

1 Exposure to political discussion is associated with higher rates of political participation
2 over time

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This paper was prepared for the 2013 Annual Meeting of the Political Networks Section of the American Political Science Association. This is a work in progress. Please do not reference.

7 **Abstract**

8 Individuals who are exposed to conversations about politics are more politically active.
9 Analytical biases make it difficult to show evidence of a causal relationship between
10 discussion and participation. It is also uncertain how long the relationship between
11 discussion and participation lasts. Here both questions are addressed with panel data
12 collected from college undergraduates who were randomly assigned to their
13 dormitories. Random assignment to social context and measurement of behavior over
14 time allows for more precise measurement of the relationship between discussion and
15 participation. The data show that discussion is associated with higher levels of
16 participation, immediately and years into the future. This relationship is more consistent
17 over time in the case of conversations between roommates compared to conversations
18 within the wider context of the dormitory. The initial increase in participation associated
19 with discussion is a mechanism underlying the long-run relationship between discussion
20 and participation. These results highlight the importance of accounting for social
21 influences on political participation.

22 Research on political behavior is largely focused on the influence of individual
23 demographic characteristics such as socioeconomic status and partisan preferences.
24 Against this dominant paradigm, a growing literature examines the influence of social
25 context. People living under the same roof can influence one another to vote (Nickerson
26 2008), likely because individuals with intimate social ties influence each other's behavior
27 (Brady et al. 1999; Klobstad 2011; Mendelberg 2002; Putnam 2000). Individuals become
28 informed about politics through deliberation, the formal process of formulating
29 government policy with other citizens (Delli Carpini et al. 2004; Mendelberg 2002).
30 Interacting with fellow citizens causes individuals to have a greater sense of attachment
31 to community, which leads to more frequent civic participation (Putnam 2000).

32 Within this literature a number of works focus on the influence of informal political
33 discussion—ad hoc conversations as people go about their daily routine (Klobstad et al.
34 2009)—on political behavior. For example, research on political communication, opinion
35 formation, the mass media, and political socialization shows that civically engaged
36 individuals influence how we learn about politics because they provide the rest of us
37 with information about politics (Alwin et al. 1991; Barker 1998; Dawson et al. 1977;
38 Downs 1957; Lazarsfeld et al. 1968; Newcomb 1943; Newcomb et al. 1967; Silbiger
39 1977; Stimson 1990; Zaller 1992). More recently, research on political discussion
40 networks show that there is a strong correlation between talking about and participating
41 in politics. For a summary of this literature see Zuckerman (2004).

42 The growing literature on political discussion challenges the traditional
43 understanding of political behavior as an act anchored in individual-level characteristics.
44 In response, it is often criticized (Klobstad 2011; Laver 2005; Lazer et al. 2010). Of

45 particular concern is the possibility that the relationship between discussion and
46 participation is spurious due to analytical biases: (1) Rather than discussion leading to
47 participation, engaging in political participation causes one to talk about politics
48 (reciprocal causation). (2) Individuals who are more active in politics might choose to
49 associate with people who are interested in talking about politics (selection bias, or
50 homophily). (3) A factor that has yet to be accounted for, or that cannot be accounted
51 for, explains the relationship between discussion and participation (endogeneity, or
52 omitted variable bias).

53 A second shortcoming of the political discussion literature is that less attention
54 has been paid to the long-run influence of these conversations on political behavior.
55 One exception is Klobstad et al. (2013). This study made use of the 2008-2009
56 American National Election Studies Panel Survey (American National Election Studies
57 2009). The data show that individuals who were exposed to disagreeable conversations
58 about politics in September, 2008 were: less certain of their vote choice for president in
59 October, 2008; in some cases held weaker partisan and ideological preferences in
60 November, 2008; in some cases were less likely to consume news media in October,
61 2008; and in some cases were less likely to be interested in politics in November, 2008.
62 While this study leverages temporal separation of cause (disagreeable dialogue) and
63 effect (participation), and uses propensity score matching to make the results of the
64 analysis more analogous to those of a controlled experiment (Ho et al. 2007), causal
65 inferences are still uncertain in a purely observational study. Moreover, Klobstad and
66 colleagues only examined the influence of disagreeable discussion 1-2 months
67 afterward.

68 Another exception is Klobstad (2011, 2010). These studies examine individuals
69 who were randomly assigned to their freshman college dormitory roommates. Data
70 were collected from study participants at three points in time: the start of the freshman
71 year of college (2003), the end of the freshman year of college (2004), and the fourth
72 year of college (2007). These data show that the relationship between exposure to
73 political discussion with one's randomly-assigned roommate during the freshman year
74 of college correlates with more frequent participation in civically-oriented student groups
75 over the entire timespan of the study. These data also identify a mechanism underlying
76 this relationship: the initial increase in participation after being exposed to political
77 discussion. More specifically, knowing that political behavior is habitual (Brady et al.
78 1999; Fowler 2006; Gerber et al. 2003; Putnam 2000), the initial influence of these
79 discussions placed the discussant on a trajectory of increased civic participation over
80 time.

81 Klobstad's (2010, 2011) leveraging of random assignment to social condition, and
82 measurement of political behavior over time, is some of the most direct evidence of
83 social influence on civic-minded behavior to date. This design accounts for reciprocal
84 causation through temporal separation of cause (discussion) and effect (participation).
85 Random assignment accounts for selection bias because the individual did not choose
86 his or her discussant. As in a controlled laboratory experiment, random assignment also
87 increases the likelihood that the estimated relationship between discussion and
88 participation is not caused by any unobserved influence on participation. Additionally,
89 these studies are the only data on the relationship between political discussion and civic
90 participation over many years. However, a limitation of these studies is that they are

91 focused on participation in student groups, not political activities. Additionally, while
92 these studies cover a 4-year timespan, they are less representative of the wider public
93 because they examine individuals while they are in college.

94 Here I extend this research (Klofstad 2010, 2011) with a fourth wave of data
95 collected from the same panel. Today these participants are in their mid-twenties, full-
96 fledged adults years removed from their undergraduate college experience. These data
97 are used to examine the relationship between political discussion and political activity.
98 The data show that political discussion is correlated with participation in political
99 organizations and contacting elected officials, but not voter turnout. There is a more
100 consistent relationship over time between discussion among roommates and
101 participation compared to the relationship between political participation and political
102 conversations within the wider social context of the dormitory. As in Klofstad (2010,
103 2011), the data show that the initial positive influence of political discussion on political
104 participation is a mechanism underlying the long-run relationship between discussion
105 and participation.

106

107 **Hypotheses**

- 108 • Exposure to political discussion will correlate with higher rates of political
109 participation.
- 110 • There will be a more consistent relationship over time between political
111 discussion among roommates and political participation than with exposure to
112 political discussion within the larger, less socially intimate, dormitory social
113 network.

- 114 • The initial increase in civic participation associated with political discussion is a
115 mechanism by which the positive relationship between discussion and
116 participation lasts into the future.

117

118 **Data and Method**

119 Participants and procedures

120 A panel survey was administered to the 2003-2004 entering class of the University of
121 Wisconsin-Madison (N = 6574). Those who resided in university housing (estimated N =
122 4348 according to university records) were randomly assigned to their roommate
123 through a lottery. Participants ranked the 18 dormitories on campus in order of where
124 they desired to live. They were then sorted randomly to determine the order in which
125 they would be assigned to housing. If space was available in the participant's first
126 dormitory of choice he or she was placed there. If space was not available an attempt
127 was made to place the participant in his or her second dormitory of choice, and so on.
128 While the pre-assignment ranking procedure influenced which dormitory the participant
129 was assigned to, he or she was still randomly assigned to a roommate. Study
130 participants also had the option to select their own roommate (as reported in the 2003
131 wave of the panel study: 12.6% of students living in university housing, N = 550). These
132 participants are excluded from the analysis.

133 Participants were invited to participate in four surveys: (1) In 2003, as they first
134 arrived to on campus, participants reported how politically active they had been during
135 high school; (2) In 2004, at the end of the first year of college, participants reported how
136 politically active they had been during their first year of college, and whether they were

137 exposed to political discussion in their randomly-assigned dormitory; (3) In 2007, during
138 the fourth year of college, participants reported their current level of political
139 participation; (4) In 2012 participants reported their current level of political participation.
140 All four questionnaires were self-administered over the Internet. Unique login names
141 and passwords were assigned to each participant to prevent completion of more than
142 one questionnaire. Contact information for participants was obtained from the
143 university's Office of the Registrar, the university's alumni association, and publically-
144 accessible databases.

145 To encourage participation, in the 2003, 2004, and 2007 waves of the study
146 participants were recruited three times over email. Each participant who completed a
147 questionnaire was entered into a prize drawing for one of 50 \$20 prizes. In the 2012
148 wave participants were first contacted by mail, then three times by email, and a final
149 time by postcard. A pre-incentive of \$2 was included in the initial contact letter.

150 To incorporate random assignment in the analysis, the following participants
151 were excluded:

- 152 • N = 550 who selected their own roommate, as reported in the 2003 questionnaire
- 153 • N = 3599 who did not provide a response in the 2003 questionnaire to whether
154 they selected their own roommate
- 155 • N = 91 who moved from the room they were originally assigned, as reported in
156 the 2004 questionnaire
- 157 • N = 1073 who did not provide a response in the 2004 questionnaire to whether
158 they moved from the room they were originally assigned to

- 159 • N = 185 who moved out of university housing, as reported in the 2004
160 questionnaire
- 161 • N = 8 who's assigned dormitory could not be verified, based on responses to the
162 2003 questionnaire and university records

163 These criteria yield N = 1068 participants included in the analysis (24.6% of the
164 university's estimated of 4348 residents in university housing in 2003-2004).

165 The Appendix contains an analysis of American Association for Public Opinion
166 Research (AAPOR) cooperation rates and non-response bias. This analysis suggests
167 that the results in this paper are most applicable to individuals who are predisposed to
168 participate in politics. While less representative of the wider public, this population is
169 useful to study because they are a "most likely" case (Gerring 2001) of social influence.
170 These are the types of individuals who are more likely to be influenced by political
171 discussion (Klofstad 2009, 2011). Consequently, if we do not find evidence of social
172 influence in this population, we are not likely to find it in other contexts.

173

174 Measures

175 Political participation is measured in four ways based on responses to questions
176 included in all four waves of the panel study. Participants reported how active they were
177 in "partisan groups," and "organizations that take stands on political issues": "not at all,"
178 "not very," "somewhat," or "very." As many participants did not engage in these activities
179 (Table 1), these two variables are coded 0 = "not at all," and 1 = "not very," "somewhat,"
180 and "very." Rate of partisan participation did not vary between 2003 and 2004 ($t_{1001} =$
181 $0.15, p = .88$), though it did increase significantly between 2004 and 2007 ($t_{556} = -2.88, p$

182 < .01), and again between 2007 and 2012 ($t_{344} = -4.89, p < .01$). Rate of participation in
183 groups that take stands did not vary between 2003 and 2004 ($t_{809} = 1.25, p = .21$),
184 though it increased significantly between 2004 and 2007 ($t_{553} = -6.87, p < .01$), and
185 decreased significantly between 2007 and 2012 ($t_{345} = 3.52, p < .01$).

186

187

[TABLE 1 ABOUT HERE]

188

189 Participants also reported how frequently they contacted elected officials about
190 issues or problems they were concerned about: “never,” “once,” or “more than once.” As
191 many participants did not engage in this activity (Table 1), the variable is coded 0 =
192 “never,” 1 = “once,” and “more than once.” Contacting declined significantly between
193 2003 and 2004 ($t_{944} = 11.54, p = .01$), increased significantly between 2004 and 2007
194 ($t_{521} = -6.31, p < .01$), and increased again between 2007 and 2012 ($t_{345} = -2.56, p =$
195 $.01$).

196 Self-reported voter turnout in 2006 (collected in 2007), 2008 (collected in 2012),
197 2010 (collected in 2012), and 2012 (collected in 2012), is also examined. As seen in the
198 wider electorate, turnout declines among this population when the presidency is not on
199 the ballot (Table 1). In comparing the two off-cycle elections, turnout decreased
200 significantly between 2006 and 2010 ($t_{332} = 10.83, p < .01$). In comparing the two
201 presidential elections, turnout did not vary significantly between 2008 and 2012 ($t_{514} =$
202 $.51, p = .61$).

203 Exposure to political discussion is measured in two ways based on responses to
204 the second questionnaire of the panel study (2004). (1) The first is participants’ reports
205 of how often they discussed “politics and current events” with their randomly assigned

206 roommates over the course of the 2003-2004 academic year. (2) The second is
207 participants' reports of how often they did the same with their randomly assigned
208 "housemates." University of Wisconsin-Madison dormitories are divided into smaller
209 units called houses. Each house is comprised of 50 to 80 students. Houses are either a
210 single floor in a high-rise building, or stand-alone buildings adjacent to each other. The
211 house is the center of the larger dormitory community for the student. As dormitories
212 vary in size, both physically and in number of residents, the house is a more
213 comparable measure of social context across study participants.

214 Both discussion variables are scaled 0 = "never," 1 = "rarely," 2 = "sometimes,"
215 and 3 = "often." The mean level of discussion between roommates is 1.4, and 1.2
216 between housemates. This difference is statistically significant ($t_{929} = 5.09, p < .01$).
217 There is a positive correlation between discussion with roommates and housemates ($r =$
218 $.28, p < .01$). Individuals who were politically-active in high school were significantly
219 more likely to report being exposed to political discussion (Table 2). However, the
220 substantive differences in the average levels of discussion are relatively small.
221 Moreover, focus group evidence gathered from a separate cohort of University of
222 Wisconsin-Madison freshman who were also randomly assigned to dormitories shows
223 that political discussion only took place if both roommates were interested in doing so
224 (Klofstad 2011). More specifically, the level of discussion reported by study participants
225 is not simply a reflection of their own political engagement. In addition, as discussed
226 below, political participation during high school is accounted for in the analysis.

227

228

[TABLE 2 ABOUT HERE]

229 Method of analysis

230 The study participant is the unit of analysis. The data are treated as a within-
231 subjects design, where participants are compared to themselves on the extent to which
232 they change their political behavior over time in response to past exposure to political
233 discussion. The analysis is conducted with logistic regression models for dichotomous
234 dependent variables:

235

236 (1) $P_{t+1,i} = R_{t+1,i} + H_{t+1,i} + P_{t,i} + D_{t,i} + B_{t,i}$

237 (2) $P_{t+2,i} = R_{t+1,i} + H_{t+1,i} + P_{t,i} + D_{t,i} + B_{t,i}$

238 (3) $P_{t+3,i} = R_{t+1,i} + H_{t+1,i} + P_{t,i} + D_{t,i} + B_{t,i}$

239

240 Here, i indicates the study participant. t indicates the wave of the survey, such that t are
241 the data collected in 2003, $t+1$ are the data collected in 2004, $t+2$ are the data collected
242 in 2007, and $t+3$ are the data collected in 2012. $R_{t+1,i}$ and $H_{t+1,i}$ are political discussion
243 within the roommate dyad and the dormitory house respectively, as collected in the
244 2004 wave of the panel study. $P_{t,i}$ is the rate of political participation measured in the
245 2003 wave of the panel study (i.e., a lag of the dependent variables). This allows for a
246 more conservative estimate of the relationship between discussion and participation by
247 accounting for how active participants were before being exposed to political discussion.
248 Additionally, as political discussion and participation are correlated (Table 2), the lagged
249 dependent variable accounts for the participant's a priori predilection to initiate such
250 conversations with his or her randomly assigned roommate.

251 Participants included in the analysis resided in 18 dormitories. Fixed effects for
252 each dormitory with a large number of participants (at least 5% of participants, $N = 12$

253 dorms) are included in the analysis ($D_{t,i}$). This excludes 6 dormitories with 16 or fewer
254 residents who participated in the study. To account for cases where both roommates in
255 a dormitory room participated in the study (16.0%, N = 171), a variable indicating
256 whether both roommates participated in the study is also included in each analysis ($B_{t,i}$).
257 Including a lag of the dependent variable in the analysis, in tandem with random
258 assignment of study participants, makes other control variables unnecessary. Standard
259 errors are clustered by dormitory house (N = 100) in all analyses to account for the
260 possibility of common influence of house environment.

261 To test whether the initial increase in political participation via political discussion
262 is a mechanism by which the positive relationship between discussion and participation
263 lasts into the future, measures of participation gathered after the time of exposure are
264 added to the regression analysis:

265

$$266 \quad (2.1) \quad P_{t+2,i} = R_{t+1,i} + H_{t+1,i} + P_{t,i} + D_{t,i} + B_{t,i} + P_{t+1,i}$$

$$267 \quad (3.1) \quad P_{t+3,i} = R_{t+1,i} + H_{t+1,i} + P_{t,i} + D_{t,i} + B_{t,i} + P_{t+1,i} + P_{t+2,i}$$

268

269 If adding these variables reduces the magnitude and statistical significance of $R_{t+1,i}$ and
270 $H_{t+1,i}$ this indicates that past participation accounts for the variance in political
271 participation in the future that was originally accounted for by political discussions that
272 took place years prior.

273 All analyses were conducted using the Stata/MP statistical computing program
274 (version 11.2). As logit coefficients are not readily interpretable, their substantive
275 meaning was assessed using Clarify, a procedure that can estimate the predicted

276 probability of participating in a political activity based on the parameters of the
277 regression model (King et al. 2000; Tomz et al. 2003). More specifically, predicted
278 probabilities were generated by varying the value of political discussion while holding all
279 other variables in the model at their means. The predicted probabilities are presented as
280 bar charts. The bars represent the difference in the predicted probability of participating
281 between participants who were exposed to the maximum and minimum levels of
282 political discussion (i.e., first differences). The full results of the logit models are
283 presented in the online supplementary material.

284

285 **Results**

286 The long-run influence of political discussion on political participation

287 Individuals who engaged in political dialogue with their randomly-assigned roommates
288 were more likely to participate in partisan organizations over the entire span of the panel
289 study (Figure 1), though the relationship is only a strong trend in 2012 ($p = .06$). The
290 magnitude of these relationships is relatively constant across the study period, though
291 there is a trend of increased magnitude between 2004 and 2007, and decline between
292 2007 and 2012. The relationship between exposure to political dialogue on the house-
293 level and participation in partisan organizations is positive and statistically significant
294 shortly after the point of exposure in 2004, and eight years later in 2012 (Figure 1).

295 Across the study period, political discussion with one's roommate is associated
296 with more frequent participation in organizations that take stands on political issues
297 (Figure 2), except in 2012 ($p = 0.27$). The results also suggest a trend of a decline in the
298 magnitude of this relationship over the eight-year span of the panel study. There is no

299 systematic relationship between exposure to political dialogue from housemates and
300 participation in organizations that take stands (Figure 2), though a trend indicates a
301 positive relationship between the two in 2004 ($p = .06$).

302

303 [FIGURES 1-3 ABOUT HERE]

304

305 The relationship between discussion with one's roommate and contacting elected
306 officials is positive and statistically significant across the entire study period (Figure 3).
307 The data also suggest a trend whereby the magnitude of this relationship increases
308 over time. Figure 3 suggests a similar interpretation for the relationship between
309 exposure to political discussion in the wider house setting, though the only time this
310 relationship is statistically significant is in the final year of the study.

311 There was no systematic relationship between exposure to political discussion
312 and voter turnout, save a predicted 16 percentage point increase in turnout in the 2006
313 election due to exposure to political dialogue with one's roommate.

314

315 A mechanism behind the lasting relationship between discussion and participation

316 Table 3 presents the test of whether the initial increase in political participation
317 associated with political discussion is a mechanism whereby the relationship between
318 discussion and participation lasts into the future. Only cases where the relationship
319 between discussion and participation were significant in the previous analysis are
320 included in this analysis. The first column in each pair shows the original results, as
321 presented visually in Figures 1-3.

322 The results for participation in partisan groups suggest that prior levels of
323 participation in these groups does not account for much of the relationship between
324 political discussion in 2004 and participation in 2007. However, the trend of a positive
325 relationship between discussion in 2004 and participation in partisan groups in 2012 can
326 be accounted for with previous participation in these types of organizations. The results
327 for organizations that take stands and contacting elected officials suggest that prior
328 participation in these groups can explain the relationship between discussion in 2004
329 and participation years into the future.

330

331 **Discussion**

332 The influence of social context on political participation is often overlooked. Instead,
333 research on this behavior focuses on individual-level demographics such as
334 socioeconomic status and strength of political preferences. This is due to analytical
335 biases that make it difficult to show evidence of social influence. To address this
336 problem, here data were presented from a panel survey conducted on individuals who
337 were randomly assigned to their college dormitories. This research design—random
338 assignment to social context and measurement of behavioral change over time—allows
339 for more accurate estimation of the relationship between discussion and participation.

340 These data lead to three conclusions: (1) As predicted, there is a positive
341 relationship between political discussion and political participation. However, this is
342 generally not the case with voter turnout. As in representative samples of adults (Verba
343 et al. 1995), voting was the activity that panel members participated in the most (Table
344 1). To wit, voting occurs among those who were and were not exposed to political

345 discussion. (2) As predicted, discussion within the more socially intimate roommate
346 dyad has a more consistent relationship over time with political participation than does
347 discussion in the wider dormitory social network. (3) As predicted, the positive
348 relationship between discussion and participation lasts for many years. The data
349 suggest that a mechanism behind this long-term relationship is the immediate influence
350 of discussion on participation. More specifically, as political participation is habitual, the
351 initial bump in participation after exposure to political dialogue places the discussant on
352 a trajectory of increased participation over time.

353 This last conclusion leads to the question of why political discussion correlates
354 with political participation in the first place. Results from the panel survey and focus
355 groups I present elsewhere (Klofstad 2011, 2009, 2007) show when individuals discuss
356 politics they recruit each other to become politically active. Exposure to political
357 discussion also correlates with increased interest in politics and enhanced political
358 efficacy. These data also show, however, that individuals are only influenced by political
359 discussion if they are predisposed to participate in politics. Consequently, to understand
360 the influence of society on human behavior one must also account for the
361 characteristics of the individual (and vice versa).

362 While the results presented here are some of the most precise estimates of the
363 relationship between political discussion and political participation available, a panel
364 study where members were randomly assigned to different social settings is not a fully-
365 controlled experiment. While participants were randomly assigned to their new social
366 setting, the amount of political discussion they were exposed to was not experimentally
367 controlled. Consequently, the external validity of these results need to be tested with

368 other natural occurrences of random assignment to social conditions (e.g., other
369 universities, office cubicles, prisons, army barracks, and the like), as well as controlled
370 experiments. Ideally, these studies would be conducted on groups of subjects who are
371 representative of the wider public.

372 The need for further research aside, the results presented here clearly
373 demonstrate the importance of considering both individual- and social-level influences
374 on political participation. Exclusion of either yields an incomplete understanding of
375 participatory democracy. Importantly, the results presented here also demonstrate that
376 seemingly inconsequential interpersonal interactions can influence human behavior
377 years into the future. The current study also illustrates the utility of data collection
378 techniques that leverage natural instances of random assignment to different social
379 conditions.

380 **Acknowledgements**

381 The University of Miami, the Nowicki Lab at Duke University, and Harvard University
382 provided research funds and facilities. The 2003-2004 freshman class of the University
383 of Wisconsin-Madison provided data. The University of Wisconsin Survey Center
384 administered the panel survey. Elif Erisen, Chris Mann, Tara Piché, Betsy Sinclair,
385 Anand Sokhey, participants at the 2013 Midwest Political Science Annual Conference,
386 and participants at the 2013 Political Networks Conference provided invaluable
387 feedback. Human subjects research approval was granted by Harvard University, the
388 University of Miami, and the University of Wisconsin-Madison.

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469 **Appendix**

470 Cooperation rates

471 For all participants included in the panel study (N = 6574) American Association for
472 Public Opinion Research (AAPOR) Cooperation Rate 2 (COOP2) rates, which are
473 calculated as the sum of fully-and partially-completed questionnaires divided by the total
474 number of participants who were contacted (AAPOR 2009), were as follows:

- 475 • Wave 1 (October-December, 2003): 57.5% (N = 3267 fully-completed, N = 513
476 partially-completed)
- 477 • Wave 2 (March-April, 2004): 37.4% (N = 2079 fully-completed, N = 378 partially-
478 completed)
- 479 • Wave 3 (April-May, 2007): 30.4% (N = 1791 fully-completed, N = 210 partially-
480 completed)
- 481 • Wave 4 (November-December, 2012): 10.7% (N = 678 fully-completed, N = 27
482 partially-completed.)

483 As detailed in the data and methods section of the paper, to incorporate random
484 assignment to dormitory in the analysis N = 5506 study participants were excluded,
485 leaving N = 1068 participants included. Of the participants included in the analysis,
486 AAPOR COOP2 rates were as follows:

- 487 • Wave 1 (2003): 100% (N = 1023 fully-completed, N = 45 partially-completed)
- 488 • Wave 2 (2004): 100% (N = 918 fully-completed, N = 150 partially-completed)
- 489 • Wave 3 (2007): 56.7% (N = 565 fully-completed, N = 41 partially-completed)
- 490 • Wave 4 (2012): 50.6% (N = 516 fully-completed, N = 24 partially-completed.)

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492 Non-response analysis

493 Of study participants who were included in the analysis (N = 1068), data were
494 available on ACT college entrance exam score (available for 92.8% of participants, N =
495 922) and high school rank (available for 92.8% of participants, N = 922). Respondents
496 were more likely to have a higher ACT score and a higher class rank than non-
497 respondents (Table A1). As educational attainment and political participation are highly
498 correlated (Verba et al. 1995), respondents to the panel surveys may be more
499 predisposed to be politically active than non-respondents. However, while these
500 differences are statistically significant, they are not substantively large.

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[TABLE A1 ABOUT HERE]

503 **Tables and Figure**

Table 1. Political participation descriptive statistics for participants included in analysis

		% participated
Partisan organizations		
	2003	18.4 (N = 195)
	2004	17.7 (N = 179)
	2007	23.0 (N = 133)
	2012	33.3 (N = 180)
Organizations that take stands		
	2003	25.2 (N = 216)
	2004	25.2 (N = 254)
	2007	40.1 (N = 232)
	2012	30.6 (N = 165)
Contacting elected officials		
	2003	38.0 (N = 404)
	2004	17.1 (N = 162)
	2007	29.7 (N = 171)
	2012	35.6 (N = 192)
Voter turnout		
	2006	66.3 (N = 374)
	2008	93.0 (N = 481)
	2010	31.9 (N = 165)
	2012	92.4 (N = 477)

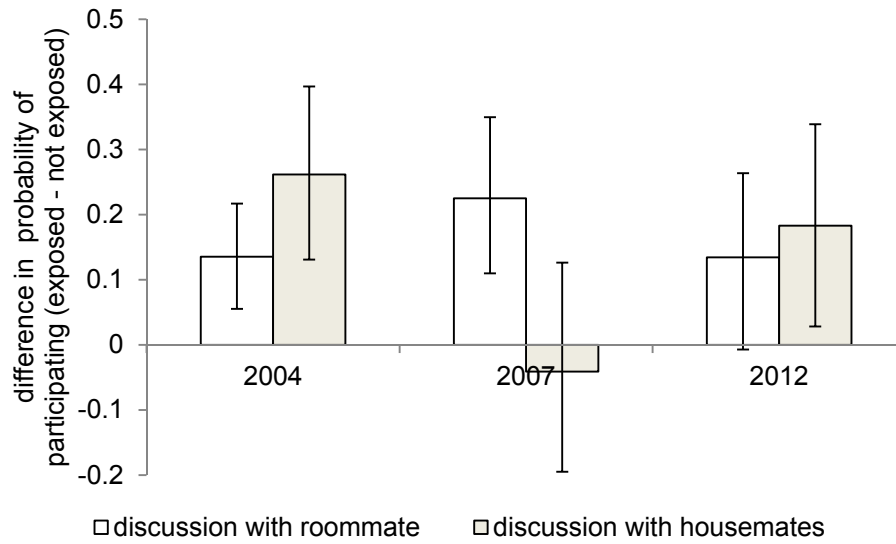
Note: Cases with missing data were omitted from analysis using listwise deletion.

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Table 2. Average level of political discussion during the first year of college (2004) by political participation in high school (2003)

	Level of discussion	
	with roommate	with housemates
Partisan groups		
participants	1.6	1.2
non-participants	1.4	1.5
Groups that take stands		
participants	1.3	1.1
non-participants	1.6	1.5
Contacting		
participants	1.3	1.1
non-participants	1.5	1.3

Note: All differences are statistically significant at $p \leq .01$.
Cases with missing data were omitted from analysis using listwise deletion.



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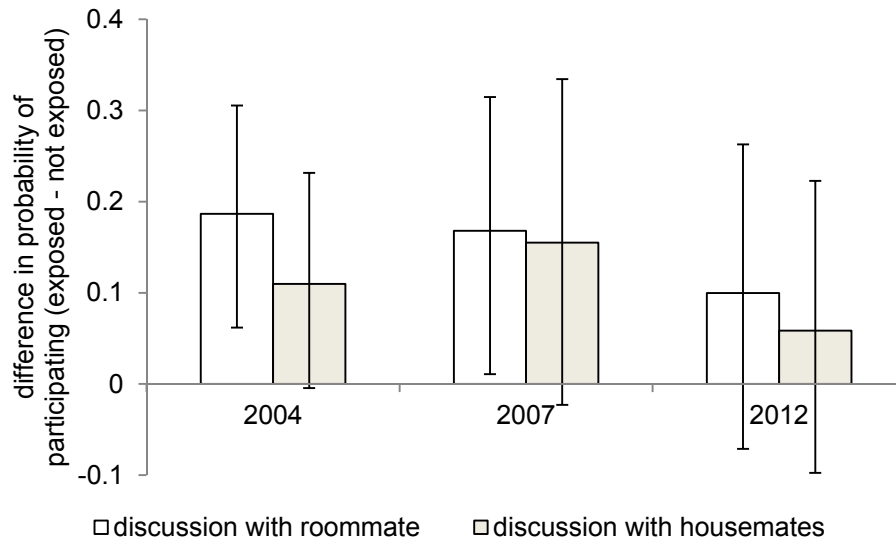
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Figure 1. Relationship between exposure to political discussion and participation in partisan organizations. Bars represent the difference in the predicted probability of participating between participants who were exposed to the maximum and minimum levels of political discussion (i.e., first differences). Vertical lines indicate the 95% confidence interval for each predicted difference.



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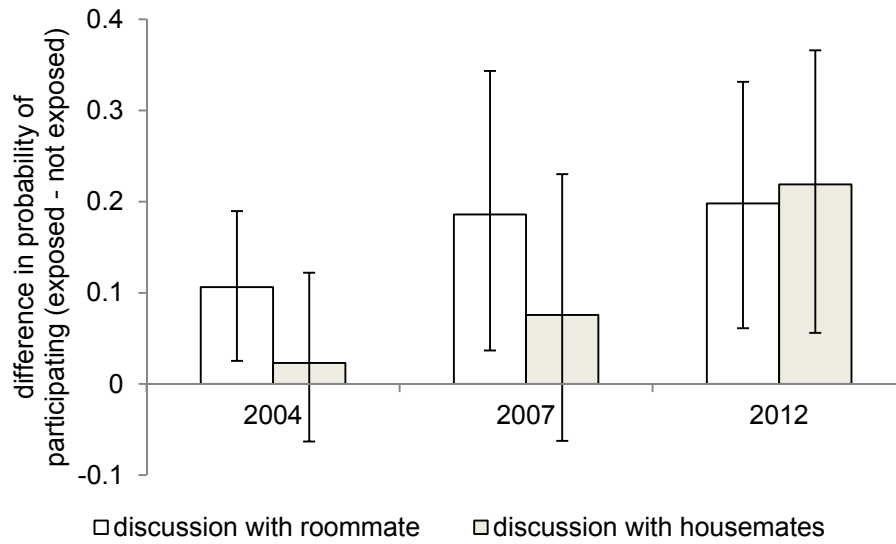
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Figure 2. Relationship between exposure to political discussion and participation in organizations that take political stands. Bars represent the difference in the predicted probability of participating between participants who were exposed to the maximum and minimum levels of political discussion (i.e., first differences). Vertical lines indicate the 95% confidence interval for each predicted difference.



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Figure 3. Relationship between exposure to political discussion and contacting elected officials. Bars represent the difference in the predicted probability of participating between participants who were exposed to the maximum and minimum levels of political discussion (i.e., first differences). Vertical lines indicate the 95% confidence interval for each predicted difference.

Table 3. Test for whether the prior influence of discussion on participation accounts for the positive relationship between discussion and participation in the future

	Partisan groups				Groups that take stands		Contacting			
	2007		2012		2007		2007		2012	
Political discussion with roommate in 2004	.47*** (.13)	.39*** (.13)	.20^ (.11)	.08 (.13)	.25* (.11)	.17 (.13)	.30* (.13)	.20 (.13)	.29** (.10)	.09 (.16)
Political discussion with housemates in 2004	-.09 (.18)	-.20 (.17)	.28* (.12)	.07 (.15)	.22^ (.13)	.13 (.15)	.13 (.12)	.15 (.11)	.33** (.13)	.31 (.20)
2003 participation	1.60*** (.28)	1.05*** (.31)	.50^ (.26)	.30 (.39)	1.56*** (.24)	1.28*** (.25)	.74*** (.20)	.56** (.22)	.25 (.19)	.15 (.29)
2004 participation	---	1.69*** (.32)	---	.33 (.36)	---	1.52*** (.31)	---	1.28*** (.22)	---	.49 (.46)
2007 participation	---	---	---	1.17*** (.33)	---	---	---	---	---	1.69*** (.32)
χ^2	102.90***	120.41***	40.77***	54.71***	107.18***	133.74***	59.70***	90.67***	62.07***	90.81***
Pseudo R ²	.14	.20	.05	.11	.13	.18	.07	.10	.05	.16
N	522	517	489	312	427	422	523	507	491	311

^p ≤ .10, *p ≤ .05 **p ≤ .01 ***p ≤ .001 (robust standard errors in parentheses)

Model type: Logistic regression

Note: Cases with missing data were omitted from analysis using listwise deletion. Constant and additional control variables are not included in the table (see online supplementary material).

Table A1. Comparison of respondents and non-respondents across panel study among participants included in analysis

	Respondents	Non-respondents
Wave 3 (2007)		
ACT score	28.6	27.4
high school rank	92.0	90.8
Wave 4 (2012)		
ACT score	28.5	27.7
high school rank	92.1	90.8

Note: Cases with missing data were omitted from analysis using listwise deletion. All differences are significant at $p \leq .01$.

528 Online Supplement

Table S1. Relationship between exposure to political discussion and participation in partisan groups (Figure 1, Panel A)

	2004	2007	2012
Political discussion with roommate in 2004	.38*** (.12)	.47*** (.13)	.20^ (.11)
Political discussion with housemates in 2004	.65*** (.15)	-.09 (.18)	.28* (.12)
Participation in partisan groups in 2003	1.89*** (.20)	1.60*** (.28)	.50^ (.26)
Fixed effects			
Roommate participated in study	-.08 (.27)	.57^ (.30)	.24 (.26)
Dorm 3	.69 (.69)	.96 (.62)	.29 (.44)
Dorm 4	.61 (.61)	.75 (.61)	.03 (.42)
Dorm 6	.04 (.60)	-.04 (.69)	.14 (.40)
Dorm 7	-.29 (.63)	-.32 (.63)	.24 (.43)
Dorm 8	1.05^ (.64)	-.23 (.64)	-.52 (.51)
Dorm 9	.47 (.71)	.59 (.70)	.14 (.41)
Dorm 10	.50 (.66)	.09 (.59)	-.43 (.49)
Dorm 11	.46 (.64)	.54 (.68)	-.06 (.46)
Dorm 12	-.31 (.75)	.20 (.81)	.21 (.59)
Dorm 13	.13 (.71)	-1.48^ (.81)	-.75 (.50)
Dorm 15	.03 (.61)	.19 (.62)	-.35 (.49)
Dorm 16	-.20 (.66)	.49 (.65)	.04 (.45)
Constant	-3.79*** (.60)	-2.52*** (.58)	-1.42*** (.37)
χ^2	154.98***	102.90***	40.77***
Pseudo R ²	.21	.14	.05
N	934	522	489

^p ≤ .10, *p ≤ .05 **p ≤ .01 ***p ≤ .001 (robust standard errors in parentheses)

Model type: Logistic regression

Note: Cases with missing data were omitted from analysis using listwise deletion. Additional control variables are not included in the table (see online supplementary material).

Table S2. Relationship between exposure to political discussion and participation in groups that take stands (Figure 1, Panel B)

	2004	2007	2012
Political discussion with roommate in 2004	.39** (.12)	.25* (.11)	.16 (.15)
Political discussion with housemates in 2004	.22^ (.12)	.22^ (.13)	.09 (.14)
Participation in groups that take stands in 2003	1.75*** (.20)	1.56*** (.24)	.52* (.21)
Fixed effects			
Roommate participated in study	-.15 (.28)	.36 (.34)	.39 (.30)
Dorm 3	.41 (.75)	.62 (.61)	.34 (.42)
Dorm 4	.25 (.71)	-.12 (.67)	.47 (.46)
Dorm 6	-.46 (.74)	-.19 (.67)	-.79 (.64)
Dorm 7	-.41 (.64)	.23 (.60)	.10 (.51)
Dorm 8	.61 (.66)	-.04 (.65)	-.46 (.57)
Dorm 9	-.33 (.62)	.12 (.66)	-.67 (.62)
Dorm 10	-.40 (.67)	-.28 (.62)	-1.69* (.81)
Dorm 11	-.90 (.71)	.54 (.74)	-.17 (.57)
Dorm 12	-.61 (.63)	.80 (.72)	.66 (.63)
Dorm 13	-.21 (.64)	-.51 (.88)	-1.46^ (.80)
Dorm 15	-.48 (.64)	-.11 (.61)	-.10 (.47)
Dorm 16	-.69 (.65)	.09 (.70)	-.57 (.56)
Constant	-2.40*** (.62)	-1.66** (.57)	-1.15** (.47)
χ^2	171.90***	107.18***	60.63***
Pseudo R ²	.18	.13	.08
N	753	427	395

^p ≤ .10, *p ≤ .05 **p ≤ .01 ***p ≤ .001 (robust standard errors in parentheses)

Model type: Logistic regression

Note: Cases with missing data were omitted from analysis using listwise deletion. Additional control variables are not included in the table (see online supplementary material).

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Table S3. Relationship between exposure to political discussion and contacting (Figure 1, Panel C)

	2004	2007	2012
Political discussion with roommate in 2004	.28** (.11)	.30* (.13)	.29** (.10)
Political discussion with housemates in 2004	.06 (.11)	.13 (.12)	.33** (.13)
Contacting in 2003	1.08*** (.18)	.74*** (.20)	.25 (.19)
Fixed effects			
Roommate participated in study	.05 (.23)	.01 (.30)	.08 (.23)
Dorm 3	.94^ (.56)	.06 (.67)	-.81* (.32)
Dorm 4	1.19* (.56)	.40 (.61)	-1.04*** (.32)
Dorm 6	.96^ (.53)	-.28 (.70)	-1.16** (.38)
Dorm 7	.28 (.56)	-.12 (.60)	-1.02*** (.32)
Dorm 8	.48 (.54)	-.86 (.79)	-1.04** (.38)
Dorm 9	.50 (.60)	-.04 (.65)	-1.16*** (.32)
Dorm 10	.74 (.56)	-.18 (.62)	-.43 (.42)
Dorm 11	.50 (.59)	.15 (.64)	-1.31** (.50)
Dorm 12	-.54 (.71)	.01 (.64)	-.84* (.35)
Dorm 13	.99^ (.51)	-.73 (.60)	-.96^ (.50)
Dorm 15	-.29 (.64)	-.27 (.60)	-1.14** (.39)
Dorm 16	.59 (.57)	.38 (.64)	-1.65*** (.35)
Constant	-3.13*** (.53)	-1.70** (.60)	-.53^ (.35)
χ^2	77.52***	59.70***	62.07***
Pseudo R ²	.09	.07	.05
N	916	523	491

^p ≤ .10, *p ≤ .05 **p ≤ .01 ***p ≤ .001 (robust standard errors in parentheses)

Model type: Logistic regression

Note: Cases with missing data were omitted from analysis using listwise deletion. Additional control variables are not included in the table (see online supplementary material).

Table S4. Relationship between exposure to political discussion and voter turnout in 2006

	2006
Political discussion with roommate in 2004	.26* (.11)
Political discussion with housemates in 2004	-.07 (.12)
Voter turnout in 2004	1.37** (4.9)
Fixed effects	
Roommate participated in study	.06 (.29)
Dorm 3	.87 (.82)
Dorm 4	-.07 (.71)
Dorm 6	-1.40* (.71)
Dorm 7	-.48 (.73)
Dorm 8	-.65 (.75)
Dorm 9	-.12 (.72)
Dorm 10	-1.15 (.71)
Dorm 11	-.91 (.74)
Dorm 12	-.78 (.96)
Dorm 13	-1.56* (.72)
Dorm 15	-.47 (.73)
Dorm 16	-.66 (.72)
Constant	-.29 (.81)
χ^2	51.67***
Pseudo R ²	.07
N	515

^p ≤ .10, *p ≤ .05 **p ≤ .01 ***p ≤ .001 (robust standard errors in parentheses)

Model type: Logistic regression

Note: Cases with missing data were omitted from analysis using listwise deletion. Additional control variables are not included in the table (see online supplementary material).

Table S5. Test for whether the prior influence of discussion on participation in partisan groups accounts for the positive relationship between discussion and participation in partisan groups in the future (full version of Table 3)

	2007		2012	
Political discussion with roommate in 2004	.47*** (.13)	.39*** (.13)	.20^ (.11)	.08 (.13)
Political discussion with housemates in 2004	-.09 (.18)	-.20 (.17)	.28* (.12)	.07 (.15)
2003 participation	1.60*** (.28)	1.05*** (.31)	.50^ (.26)	.30 (.39)
2004 participation	---	1.69*** (.32)	---	.33 (.36)
2007 participation	---	---	---	1.17*** (.33)
Fixed effects				
Roommate participated in study	.57^ (.30)	.60^ (.32)	.24 (.26)	.08 (.37)
Dorm 3	.96 (.62)	.69 (.72)	.29 (.44)	.35 (.52)
Dorm 4	.75 (.61)	.48 (.67)	.03 (.42)	-.35 (.55)
Dorm 6	-.04 (.69)	.05 (.74)	.14 (.40)	.05 (.54)
Dorm 7	-.32 (.63)	-.35 (.66)	.24 (.43)	-.14 (.56)
Dorm 8	-.23 (.64)	-.37 (.66)	-.52 (.51)	-.38 (.76)
Dorm 9	.59 (.70)	.41 (.69)	.14 (.41)	.19 (.55)
Dorm 10	.09 (.59)	-.06 (.64)	-.43 (.49)	-.70 (.59)
Dorm 11	.54 (.68)	.27 (.78)	-.06 (.46)	-.32 (.79)
Dorm 12	.20 (.81)	.18 (.78)	.21 (.59)	.31 (.69)
Dorm 13	-1.48^ (.81)	-1.70* (.86)	-.75 (.50)	-1.77** (.69)
Dorm 15	.19 (.62)	.21 (.69)	-.35 (.49)	-.63 (.67)
Dorm 16	.49 (.65)	.51 (.72)	.04 (.45)	-.40 (.60)
Constant	-2.52*** (.58)	-2.43*** (.63)	-1.42*** (.37)	-.91^ (.50)
X ²	102.90***	120.41***	40.77***	54.71***
Pseudo R ²	.14	.20	.05	.11
N	522	517	489	312

^p ≤ .10, *p ≤ .05 **p ≤ .01 ***p ≤ .001 (robust standard errors in parentheses)

Model type: Logistic regression

Note: Cases with missing data were omitted from analysis using listwise deletion. Additional control variables are not included in the table (see online supplementary material).

Table S6. Test for whether the prior influence of discussion on participation in groups that take stands accounts for the positive relationship between discussion and participation groups that take stands in the future (full version of Table 3)

	2007	
Political discussion with roommate in 2004	.25* (.11)	.17 (.13)
Political discussion with housemates in 2004	.22^ (.13)	.13 (.15)
2003 participation	1.56*** (.24)	1.28*** (.25)
2004 participation	---	1.52*** (.31)
Fixed effects		
Roommate participated in study	.36 (.34)	.37 (.35)
Dorm 3	.62 (.61)	.85^ (.49)
Dorm 4	-.12 (.67)	-.21 (.56)
Dorm 6	-.19 (.67)	.25 (.59)
Dorm 7	.23 (.60)	.60 (.48)
Dorm 8	-.04 (.65)	-.07 (.54)
Dorm 9	.12 (.66)	.37 (.64)
Dorm 10	-.28 (.62)	.12 (.52)
Dorm 11	.54 (.74)	.99 (.70)
Dorm 12	.80 (.72)	1.36 (.67)
Dorm 13	-.51 (.88)	-.45 (.90)
Dorm 15	-.11 (.61)	.32 (.51)
Dorm 16	.09 (.70)	.53 (.65)
Constant	-1.66** (.57)	-2.01 (.49)
χ^2	107.18***	133.74***
Pseudo R ²	.13	.18
N	427	422

^p ≤ .10, *p ≤ .05 **p ≤ .01 ***p ≤ .001 (robust standard errors in parentheses)

Model type: Logistic regression

Note: Cases with missing data were omitted from analysis using listwise deletion. Additional control variables are not included in the table (see online supplementary material).

Table S7. Test for whether the prior influence of discussion on contacting accounts for the positive relationship between discussion and contacting in the future (full version of Table 3)

	2007		2012	
Political discussion with roommate in 2004	.30*	.20	.29**	.09
	(.13)	(.13)	(.10)	(.16)
Political discussion with housemates in 2004	.13	.15	.33**	.31
	(.12)	(.11)	(.13)	(.20)
2003 participation	.74***	.56**	.25	.15
	(.20)	(.22)	(.19)	(.29)
2004 participation	---	1.28***	---	.49
		(.22)		(.46)
2007 participation	---	---	---	1.69***
				(.32)
Fixed effects				
Roommate participated in study	.01	-.01	.08	-.18
	(.30)	(.34)	(.23)	(.36)
Dorm 3	.06	-.004	-.81*	-1.12
	(.67)	(.85)	(.32)	(.80)
Dorm 4	.40	.22	-1.04***	-1.74*
	(.61)	(.78)	(.32)	(.85)
Dorm 6	-.28	-.34	-1.16**	-1.85*
	(.70)	(.84)	(.38)	(.83)
Dorm 7	-.12	-.06	-1.02***	-1.60 [^]
	(.60)	(.75)	(.32)	(.82)
Dorm 8	-.86	-.74	-1.04**	-1.26
	(.79)	(.92)	(.38)	(.97)
Dorm 9	-.04	-.13	-1.16***	-1.04
	(.65)	(.83)	(.32)	(.83)
Dorm 10	-.18	-.11	-.43	-.61
	(.62)	(.79)	(.42)	(1.01)
Dorm 11	.15	-.04	-1.31**	-1.10
	(.64)	(.83)	(.50)	(.93)
Dorm 12	.01	.20	-.84*	-1.14
	(.64)	(.81)	(.35)	(.91)
Dorm 13	-.73	-.77	-.96 [^]	-1.31
	(.60)	(.75)	(.50)	(.92)
Dorm 15	-.27	-.12	-1.14**	-1.27
	(.60)	(.75)	(.39)	(.88)
Dorm 16	.38	.20	-1.65***	-2.03
	(.64)	(.81)	(.35)	(.96)
Constant	-1.70**	-1.70*	-.53 [^]	-.41
	(.60)	(.76)	(.35)	(.83)
χ^2	59.70***	90.67***	62.07***	90.81***
Pseudo R ²	.07	.10	.05	.16
N	523	507	491	311

[^]p ≤ .10, *p ≤ .05 **p ≤ .01 ***p ≤ .001 (robust standard errors in parentheses)

Model type: Logistic regression

Note: Cases with missing data were omitted from analysis using listwise deletion. Additional control variables are not included in the table (see online supplementary material).