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The Lasting Effect of Civic Talk on Civic Participation: Evidence from a Panel Study

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ABSTRACT

Extant research shows that individuals who discuss politics and current events with their peers also participate more actively in civil society. However, this correlation is not sufficient evidence of causation due to a number of analytical biases. To address this problem, data were collected through a panel study conducted on students at a large public university in the Midwestern United States. These data show that discussing politics and current events caused these students to participate in civic activities during their first year of college. A follow-up study conducted on the same population during their fourth year of college shows that the positive effect of civic talk on civic participation still exists despite the passage of three years. Further analysis shows that the boost in civic participation initially after engaging in civic talk is the mechanism by which the effect of civic talk lasts into the future. These findings illustrate the need to account for both individual- and social-level antecedents of civic participation when studying participatory democracy.

INTRODUCTION

Because civic participation is integral to the performance of democracy, the question of what causes a person to step out of his or her private life and enter the public sphere has been a subject of constant study in the social sciences. Within this research tradition, a growing number of political scientists have focused their work on the sociological antecedents of civic participation. Specifically, a number of studies have shown a positive correlation between "civic talk"—informal discussion of politics and current events that occurs in an individual's "peer group" or "social network"—and civic participation. However, it is challenging to analyze this phenomenon with precision because it is difficult to determine if our peers influence us, or if our own patterns of behavior influence how we select and act with our peers (e.g., Laver 2005; Nickerson 2008). Consequently, political scientists largely ignore the role of social-level antecedents of civic participation, and instead focus on individual-level factors (e.g., strength of political preferences, psychological engagement with politics, and the like).[1]

To address this problem new data were collected over three points in time from a panel of undergraduate students at a large public university in the Midwestern United States. This study allows for a more precise examination of civic talk because it more closely resembles a controlled experiment than previous studies; the study is quasi-experimental because the students who participated in it were randomly assigned to

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[1] A quintessential example is the seminal "Michigan School" of political behavior (e.g., Zuckerman 2004). The founders of this research tradition went so far as to say that "[b]y and large we shall consider external conditions as exogenous to our theoretical system" (Campbell et al. 1960, p. 27).

their first year dormitory roommates. In addition, the panel aspect of this study allows for examination of whether the effect of civic talk on civic participation lasts beyond the initial point of exposure.

The results generated from this study show that there is a meaningful causal relationship between civic talk and participation in civil society. Initially after engaging in civic talk with their roommates, the population under study increased their participation in voluntary civic organizations by 38 percent. Moreover, the effect of civic talk is lasting. Study subjects who engaged in civic talk during their first year of college continued to participate in more voluntary civic organization activities during their fourth year of college. Despite the passage of three years, the effect of civic talk is still felt. Further analysis shows that the initial boost in civic participation caused by civic talk is the mechanism by which the effect of civic talk lasts into the future. These findings illustrate that political scientists need to consider both individual- and social-level antecedents of civic participation in order to gain a comprehensive understanding of how contemporary participatory democracy functions.

SOCIOLOGICAL EXPLANATIONS OF CIVIC PARTICIPATION

A number of different lines of research in the social sciences assert that the individuals in our social environment have an effect on our political opinions and behaviors. For example, research on households shows that people living under the same roof can influence each other to vote (e.g., Nickerson 2008). The literature on public deliberation shows that individuals become more informed about politics through the process of formulating public policy options with other citizens (Barabas 2004; Delli

Carpini et al. 2004; Page and Shapiro 1992; Mendelberg 2002). Works on social capital and interpersonal cooperation illustrate that interacting with fellow citizens causes individuals to have a greater sense of attachment to their community, which leads to more frequent participation in civic activities (Dawes et al. 1990; Putnam 2000; Sally 1995). Research on political communication, opinion formation, the mass media, and political socialization shows that the individuals around us influence how we learn about politics. This occurs because civically-engaged individuals provide the rest of us with information about politics and current events (Barker 1998; Dawson et al. 1977; Downs 1957; Lazarsfeld et al. 1968; Silbiger 1977; Stimson 1990; Zaller 1992).

With regard to civic talk among peers—the specific focus of this paper—the literature on social networks contends that talking about politics with the people in our immediate social environment leads us to participate in civic activities (e.g., Campbell and Wolbrecht 2006; Huckfeldt and Sprague 1991 and 1995; Huckfeldt et al. 1995; Kenny 1992 and 1994; Klofstad 2007; Lake and Huckfeldt 1998; McClurg 2003 and 2004; Mutz 2002). For example, using a national social survey Lake and Huckfeldt (1998) show that the amount of political discussion occurring in an individual's network of friends correlates with his or her level of political participation. More recent research has also begun to identify the mechanisms that allow individuals to translate discussion into action (Klofstad 2007; McClurg 2003). These studies suggest that civic talk causes civic participation because such discussions provide individuals with the motivations and resources that are necessary in order to participate in civil society. For example, in McClurg (2003) shows that peers are an important source of information on politics and current events. Information motivates participation because it increases civic

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competence (the ability to participate) and civic engagement (having an interest in participating in the first place). Klofstad (2007) comes to a similar conclusion on the role of information. This study also finds evidence that individuals are recruited by their peers to participate in civic activities when engaging in civic talk discussions.

THE LASTING EFFECT OF CIVIC TALK ON CIVIC PARTICIPATION?

While there is a growing literature concerned with social networks, the question of whether the influence of civic talk on civic participation is lasting has not been answered. Nonetheless, the literature on path dependence offers theoretical leverage on this question of persistence over time.

"Path dependence" simply means that the past plays a role in what can and will happen in the future. More precisely, path dependence is a process of self-reinforcement, "…in which preceding steps in a particular direction induce further movement in the same direction" (Pierson 2000, p. 252; also see Pierson 2004 and Collier and Collier 1991). Self-reinforcement occurs because of increasing returns, a process whereby once a course of action is initiated it becomes increasingly costly to change course over time. For example, after over 200 years of conducting Congressional elections in the United States under the system of single member district plurality, it would be extremely difficult to change to a system of proportional representation.

While the concept of path dependence has traditionally been applied to studies of institutional and policy development, research on civic participation shows that civic participation is also a self-reinforcing phenomenon. For example, through a field

experiment Gerber and colleagues (2003) show that individuals who have been induced to vote in the past are more likely to vote in the future (also see Fowler 2006 and Plutzer 2002). Additional research suggests that other forms of civic activity may also be self-reinforcing (e.g., Brady et al. 1999; Burns et al. 2001; Putnam 2000; Rosenstone & Hansen 1993; Verba et al. 1995). For example, Verba and colleagues (1995) find that individuals who participate in civic activities through their church or a voluntary civic organization also tend to be active in other civic activities such as campaign voluntarism. Research on political socialization also shows that past patterns of civic participation, especially the experience one has during adolescence and young adulthood, are highly influential in determining how civically active a person will be in the future (e.g., Campbell 2006; Jennings and Niemi 1981).

Why is civic participation a self-reinforcing behavior? In the parlance of path dependence theory, civic participation is self-reinforcing because of increasing returns; the more civically active an individual is today, the easier it becomes for him or her to participate in the future.[2] Civic participation is subject to increasing returns over time because individuals are not automatically equipped to participate in civil society. Instead, we require resources (e.g., knowledge on how to participate) and psychological motivations (i.e., civic engagement) in order to participate in civic activities. These

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[2] It is worth clarifying that my use of path dependence theory in this context varies somewhat from the traditional theory. Typically, processes are seen as path dependent if they become more costly to change over time. In contrast, I am suggesting that civic participation is path dependent because as a person becomes more active in such activities, it because less costly to participate over time.

prerequisites can be obtained as individuals take the resources and motivations they acquire through participating in civic activities today and apply them to participation in the future (Verba et al., 1995). For example, a person can apply the experience they gained organizing a public service project for his or her church to organizing a partisan "get out the vote" drive. Citizens who are mobilized to participate in civic activities also tend to already be civically active because agents of civic mobilization (e.g., political parties and other civic organizations) are "rational prospectors" (Brady et al. 1999). These agents want their mobilization efforts to result in civic activity, and as such they target individuals who are already participating in civil society. Also in a recent study Campbell finds that "…the civic norms within one's adolescent social environment have an effect on civic participation well beyond adolescence..." (2006, p. 5). Otherwise stated, if you learn earlier in life that civic participation is important, your sense of civic duty will impel you to participate in civic activities in the future.

To summarize, if we assume that civic participation is a self-reinforcing behavior, past patterns of participation will help determine future patterns of participation. As such, if engaging in civic talk causes an individual to become more active in civil society, that initial effect should be felt after the point of exposure to civic talk as the individual parlays his or her past participatory experience into future participation in civic activities. In other words, causing an initial increase in civic participation could be the mechanism by which the positive effect of civic talk lasts into the future.

DATA: THE COLLEGIATE SOCIAL NETWORK INTERACTION PROJECT (C-SNIP)

Despite the growing list of scholars who are concerned with social-level antecedents of civic participation, research on peer networks has been heavily criticized because it is difficult to provide evidence of a causal relationship between civic talk and civic participation. Existing works struggle to produce definitive results because it is difficult to determine if our peers influence us or if our own patterns of behavior influence how we select and interact with our peers (e.g., Laver 2005; Nickerson 2008). For example, the central argument made in this literature is that talking about politics and current events with our peers leads us to become more active in civil society. However, an equally plausible explanation is that being active in politics causes you to talk about politics with your peers (reciprocal causation). Individuals who are more active in politics may also explicitly choose to associate with peers who are more interested in talking about politics (selection bias). Finally, some factor that has not been accounted for could be causing people to both have political discussions with their peers and participate in civic activities (endogeneity bias).

Traditionally, non-recursive (or "two-stage") regression models are used to overcome analytical biases like these. In such specifications, the independent variable of interest (in this case, the amount of conversation about politics and current events an individual has with his or her peers) is modeled with instrumental variables that do not correlate with the outcome variable being predicted (in this case, the amount of civic participation an individual engages in). However, it is difficult to think of any variable that could reliably predict the level of civic talk occurring in an individual's peer group, yet not

be correlated with how civically active he or she is. Instrumental variables like these have not been identified.[3]

An ideal method to ameliorate these analytical problems would be to randomly assign one group of individuals to engage in civic talk (the treatment group), and another group of like individuals to not engage in civic talk (the control group). Under random assignment, treated and untreated subjects are identical to one another, save that one is exposed to the treatment while the other is not. This research design would allow us to be confident that the outcomes of the study are actually being caused by civic talk instead of any other observed or unobserved factors.[4]

With this ideal research design in mind, data were collected from first year college students who lived in university housing at the University of Wisconsin-Madison during the 2003-2004 academic school year. This study is hereafter referred to as the Collegiate Social Network Interaction Project Panel Survey (C-SNIP). Random assignment is incorporated into the C-SNIP design because study participants were assigned to their first year college dormitory roommate based on a lottery. Incoming first year dormitory residents ranked the sixteen dormitories on campus in order of where

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[3] Non-recursive models have been used when the independent variable of interest is peer behavior (e.g., vote choice), not political discussion (Kenny 1992; Levine 2002).

[4] Nickerson (2008) utilizes this type of research design to test whether individuals living in the same household influence each other to vote. However, this study does not examine whether civic talk is the causal agent behind civic participation. Moreover, the study does not examine whether the influence of peers lasts beyond the point of initial exposure to treatment.

they wanted to live. Subjects were then randomly sorted by a computer in order to determine the order in which they would be assigned to dormitories. If space was available in the student's first housing choice at the time that his or her name was reached in the randomly-sorted list, the student was placed in a room in that dormitory. If space was not available, an attempt was made to place the student with a roommate in his or her second choice dormitory, and so on.

C-SNIP participants initially completed two survey questionnaires: one at the beginning of the 2003-2004 academic year before they were affected by their randomly-assigned roommate, and a second at the end of the 2003-2004 school year. During the first wave of the study, students were asked about their patterns of civic participation during high school. During the second wave of the study students were asked about their civic activities in college, as well as about their roommate. In the spring of 2007, during their fourth year of college, this same population was re-interviewed. The 2007 questionnaire repeated most of the questions asked in the 2003-2004 studies. This additional data point allows for an assessment of whether the effect of civic talk felt by these students during their first year in college lasted into their final year of college. These data also reduce problems associated with reciprocal causation, the possibility that civic participation causes civic talk, since the two phenomena are temporally separated from one another by three years (with talk occurring before participation).

MEASURES

Independent Variable: Civic Talk

The independent variable of interest in this analysis is the amount of civic talk that occurred between college roommates. In the C-SNIP questionnaire, each student was asked, "When you talk with your roommate, how often do you discuss politics and current events: often, sometimes, rarely, or never?" An alternative approach to using the subject's self report would be to use an exogenous measure of civic talk: the report of the subject's roommate. Based on the small number of subjects who were willing to report their dormitory address, however, only 84 roommate pairs were able to be reliably identified. Comparison of the amount of civic talk that the members of these pairs reported engaging in is the same (t = -1.14, p = .16). This shows that the subject's self report is observationally equivalent to an exogenous measure of civic talk.

Dependent Variable: Civic Participation

Civic participation is measured as how active students reported being in voluntary civic organizations during their first and fourth years of college. In total, seven different types of group affiliations are accounted for: charitable and voluntary service, leadership and civic training, groups that "take stands on political issues or current events," partisan groups, student government, student publications (e.g., newspaper), and speech clubs and teams (e.g., forensics, debate). For each organization, students were asked to rate how active they were in that organization on a four-point scale, ranging from "not at all active" to "very active." Civic participation is operationalized as

the total amount of organizational activity that each student engaged in (the sum of the seven four-point scales).

Control Variables

Based on data collected in the first C-SNIP survey, the analysis controls for how active each subject was in voluntary civic organizations during high school, before they engaged in civic talk in college (i.e., a lag of the dependent variable). This allows for an assessment of the effect of civic talk on civic participation, given the subject's *a priori* baseline predilection to participate in civic activities. To increase the precision of the analysis, the analysis also uses fixed effects to account for how the dormitory assignment process was executed (i.e., a dichotomous indicator variable for each dormitory).

METHOD: DATA PREPROCESSING

As is the case with any study that is not conducted in a laboratory, determining which C-SNIP subjects would and would not be exposed to the civic talk treatment was not under complete control. While the process of assigning subjects to their dormitory roommates was random, each subject was allowed to discuss politics and current events with their roommate as much or as little as he or she wished. Because of this deviation from random assignment, exogenous factors could be affecting both the

treatment (the amount of civic talk each student engaged in) and the outcome of interest (civic participation) (e.g., Dunning 2008; Achen 1986).[5]

A seemingly logical way to address this feature of the data would be to add offending exogenous factors to the analysis as control variables. Unfortunately, this approach is not a sufficient solution; including variables in a regression model that are strongly related to both the treatment and the outcome can significantly decrease the precision of the analysis (e.g., Achen 1986). This feature of the C-SNIP study, however, can be accounted for by preprocessing the data with a "matching" procedure (Ho et al. 2007a and 2007b). The intent of matching is to make the C-SNIP data set appear as if it were generated through a perfectly-controlled laboratory experiment. This is done by finding subjects who were very similar to one another before they started interacting with their college roommate, save the fact that one of them engaged in civic talk with their roommate and the other did not. By comparing the participatory habits of nearly identical subjects who did and did not engage in civic talk, we can be confident that any observed difference in civic participation is the consequence of civic talk, and is unrelated to the factors that the C-SNIP subjects were matched on.

Unlike existing cross-sectional surveys, the C-SNIP panel data set is tailor-made for matching because subjects were surveyed about their characteristics before and after they engaged in civic talk with their college roommate. In total, 109 pretreatment

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[5] For example, students who were civically active before they came to college were more likely to discuss politics and current events with their new roommates ($r = .17$, $p < .01$). Prior experience participating in civic activities also increased the likelihood of subjects choosing to participate in civic activities in college ($r = .37$, $p < .01$).

variables were used in the matching procedure. Matching on a large number of pre-treatment covariates increases the validity of the final analysis, since it is more likely that all relevant factors are accounted for in the data set (Ho et al. 2007b). This set of variables included measures of civic participation in high school, measures of why each student ranked the dormitories before being placed, indicators of which dorm each subject was eventually placed into, pre-treatment information on the subject's roommate and dormitory, demographics, measures of home life before coming to college, and civically-relevant attitudes and characteristics.[6] More detail on how this procedure was conducted is included in the appendix.

RESULTS

Civic Talk Has a Lasting Effect on Participation in Voluntary Civic Organizations

To what extent does civic talk influence how active a person chooses to be in civil society? I start to answer this question by examining how active subjects were in voluntary civic organizations during their first year of college. The results of a

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[6] Matching is less precise than a controlled experiment because the procedure does not account for unobserved differences between treated and untreated subjects (e.g., Arceneaux et al. 2006). However, given the extensive set of pre-treatment covariates that were used in the matching procedure, it is difficult to think of any meaningful unobserved factors that are not accounted for in the analysis. Given that a true experiment is an extremely difficult (if not impossible) research design to execute for this research question, matching (in concert with quasi-random assignment to treatment and controlling for a lag of the dependent variable) is arguably a next best alternative.

multivariate regression analysis of participation in voluntary civic organizations are

presented in Table 1.

[TABLE 1 ABOUT HERE]

In the first column of Table 1 the data show that subjects who reported engaging

in civic talk when conversing with their roommate were more likely to participate in

voluntary civic organizations during their first year of college. All other factors equal,

participation for treated subjects was 38 percent higher than that of untreated subjects

(an increase from 2.1 to 2.9 on the voluntary organization participation scale).[7] Similar

results appear in the second column. Here, instead of estimating the immediate

influence of civic talk on civic participation, the effect of the treatment is estimated three

years after the subject engaged in civic talk. Regardless of this multi-year gap between

treatment and outcome, the influence of civic talk is still statistically significant and

substantively meaningful. All else equal, exposure to civic talk during the 2003-2004

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[7] Substantive interpretations of regression coefficients were calculated with the "setx"

and "sim" procedures in the Zelig package for R (Imai et al. 2007a and b). The

estimated treatment effect in the unmatched data set is a 45 percent increase in

participation. This suggests that I would have slightly overestimated the influence of

civic talk if I had not matched the data.

academic school year increased civic participation by 20 percent in 2007 (an increase

from 3.0 to 3.6 on the voluntary organization participation scale).[8]

[FIGURE 1 ABOUT HERE]

While the results in Table 1 show that the influence of civic talk is lasting, they

also suggest that the effect might diminish over time. For example, the treatment effect

estimated from the matched data set drops from a 38 percent increase in participation in

voluntary organizations in 2004 to a 20 percent increase in 2007. However, Figure 1

shows that this difference is not statistically significant. The light-colored bars in this

figure represent the estimated increase in civic participation due to engaging in civic

talk. While the estimated effect declines between 2004 and 2007, the confidence

intervals around the 2004 and 2007 estimates overlap (represented by the vertical lines

running through each bar). This shows that for the average subject, the positive impact

of civic talk on participation in voluntary civic organizations did not decrease even after

the passage of three years.

In order to assess the magnitude of the effect that civic talk has on participation

in voluntary civic organizations, Figure 1 also compares the effect of civic talk

(represented by the light-colored bars) to the effect of having participated in voluntary

civic organizations in high school before engaging in civic talk in college (represented by

the darker-colored bars). These results illustrate that while the effect of civic talk is

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[8] The treatment effect in the unmatched data set is estimated to be a 29 percent

increase in participation.

statistically significant and lasting, the effect is not as substantively large as that of prior participatory experience. In both 2004 and 2007, the effect of engaging in civic talk is less than the effect of having above average prior participatory experience.

Why Does the Effect Last?

What explains the lasting effect of civic talk on civic participation? It was hypothesized that the effect of civic talk would last into the future by having an impact on patterns of civic participation in the present. In other words, causing an initial increase in civic participation is the mechanism by which the positive effect of civic talk on civic participation lasts into the future.

[TABLE 2 ABOUT HERE]

Table 2 offers two tests of this hypothesis. In Table 1, the lasting effect of civic talk on civic participation was estimated while controlling for the amount of civic participation subjects engaged in during high school before engaging in civic talk with their randomly-assigned college roommate. In the first column of Table 2, the analysis now also accounts for the amount of civic activity subjects engaged in during their first year of college (the dependent variable in the first column of Table 1). The goal of adding this variable to the analysis is to "explain away" the peer effect. If the boost in civic participation caused by civic talk during one's first year in college explains why the effect of civic talk lasts into one's fourth year in college, the peer influence variable should no longer be statistically significant after a measure of the subject's level of civic

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participation during his or her first year in college is added to the model. This will only

occur if participation during one's first year in college accounts for the variance in civic

participation during one's fourth year in college that was originally accounted for by civic

talk. The results in the first column of Table 2 show that this is the case. Once civic

participation during one's first year in college is added to the analysis, the civic talk

coefficient is no longer statistically significant.

A second examination of why the effect of civic talk lasts appears in the second

column of Table 2. These results are the final outcome of a two stage least squares

analysis of civic participation during one's fourth year in college. The first stage of the

analysis uses civic talk to estimate the amount of civic activity that each subject

participated in during his or her first year in college (see the first column of Table 1). The

second stage of the analysis, presented in the second column of Table 2, uses the

estimate of civic participation during one's first year in college from the first stage of the

model to estimate civic participation during one's fourth year in college. The results of

this analysis show that civic participation during one's first year in college is the only

variable in the model that can account for civic participation during one's fourth year in

college. What these results show, as expected, is that civic talk has an immediate effect

on how civically active an individual chooses to be. This initial effect on an individual's

patterns of behavior then has a direct effect on patterns of behavior in the future.

DISCUSSION AND CONCLUSION

Of the myriad explanations that exist for why individuals choose to participate in

the processes of democratic governance, no one theory has a monopoly on the truth.

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However, one thing we do know is that the people in our immediate social environment have a place on this list of explanations. Human beings may not be Aristotelian political animals, but we are social animals. We experience politics with and through our peers.

Against this logical presumption, research on civic participation has been dominated by theories that focus on individual-level characteristics and largely ignore the role of social context. A number of studies do assert that an individual's social network of peers have an impact on whether he or she decides to participate in civic activities. However, this argument has been heavily criticized because researchers have been unable to accurately measure the causal relationship between peer influence and individual-level civic participation. As such, the question of how much influence civic talk has on participatory democracy has remained largely unresolved.

This paper has addressed this important methodological and substantive question with new evidence. Using panel data, this paper shows that civic talk can have a causal influence on how citizens participate in the processes of self governance. This is the case even after accounting for how civically active subjects were before they engaged in civic talk, arguably one of the best measures of an individual's predilection to participate in civic activities. Moreover, the effect of civic talk is substantively meaningful because it is lasting. The evidence shows that subjects were still more likely to participate in voluntary civic organizations three years after they engaged in discussions of politics and current events. Further analysis shows that the initial boost in civic participation caused by civic talk is the mechanism by which the effect of civic talk lasts into the future. In other words, all else equal, being engaging in civic talk early in

their college careers placed the subjects in this study on a self-reinforcing path of higher levels of civic participation compared to those who did not engage in civic talk.

Despite the significant and meaningful effect that peers have on civic participation, however, the results of this study do not suggest that sociological explanations of civic participation should supplant individual-level explanations. To the contrary, the estimated effect of civic talk on civic participation is less than that of having prior participatory experience. As such, the results presented in this analysis show that in order to more comprehensively understand how contemporary participatory democracy functions, both social- and individual-level antecedents of civic participation need to be considered. Neither factor on its own is a sufficient explanation for why an individual chooses to participate in civil society.

While these results add to our understanding of participatory democracy, further research is needed in order to understand the relationship between civic talk and civic participation. Specifically, in thinking about future directions for research on this topic, the costs and benefits associated with the evidence presented in this paper should be considered. The data utilized in this study come from one group of college students at one university. As such these results should be verified in other contexts. This said, it is important to underscore that the quasi-experimental design of this panel study, when combined with the matching data preprocessing procedure, allows for more accurate measurement of the relationship between civic talk and civic participation. Future studies should therefore make further use of methods that allow for more effective study of complex causal relationships, such as experiments (e.g., Nickerson 2008), participant observation (e.g., Eliasoph 1998; Harris-Lacewell 2004; Walsh 2004), focus groups

(e.g., Hibbing and Theiss-Morse 1995), and agent-based modeling (e.g., Johnson and Huckfeldt, 2004).

In considering future venues in which to study civic talk, it is also worth noting that the case examined in this paper—college—is a useful setting in which to study civic talk because it represents a "crucial" case of peer influence (e.g., Eckstein 1975; Gerring 2001). College is a crucial case because it is a "most likely" case of peer influence (Gerring 2001). When a young person leaves his or her family to begin life as an independent adult, peers are likely to be become highly influential in his or her life (Beck 1977; Campbell et al. 1960). Otherwise stated, college is a crucial case to study because if we do not find evidence of a causal relationship between civic talk and civic participation in this environment, we are less likely to find it in other contexts where peers may be less influential. An individual's first year of college is also a crucial case because it is a "paradigmatic" case of peer influence (Gerring 2001). The paradigm case is one that illustrates the theoretical importance of the phenomena being studied. Collegiate peers define what peer influence is because peers are such a central facet of the individual's life as he or she begins adulthood. Moreover, collegiate peers illustrate the importance of peer influence because they are likely to influence the patterns of civic participation that young people carry with them through the rest of their lives.

In this spirit, I conclude by noting that there is currently a great amount of concern among academics over the strength of participatory democracy, largely because of declines in civic participation that have occurred over the past half of a century (e.g., Putnam 2000; but, also see McDonald and Popkin 2001). As such, it is incumbent upon our field to continue to examine why individuals choose to participate in

the processes of democratic governance. This paper shows that social-level factors

such as peer networks deserve a meaningful place in this agenda.

APPENDIX

Descriptive Statistics and Survey Questions

[TABLE A1 ABOUT HERE]

Participation in Voluntary Civic Organizations

"How active were you in the following types of organizations [during high school / during your first year here at the University of Wisconsin / at the University of Wisconsin this year]: very active, somewhat active, not very active, or not at all active?"

- ➢ "Student government (for example, [student council/ASM[9]], etc.)"

- ➢ "Partisan political groups (for example, [Young/College] Republicans or Democrats, etc.)"

- ➢ "Organizations that take stands on political issues or current events (for example, a group interested in protecting the environment, etc.)"

- ➢ "Charitable or voluntary service organizations (that is, working in some way to help others without pay and not for course credit)"

- ➢ "Leadership training or civic organizations (for example, community service organizations, etc.)"

- ➢ "Student publications (for example, yearbook, newspaper, etc.)"

- ➢ "Forensics, debate, or other speech clubs or teams"

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[9] ASM (The Associated Students of Madison) is the student government body at the University of Wisconsin.

Civic Talk

 "When you talk with your roommate, how often do you discuss politics and current events: often, sometimes, rarely, or never?"

The Collegiate Social Network Interaction Project Panel Survey (C-SNIP)

The population surveyed was all 4358 first year students at the University of Wisconsin-Madison living in university housing during the 2003-2004 academic year (eighty-two percent of the 5322 first year students who entered the University in 2003). Study participants initially completed two questionnaires over the Internet during the 2003-2004 academic year: one at the beginning of the year (October-November, 2003), and a second at the end of the year (March-April, 2004). A third questionnaire was administered between April and May of 2007. Lack of access to the Internet can bias survey response rates (Best et al. 2001; Couper 2000; Zhang 2000). This was not an issue in this study because subjects had free access to the Internet.

During each wave of the study, three attempts were made by email to recruit the sample to fill out a questionnaire. Email addresses were obtained from the University of Wisconsin-Madison Office of the Registrar and from publicly accessible student directories. Unique login names and passwords were assigned to each respondent in these emails in order to prevent subjects from completing more than one questionnaire. To increase participation from a broad cross-section of the population under study, each student who completed a questionnaire was also entered into a prize drawing for one of fifty $20 prizes. The recruitment emails also were worded to make the prospect of participating in the study appealing to a wide audience.

In total, twenty-three percent of the eligible population of 4358 first year students living in university housing fully completed both questionnaires (N = 999). Just under twenty-four percent of the eligible population completed at least some portion of both questionnaires (N = 1044). Of the 1044 students who at least partially completed both C-SNIP questionnaires in 2003-2004, 53 percent of subjects (N = 557) fully completed, and over 57 percent of subjects (N = 598) at least partially completed, the 2007 questionnaire. These response rate figures exclude subjects who were eliminated from the analysis to reduce bias: subjects who moved from the dormitory room they were initially assigned to, subjects who chose their own roommate, and subjects who had no roommates. To account for missing data, the data set was preprocessed using the Amelia II multiple imputation package for R (Honaker et al. 2007; see also King et al. 2001). The data were imputed 5 times. To aid in the tolerance level was set to .001, and a ridge prior of five percent of the cases in the data set was used. All dichotomous variables were imputed using the nominal transformation; no other transformations were used.

While imputation compensates for missing data, it is still important to address the issue of response rate. While the C-SNIP study recruitment procedures were designed to attract a broad cross-section of participants from the population, it could be the case that certain types of individuals, say those who are more interested in the subject of the study, choose to participate at higher rates. For example, after participating in the first survey, each respondent knows that the subsequent two waves of the study will address politics and current events. This might prompt individuals who are more interested and active in these matters to complete the study. It this is the case, the civic

talk effects presented in this book could be inflated (i.e., if those who are interested in the study are more civically active and more likely to engage in civic talk than their non-respondent counterparts).

[TABLE A2 ABOUT HERE]

Table A2 offers an empirical test of this proposition by examining the characteristics of respondents and non-respondents in each of the three waves of the C-SNIP panel study. The top portion of the table examines the demographic characteristics of respondents and non-respondents. Fortunately these three measures were available for the entire population that was surveyed, and as such they can be used to assess response bias in all three waves of the study. These data show that when compared to non-respondents, respondents scored higher on their ACT college entrance exam, were more likely to be female, and were less likely to belong to a racial or ethnic minority group. However, while these differences are statistically significant, in the case of ACT score and race the substantive differences between respondents and non-respondents is small. Moreover, all three these demographic characteristics were included in the matching data preprocessing procedure. Consequently, any differences between respondents and non-respondents on these variables are automatically accounted for in the analysis. The bottom portion of Table A2 shows survey responses provided by respondents in previous waves of the C-SNIP study to gauge differences between respondents and non-respondents in subsequent waves of the study. No

differences are found between these two sub-sets of the population in either Wave 2 or Wave 3 of the study.

Matching Procedure

In this paper, a "full matching" data preprocessing procedure was used (Gu and Rosenbaum 1993; Hansen 2004; Ho et al. 2007a; Rosenbaum 1991).[10] Full matching is a hybrid of "subclassification" and "optimal matching" (Hansen 2004; Ho et al. 2007a). Subclassification involved matching multiple untreated subjects to each treated subject. Each untreated subject is only matched to a single treated subject (i.e., matching without replacement). Each subclass was created in order to find a set of subjects who did not engage in civic talk whose distribution of pre-treatment characteristics best approximates the pretreatment characteristics of a subject who engaged in civic talk. More specifically, these subclasses were created by matching subjects based on the closeness of their propensity scores (Hansen 2004; Ho et al. 2007b). This score represents the *a priori* propensity that each subject had to engage in civic talk before they engaged in civic talk, based on the pretreatment covariates included in the matching procedure.

In the full matching procedure the method used for creating subclasses is "optimal." Under an optimal matching process, after an untreated subject is matched to a treated subject, that untreated subject may eventually be moved to a different

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[10] The procedure was conducted using the using the MatchIt package for R (Ho et al. 2004; see also Ho et al. 2007a and 2007b), which makes use of the "optmatch" package designed by Hansen (2004).

subclass in order to improve the final outcome of the matching process (i.e., to make each subclass as similar to the treated subject as possible). The alternative to the optimal approach is a "greedy" approach, where once an untreated subject is matched to a treated subject it is never moved to another subclass. Optimal approaches have been shown to produce superior matches when compared to greedy methods (Hansen 2004; Ho et al. 2007a).

The full matching process was used for three reasons. First, a large number of pretreatment covariates (many with large continuous or ordinal scales) were used in the matching procedure. This makes finding only a single suitable control case to match to each treated case extremely difficult, if not impossible. Second, in order to classify subjects as either "treated" or "untreated," the civic talk scale ranging from "never" to "often" was dichotomized; subjects scoring above the mean were considered to have been treated. This resulted in the classification of 490 treated subjects and 544 untreated subjects. When the number of treated and untreated cases is roughly equal, as in this case, it is difficult to find a single control case to match to each treated case. Finally, full matching allows each case in the original data set to be retained in the matched data set (i.e., cases are not dropped from the original data set to create the matched date set), thereby increasing the precision of the analysis by preserving every possible degree of freedom.

[TABLE A3 ABOUT HERE]

The results presented in Table A3 offer examples of how the matching procedure increased the similarity between subjects who did and did not engage in civic talk. The first row in the table shows the overall improvement in similarity between treated and untreated subjects, as measured by the subject's estimated propensity to engage in civic talk (see the appendix for a discussion of propensity scores). Overall, the difference between subjects who did and did not engage in civic talk with their roommates is 300 times smaller in the matched data set compared to the unmatched data set. The remaining rows of the table show that the matching procedure reduced the difference between treated and untreated subjects on factors that correlate with whether an individual was likely to engage in civic talk with their roommate and participate in civic activities. As such, we can be confident that these and the other variables used in the matching procedure are not causing the relationship documented in this paper between civic talk and civic participation.

REFERENCES

Achen, Christopher. 1986. *The Statistical Analysis of Quasi-Experiments*. Berkeley, CA:

University of California Press.

Arceneaux, Kevin, Alan S.Gerber, and Donald P. Green. 2006. "Comparing

Experimental and Matching Methods Using a Large-Scale Voter Mobilization

Experiment." *Political Analysis* 14(1): 37-62.

Alimadhi, Ferdinand, Ying Lu, and Elena Villalon. 2007. "twosls: Two Stage Least

Squares." In Kosuke Imai, Gary King, and Olivia Lau, "Zelig: Everyone's

Statistical Software." http://gking.harvard.edu/zelig.

Barabas, Jason. 2004. "How Deliberation Affects Policy Opinions." *American Political

Science Review* 98(4):687-701.

Barker, David C. 1998. "Rush to Action: Political Talk Radio and Health Care

(un)Reform." *Political Communication* 15(1):83-97.

Beck, Paul Allen. 1977. "The Role of Agents in Political Socialization." *The Handbook

of Political Socialization*, ed. Stanley Allen Renshon. New York, NY: Free Press.

Best, Samuel J., Brian Krueger, Clark Hubbard, and Andrew Smith. 2001. "An

Assessment of the Generalizability of Internet Surveys." *Social Science

Computer Review* 19: 131-145.

Campbell, David E. 2006. *Why We Vote: How School and Communities Shape Our

Civic Life*. Princeton, NJ: Princeton University Press.

Campbell, David E. and Christina Wolbrecht. 2006. "See Jane Run: Women

Politicians as Role Models for Adolescents." *Journal of Politics* 68(2).

Collier, Ruth Berins, and David Collier. 1991. *Shaping the Political Arena: Critical Junctures, the Labor Movement, and Regime Dynamics in Latin America*. Princeton, NJ: Princeton University Press.

Couper, Mick P. 2000. "Web Surveys: A Review of Issues and Approaches." *Public Opinion Quarterly* 64: 464-494.

Dawes, Robyn M., Alphons J.C. van de Kragt, and John M. Orbell. 1990. "Cooperation for the Benefit of Us—Not Me, or My Conscience." In *Beyond Self-Interest*, ed. Jane Mansbridge. Chicago, IL: University of Chicago Press.

Dawson, Richard E., Kenneth Prewitt, and Karen S. Dawson. 1977. *Political Socialization, Second Edition*. Boston, MA: Little, Brown and Co.

Delli Carpini, Michael X., Fay Lomax Cook, and Lawrence R. Jacobs. 2004. "Public Deliberation, Discursive Participation, and Citizen Engagement: A Review of the Empirical Literature." *Annual Review of Political Science* 7: 315-344.

Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York, NY: Harper and Row.

Dunning, Thad. 2008. "Improving Causal Inference: Strengths and Limitations of Natural Experiments." *Political Research Quarterly* 61(2): 282-293.

Eckstein, Harry. 1975. "Case Studies and Theory in Political Science." In Fred I. Greenstein and Nelson W. Polsby, Handbook of Political Science, Scope and Theory. Reading, MA: Addison-Wesley.

Fowler, James. 2006. "Habitual Voting and Behavioral Turnout." *Journal of Politics* 68: 335-344.

Gerber, Alan, Donald Green, and Ron Shachar. 2003. "Voting may be habit-forming: Evidence from a randomized field experiment." *American Journal of Political Science* 47:540-550.

Gerring, John. 2001. *Social Science Methodology : A Criterial Framework*. Cambridge, England: Cambridge University Press.

Gu, X., and Rosenbaum, P. 1993. "Comparison of Multivariate Matching Methods: Structures, Distances, and Algorithms," *Journal of Computational and Graphical Statistics* 2: 405–420.

Hansen, Ben B. 2004. "Full Matching in an Observational Study of Coaching for the SAT." *Journal of the American Statistical Association* 99: 609-618.

Harvard University Institute of Politics. 2000. Attitudes Toward Politics and Public Service: A National Survey of College Undergraduates (Top Line Data From the 2000 National Survey of College Undergraduates). Available at http://www.iop.harvard.edu/pdfs/survey/2000_topline.pdf (accessed on 06/27/2007).

Ho, Daniel, Kosuke Imai, Gary King, and Elizabeth Stuart. 2004. "Matchit: Matching as Nonparametric Preprocessing for Parametric Causal Inference." http://gking.harvard.edu/matchit/.

Ho, Daniel, Kosuke Imai, Gary King, and Elizabeth Stuart. 2007a. "Matchit: Matching as Nonparametric Preprocessing for Parametric Causal Inference (Technical Manual)." http://gking.harvard.edu/matchit/.

Ho, Daniel, Kosuke Imai, Gary King, and Elizabeth Stuart. 2007b. "Matching

    as Nonparametric Preprocessing for Reducing Model Dependence in Parametric

    Causal Inference." *Political Analysis 15*(3): 199-236.

Honaker, James, Gary King, and Matthew Blackwell. 2007. "Amelia II: A Program for

    Missing Data." http://gking.harvard.edu/amelia/.

Huckfeldt, Robert, and John Sprague. 1991. "Discussant Effects on Vote Choice:

    Intimacy, Structure, and Interdependence." *The Journal of Politics* 53: 122-158.

Huckfeldt, Robert, and John Sprague. 1995. *Citizens, Politics, and Social

    Communication: Information and Influence in an Election Campaign*.

    Cambridge, England: Cambridge University.

Huckfeldt, Robert, Paul Allen Beck, Russell J. Dalton, and Jeffrey Levine. 1995.

    "Political Environments, Cohesive Social Groups, and the Communication of

    Public Opinion." *American Journal of Political Science* 39: 1025-1054.

Imai, Kosuke, Gary King, and Olivia Lau. 2007a. "Zelig: Everyone's Statistical

    Software." http://GKing.harvard.edu/zelig.

Imai, Kosuke, Gary King, and Olivia Lau. 2007b. "Toward A Common Framework

    for Statistical Analysis and Development." Unpublished manuscript available at

    http://gking.harvard.edu/files/abs/z-abs.shtml.

Imai, Kosuke, Gary King, and Olivia Lau. 2007c. "ls: Least Squares Regression

    for Continuous Dependent Variables." In Kosuke Imai, Gary King, and Olivia

    Lau, "Zelig: Everyone's Statistical Software." http://gking.harvard.edu/zelig.

Imai, Kosuke, Gary King, and Olivia Lau. 2007d. "logit: Logistic Regression for

Dichotomous Dependent Variables." In Kosuke Imai, Gary King, and Olivia

Lau, "Zelig: Everyone's Statistical Software." http://gking.harvard.edu/zelig.

Jennings, M, Kent and Richard G. Niemi. 1981. *Generations and Politics: A Panel Study

of Young Adults and Their Parents*. Princeton, NJ: Princeton University Press.

Kenny, Christopher. 1992. "Political Participation and Effects for the Social

Environment." *American Journal of Political Science* 36: 259-267.

Kenny, Christopher. 1994. "The Microenvironment of Attitude Change." *The

Journal of Politics* 56 (3): 715-728.

Klofstad, Casey A. 2007. "Talk Leads to Recruitment: How Discussions About Politics

and Current Events Increase Civic Participation." *Political Research Quarterly*

60(2): 180-191.

King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. 2001. Analyzing

Incomplete Political Science Data: An Alternative Algorithm for Multiple

Imputation, *American Political Science Review, 95*(1): 49-69.

Lake, R.L., and Robert Huckfeldt. 1998. "Social Capital, Social Networks, and

Political Participation." *Political Psychology* 19: 567-583.

Laver, Michael. 2005. "Book Review of *The Social Logic of Politics*." *Perspectives

on Politics* 3(4): 933-934.

Lazarsfeld, Paul F., Bernard Berelson, and Hazel Gaudet. 1968. *The People's

Choice: How the Voter Makes Up His Mind in a Presidential Election*, 3rd

Edition. New York, NY: Columbia University.

Levine, Jeffrey, 2002. "Choosing Alone? A Return to the Network Basis of

    Political Choice." *Unpublished Manuscript.*

Mendelberg, Tali. 2002. "The Deliberative Citizen: Theory and Evidence." In

    Political Decision Making, Deliberation, and Participation, eds. M.X. Delli Carpini,

    L.Huddy, R. Shapiro. Greenwich, CT: JAI Press.

McClurg, Scott D. 2003. "Social Networks and Political Participation: The Role of

    Social Interaction in Explaining Political Participation." *Political Research*

    Quarterly 56(4): 449-64.

McClurg, Scott D. 2004. "Indirect Mobilization: The Social Consequences of

    Party Contacts in an Election Campaign." *American Politics Research*

    32(4): 406-43.

McDonald, Michael, and Samuel Popkin. 2001. "The myth of the vanishing voter."

    American Political Science Review 95: 963-974.

Mutz, Diana C. 2002. "The Consequences of Cross-Cutting Networks for Political

    Participation." *American Journal of Political Science* 46 (4): 838-855.

Nickerson, David W. 2008 "Is Voting Contagious?: Evidence from Two Fields

    Experiments." *American Political Science Review*: 102: 49-57.

Page, Benjamin, and Robert Shapiro. 1992. *The Rational Public*. Chicago, IL:

    University of Chicago Press.

Pierson, Paul. 2004. *Politics in Time: History, Institutions, and Social Analysis*.

    Princeton, NJ: Princeton University Press.

Pierson, Paul. 2000. "Increasing Returns, Path Dependence, and the Study of Politics."

    American Political Science Review 94: 251-267.

Plutzer, Eric. 2002. "Becoming a Habitual Voter: Inertia, Resources, and Growth in

    Young Adulthood." *American Political Science Review* 96(1): 41-56.

Putnam, Robert. 2000. *Bowling Alone: The Collapse and Revival of American*

    Community. New York, NY: Simon and Schuster.

Rosenbaum, P. 1991. "A Characterization of Optimal Designs for Observational

    Studies," *Journal of the Royal Statistical Society 53*: 597–610.

Sally, David. 1995. "Conversation and Cooperation in Social Dilemmas: A Meta-

    Analysis of Experiments from 1958 to 1992." *Rationality and Society* 7(1):58-92.

Silbiger, Sara L. 1977. "Peers and Political Socialization." *The Handbook of*

    Political Socialization, ed. Stanley Allen Renshon. New York, NY: Free Press.

Stimson, James A.. 1990. "A Macro Theory of Information Flow." In *Information and*

    Democratic Processes, eds. James Kuklinski and John Ferejohn. University of

    Illinois Press.

Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and*

    Equality. Cambridge, MA: Harvard University Press.

Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. Cambridge, England:

    Cambridge University Press.

Zhang, Yin. 2000. "Using the Internet for Survey Research: A Case Study."

    Journal of the American Society for Information Science 51: 57-68.

Zuckerman, Alan S. 2004. "Returning to the Social Logic of Politics." In *The*

    Social Logic of Politics: Personal Networks as Contexts for Political

    Behavior, ed. Alan S. Zuckerman. Philadelphia, PA: Temple.

TABLES AND FIGURES

Table 1: The Effect of Civic Talk on Civic Participation (Regression Analysis)

	1st Year in College	4th Year in College
Peer Influence		
Civic Talk Among Roommates	.81** (.30)	.62* (.31)
Pre-Treatment Level of Civic Participation		
Participation in Voluntary Civic Organizations in High School	.22*** (.03)	.17*** (.03)
Treatment Assignment Controls		
Dormitory 1	-.32 (2.38)	-1.27 (2.49)
Dormitory 2	-1.04 (1.88)	-.77 (2.52)
Dormitory 3	-.30 (1.83)	-1.03 (2.41)
Dormitory 4	-1.66 (1.86)	-.19 (2.14)
Dormitory 5	-1.44 (1.80)	-.32 (1.99)
Dormitory 6	-.88 (1.73)	-.87 (2.15)
Dormitory 7	-.14 (1.72)	-.91 (2.06)
Dormitory 8	-.79 (1.75)	-.19 (2.04)
Dormitory 9	-.87 (1.71)	-.58 (1.97)
Dormitory 10	-1.20 (1.77)	-.48 (2.13)
Dormitory 11	-1.22 (1.90)	-.41 (2.10)
Dormitory 12	-1.60 (1.75)	-1.07 (2.02)
Dormitory 13	-2.44 (9.40)	-1.23 (8.57)
Dormitory 14	-1.44 (1.72)	-.29 (2.04)
Dormitory 15	-1.51 (1.73)	-.56 (2.02)
Constant	1.67 (1.76)	2.50 (2.16)
Adjusted R^2	.13	.09
N	1044	1044

Source: Collegiate Social Network Interaction Project Panel Study

Model Type: Ordinary Least Squares (Imai et al. 2007c)

*p ≤ .10, **p ≤ .05, ***p ≤ .01 (standard errors in parentheses)

Figure 1: Comparing the Effects of Civic Talk and Past Participation on Civic Participation

Notes: The line on each bar represents the 95 percent confidence interval about the estimate. Figures are based on the regression analysis presented in Table 2. The civic talk first difference is calculated between treated and untreated subjects. The past participation first difference is calculated by comparing the expected levels of participation for subjects with average levels of prior experience to those with the maximum level of prior experience.

Table 2: Explaining the Lasting Effect of Civic Talk on Civic Participation (Regression Analysis)

	One-Stage Model[a]	Two-Stage Model[b]
Peer Influence		
Civic Talk Among Roommates	.33 (.31)	---
Pre-Treatment Level of Civic Participation		
Participation in Voluntary Civic Organizations in High School	.09** (.04)	-.04 (.08)
Level of Civic Participation Initially After Treatment		
Participation in Voluntary Civic Organizations During 1st Year of College	.36*** (.04)	.94*** (.28)
Treatment Assignment Controls		
Dormitory 1	-1.14 (2.35)	-2.36 (2.15)
Dormitory 2	-.38 (2.19)	-1.20 (1.48)
Dormitory 3	-.91 (2.13)	-1.71 (1.45)
Dormitory 4	.43 (1.87)	.62 (1.62)
Dormitory 5	.20 (1.72)	-.17 (1.41)
Dormitory 6	-.55 (1.97)	-1.03 (1.42)
Dormitory 7	-.86 (1.88)	-1.63 (1.43)
Dormitory 8	.10 (1.80)	-.33 (1.36)
Dormitory 9	-.26 (1.75)	-.97 (1.46)
Dormitory 10	-.03 (1.87)	-.31 (1.41)
Dormitory 11	.04 (1.80)	-.12 (1.43)
Dormitory 12	-.48 (1.78)	-.83 (1.40)
Dormitory 13	-.34 (7.84)	.12 (2.56)
Dormitory 14	.24 (1.81)	.01 (1.39)
Dormitory 15	-.004 (1.80)	-.46 (1.40)
Constant	1.88 (1.91)	1.88 (1.41)
Adjusted R^2	.24	n/a
N	1044	1044

Source: Collegiate Social Network Interaction Project Panel Study

Model Type: [a]Ordinary Least Squares (Imai et al. 2007c); [b]Two Stage Least Squares (Alimadhi et al. 2007)

*p ≤ .10, **p ≤ .05, ***p ≤ .01 (standard errors in parentheses)

Table A1: Descriptive Statistics

	Min	Max	Mean	Std. Dev.	N
Civic Talk Among Roommates					
Full Scale	-.55	4.26	1.40	.89	1044
Dichotomous Treatment Coding	.00	1.00	.47	.50	1044
Civic Participation					
High School	-.76	19	6.60	3.96	1044
2004	-6.54	21	2.43	2.91	1044
2007	-4.98	14	3.20	2.66	1044
Dormitory Assignment					
Dormitory 1	.00	1.00	.002	.05	1044
Dormitory 2	.00	1.00	.06	.23	1044
Dormitory 3	.00	1.00	.09	.28	1044
Dormitory 4	.00	1.00	.02	.12	1044
Dormitory 5	.00	1.00	.08	.26	1044
Dormitory 6	.00	1.00	.11	.32	1044
Dormitory 7	.00	1.00	.10	.30	1044
Dormitory 8	.00	1.00	.10	.30	1044
Dormitory 9	.00	1.00	.07	.25	1044
Dormitory 10	.00	1.00	.07	.26	1044
Dormitory 11	.00	1.00	.04	.21	1044
Dormitory 12	.00	1.00	.06	.23	1044
Dormitory 13	.00	1.00	.001	.04	1044
Dormitory 14	.00	1.00	.11	.32	1044
Dormitory 15	.00	1.00	.09	.29	1044

Source: Collegiate Social Network Interaction Project Panel Study

Notes: The values presented in this table are means calculated from five imputed data sets. The minimums of some variables are negative because a range prior was not specified for ordinal variables.

Table A2: Characteristics of Respondents and Non-Respondents (Means)

	Survey 1 (High School)			Survey 2 (1st Year of College)			Survey 3 (4th Year of College)		
	Respondents		Non-Respondents	Respondents		Non-Respondents	Respondents		Non-Respondents
ACT Score	27.76	>	27.18	27.91	>	27.29	28.12	>	27.21
Gender (Female)	.60	>	.44	.62	>	.48	.60	>	.50
Race (Non-White)	.10	<	.13	.09	<	.12	.07	<	.13
Civic Participation: High School	---		---	6.48	=	6.41	6.47	=	6.43
Civic Participation: 1st Year of College	---		---	---		---	2.39	=	2.21

Source: Collegiate Social Network Interaction Project Panel Study

> or **<** indicates a significant difference of means at p <= .10, **=** indicates an insignificant difference of means at p < .10 (two-tailed t-tests)

Table A3: Similarity of Treated and Untreated Subjects

	Mean Difference Between Treated and Untreated Subjects		Correlations		
	Un-Matched Data	Matched Data	Civic Talk	Participation in Voluntary Civic Organizations	
Example Pre-Treatment Variables				*2004*	*2007*
Measure of Overall Similarity (Propensity to Engage in Civic Talk)	.95	.003	.27***	.31***	.40***
Participation in Voluntary Civic Organizations in High School	.21`	.04	.31***	.37***	.17***
Engaging in Civic Talk with Parents During High School	.51	.03	.22***	.18***	.25***

<u>Source</u>: Collegiate Social Network Interaction Project Panel Study

<u>Note</u>: The mean difference measure is in standard deviations.

***p ≤ .01