more difficult to perceive.

relative to both other groups, the high-SNH respondents once again showed a diminished rate of discussion.

[INSERT FIGURE 4 HERE]

As noted above, this finding might be somewhat idiosyncratic to this particular span of time in American history. An alternative explanation, however, would suggest that perhaps social cross-pressures' effects on discussion take time to materialize—that when observed in 2000, the heterogeneity of respondents' networks hadn't yet resulted in less frequent discussion, because the impulse to avoid contentious interactions first requires repeated conflict to be ingrained.[21] Unfortunately, without data on additional elections or on the evolution of social networks over time, we are unable to readily distinguish between these alternatives. But importantly, the observation that the frequency of discussion by individuals facing social cross-pressures declines substantially over time gives us a justification to continue testing the second steps in these pathways in the remaining columns of Table 2—that decreased discussion reduces participation by diminishing interest, knowledge, and the mobilization of individuals by their peers.[22]

In column 5, we control for political interest. As expected, interest has a highly significant positive effect on turnout; meanwhile, the coefficient on discussion frequency is diminished by more than 50% from the previous model and crosses the threshold into insignificance.[23] This suggests that

[21] This of course suggests that SNH present in 1996 could manifest itself in 2000, those present in 1992 could manifest in 1996, etc. What we of course do not know is whether there is anything special about a 4 year gap as opposed to 2 years, 8 years, or even 6 months. Unfortunately, we currently lack the necessary panel data to move our analysis of this topic forward much at this point in time.

[22] We do so for two reasons. First, we want to see if the second half of these causal pathways remains credible explanations for the manner by which cross-pressures *could* exert influence on political behavior should we find evidence using other data that being cross-pressured does in fact reduce political discussion. Second, we do find just such evidence in the over-time data that we present later in the paper in the following section.

[23] As a check for robustness, we tested whether the opposite relationship was true—that is, whether discussion frequency would show itself to be a mediator of interest if we modeled it as such (first introducing interest on its own and then discussion frequency afterward). Were that the case, it would suggest that rather than interest mediating the effect of discussion, the two variables were simply correlated with each other in a coincidental fashion. Our results suggest otherwise, however: while introducing interest as a mediator for discussion reduces the coefficient on discussion by nearly 60%, introducing discussion as a mediator for interest reduces interest's coefficient by less than 10%. Thus the pathway from discussion through indifference is clearly the more likely of the two.

the second step of pathway 3A is highly plausible: much of the observed effect of discussion is explained by its correlation with increased political interest. A similar pattern holds in column 6 for political knowledge. Measuring respondents' ability to recognize important political figures and identify background information about the presidential candidates, these knowledge scales are associated with significantly higher turnout, and their inclusion reduces the coefficient on discussion frequency by about 20%. Testing pathway 3C, however, is not as successful. Though mobilization is shown (in column 7) to be an effective predictor of turnout as expected, its inclusion has negligible effects on the predictive power of discussion frequency. This pathway as such turns out to be the least plausible of those tested herein, as both its steps are unsupported by this analysis.

All three of these variables are included in the final model, shown in column 8. It is interesting to note that in this model, discussion frequency has less than a third of its original magnitude and is no longer significant in predicting turnout; this suggests that nearly all of its relationship with turnout acts by way of associated changes in interest and knowledge. Interestingly, though, both measures of cross-pressures (PVC and SNH) retain plenty of explanatory power even when all of the proposed mediating variables are controlled for. We suggest three possible explanations for the lingering significance of these variables. First, measurement error in our mediating variables could limit the model's ability to recognize the effects of cross-pressures on these variables. This could also come about as an artifact of selection: there may be links between our measures of cross-pressures and reported turnout in which participation influences attitudes or associations, or in which both cross-pressures and participation are affected by some other unobserved variable. Finally, there may be other pathways through which cross-pressures affect participation aside from those proposed herein. Though we cannot distinguish between these possibilities here, the results do offer an interesting subject for future research.

Before moving on, it is also important to note that there is nothing fixed about the direction of the causal arrows between frequency of political discussion and especially interest in politics and knowledge of politics. Indeed, in many walks of life we would expect that those who are more interested in and knowledgeable of politics would discuss the subject more frequently. The reason we have the causal arrows in the direction we do is simply due to our attempt to give a fair hearing to existing theoretical arguments about the effects of *cross-pressures* on participation, and in this literature the argument has been made that being cross-pressured leads to less discussion of politics which in turns leads to less interest, knowledge, and mobilization.

Ultimately, our analysis most strongly supports the first two of the proposed pathways through which cross-pressures may affect participation: both social and issue cross-pressures are associated with greater indifference, which is in turn linked to lower voter turnout. Pathways 3A and 3B give mixed results: our models confirm that reduced discussion frequency is associated with lower interest and knowledge and thereby inhibits turnout, but the evidence presented so far does not support the theory that social cross-pressures reduce discussion. Finally, pathway 3C is wholly unsupported: there is no evidence here either that cross-pressures reduce discussion or that reduced discussion leads to lower levels of mobilization. However, the one important caveat in both of these last two conclusions is that we did find evidence that social cross-pressures were associated with less frequent discussion of politics four years later.

With these findings in hand, a logical next question is to what extent cross-pressures can suppress other forms of political participation, and it is to this topic that we turn in the following section.

7. Other Forms of Participation

The results of our analysis offer plenty of insights about the role of cross-pressures in predicting turnout. But what about other forms of participation? Though it is beyond the scope of this paper to repeat the full set of tests for other behaviors, it is useful to consider how the various measures of cross-pressures introduced in the first analysis predict other forms of participation. Rather than simply providing additional data with which to test our measures of cross-pressures, these tests offer another angle from which to view how our basic framework for understanding cross-pressures' effects—in which cross-pressures may affect voters' perceived differences between candidates as well as the costs and benefits of participation itself—applies to behaviors other than turnout.

We model how our various measures of cross-pressures (along with the same set of control variables used in the previous models) relate to three other forms of participation:

(1) attempting to influence others' votes

(2) public involvement in a campaign (through displaying signs and stickers, attending campaign events, or working for the campaign)

(3) private campaign involvement (through donations to candidates, parties, or other political groups).[24]

These categories are inspired by the distinction made by Mutz (2002) between "confrontational" and "nonconfrontational" participation, though our typology is somewhat different both in theory and application.

The first two categories could be considered public forms of participation, in that they both involve the individual openly announcing her political preferences to others; as such, we expect both behaviors to be strongly influenced by both issue and social cross-pressures (with the individual

[24] These variables come from questions B2 through B8 in the 2000 post-election wave of the 2000–2002–2004 ANES panel dataset. The first category is modeled with a binary dependent variable using a logit regression; the second and third use additive scales and ordered logit models.

deciding whether the benefits of supporting her preferred candidate outweigh potential social costs). The differences between them, however, is that the first category (attempting to influence others directly) involves a more personal and strategic choice than the second. In directly attempting to influence other individuals, the potential benefits come from winning over specific people in one's social network, rather than abstract "potential voters"; as such, the receptivity of an individual's discussants is a far more relevant consideration than for other forms of participation.[25] At the same time, advocacy for a candidate carries with it far more potential for social conflict than less direct campaign involvement, and so the two categories involve distinctly different social costs as well.

The third category (private involvement in the form of campaign contributions) differs from either of the first two in that the individual is *not* faced with substantial social costs from supporting her candidate. (While large contributions are publicly reported, the vast majority of individual donations are not made public, and even large contributions would only be discovered long after the fact and by those who sought them out specifically.) Because the social costs of such participation are negligible, the calculation made by the individual (so far as cross-pressures are concerned) focuses primarily on the strength of her candidate support. Thus we would expect a greater role for issue cross-pressures in predicting private campaign involvement than we would in predicting advocacy or public campaigning.

Table 3 shows the results of our models for each form of participation. In contrast to our models of turnout shown earlier, respondents with heterogeneous social networks show an *increased* likelihood of attempting to influence others. While this might seem paradoxical at first glance, the individual's calculation in deciding whether to engage in such advocacy is unique (as we discussed earlier in this section), and we imagine that much of this result stems from the context in which

[25] While we imagine that most advocacy comes about from instrumental motivations, it's certainly also possible that one could enjoy trying to convert others without expecting to influence the election's outcome. In this case, however, the individual would still be likely to get greater satisfaction from successful advocacy than from failure.

individuals would have the opportunity to influence others. For those whose associates overwhelmingly share their candidate preferences (wherein SND would be very low), there's little need for an individual to attempt to influence others. But conversely, though the other extreme (where the individuals' peers are uniformly of the opposite viewpoint; here, SND would be very high) presents the individual with plenty of targets for conversion, the environment for advocacy would not be very inviting.

[INSERT TABLE 3 HERE]

In a uniformly Republican social network, for example, a Democrat who attempted to persuade her peers would risk serious social repercussions. And moreover, a Republican-dominated social network could suggest that those Republicans have stronger partisan attachments than Republicans in mixed networks, making conversion a much more daunting task. In light of these considerations, mixed networks (where SNH is high but SND is average) would appear to be the most conducive to advocacy. And in Table 3, this is exactly what we see in the first model: there is no significant relationship between disagreement and advocacy, and while heterogeneity may well negatively impact the individual's desire to influence others, any such effect is drowned out by the increased utility of such attempts in heterogeneous networks. This result persists when we exclude disagreement from the model (column 2), dispelling any concerns that this result is the artificial byproduct of collinearity between the two measures.

The results for measures of issue cross-pressures, meanwhile, are in the negative direction as we would expect, and significant when the model is restricted to the most promising measure (PVC, shown in column 2). Issue cross-pressures appear to diminish the individual's motivation to influence others, and since the special social costs of advocacy are unrelated to individual policy preferences, their overall effects are similar to those seen in the turnout models shown earlier.

The results for public campaign involvement are more in line with our predictions about the relationship between cross-pressures and participation. All measures of cross-pressures are associated with lower public campaign involvement (column 3). When restricted to the most promising measures of each type (column 4), both social and issue cross-pressures show significant negative coefficients.[26] Where these results become more interesting is when they are compared to those for private campaign involvement (columns 5 and 6). We noted above that because the social costs of private campaigning are negligible, the impacts of social cross-pressures should be smaller than they are for public campaigning, and we see that this is indeed the case—while the effect of heterogeneity is effectively unchanged between models 3 and 5 (and not significant in any of the models shown), the coefficient for disagreement (which is significant in the restricted specification used in model 4) plummets to almost 0 when used to predict private donation (model 5). Issue cross-pressures continue, meanwhile, to exhibit very strong negative effects across both forms of campaign involvement.

Finally, when considering these categories, it would make the most sense to classify turnout as a form of private campaign involvement. And indeed, comparing the results of models 5 and 6 in Table 3 with the corresponding models in Table 1, we see remarkably similar results: PVC and SNH are better predictors than their counterparts, with PVC appearing most significant overall. Alongside the patterns discussed, this gives further support to the notion that our classification scheme is useful for studying the effects of cross-pressures—and more importantly, that our proposed framework for understanding cross-pressures (the pathways introduced in Figure 1) offers guidance

[26] The question of why IPC appears the better measure in this model is one for which we do not have a firm answer, but suspect this some of its predictive power may come from the relationship between ideological consistency and political sophistication; that is, the correlation between political sophistication and public campaign involvement is stronger than the same relationship with regard to turnout. This would of course be a non-causal relationship, in that one's level of sophistication is a determinant of cross-pressures (and would thus be proxied by a measure thereof), which illustrates the hazards of assuming the directions of relationships observed in data such as this. That said, both measures (in column 3) lead to coefficients in the predicted direction, so this suggestion should not lead readers to presume that the entire relationship is due to endogeneity, only that endogeneity is one possible factor contributing to these results.

for studying both turnout and other forms of participation. Yet we also once again acknowledge the perils of endogeneity in these sorts of analyses. Without further evidence showing *how* cross-pressures affect these various forms of participation, the results only prove the existence of a correlation and the potential for future study. But with that caveat, these results provide the clearest look at the relationships between cross-pressures and participation of any study to date.

8. Conclusion

Our aim in this paper was to better understand how cross-pressures affect political participation. In doing so, we looked first to seminal studies of political behavior for guidance. We built upon the wealth of recent research into social cross-pressures which use data on political networks. Along with this, we also revisited the less-covered topic of issue cross-pressures. Such cross-pressures were discussed in the nascent days of political behavior research, but have largely been forgotten in the intervening years.

There is little consensus in the extant literature about the effects of cross-pressures on participation. Previous studies have proposed a variety of ways to conceptualize and measure cross-pressures and suggested a wide range of potential mechanisms. As a consequence, such studies offer a very mixed assortment of often-conflicting results. Because of the strong correlations between various measures of cross-pressures, as well as between possible mediating variables, we believe it is vital to consider multiple measures and mechanisms side-by-side, to be able to distinguish those which are most supported by empirical evidence.

We examined five potential pathways through which cross-pressures might affect participation, which together encompass many (if not most) of the mechanisms suggested in previous research. The pathways examined in this paper are rooted in traditional models of rational participation. In each, cross-pressures influence participation by affecting either perceptions of the

candidates' relative merits, the costs of participation, or the benefits of participation irrespective of the election's outcome. To test these pathways, we first compared alternative measures of issue and social cross-pressures against each other, predicting voter turnout in the 2000 US presidential election. Taking the most promising measure for each type of cross-pressure, we then introduced mediating variables into our models of turnout, to see whether their inclusion would affect the results as our hypotheses predict. Finally, we tested each measure of cross-pressures in modeling seven other forms of participation.

Our results bring renewed clarity to the study of cross-pressures. The first analysis using voter turnout showed that, for issue cross-pressures, conflicts between policy and candidate preferences are better predictors of turnout than ideological inconsistency across issues. Of the measures of social cross-pressures, heterogeneity among discussants in social networks matters more than the level of disagreement between individuals and their peers. In both cases, those who are highly cross-pressured are less likely to vote.

We then tested the five proposed pathways by introducing measures of indifference, discussion frequency, political interest, knowledge, and mobilization into our turnout models, then observing the evolution of social cross-pressures' effects on discussion between the 2000 and 2004 elections. The first two proposed pathways show themselves to be the most plausible: both issue and social cross-pressures are associated with increased indifference, which in turn predicts lower turnout. The remaining pathways share a common first step—social cross-pressures lead to less frequent discussion of politics—and the evidence for this relationship was mixed. Social cross-pressures were not associated with a decrease in discussion frequency in 2000, but those subject to the highest social cross-pressures showed a substantial decline in discussion frequency in subsequent years. The second steps of each of these three pathways provided clearer results. Reduced discussion is associated with lower interest and knowledge, and each of these is then reflected in lower turnout.

Lower rates of mobilization also predict lower turnout, but we found no evidence that mobilization is related to discussion frequency.

Finally, looking at other forms of participation besides turnout, we showed that the best measures of cross-pressures, and their associated mechanisms, can vary for particular actions such as voter advocacy. In these cases, there may be other considerations beyond those involved in the turnout decision, such as the greater social costs one might face when publicly demonstrating her support for her preferred candidate. We showed in our analysis that while the relationship between cross-pressures and campaign contributions mimics the results found for voter turnout, more public displays of campaign involvement show a stronger link to social cross-pressures. When considering the likelihood of an individual attempting to influence others' votes directly, social factors were still quite important, but manifested themselves in a surprising way: because heterogeneous networks offer the greatest opportunity for advocacy, they were associated with higher participation instead of lower. This example illustrates once again the importance of carefully addressing the mechanisms involved in studying the effects of cross-pressures, because the relationships between the various forms of both cross-pressures and participation are multifaceted, and defy previous researchers' attempts to apply a single, simple explanation.

So what, ultimately, does this all mean for the study of cross-pressures? First, we have shown in this paper that it is important to consider multiple alternatives for both measures and mechanisms side-by-side, to avoid misleading conclusions. We have also shown that the much-neglected issue type of cross-pressures deserves greater attention in studies of participation. In bringing various measures of cross-pressures together, we demonstrated which of these best predict participation. Far from just a methodological exercise, these findings also provide insight into the processes at work both within and between individual citizens. Our study of potential pathways suggested the most promising avenues in which future researchers might watch more closely for signs of cross-

pressures' effects. We hope that these contributions will provide new vigor to a long-studied topic and offer a framework through which many of the questions surrounding cross-pressures may eventually be resolved.

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Table 1: Using Social and Attitudinal Cross-Pressures to Predict Turnout

Dependent variable: self-reported turnout in 2000 presidential election (measured in post-election 2000 wave of panel)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Internal Policy Conflict	-0.41					-0.32	
	(0.33)					(0.35)	
Policy-Vote Conflict	-1.63**	-1.90**				-1.42**	-1.63**
	(0.44)	(0.38)				(0.47)	(0.40)
Social Network Heterogeneity			-1.12**	-0.51*	-0.54**	-0.46*	-0.48*
			(0.23)	(0.23)	(0.21)	(0.23)	(0.21)
Social Network Disagreement			0.80**	-0.07		-0.03	
			(0.18)	(0.19)		(0.18)	
Social Network Politicization				0.66**	0.64**	0.63**	0.62**
				(0.09)	(0.07)	(0.09)	(0.07)
n				1540			

Cell entries are binary logit coefficients, with robust SEs in parentheses; * = significant at 0.05 level (one-tailed), ** = 0.01 level. Control variables not shown: age, education, income, gender, race, length of residency, religious denomination, presidential vote margin. Full results available from authors upon request.

Table 2: Cross-Pressures, Mediating Variables, and Voter Turnout

Dependent variable: self-reported turnout in 2000 presidential election (measured in post-election 2000 wave of panel)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Policy-Vote Conflict	-1.63**	-1.41**	-1.52**	-1.34**	-1.18**	-1.18**	-1.35**	-1.08**
	(0.40)	(0.41)	(0.41)	(0.42)	(0.44)	(0.43)	(0.42)	(0.44)
Social Network Heterogeneity	-0.48*	-0.41*	-0.58**	-0.50**	-0.41*	-0.49*	-0.50**	-0.42*
	(0.21)	(0.21)	(0.21)	(0.21)	(0.22)	(0.22)	(0.22)	(0.22)
Indifference		-1.23**		-1.12**	-0.95**	-1.06**	-1.12**	-0.92**
		(0.29)		(0.30)	(0.30)	(0.30)	(0.30)	(0.30)
Discussion Frequency			0.28**	0.25**	0.11	0.20**	0.24**	0.08
			(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Political Interest					0.74**			0.61**
					(0.12)			(0.13)
Political Knowledge						0.40**		0.33**
						(0.07)		(0.07)
Mobilization							0.32*	0.34*
							(0.16)	(0.16)
n	1540							

Cell entries are binary logit coefficients, with robust SEs in parentheses; * = significant at 0.05 level (one-tailed), ** = 0.01 level. Control variables not shown: age, education, income, gender, race, length of residency, religious denomination, presidential vote margin, social network politicization. Full results available from authors upon request.

Table 3: Predicting Other Forms of Participation

Dependent variables: Binary indicator for action listed at column head, measured in post-election 2000 wave with regard to 2000 campaign

	Attempt to Influence Others		Public Campaign Involvement		Private Campaign Involvement	
	(1)	(2)	(3)	(4)	(5)	(6)
Internal Policy Conflict	-0.25		-0.62	-0.83**	-0.49	
	(0.27)		(0.38)	(0.27)	(0.44)	
Policy-Vote Conflict	-0.40	-0.64*	-0.40		-1.15*	-1.74**
	(0.39)	(0.31)	(0.55)		(0.68)	(0.48)
Social Network Heterogeneity	0.46**	0.42**	-0.19		-0.21	-0.25
	(0.18)	(0.16)	(0.25)		(0.27)	(0.24)
Social Network Disagreement	-0.04		-0.17	-0.23*	-0.03	
	(0.10)		(0.14)	(0.13)	(0.14)	
n	1540					

Cell entries are binary logit coefficients (first two models) or ordered logit coefficients (remaining models), with robust SEs in parentheses; * = significant at 0.05 level (one-tailed), ** = 0.01 level. Control variables not shown: age, education, income, gender, race, length of residency, religious denomination, presidential vote margin, social network politicization. Public campaign involvement is an additive scale ranging from 0-3, wherein respondents receive one point for (a) displaying a yard sign or bumper sticker, (b) attending a political meeting or rally, and (c) working for a campaign. Private campaign involvement is a similarly-constructed scale, points assigned for donating money to (a) a candidate, (b) a political party, and (c) an outside political organization which supported or opposed particular candidates. Full results available from authors upon request.

Figure 1: Pathways to Participation

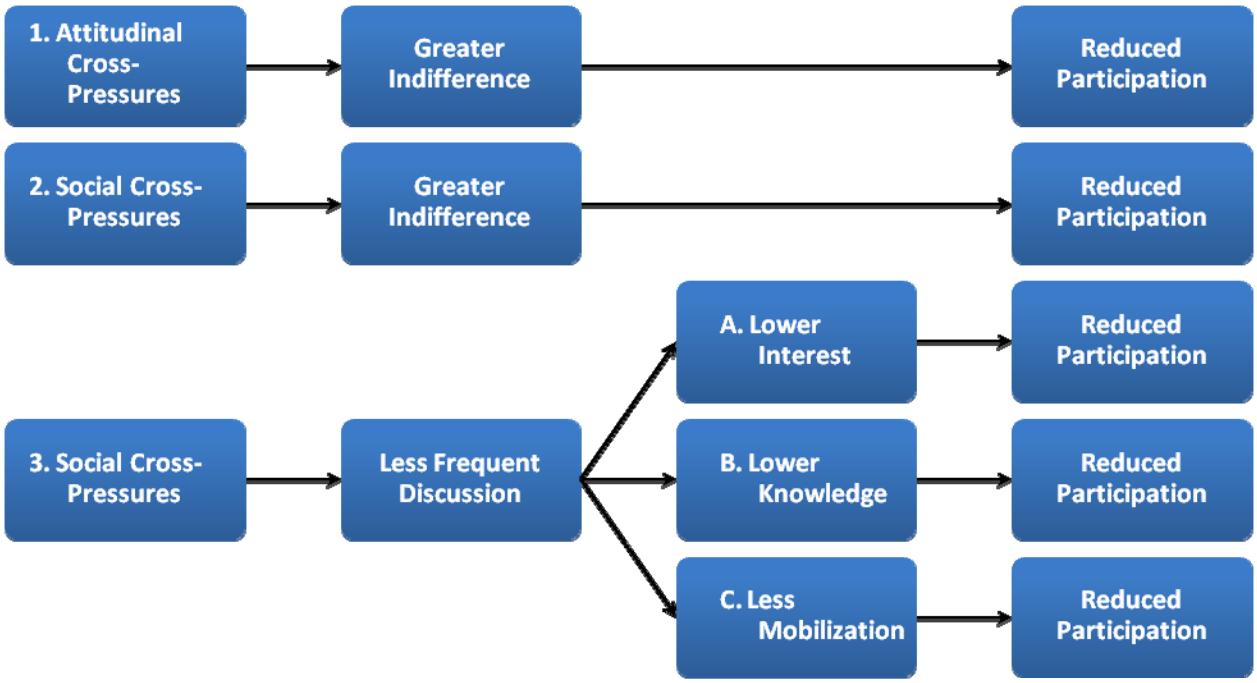
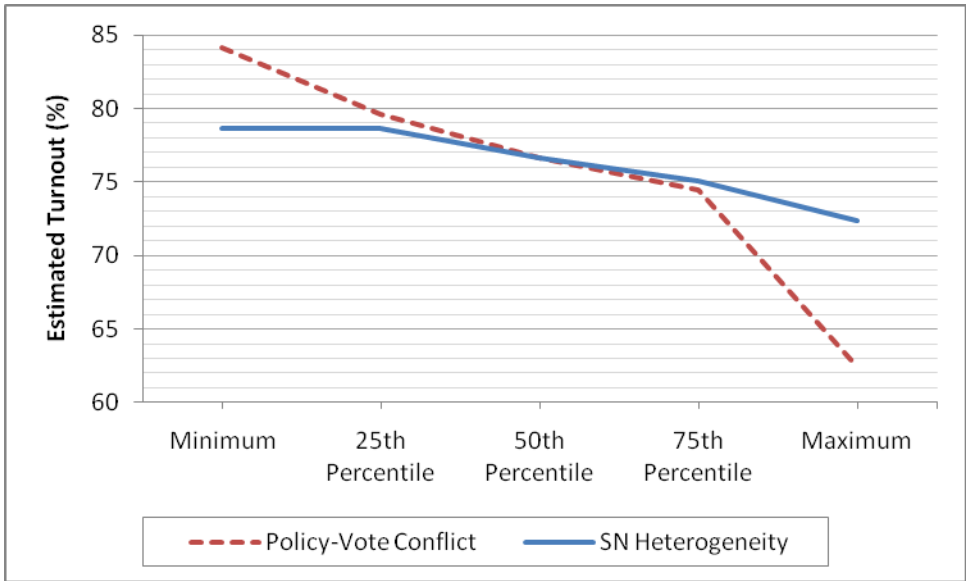


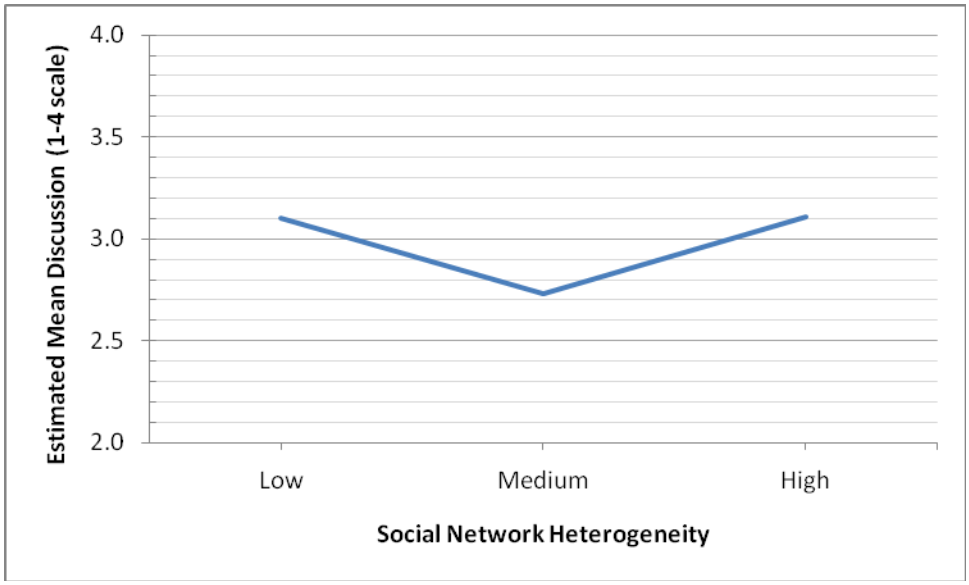
Figure 2: Estimated Effects of Cross-Pressuredness on Turnout



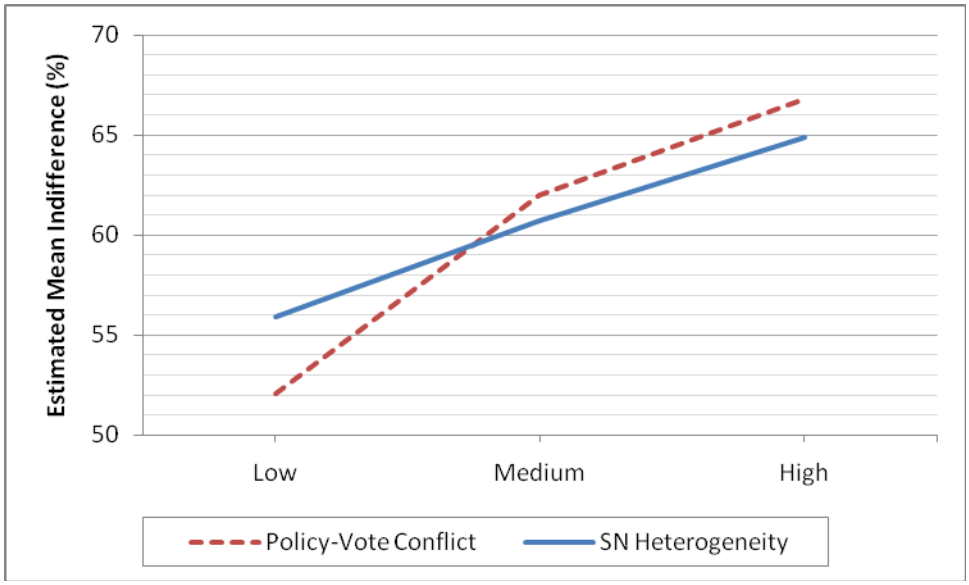
Estimates based on results of model shown in last column of Table 1.

Figure 3: Discussion Frequency and Indifference by Cross-Pressuredness in 2000

(a) Discussion Frequency



(b) Indifference between Bush and Gore



Estimates derived from OLS models of discussion frequency / indifference which include the explanatory variable listed (PVC or SNH), along with controls for age, education, income, gender, race, length of residency, religious denomination, presidential vote margin, and social network politicization (SNH models only). Full model results available from authors upon request.

Figure 4: Differences in Discussion Frequency by Social Network Heterogeneity, 2000 to 2004

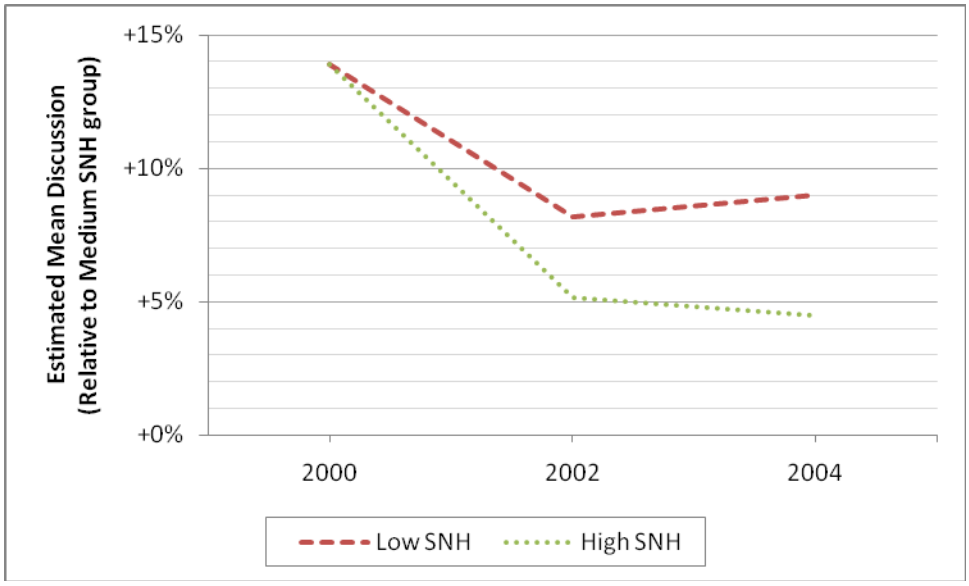


Figure shows the predicted difference in mean discussion frequency on 1-4 scale for respondents with low- and high-heterogeneity social networks, relative to the frequency predicted for the medium-heterogeneity group in each year (relative values are used to eliminate noise from year-to-year difference in overall discussion frequency). Estimates derived from OLS models of discussion frequency which include controls for age, education, income, gender, race, length of residency, religious denomination, presidential vote margin (2002 model uses margin from 2000; 2000 and 2004 use same-year margin), and social network politicization. Full model results available from authors upon request.