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Scott D. McClurg
Southern Illinois University, mcclurg@siu.edu

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Social Networks and Political Participation:
The Role of Social Interaction in Explaining Political Participation

Scott D. McClurg
Assistant Professor
Department of Political Science
Southern Illinois University
3165 Faner Hall
Mailcode 4501
Carbondale, IL 62901-4501

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Social Networks and Political Participation: The Role of Social Interaction in Explaining Political Participation

The argument advanced in this paper is that interaction in social networks has a strong, though often overlooked, influence on the individual propensity to participate in politics. Specifically, I argue that social interaction creates opportunities for individuals to gather information about politics that allow them to live beyond personal resource constraints, thereby supporting the political activity of many people. Using relational data from the South Bend election survey, this paper provides evidence that the effect of social interaction on participation is contingent on the amount of political discussion that occurs in social networks. Additional analysis shows the substantive and theoretical importance of such interaction by explaining how it is distinct from the effect of social group memberships and how it enhances the effect of individual education on the probability of participation. This key contribution of this paper is to show that models of political participation that do not account for informal social interaction will be theoretically underspecified. It also shows that such interactions play a crucial role in explicating the role of *other factors* that predict participation, such as group membership and individual resources.

INTRODUCTION

Given the central role that scholars and casual observers attribute to citizen participation in American democracy, it is no surprise that a great deal of effort has been spent examining the causes of such activity. But untangling the theoretical thicket surrounding participation has proved to be a trying task, with recent reviews of the field observing that we have much left to learn about the causes of political involvement (Leighley 1995; Schlozman 2002; Rosenstone and Hansen 1993). In response to such observations, the analytic focus of participation scholars has started to move beyond a narrow concentration on the individual characteristics and resources associated with participation, specifically by devoting greater attention to role the environmental determinants of involvement. Despite this trend, one area that still receives little attention is the influence of interaction in social networks on individual levels of participation.

One reason for this inattention is that social interaction is seemingly ubiquitous and may not provide much leverage in sorting participants out from non-participants. Another reason is that existing scholarship highlights the importance of formal social interaction, such as membership in voluntary groups, as a cause of involvement. Consequently, there may be a tendency to assume that the social underpinnings of participation are effectively "controlled for" once formal group memberships are accounted for in empirical analyses.

This paper seeks to rectify this shortcoming by testing the implications of a social network model of political involvement. Three questions are addressed. First, when and how do social networks make people politically active? Second, is the impact of informal

interaction in those networks *distinct from* that of formal social organizations? Finally, how much does a social network model of involvement add to our theoretical and substantive understanding of how people become involved in politics?

To address these questions, I first outline a social network model of participation that emphasizes the *substance* – rather than the *form* – of social interaction as the key to unlocking social network influences on participation. This model is then used to outline predictions about the circumstances under which informal interaction should influence participation, thereby highlighting the usefulness of social interaction as a theoretical tool for studying involvement. The model is also used to demonstrate that social interaction has a value-added effect that helps us better understand when personal characteristics and resources contribute to involvement. Using relational data from the South Bend election survey, this paper provides evidence that social networks only influence participation when they carry political substance, that this effect exists even when controlling for membership in formal social institutions, and that even the effect of individual resources cannot be fully understood without accounting for this process.

SOCIAL INTERACTION AND POLITICAL PARTICIPATION

Previous research

Traditional explanations of political participation focus attention on the individual characteristics that distinguish participants from non-participants, such as levels of education and income. But the empirical limits of those explanations have led to renewed interest in the environmental foundations of political involvement (Leighley 1995; Rosenstone and Hansen 1993). In terms of sociological causes of action, this has led to a considerable body of research investigating forms of formal social engagement,

such as membership in civic groups, churches, and the workplace (Verba *et al*. 1995; Harris 1994; Radcliff and Davis 2000; Calhoun-Brown 1996; Putnam 2000; Leighley 1996; Olsen 1972; Pollock 1982; Sallach *et al*. 1972; Ayala 2000). Explanations for the relationship between membership in social organizations and political involvement includes arguments that the membership stimulates a collective interest in politics (e.g., Putnam 2000), makes people available to elites for mobilization (e.g., Leighley 1996), and helps people learn skills that make participation easier (e.g., Verba *et al*. 1995).

In contrast, relatively little research investigates the importance of social interaction that occurs in interpersonal networks. Huckfeldt (1979) and Giles and Dantico (1982) show that individual participation in politics varies as a function of neighborhood education, an effect attributed to social interaction in interpersonal networks. Kenny (1992) illustrates that having friends who participate makes people more likely to participate themselves, while other research demonstrates that the size and political orientation of networks predicts electoral participation (Leighley 1990; Knoke 1990a, 1990b; Lake and Huckfeldt 1998). Other work indirectly implies that even basic forms of interaction such as playing cards, attending dinner parties, or being married may make people more likely to participate by increasing interpersonal trust and adherence to social norms (Timpone 1998; Putnam 2000, Chapter 1). Similarly, there is evidence that patterns of family interaction can help explain patterns of participation (Burns *et al*. 2001).

The failure to adequately investigate social network effects on involvement may be attributed to two trends, both of which are rooted in the absence of a clear theoretical link between social networks and involvement. The first is an implicit belief that formal

and informal social interaction can be lumped together under the rubric of social capital. Yet scholarly explanations of group effects and social network effects imply that they should influence behavior in distinct ways. Social network theorists see informal interaction as being important because it exposes people to stimuli that are social in origin and distinct from individual development. By contrast, explanations for organizational effects focus on the development of civic skills (Verba *et al*. 1995; Ayala 2000) and availability for mobilization (Leighley 1996). Neither of these explanations for formal membership effects emphasizes the same factors as the social network argument. And even if formal organizations expose people to the same social stimuli that interest network theorists, this has not been the focus in the literature on participation and we likely underestimate the importance of such factors.

It is also possible that informal social interaction is seen as a weak theoretical tool for explaining participation. Even in light of the apparent decline in social involvement, informal social interaction remains ubiquitous. The implication is that, if everyone engages in social interaction, it cannot be used to sort participants from non-participants. Even though the aforementioned research by Huckfeldt, Knoke, Kenny, and Leighley belies such a conclusion, it is clear that we need a better understanding of how informal interaction influences electoral participation. Simply stated, we need an empirically-validated model that identifies when informal social interaction supports involvement and when it does not.

A Social Network Model of Participation

The two shortcomings mentioned here both stem from the absence of an empirically-tested, micro-sociological model of participation. Here I draw on an

approach which postulates that social exchange variably exposes people to a social supply of information that broadens their exposure to and understanding of politics (Huckfeldt and Sprague 1995; McPhee 1963; Huckfeldt 2001, 1984, 1983). Based in the tradition of contextual research, this approach has been used to extensively and effectively study many political behaviors other than political participation, such as vote choice (Huckfeldt and Sprague 1995, 1988; Beck *et al*. 2002) and public opinion (Kenny 1994; MacKuen and Brown 1987; Huckfeldt et al. 1995, 1998).

The main tenet of this approach is that informal conversations between network partners expose people to political information from the surrounding social environment. Extrapolating to participation, the implication is that social interaction can make people more active in politics when it exposes them to politically-relevant information. Conceptually, social discourse exposes people to a wide range of information that may influence participatory decisions, such as information about the desirability of participation. Discussions with friends who are interested or active in politics can help people learn about the reasons for participating while reinforcing the idea that such behavior is desirable among ones peers. People also may be exposed to information about the mechanics of electoral politics and involvement. Information about which candidate to support, why to support that candidate, when the candidate is holding a rally, or even how to just get involved are all types of information that can be effectively exchanged by word-of-mouth.

Social interaction exposes people to a different set of politically-relevant information and stimuli than they possess individually (Huckfeldt 2001; Mutz 2002a, 2002b). Since individual understanding, information, resources, and ability are

inherently limited, this means that social interaction provides people with another opportunity to accrue resources that lower the barriers to political participation. Consequently, social resource supplement (rather than supplant) the person resources and abilities that make participation likely.

By outlining a social mechanism by which social networks influence participation – conversations between people – and defining when it should influence their behavior – when politically-relevant information is exchanged – this model places a clear emphasis on the *substance*, rather than the *form*, of social interaction. Such an approach has three advantages for understanding participation. First, it is flexible enough to allow many different social *forms* to influence behavior – ranging from marriage to friendship to membership in formal organizations – without losing its explanatory power. Second, it does not directly contradict previous findings explaining the relationship between formal social groups and participation. Together, these features imply that there is more than one way that sociological factors can influence participation. Third, the model can be exploited to develop meaningful hypotheses about the relationship between social networks and involvement because not all social interactions will influence participation.[1]

The Value-Added Effect of Social Interaction

Although the preceding discussion implies that social resources function similarly to individual resources, sociological theory also suggests that social interaction has a second benefit – it facilitates the application of individual resources to collective behavior. A classic statement of this can be found in Coleman's (1988, S109-S113) discussion of how family life impacts a child's education where he argues that people

[1] This somewhat contrasts some work on social capital which suggests that all forms social interaction promote a shared sense of community or interpersonal trust, both of which may support political involvement.

with more access to social resources find it easier to apply their own personal resources towards furthering their child's education.

The importance of this can be seen by contrasting a social network approach with research on the individual characteristics that drive participation. The latter literature, which has dominated research on participation for years, argues that individuals of higher social status are more likely to participate than lower status people because they have resources that make participation easier for them. The social network model makes a similar argument in that low status people may still become politically active if they accrue social resources. As such, social resources may close the participation gap that exists between low and high status individuals. However, the network model also insinuates that this gap may exist in part because social resources exacerbate the differences because they facilitate the application of human capital toward political activity.

This second possibility is important because it shifts our theoretical conception of how resources influence activity. If social resources do not have the added-value effect, the implication is that people must pass a resource threshold in order to participate – once individuals get enough resources, personal or social, they will participate. In this case, social interaction would merely be another resource that makes participation more likely. But if social interaction does have the added-value effect, then we should see a curvilinear effect and the combination of high individual resources and high social resources will widen this participation gap. This implies that we must not think of resources simply in terms of "how much" but also in terms of "what type."

DATA AND MEASURES

To establish the theoretical and substantive importance of social networks in explaining participation, I use survey data gathered in South Bend, Indiana during the 1984 presidential election (for details see Huckfeldt and Sprague 1985; 1995, Chapter 1). The South Bend Study is appropriate because it was designed to measure social influence. This is accomplished by gathering the names of people with whom respondents discussed political matters, therefore yielding information on their *political networks*. I focus the analysis on the impact of social interaction by using a subset of the South Bend respondents for which interviews of the discussants were also completed. Following other work in this area the unit of analysis is respondent-discussant pair, or discussion dyad. These data help isolate the social process being examined though they have limited external validity and future work should examine these questions in a broader context.

Dependent Variable. Each main respondent was asked whether he or she had worked for a candidate in the election, attended a meeting or rally, put up a political sign or bumper sticker, or donated money (see Appendix A for variable descriptions).[2] An index of electoral involvement was created by adding together each of these dichotomous variables, where a "1" signified participation and a "0" signified non-participation. As a measure of participation in election campaigns, this index serves as the dependent variable in the analyses below.

[2] Over eighty-percent of the respondents reported voting, a highly suspicious number given aggregate turnout in American elections. However, it is not surprising since research demonstrates the social desirability issues lead people to over-report voting (Clausen 1968; Silver *et al*. 1986). As a result, the dichotomous variable measuring whether a respondent voted was not used because it is unreliable. No comparable evidence exists to suggest that the other measures are susceptible to the same bias and overreport problems, so I use them in measuring participation.

Figure 1 shows that a majority of the respondents do not participate in even one political act beyond voting. Among those who are involved, most people only participate in one of the four activities. The graph also shows that the dependent variable does not have a standard normal distribution. The typical response to a dependent variable of this type is to use a model for count data, the most common of which is the Poisson regression model. Yet this model assumes that people with the same independent variables are expected to exhibit the same number of activities (Long 1997, p. 221-3), an assumption not supported by a hypothesis test of for overdispersion (probably reflecting unobserved heterogeneity). As a result, statistical estimates are obtained with the negative binomial regression model (Long 1997, p. 235-7; King 1988, 1989).[3]

[Insert Figure 1 about here]

Measures of Social Interaction. Each survey respondent was asked to name up to three people with whom he or she discussed politics.[4] Respondents were then queried about the nature of their discussion with these people. One question asked the respondent to report how often he or she spoke with each discussant, a measure of generic social interaction. The second question asked how frequently the respondent and the discussant discuss politics, a measure of political interaction. For both variables, respondents gave one of four answers – never, once in a while, sometimes, or fairly often.[5] These questions provide measures of social interaction in the discussion dyads.

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[3] Overdispersion can be the product of either unobserved heterogeneity or contagion, where a single activity makes another more likely (Long 1997). A clear treatment of the key assumptions underlying the negative binomial model can be found in Long (1997), Greene (1997), and Cameron and Trivedi (1986, pp. 33-34).

[4] For purpose of clarification, it is important to point out that every discussant is technically a political discussant because of how they names were collected. But Figure 2 shows that being identified as a political discussant does not mean that political conversation occurs between the respondent and discussant.

[5] These responses are numerically coded to range from 0 (never) to 3 (fairly often).

Figure 2 displays the histogram for both discussion measures. Not surprisingly, people have frequent social conversations with the people in their networks with 90-percent of all respondents talking to their discussant sometimes or fairly often. In contrast, explicitly political interaction is relatively low with a majority of individuals only talking politics once in a while. A chi-square test shows that political interaction and social interaction are not independent of one another (χ^2=31.1588, p<.01), though there is a very low level of correlation between these two variable (r=.07). Comfortably identifying people as political informants in no way implies that your political interactions are frequent. The transfer of political information is relatively infrequent, even in specialized *political discussion networks* in the *midst* of an election.

[Insert Figure 2 about here]

THE THEORETICAL IMPORTANCE OF SOCIAL INTERACTION

The goal of this section is to evaluate the social network model, specifically by investigating the proposition that social networks and informal social interaction are empirically-relevant to the study electoral involvement because of the *substance* they provide. To demonstrate the theoretical relevance of the social network model it is specifically important to show that not all forms of informal social interaction influences behavior and the effect is not dependent on being a member of a formal membership group. In this section, I therefore explore the general hypothesis that conversations which carry politically-relevant information make participation more likely regardless of participation in formal social organizations.

The Substance of Social Interaction as an Influence on Political Involvement

I begin by testing the hypothesis that social interaction only affects participation when there is an exchange of political information. To examine this hypothesis I estimate two separate statistical models of electoral involvement. Both models include variables identified as important for understanding participation, including controls for socioeconomic status, politically-relevant attitudes, generalized civic engagement, and political mobilization.[6] The difference between the two models lies with the measure of social interaction. In the generic model, social interaction is measured as the frequency with which the respondent reported talking with his or her named political discussant, with no reference to political substance. In the political model, social interaction is measured as the frequency of political discussion. If the hypothesis is correct, then social interaction will only be statistically significant in the second model.

Although it may seem relatively clear that political conversation should predict participation and generic social interaction should not, the demonstration here is important for two reasons related to a sociological understanding of political involvement. First, the terms "social capital," "civic engagement," and "civil society" are often used to describe a wide variety of social phenomenon. Moreover, the typical claim is that more "social capital" or greater "civic engagement" increases an individual's likelihood of becoming politically-active. Yet the model outlined here suggests a more narrow and useful specification. Additionally, both statistical models include factors that are sometimes believed to capture social influences on participation, mainly marital status and formal group membership. As such, the specification represents a relatively clear

[6] Family income has not been included in these models because it is strongly collinear with education and has the effect of reducing the statistical precision of the coefficient associated with education. Including income in these models does not change any of the conclusions offered in this paper.

test of the proposition that informal social interaction influences participation beyond the effects of formal groups, but only when that interaction revolves around the exchange of political information as reported through survey interviews.

Negative binomial parameter results for these two models are displayed in Table 1. The results are largely consistent with each other in that education, party mobilization, and membership in an organized group are statistically significant predictors of campaign participation. Most importantly, the results show that social interaction is only statistically significant when it explicitly contains political substance, **even** in the presence of measures of group membership and activity. This highlights two things that directly confront the reasons why informal social interaction does not receive as much attention as other forms of social engagement. First, social exchange exerts a positive and statistically precise effect on participation, but only when it is politically-relevant. So even if informal interaction builds social capital with all of its potential benefits, that social capital is only relevant to politics in particular circumstances (Lake and Huckfeldt 1998). Second, this effect exists even after controlling for membership in organized groups, supporting the earlier argument that formal and informal social interaction have theoretically distinct effects on involvement.

[Insert Table 1 about here]

One surprising result surfaces in Table 1. Interest in the campaign is a statistically significant predictor of political participation in the social interaction model, but not in the political interaction model. This is likely due to the fact that political discussion is related to a respondent's interest in political topics. Yet previous research shows that political discussion is not purely driven by political interest, but also by the

motivations of the other conversant, perceived levels of political knowledge, and shared political viewpoints (Huckfeldt 2001). Moreover the relationship between political conversation and campaign interest is likely reciprocal. People who are interested in politics undoubtedly bring it up more in their social conversations. Likewise, people who are exposed to political conversations may themselves become more interested in the subject matter. In short, these factors are clearly related to, but not synonymous with, each other. Excluding either from a model of participation runs the risk of omitted variable bias in the other's coefficient, while including both increases the risk of colinearity and hence statistically insignificant results.

Substance versus Form

Even though Table 1 shows that the *substance* of social interaction influences electoral involvement, it does not show that the *form* of social interaction is irrelevant. Although they show that group membership effects are distinct from network effects, they say nothing of how *network form* might influence participation. As a further test of the model's argument that *substance* and *political relevance* of social interaction drives the effect, it is important to show that the results are not solely driven by interaction in particular types of networks, especially those based on intimate social relations.

Such an investigation has additional benefits. Prior research implicitly emphasizes network form, such as Timpone's (1998) excellent analysis of the importance of marital status as a predictor of voter turnout or Putnam's (2000) work on social capital, without investigating the exchanges taking place in networks. Examining the earlier results for different types of dyads is an initial step in expanding the discussion of this issue. This highlights the potential benefits of exploring the social network model in

more detail. Questions about family networks (strong ties) versus less intimate networks (weak ties) are typical in the social network literature, but are not part and parcel of the participation literature even though evidence has shown the importance of marital status (Grannovetter 1973; Burt 1987).[7] Consequently, examining network form illustrates how a social network model can stimulate more empirical investigation into the causes of activity.

Following in the tradition of Huckfeldt and Sprague (1995; see also Burt 1987), the model outlined here predicts that people who are exposed to similar information via social interaction will exhibit similar behaviors. Thus the model predicts that political conversations should buttress political participation regardless of the relationship between the individual and her discussant. At the same time, this model does not necessarily imply that form is entirely irrelevant. Indeed, it may be that the strength of a substance effect may vary in different types of relationships because information coming from more intimate associates is weighed more heavily than that provided by conversations with friends.

I begin by examining the frequency of political discussion in cohesive dyads – interactions between spouses and family – and non-cohesive dyads – interactions with casual acquaintances. One way that form may trump substance and undercut the model used here is if political conversation only occurs in cohesive (i.e., family) rather than non-cohesive (i.e., friends) discussion dyads. Table 2 provides some evidence that political discussion is somewhat more frequent among spouses than it is among family and friends, with 31-percent of the marital dyads having political conversations "fairly

[7] Knoke (1990b) is an excellent example of a study that belies this conclusion. He suggests that network form is largely irrelevant when compared to the politics of the network.

often." Only 14-percent of family dyads and 22-percent of friendship talk politics with such frequency. Nevertheless, political discussion is not restricted to cohesive dyads. The modal category for all three types of dyads – spousal, familial, and friendship – is to discuss politics "once in a while" with the second highest category being "fairly often." Moreover, the amount of political conversation in friendship dyads is slightly higher than it is in family dyads. In short, people are can exposed to political in all types of social relationships.

[Insert Table 2 about here]

Another way that form could matter over substance is if political discussion only influences participation in specific types of dyads. Table 3 examines this possibility by re-estimating the political interaction model for three types of discussion dyads – spouses, family members, or friends/acquaintances. The results provide evidence that both the form and substance of conversation matter. Most importantly, in terms of the model presented here is that political discussion is a statistically significant predictor of involvement in all types of dyads, despite relatively low numbers of observations. These results are consistent with Knoke's (1990b) observation that the content of interaction is the key to understanding network effects on participation. Consequently, the findings demonstrate that political influence is not restricted solely to family contacts. If a person grows up in an apolitical family, for instance, the potential for political mobilization still exists. Since other evidence suggests that friendship ties expose people to more heterogeneous political ideas and promote political tolerance (Huckfeldt 2001; Mutz 2002b; Grannovetter 1973), it is encouraging to see that those conversations also make participation more likely.

This conclusion does not mean that the effect of content is unrelated to network cohesion. The coefficient associated with political interaction is about 50-percent larger for spouses and family members than it is for friends and acquaintances. Although we cannot make too much of this difference without more extensive analysis, it implies that the relationship between network cohesiveness and involvement may be worth further investigation. This conclusion is different from that offered by Knoke (1990b) in his analysis of General Social Survey data, though his perceptual measure of a discussion partner's closeness may account for the difference.

[Insert Table 3 about here]

THE SUBSTANTIVE IMPORTANCE OF SOCIAL INTERACTION

So far the analysis implies that models which do not account for informal social interactions are underspecified in a theoretical sense. But illustrating theoretical relevance of a concept is not the same as demonstrating that it is substantively important. In this section, the goal is to illustrate that social networks play a substantively crucial role in the process which produces electoral involvement.

The primary challenge here revolves around choosing a standard for judging substantive importance. I take the approach of comparing network effects to the substantive effect that individual resources, measured as years of education, have on individual participation. As noted earlier, socioeconomic status is an important predictor of political involvement, largely because it measures individual resource constraints (Verba *et al*. 1995; Nie et al. 1996). It is also, however, an imperfect predictor, with significant proportions of low status people participating and high status people staying out of politics. By showing how informal social interaction help explain the behavior of

these anomalous groups in a way that is substantively meaningful, I can illustrate the importance of this concept for our understanding of participation.

Social Interaction, Low-Status Individuals, and Political Activity. The model offered in this paper posits that social interaction should be substantively important for people with and without personal resources. When considering the behavior of low status individuals this means that social interaction should make up the absence of personal resources and we should see a meaningful increase in the propensity to participate among low status individuals who discuss politics. To examine the effect of political discussion for this group, I calculate number of political activities a person with a high school diploma is expected to engage in while varying the level of political conversation. More specifically I produce a distribution of expected values using a method suggested by King *et al*. (2000) for interpreting statistical results (more details are provided in Appendix B).[8] In producing these graphs, all of the other independent variables are set equal to their expected values for an individual with twelve years of education (see Table B in the Appendix B).

These distributions are displayed in the panels of Figure 3. In each panel the solid line shows the expected value distribution for individuals *who do not talk politics with their discussion partner*. The dashed line in each panel is the expected value distribution of participation where level of discussion increases from fairly often (Panel A), to once in a while (Panel B), and then to most times (Panel C). The important message in this figure is that political discussion has a substantively strong influence on the participatory behavior of low status individuals. A low status person who never talks politics with his

[8] This method uses statistical simulation to produce a distribution of expected value for the dependent variable. By changing values of the independent variables to produce these expected value distributions, the substantive effects can be effectively discerned through graphical analysis (Cleveland 1993).

or her discussant is expected to engage in approximately .16 political activities. Conversely, the average expected value of participation increases to .68 for a low status person who talks politics most times with his or her discussant, almost a four-fold increase. Similarly, increasing the level of political discussion by one category produces a one-and-a-half factor increase in the level of participation, the same effect as increasing education from a high school diploma to a college degree.

Interestingly, the uncertainty associated with this prediction – visually depicted by the spread of the curve – increases with levels of political discussion, meaning that low status person still may not become involved even when they talk politics with considerable frequency. Nevertheless, the results indicate that low status individuals who gain political information from their social network have a substantially higher chance of becoming engaged in electoral politics than their counterparts who do not talk politics.

[Insert Figure 3 about here]

Figure 3 also shows that the marginal effect of discussion on participation increases with levels of political discussion. Moving from the never talks politics category to the talks politics once in a while category increases the average expected level of political activity for low status people by .10 units, while moving from the once in a while category to the fairly often category increases the average expected value by .16 units. Finally, moving from the fairly often to the most times categories increases expected political activity by .26 units.

Social Interaction, High Status Individuals, and Political Activity. Figure 4 depicts the effect of political discussion on the activity of relatively high status individuals by examining the effect of political discussion on the expected value of

participation for individuals with sixteen years of education (approximately a college degree). The other independent variables are set equal to their expected value for individuals with sixteen years of education.

The general pattern between the panels of Figure 4 resembles that in Figure 3 – the difference in the expected value of political activity noticeably increases with the level of political discussion. As before, going from the lowest level of political discussion to the highest increases the expected level of participation by a factor of four. And the marginal effect of discussion again gets stronger with the level of political talk.

[Insert Figure 4 about here]

This figure provides one additional insight about the substantive impact of social networks on participation. In examining Panel A, for instance, we can see that the predicted level of activity for these high status individuals is still relatively low (below .5). *In fact, the mean of the two expected value distributions in Panel A (.27 and .41, respectively) are both below the sample average!* In other words, people who are relatively better off in terms of individual civic resources (measured here with education) are still not very likely to participate unless they engage in politically-relevant exchanges with other people. The benefits of a high social status are by themselves insufficient for producing high levels of political activity.

Social and Personal Foundations of Political Participation. Although the results show that informal social interaction has a strong substantive impact on participation, the model posited above implies that high status individuals are more likely to benefit from politically-oriented social interaction than low status individuals. In other words, social resources are posited to have a value-added effect on participation in that they make

people more likely to employ their personal resources toward political participation. This suggests that there is a curvilinear dependency between individual and social resources in explaining participation.

The expected level of involvement is always greater for high status people than for low status people, undoubtedly reflecting the effect of higher status and its concurrent individual resources. But does political discussion contribute to the participation gap between low and high status people? Or, does political discussion help place them on more equal ground? If the first scenario applies, it would be consistent with the value-added hypothesis that social resources make individual resources more substantively valuable. If the second scenario applies, then it would imply that social and individual resources function in exactly the same manner, with a certain level of resources – of whatever type – are necessary to encourage participation and once an individual has them, she will likely become engaged (again, a threshold effect).

Table 4 reports the means for all of the simulated expected value curves displayed in Figure 3 and Figure 4. Going down the first two columns, we see that the factor change of increasing conversation is relatively constant – the pure effect of discussion on participation. But examining the third column, we see that the difference between means of the expected value distribution increases with the level of the discussion variable. This demonstrates that integration into the social structure serves to exacerbate the effects of status. Among people who never talk politics in their dyads, high status people are expected to engage in roughly .10 more activities than low status people. This gap increases to .36 more activities *because* of the impact of social discussion.

This result suggests that participation is not simply a matter of endowing people with resources. Personal resources must be combined with social resources in a way that encourages political participation for people to become active in politics. This is evidence that social factors are especially important for people who possess human capital. Although people who have little personal resources benefit from social interaction, those substantive benefits pale in comparison to those experienced by high status individuals. So while a social network model helps explain the behavior of two anomalous groups (low status participants and high status non-participants), this demonstration also shows that we cannot fully understand the importance of even individual characteristics without accounting for the micro-sociological environment surrounding individuals. As such, it implies that the social dimensions of participation are crucially important also for understanding the impact of individual resources.

DISCUSSION

Experience shows that attention to the importance of social networks for explaining participation does not always meet their ascribed importance. For example, a substantial body of work focuses on explanatory factors that are best understood as individual characteristics, including early research on socioeconomic status and later work investigating civic resources and the psychological underpinnings of involvement. Among the body of work that does examine environmental factors, there is a preoccupation with features of the political context and formal group occupation. Both sets of literature tend to de-emphasize or, at least, do not prioritize the importance of social networks in understanding involvement. Just as these scholarly literatures provide substantial insight, they also direct our attention away from another factor that is also

crucially important – the social underpinnings of political action. This paper illustrates that a failure to incorporate social network factors in to our models of participation has led to a misunderstanding of how group memberships, network intimacy, and individual resources contribute to involvement. Most importantly, it highlights the fact that social influences on participation are worthy of detailed and extensive inquiry as well.

Along these lines, this paper builds on previous research by providing a more solid conceptual foundation for this kind of work. Specifically, the results presented here have important implications for the manner in which empirical scholars treat social effects in models of participation. For example, one common approach to "controlling" for social effects is to include broad measures of social connectivity, such as marital status (Timpone 1998), or measures of civic engagement, such as church attendance and group membership (Olsen 1972; Pollock 1982; Sallach *et al*. 1972). Not only do the results demonstrate that the first measure only roughly controls for the social process underlying participation, but it illustrates that social interaction effects are not synonymous with group membership effects. Overemphasizing the importance of such group memberships without acknowledging more informal social processes may undervalue the impact of social forces on participation.

One reason for this is that membership in formal social organizations has been declining for five decades (Putnam 2000). If these membership effects were equivalent to all social effects on participation, this would imply that the importance of the social environment was in decline. Another reason is that a common explanation of group membership effects is that they provide individuals with opportunities to develop individual civic skills (Verba *et al*. 1995). A primary message of this paper is that we

should look beyond such resources if we are to improve our understanding of how people become politically active. If the results hold more generally, they imply that a full accounting of process producing participation must examine the substance of social interaction more closely *in addition to* membership in civic institutions.

Additionally, there is evidence that not all forms of social interaction are important. One claim made by proponents of social capital is that social involvement exposes people to community norms and promotes interpersonal trust, factors which in turn make political involvement more likely. Although the model and results outlined here do not contradict those claims, it does provide a mechanism deriving hypotheses about when social networks should support political action. It also helps promote a more detailed understanding of the social foundations of participation, one that moves beyond using rough measures of social interaction such as marriage.

More generally, the results highlight the potential pitfalls of over-individualized models of political participation. Specifically they imply that any model that does not account for the impact of politically-relevant social interaction will be underspecified. Although there are some clear limits on the data used to examine these findings, they illustrate that we may overestimate the importance of personal resources because their application may rely on the types of social interaction experienced by the individual.

As a discipline, more attention should be devoted to unraveling the underlying social dynamics that spur movement off of the sidelines and onto the field in electoral politics. The model supported by the evidence here implies that one fruitful line of work will examine implications stemming from the main assumption of the social network model employed above – that social interaction is important when it helps increase

individual levels of political information. This assumption provides the foundation for a potentially rich investigation of the social foundations of involvement. A second line of inquiry is to explore the link between different types of networks, the substance of discussion and involvement. The fact that political conversations are more influential when carried on between spouses opens a number of questions about the relationship between *source-effects* and *substance-effects* in promoting participation. Finally, this paper suggests that we must think seriously about the factors that drive political interaction in social networks.

Figure 1. Histogram of the Number of Electoral Activities Respondents Participated in During the 1984 Election. This figure displays the number of electoral activities South Bend respondents participated in during the 1984 presidential election. This graph shows that the distribution of the dependent variable is non-normal. It also illustrates the relatively low level of electoral activity in the sample.

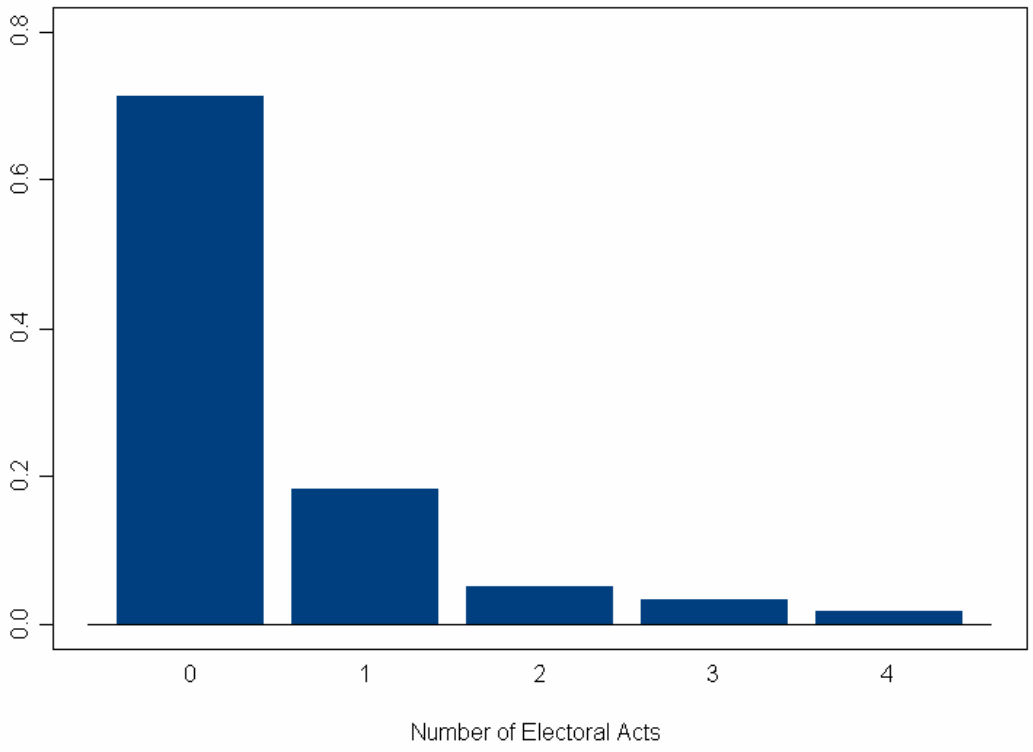
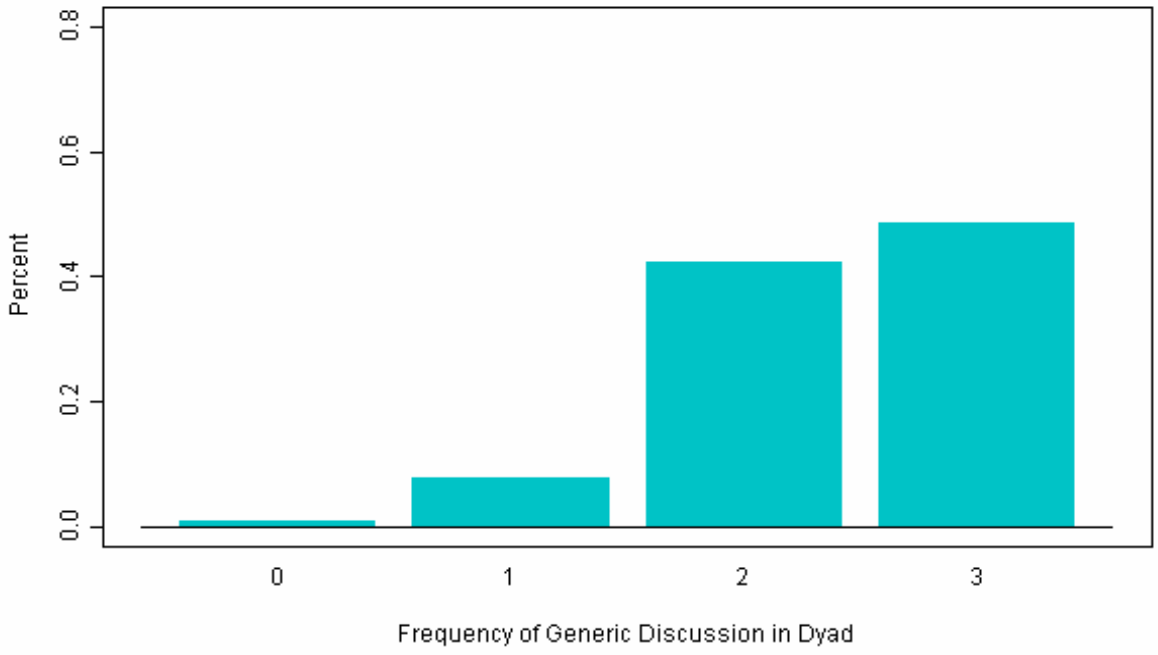


Figure 2. Histogram of Two Different Types of Discussion. While people report frequent discussions of all types with their discussants, this figure shows that most survey respondents only report discussing politics fairly often or once in a while with their discussants.



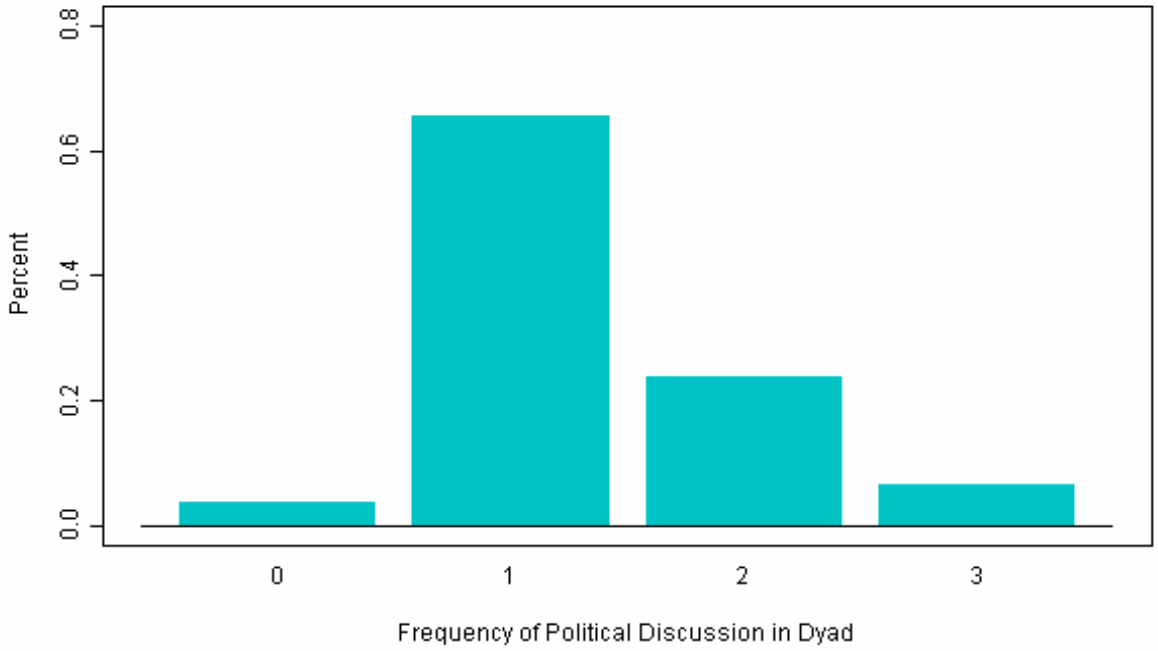


Table 1. Parameter Estimates for a Two Negative Binomial Regression Model Predicting Number of Electoral Activities. This table presents the parameter estimates of the relationship between different types of social interaction – that based on politics and that which is not – and participation in electoral activities.

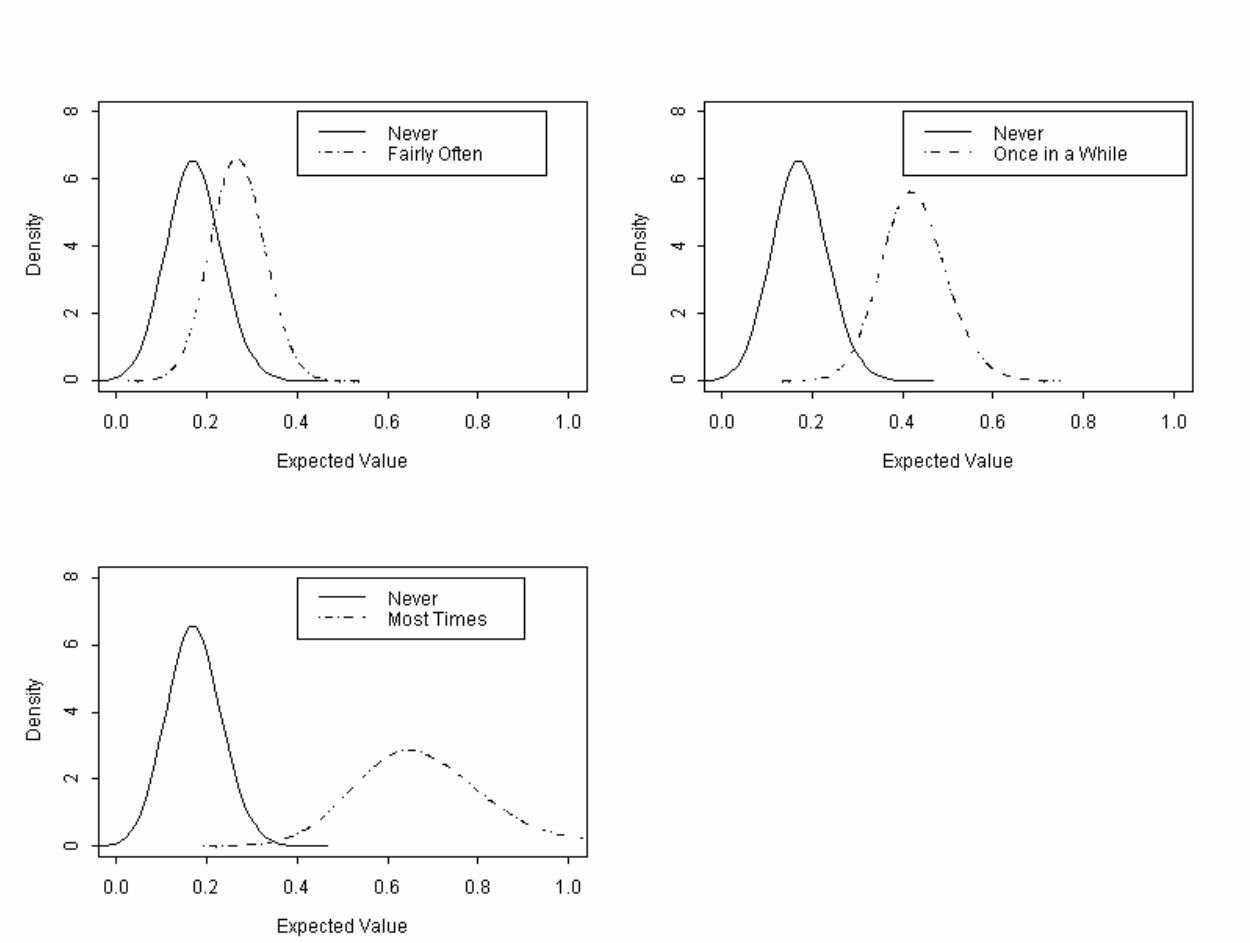
Independent Variable	Generic Interaction[a] Model	Political Interaction Model
Social Discussion	0.06 (0.54)	
Political Discussion		0.46** (3.96)
Years of Education	0.08* (2.45)	0.09** (2.75)
Campaign Interest	0.31** (2.57)	0.18 (1.43)
Age	0.00 (0.09)	0.00 (0.37)
Party contact	0.80** (5.14)	0.85** 5.58
Church Attendance	-0.06 (-1.17)	-0.06 (-1.23)
Member of Organized Group	1.24** (3.36)	1.24** (3.34)
Married	-0.11 (-0.60)	-0.17 (-0.97)
Partisan Extremity	0.26** (3.15)	0.28** (2.93)
Constant	-4.21** (-5.38)	-4.60* (-6.51)
α*	1.03**	01.03**
Likelihood Ratio χ^2	74.89**	74.89**
Number of Observations	537	537

Source: 1984 South Bend Election Study.

[a]The dependent variable in this model is political activity, *not including* a measure of whether or not the respondent went to the polls, during the 1984 campaign period.

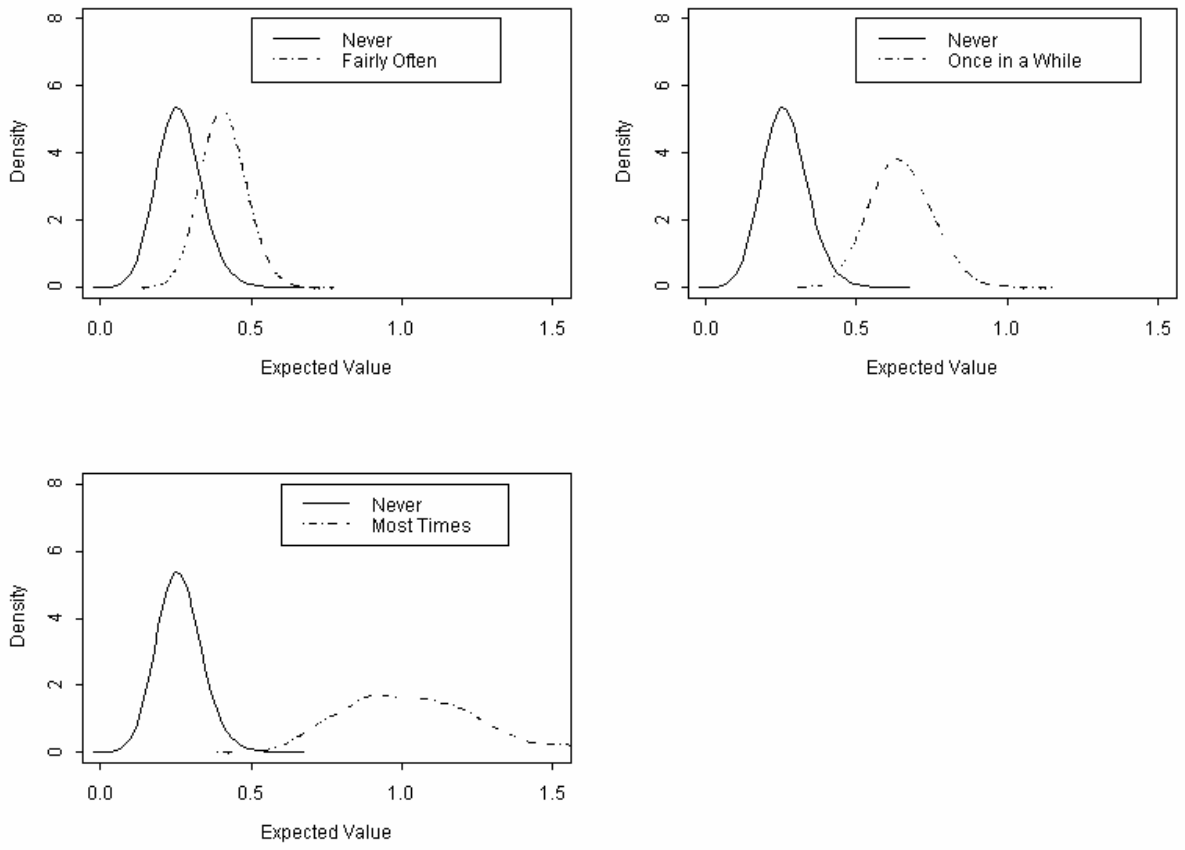
*p<.05 **p<.01

Figure 3. Density Estimates of the Simulated Expected Value Distribution for Respondents with Twelve Years of Education. These graphs illustrate the substantive importance of political discussion among high school educated individuals.



Notes: Simulations are based on the model reported in Table 1 using the measurement values given in the text. Simulations produced using CLARIFY (King *et al*. 2000; Tomz *et al*. 1998).

Figure 4. Density Estimates of the Simulated Expected Value Distribution for Respondents with Sixteen Years of Education. These graphs illustrate the substantive importance of political discussion among college educated individuals.



Notes: Simulations are based on the model reported in Table 2.1 using the measurement values given in the text. Simulations produced using CLARIFY (King *et al*. 2000; Tomz *et al*. 1998).

Table 2. Level of Political Interaction within Different Types of Discussion Dyads. This table shows the level of political discussion that takes place in different types of dyads. Each cell shows the number of dyads within each column that exhibited a particular level of discussion. Percentages are for column totals. This table shows that the level of political discussion is similar across types of relationships, except for the lower level with family members.

Level of Political Discussion	Type of Dyad			
	Spouse	Family	Friend	All
Never	3 (1%)	7 (5%)	26 (5%)	36 (4%)
Once in a While	167 (61%)	97 (75%)	342 (66%)	606 (66%)
Fairly Often	86 (31%)	18 (14%)	116 (22%)	220 (24%)
Most Times	19 (6%)	8 (6%)	34 (7%)	61 (6%)
Total N	275	130	518	923
%	(101%)[1]	(100%)	(100%)	(101%)

Source: South Bend Data.

[1] Column percentages may not add up to 100% because of rounding error.

Table 3. Parameter Estimates for a Three Negative Binomial Regression Models Predicting Number of Electoral Activities. This table presents the parameter estimates of the relationship between political interaction and participation in electoral activities, dependent on the type of dyad relationship.

Independent Variable	Spouses	Family Members	Friends
Political Discussion	0.58*	0.65*	0.39**
	(2.25)	(2.10)	(2.98)
Years of Education	0.16*	0.17	0.05
	(2.04)	(1.88)	(1.24)
Interest in Politics	0.12	0.04	0.17
	(0.43)	(0.14)	(1.08)
Age	0.01	0.00	-0.00
	(1.20)	(0.31)	(-0.70)
Party contact	0.12	1.05*	1.12**
	(0.40)	(2.42)	(6.07)
Church Attendance	-0.15	-0.29*	0.13
	(-1.39)	(-1.99)	(0.21)
Member of Organized Group	1.79*	1.04	1.57*
	(2.57)	(1.31)	(2.54)
Married	------	1.42*	-0.15
		(2.42)	(-0.76)
Partisan Extremity	0.21	0.12	0.32**
	(1.19)	(0.23)	(3.29)
Constant	-5.25**	-6.30*	-4.37**
	(-3.40)	(-3.23)	(-4.80)
α*	1.05**	0.21	0.52
Likelihood Ratio χ^2	21.98**	22.13**	81.13**
Number of Observations	153	81	304

Source: 1984 South Bend Election Study.

[a]The dependent variable in this model is political activity, *not including* a measure of whether or not the respondent went to the polls, during the 1984 campaign period.

*p≤.05 **p≤.01

Table 4. Mean of the Simulated Expected Value Distributions. This table demonstrates that educational attainment is not the only reason that the expected value of the participation variable increases between Figure 3 and Figure 4.

Political Discussion	Mean of the Simulated Expected Value Distribution		
	High School	College	Diff.[a]
Never	0.17	0.27	0.10
Once in a While	0.27	0.41	0.14
Fairly Often	0.43	0.65	0.22
Most Times	0.68	1.04	0.36
Difference[b]	0.51	0.77	0.26

Source: These are the mean values for these expected value distributions displayed in Figure 3 and Figure 4. Simulations are based on the political interaction model reported in Table 1 using the measurement values given in the text. Simulations produced using CLARIFY (King *et al*. 2000; Tomz *et al*. 1998).

[a] This is the column difference for each row.
[b]This is the row difference for each column.

Appendix A – Variable Descriptions and Coding

South Bend Data

These data were collected by Robert Huckfeldt and John Sprague. The survey was designed as a panel study with a snowball component. There were three waves in which data was gathered on the main respondents, who are analyzed in this paper. Two of the survey waves took place prior to the 1984 election. A third wave was administered soon after the election. There was replacement for observations that dropped out of the survey at each wave. The variables measuring income, education, and age were administered to main respondents during the survey wave in which they entered. The measures of political activity, number of discussants, and party mobilization were all administered in the post-election wave. The remainder of this appendix describes each of these variables and reproduces the *original* question used to gather the data.

Political Activity

This measures how many of the following activities that a respondent engaged in during the 1984 election season: working on a campaign, attending a meeting or rally, putting up a political sign or bumper sticker, or donating money to a party or candidate. The questions used to gather the information are listed below. Descriptive statistics are provided in Table A.

"Did you work for any candidate in this election?"
(1) Yes (0) No

"Did you go to any political meetings, rallies, dinners, or things like that?"
(1) Yes (0) No

"Did you put up a political yard sign or bumper sticker during the campaign?"
(1) Yes (0) No

"Did you give any money to a political party or candidate?"
(1) Yes (0) No

Number of Discussants

This variable measures how many people the respondent reported discussing politics with. As noted in the text, this variable was coded using a set of questions about how the respondent knew each discussant. The question used to gather this information is listed below. Descriptive statistics are provided in Table A.

"Is <first name of discussant> a member of your family? (I mean, is <first name of discussant> related to you in any way – by marriage or blood?)"
(1) Not related (2) Spouse (3) Mother or Father
(4) Brother or sister (5) In-laws (6) Son or Daughter
(7) Other blood relative

"(If not related:) How did you get to know <first name of discussant>?"
(1) Work (2) Church (3) Neighborhood
(4) Family (5) Republican Party (6) Democratic Party
(7) Other organization (10) Politics (11) School
(12) Children in school together (13) Friend of family (14) Casual social sit.

Years of Education

This is a straightforward question about how many years the main respondent had been educated. The survey question is provided below. Descriptive statistics are provided in Table A.

"What is the highest grade of school or year of college you have completed?"

Interest in Politics

This is a measure of each respondent's level of interest in politics. The survey question is listed below. Descriptive statistics are provided in Table A.

"And how much interest did you have in this year's election?"

(0) None at all (1) Only a little (2) Some

(3) A great deal

Income

This variable measures each respondent's income level by categories. The survey question is listed below. Descriptive statistics are provided in Table A.

"Last year, before taxes, was your total family income (response categories read):

(1) Under $5000 (2) $5000 - $10,000 (3) $10,000 - $15,000

(4) $15,000 - $20,000 (5) $20,000 - $30,000 (6) $30,000 - $40,000

(7) $40,000 - $50,000 (8) $50,000 and over."

Age

Each respondent was asked what year he or she was born in. The age variable was coded by subtracting that number from 1984. The survey question is listed below. Descriptive statistics are provided in Table A.

"In what year were you born?"

Party Mobilization

This is a post-election measure that asks each respondent whether he or she was contacted by a political party during the election. The survey question below was re-coded as a three point measure to reflect whether a respondent was contacted by both major parties, one major party, or neither major party. Descriptive statistics are provided in Table A.

"As you know, the political parties try to talk to as many people as they can to them to vote for their candidate. Did anyone from one of the political parties call you up, or come around and talk to you about the campaign this year?"

(1) Yes (2) No

"(If yes:) Which party was that?"

(1) Republican (2) Democrat (3) Both

(4) Other

Table A. Descriptive Statistics. This table presents the descriptive statistics for each of the variables used to produce the statistical estimates in Table 2 of the paper.

Variable	Mean	Stand. Deviation	Min	Max	N
Political Activity	0.45	0.87	0	4	1502
Number of Discussants	1.04	1.11	0	3	2158
Years of Education	12.99	2.52	2	17	2150
Interest in Politics	2.45	0.76	0	3	1507
Income	4.54	1.95	1	8	1931
Age	50.30	15.66	18	98	2129
Party contact	0.31	0.60	0	2	2158

Source: 1984 South Bend Election Study (Huckfeldt and Sprague 1985).

APPENDIX B: INTERPRETING STATISTICAL RESULTS WITH STATISTICAL SIMULATION

Description

This appendix describes a method for interpreting statistical results developed by Gary King, Michael Tomz, and Jason Wittenberg (1998). In addition to developing this method, the authors have provided software for implementing it in STATA (Tomz *et al*. 1998).

Method

King *et al*. (1998) argue that there are two types of uncertainty in statistical results. One of these types is fundamental uncertainty. This form of uncertainty is accounted for in statistical results with the stochastic components of models. A second form, labeled estimation uncertainty, refers to the fact that we have imperfect knowledge about population parameters. In other words, the point estimates that come from statistical procedures are draws from a distribution around the true population parameter (see equation [1]). The problem, according to King and his co-authors, is that interpretation rarely accounts for this latter form of uncertainty.

$$[1] \qquad \beta \sim N(\beta^*, V^*(\beta^*))$$

In order to rectify this problem, King *et al*. (1998) suggest using a simulation method to incorporate estimation uncertainty into substantive interpretation. This method assumes that the vector of parameter estimates in a statistical model, β^*, are a draw from a normal distribution around the true population parameter, β. The algorithm proceeds as follows:

1. Record parameter estimates from a statistical model;

2. To incorporate estimation uncertainty, draw a value from the distribution of β to represent a parameter estimate;

3. Choose values for the independent variables at which you will compute an expected value of the dependent variable;

4. Using the simulated coefficients from step 2 and using a draw from the model's stochastic distribution, simulate an expected value of the dependent value for the set levels of the independent variables.

By repeating each of these steps *M* number of times, it is possible to produce a distribution of expected values for the chosen levels of the independent variables that incorporates both types of uncertainty into the interpretation. Comparing the expected value distributions for different values of the independent variables allows us to see the substantive impact of these variables. In particular, graphical display of these expected value distributions can clearly depict these relationships (Cleveland 1993).

Implementation in the paper

In order to use the method described above, it is necessary to choose levels of the independent variables at which you want to see effects. In the negative binomial model used in this paper, the effect of number of discussants on the expected value of the participation variable *depends* on the level of *all the other variables*. In order to produce realistic comparisons for low and high status people, I chose levels of the independent variables that are typical for individuals with a high school education and a college education. These were obtained by regressing each of the independent variables (other than number of discussants) on education and predicting their value when years of education equalled 12 and 16, respectively. Table B reports these values.

Table B. Expected Value of Independent Variables for High School and College Educated Respondents. This table presents the expected value for each of the independent variables at particular levels of education. These are the values at which these variables were set in producing the expected value distributions used in Figure 3 and Figure 4.

Variable	Value when Education =	
	12 Years	16 Years
Interest in Politics	1.32	1.44
Income	4.16	5.87
Age	50.43	45.87
Party contact	0.24	0.27
Church Attendance	2.49	2.61
Group Membership	0.94	0.94
Married	0.72	0.84
Partisan Extremity	1.85	1.97

Source: 1984 South Bend Election Study (Huckfeldt and Sprague 1985).

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