

Voter Turnout Among College Students: New Data and a Rethinking of Traditional Theories*

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Objectives. Traditional theories of turnout are of limited applicability to college students: the concepts and measures associated with these theories were not designed with students in mind, and factors not considered by the traditional theories are relevant. We offer a new theoretical perspective for understanding college student turnout and test it using a new data set. *Methods.* We conducted a phone survey of college students following the November 2004 U.S. presidential election. We test our theoretical expectations using descriptive statistics and logistic regression models. *Results.* We find that the usual demographic factors are of little relevance. Turnout is, however, related to the same motivational factors that stimulate older voters, as well as to mobilization by parties. College-specific factors, such as distance between home and college, are also relevant. Turnout was also higher for students whose hometown or college town was in a battleground state. *Conclusion.* The results suggest new approaches to the study of young people and how and when they become part of the voting public.

Low voter turnout among U.S. youth has long garnered attention. Even in the 1960s, the high point of voter turnout in the past 100 years, the American Heritage Foundation commissioned a report about “the problem of non-voting among young adults in the United States” (Converse, 1971). In 2004, youth turnout increased, yet the disparity between the turnout rates of 18–24 year-olds and the highest turnout age group had actually grown, from

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21 percentage points in 1972 (the year the 26th Amendment took effect) to 27 points (U.S. Census Bureau, 2006), prompting Wattenberg (2007) to ask, *Is Voting for Young People?*

Despite this longstanding concern over youth turnout—along with obvious reasons to think that students differ from other young adults—there is almost no theoretical or empirical work specifically devoted to college students. We know that many students will vote later in life, but the lack of knowledge about their turnout behavior while in college, still forming their political selves, is something of a “missing link” (Hillygus, 2005). We do know that college students are in an unusual situation. Many, often for the first time in their lives, are moving away from their home life and hometown. They often find themselves in a situation unlike any they will face in later years—living in close quarters with a set of same-age individuals who have the same “occupation” (student) though often with very different career interests. Many are also in the unique situation of having a choice about where to vote—in their hometown or in their college town.

The unique characteristics of the college student population raise questions about whether traditional theories about education, race, employment, mobility, and other demographic characteristics apply to college students. Likewise, is political party mobilization relevant, or are students ignored by the parties? What about college-specific factors—the possibility, already noted, of strategic registration, but also the distance between their college towns and hometowns, and their differing interests (majors)? There is also the possibility that registrars in college towns make voter registration difficult for students (Niemi, Hanmer, and Jackson, 2009).

In sum, college students are in the process of forming their identities and are doing so in a unique social and political environment. Given the increasing interest in the political and civic behavior of young people generally (e.g., Zukin et al., 2006; Dalton, 2007), the importance of one’s first vote (Plutzer, 2002), along with the interest of youth organizations, candidates, civic educators, and others in increasing youth turnout (e.g., *Civic Mission of the Schools*, 2003), it is important to understand what it is that propels some students to vote while others do not.

We first lay out a theoretical framework for understanding turnout among the student population. We test this framework with a November 2004 nationwide postelection survey of students at four-year colleges and universities. We find that variations in turnout levels are not associated with traditional demographic measures (even on those where there is heterogeneity), but can be attributed to the same motivational factors that stimulate older voters to go to the polls. Mobilization by political parties played a surprisingly important role as well. In addition, college-specific factors, such as the distance between students’ college towns and hometowns, were also relevant. Potential problems with registering and voting were not a factor. Intriguingly, when the opportunity presented itself, students took advantage of the strategic opportunity to register and vote in battleground states.

Overall, we demonstrate the limited role of traditional theories in explaining what motivates college students to vote and highlight the role of new factors and the theories that underlie them.

Theoretical Background

Demographic Characteristics

Traditional theories about voter turnout do not always fit well with the unique characteristics of college students. In part, of course, this is because students exhibit little variation in age and education. The problem is not simply one of restricted variance, however. The fact that college students are young and have not yet finished their education means that they have not yet experienced whatever changes in knowledge, norms, and expectations aging and higher education bestow. They are not yet “highly educated,” having only acquired little in terms of the benefits associated with these characteristics, such as placement in social networks, experience with bureaucratic procedures, and so on.¹

Added to conceptual differences between college students and older voters is that the usual demographic variables, as typically measured, are problematic when it comes to students. Take education itself. A standard education question reads: “What is the highest grade of school or year of college you have completed?” College students, if they interpret the question literally, should answer 12th grade or one, two, or three years of college; if the usual three- to five-point education scale is then created, freshmen would be classified as “high school graduates” and sophomores, juniors, and seniors would be considered as having “some college.”² Yet many of these students will complete college and even earn advanced degrees (as also noted by Achen, 2006). Is it sensible to classify them by the level they have attained so far?

Mobility and home ownership are other variables for which the standard query and even the underlying concept may not have the same meaning for college students. In recent NES interviews, the questions are: “How long have you lived in this (house/condo/apartment)?” “(Do you/Does your family) own your home, pay rent, or what?” If the respondent is a college student living away from home, he or she probably has lived at that location for a relatively brief time and pays rent. Yet those might not be meaningful responses for students who, for voting purposes, regard themselves as still living with their parents, sometimes in a house where they lived all their life

¹Tenn (2007), however, has shown that for young people, an additional year of education does not influence turnout, so the effects may be traceable to what happens to students after they graduate.

²This wording is from the National Election Studies (NES). In the Current Population Survey (CPS), the question refers to “level of school” completed.

prior to college. Similarly, how should one classify college students who live year-round in the home their parents own?

With the age of college students almost invariant and the meaning and measurement of their education and mobility questionable, several key variables used in models of voter turnout may well not account for varying rates of turnout among college students. Though there is considerable variation among students in hours worked, most student jobs do not mirror the careers they will ultimately obtain, so labor force participation may also be of limited explanatory power. Additionally, family income may not mean the same thing to those still dependent on their parents (as most college students are).

Based on these considerations, our first hypothesis is as follows.

H₁: Traditional, demographic-based theories about voter turnout are of limited value in accounting for varying rates of turnout among college students.³

Motivation and Mobilization

A second set of individual-level factors, those related to motivation and mobilization, are more likely to apply to college students in the same way they apply to other adults. General interest in politics, attachment to political parties, interest in the presidential election itself, and being mobilized are probably significant factors driving students to vote just as for other adults. Even here, however, there is some uncertainty. "Being part of a college community," Wolfinger and Rosentone (1980:57) argued in their 1980 study, "provides relatively free access to information about politics. Through living groups, extracurricular activities, and classes, students are less socially isolated than non-students . . . [and] political information [is] freer." On the other hand, students who are away at school could be isolated both from their hometowns and from their college communities (Franklin, 2006). Working, as more students do these days, could also make them more isolated. Although social interaction and information may or may not be relatively abundant, feelings about parties and politics are likely to vary substantially across students and therefore be a factor associated with variations in student turnout rates. Likewise, party mobilization, though possibly infrequent on college campuses, should also work in the expected way (Nickerson, 2006). Thus, while there is some uncertainty about the amount

³Highton and Wolfinger (2001) find that mobility, home ownership, labor force participation, education, and age all increase turnout among young (18–24 year-old) voters, but their analysis does not address college students specifically. Moreover, the questions noted in the text apply to their analysis. It is unclear, for example, how students are (or should be) coded on the education variable; mobility appears to reflect student wanderings regardless of whether they vote at their parents' address; labor force participation does not distinguish between part-time and full-time work.

and cost of information and activity on campus, with respect to understanding variation in turnout among students, we propose the following hypothesis.

H₂: *Psychological factors—such as general interest in politics, attachment to political parties, and interest in the presidential election—along with political party mobilization are significant in explaining variation in turnout among college students.*

College-Specific Factors

The Calculus of Voting Model with Strategic Considerations. Structural features are a third set of factors used to explain turnout in the United States. These factors relate directly to the calculus of voting model (Downs, 1957; Riker and Ordeshook, 1968) and, importantly, reveal distinctive features for college students. In its simplest form, the calculus of voting model predicts voting when the benefits exceed the costs. Consider now that college students often have a choice as to where they can register and vote and thus face two sets of calculations, one for their home community and one for their college community.

Costs can be quite different in the two locations. In addition to the closing date for registration, states vary considerably as to the friendliness they show toward students who wish to vote in their college towns (O’Loughlin and Unangst, 2006). State-sponsored websites, for example, indicate that students are sometimes welcomed and sometimes discouraged from voting in their college location (Niemi, Hanmer, and Jackson, 2009). It was even claimed, by party officials in one state, that poll watchers were strategically placed at polling stations in precincts with high percentages of college students and charged with the task of challenging their eligibility (Hanmer, 2009). Beyond that, local registrars are known to vary in the way they interpret the laws (Niemi, Hanmer, and Jackson, 2009). All this is in sharp contrast to Wolfinger and Rosenstone’s (1980:57) comment that “it is generally easier for students [than nonstudents] to register and vote.”

Thus, students in some states and localities may be advantaged or disadvantaged, and certain kinds of students (e.g., those living at home) may find it easier than others to register and go to the polls. Although we believe the difficulties students faced in 2004 were exaggerated by repetition of a few cases, the effects of state laws along with informal norms might have contributed to certain kinds of students voting more than others.

In addition to variable costs, the benefits of voting can also vary significantly across locations, thus creating an opportunity for students to act strategically. A student from New York, where the Democratic presidential candidate is sure to win, who goes to college in Ohio, where the outcome is

less certain, might find that the benefits do not outweigh the costs in New York, but they do in Ohio—and consequently register and vote in Ohio. This logic is easily extended to decisions based on involvement with the issues and candidates in one's college community versus one's home community.

Similarly, if the home-state and college-state benefits are equal, students have a choice to register where costs are lower. For example, an unregistered student from Arizona who goes to college in Wisconsin does not face a closed door, as she can register and vote on Election Day in Wisconsin. Whether the decision is driven by the costs, benefits, or some combination, the added choice afforded to college students living outside their home jurisdiction is likely to boost college student voting beyond what it would otherwise be and result in students registering and voting strategically with respect to competitiveness of the presidential vote in the state.

Other College-Specific Factors. In addition to the distinctiveness of college students that is revealed when considering the calculus of voting model, several other college-specific factors are relevant. First, while the standard mobility question is not likely to work for college students, transferring between colleges is a specific type of mobility that involves the kind of change in one's social and political context that is likely to influence turnout.⁴ The distance between one's college town and hometown is another factor that might influence turnout. As the distance increases, it becomes more difficult for those who want to vote at home to do so, as they either have to travel a longer distance or take the steps necessary to vote absentee.⁵ Another college-specific factor worthy of consideration is the college major. Although the literature provides little guidance as to what to expect (see somewhat contradictory results in Sax, 2000; Astin, 1993; Feldman and Newcomb, 1969:156–67; Knox, Lindsay, and Kolb, 1993:108), work by Hillygus (2005) finds relationships between college coursework and turnout after college, suggesting that majoring in science, math, or engineering decreases the probability of voting.⁶

⁴Mobility is a large component of this measure; however, students who transfer might be less likely to vote due to family concerns, as well as financial, academic, or psychological difficulties. Although we cannot be sure of the exact weight to apply to each mechanism, they all lead to the same directional prediction.

⁵The cost of obtaining an absentee ballot should not be influenced much by distance (perhaps a bit due to mail delivery times), but distance may capture variation in the ability of students to make a choice about returning home to vote or requesting an absentee ballot. Since being away at college is a valid reason for obtaining an absentee ballot, measures of state laws relating to unrestricted absentee voting are not theoretically relevant.

⁶If true, the explanation probably lies in levels of interest in politics and other social phenomena relative to interest in the natural world.

Based on the above discussion, we hypothesize the following.

H₃: *College-specific factors influence turnout in the following ways:*

- a *Students who live in a state (home or college) with later closing dates for registration are more likely to vote.*
- b *Students whose hometown or college town is in a presidential battleground state are more likely to vote.*
- c *Students who transfer between colleges are less likely to vote.*
- d *Students living closer to their hometown are more likely to vote.*
- e *Students who major in science, mathematics, and engineering are less likely to vote.*

Data: The College Student Survey

Studying college students is complicated by the fact that students are a small proportion of the adult population; adult cross-section samples generally include too few for detailed analysis. The mammoth CPS is an exception, but it does not include questions about attitudes, nor does it allow one to separate students living at home from those living at school. In addition, we noted above that the usual demographic characteristics entered into turnout models do not apply well to college students, further limiting the utility of this widely used data source. Specialized studies of youth variously include too few college students; fail to include students who live at home, on campus, and off campus but not with their parents; fail to ask about voting; or ask about voting but do so months or years after the election, when reports are likely to suffer from lapses in memory (on the last point, see Weir, 1975).

College students are an especially elusive population to locate and interview. They live in a variety of settings, including dormitories, fraternity and sorority houses, apartment buildings owned by colleges and universities, private rooms and apartments, and at home with their parents. Their work-a-day schedules are erratic, and they are often away from their abode during the time when most survey calls are made. Many live in multiperson housing in which cohabitants are less likely than in single-family dwellings to know each others' schedules. They are mostly young, which today means that a relatively large number operate exclusively with cell phones, further complicating the situation.⁷ As a consequence, tracking down college students for telephone interviews is very difficult.⁸ The procedures used in this article

⁷At the time of the study, it was considered inappropriate to call cell phones because some people need to pay for inbound calls. However, one typically does not know in advance which calls are to cell phones.

⁸We rejected the alternative of an Internet survey as not yet sufficiently studied. "Web-enabled" samples do not reach a sufficiently large number of college students.

overcome these problems as much as possible short of an extremely costly effort. The result was a sample that incorporates a widely varying set of students that is reasonably representative of the population on a number of important characteristics (see below), though it falls short of a fully representative sample.

The target population was all U.S. citizens aged 18–24 who were full-time students at U.S. four-year, not-for-profit colleges and universities. As a complete sampling frame for this population does not exist, we began by purchasing a large, random sample of phone numbers from Survey Sampling, Inc., which drew on a proprietary source that compiles published college directories. The survey was conducted November 9–19, 2004. Cases were selected and interviews completed in 285 colleges and universities nationwide.⁹ Screening questions were used to ensure that respondents met our selection criteria. We included only undergraduates at four-year schools who were U.S. citizens; we also excluded students older than 24, as the forces at work in older students' lives may differ from those at work among traditional students. Interviews lasted 10–15 minutes. Twelve-hundred students were interviewed. The response rate—calculated as the number of completed interviews among those contacted who were not excluded on the basis of year in school, age, citizenship, or quota controls, and for whom there was not a language barrier—was 24 percent.¹⁰ Further details are provided below.

The sample diverges somewhat from the targeted population, especially with respect to students' residences. Briefly, we have more than the proportionate number of on-campus students and fewer in each of the other two categories.¹¹ With respect to other characteristics, the sample is more like the population.¹² As a result of the observed discrepancies, we checked

⁹We have no reason to believe that the factors that influence turnout differ based on whether the school publishes its directory or not.

¹⁰In general surveys of college students, response rates of 20–40 percent are not unusual. Dey (1997) notes that response rates for a nationwide mail followup to the well-known Cooperative Institutional Research Program freshman survey dropped to the low 20 percent range by the 1990s. Porter and Whitcomb (2005) report that response rates for four web surveys at a “selective liberal arts college” were 38–44 percent. A report on four web-based surveys of students at the University of Minnesota (*Minnesota Daily*, 2006) notes response rates of between 23 and 29 percent.

¹¹Given ambiguity expressed by the vendor about the information contained in the various files (possibly resulting in considerable inefficiencies in reaching students), we oversampled school-based housing. We also wanted to ensure an adequate sample of these students, as they are often left out of other samples. A comparison of the sample to the population is available upon request.

¹²Oversampling of public institutions and regional disparities probably stems from varying propensities to publish student directories. The greater proportion of young students is a result of our decision to sample heavily from school-based phone numbers, as younger students are more likely to live on campus. The results we report below do not appear to be a function of a sample biased by the inclusion of too many students from well-to-do families; there is a good deal of variation in the sample in terms of type of college as well as family income.

all the analyses using weighted data (reflecting information on student residence). In practice, the weights made little difference; we present the unweighted data here.

Results

We turn now to a test of our hypotheses regarding the effects of demographics, motivation and mobilization, and college-specific factors on the turnout of college students. Our dependent variable indicates whether or not the student voted, based on his or her self-report.¹³ While we tend to focus first on the descriptive results, based on the nature of our theoretical expectations, we sometimes discuss the variables of interest in the context of multiple regression. After discussing each set of hypotheses individually, we combine them more concretely through the multiple regression framework.

Demographic Characteristics: Not the Usual Stuff

Though we have argued that most demographics are of questionable meaning and value in modeling turnout of college youth, it is useful to confirm this observation by looking briefly at the relationship between “the usual suspects” and reported turnout. As predicted, when standard demographics are examined, a number of nonresults emerge. Though some small effects are found in bivariate analyses, once other variables are controlled for, age, employment, residential stability/mobility measured as years in the home community, parents’ household income, and race do not have an effect on turnout (results available upon request). Gender, which clearly has substantial variation in the college student population, is the only traditional variable to survive in a multivariate analysis; overall, women voted at a rate almost 10 percentage points above that for men (81 percent vs. 72 percent).¹⁴ As will be discussed below, measures of mobility also survive, but only when the measures take into account the unique characteristics of college students. Overall, the evidence supports Hypothesis 1.

¹³Overall turnout in our sample is high—77 percent according to students’ self-reports. While surely an overestimate of real turnout, we used answer choices similar to those shown to reduce overreporting (Belli et al., 1999; Duff et al., 2007), and the figure does not appear to be inflated more than overestimates in the National Election Studies and similar surveys (Wolfinger and Rosenstone, 1980:116; Duff et al., 2007). Exact estimates are not available. According to the CPS’s less-inflated number, turnout among college students was just over 59 percent (Lopez and Elrod, 2005:5); the 59 percent figure includes both two- and four-year institutions, which the CPS does not distinguish. Also, in 2004 there was an unusual level of interest in the presidential election, yet this level of turnout, as measured in the CPS, was only a point higher than in 1984 and several points lower than in 1992.

¹⁴Among 18–24 year-olds in the 2004 CPS, 6 percent more women than men reported voting. From 1984–2000, the difference varied between 1 percent and 6 percent, always in favor of women. See Lopez and Elrod (2005:5).

What these results say about young people in general remains an open question. Among nonstudents, part-time students, and students in two-year colleges, the greater variation in demographic factors, and thus in the skills and resources these factors impart, should be important for comparisons across these groups. It is clear, however, that among full-time students in four-year colleges and universities, the usual analysis is not very enlightening. This is not to deny the fact that demographics predict why 18–24 year-olds, including college students, turn out at lower rates than older voters.

Motivation and Mobilization: Traditional Factors at Work

In contrast to demographic variables, attitudes about politics and parties were important explanations of student turnout in 2004. The frequency of political discussions, for example, is strongly correlated with turnout (Table 1, top panel). The same is true of a measure that asked specifically about interest in the 2004 presidential race; while 82 percent of those who followed the campaign at least somewhat closely reported voting, only 45 percent of those who did not follow the campaign closely, or at all, reported turning out. As with other psychological measures, partisan strength was strongly related to turnout: 89 percent of strong partisans claimed to have voted, 75 percent of weak partisans, 69 percent of leaners, and only 55 percent of the relatively small group who said they were independent or apolitical. As with their elders, then, psychological variables are a major factor in explaining why some students go to the polls and others do not.

TABLE 1

Turnout of College Students by Frequency of Political Discussions and by Political Party Mobilization

Characteristic	Percentage Voting (N)
<i>Discuss politics and current events outside of class</i>	
Almost every day	87.7 (399)
Once a week	76.3 (469)
A few times a month	66.3 (252)
A few times a year or less	66.3 (80)
Total	77.3 (1,200)
<i>Mobilization by political parties</i>	
In person and by mail/email	92.1 (625)
In person or by mail/email	83.7 (386)
Neither	69.1 (177)
Total	77.3 (1,188)

NOTE: "A few times/month" includes "once a month." "A few times/year or less" includes four cases of "don't know."

Mobilization by the political parties in the form of get-out-the-vote campaigns is a longstanding concern in political science. However, the extent to which mobilization occurs on college campuses has never been studied. Theoretically, campuses provide an excellent way to reach large groups of people efficiently. On the other hand, if the parties think that young people are not likely to vote and that it is uncertain where students will vote if they do cast a ballot, they may conclude that such efforts would be wasted. Rosenstone and Hansen (1993:162–69), in one of the few pertinent comments on this point, note that the parties carefully target their contacting; among other things, this means they contact older people at substantially higher rates than young people. On the other hand, in the past few elections, candidates and parties have become adept at contacting and otherwise engaging young people through online methods (e.g., Polantz, 2008).

According to the students' reports, the political parties in fact reached large numbers of them in 2004.¹⁵ We asked students two questions regarding party mobilization. The first, drawn from standard NES questions, asked respondents whether anyone from any of the political parties "call[ed] you . . . or [came] around and talked to you individually about the campaign this year." The second question asked whether any of the parties "[sent] you mail or e-mail about the campaign this year." A quarter responded positively to the first question; more than a third said yes to the second question. Altogether, nearly half said they had been contacted in one or another of these ways.¹⁶ Both parties were active. About a third of the students who were contacted recalled being reached by both parties, though the Democrats had a 60–40 edge overall.

Contact by the political parties is strongly associated with higher rates of turnout. Those who recalled being contacted voted at a higher rate than those who did not recall being reached; if they recalled both an in-person and mail or email contact, they went to the polls in especially high numbers (Table 1, bottom panel).¹⁷

Hypothesis 2 is therefore supported at the bivariate level. As we shall see below, these factors maintain their strength in a multivariate analysis.

¹⁵NES data show the parties contacted more of the overall electorate in 2000–2004 than at any time in the past 50 years. See (http://www.electionstudies.org/neguide/toptable/tab6-c_1a.htm).

¹⁶We did not determine whether students were contacted on campus or through their hometown addresses (though the distinction is pretty much meaningless when it comes to email).

¹⁷Possibly, of course, what we are seeing is that those who voted recalled contacts more frequently than those who did not register or vote. The fact that students' responses were not identical to the two contact questions, that they distinguished between Democratic and Republican contacts, and that those who recalled both kinds of contacts were especially active lends validity to their reports. Nonetheless, as is surely the case in other surveys, some recollections were probably biased. To the best of our knowledge, there are no studies that either validate mobilization recall or provide a corrective mechanism for this phenomenon.

College-Specific Factors: New Considerations

A large majority of the students (71 percent) who were registered did so in their hometowns. Among registrants who attended college in a different town or city, 67 percent registered in their hometowns. For a fairly large number of students, then, voting required more than a minimal effort: they had to vote by absentee ballot or make some, possibly substantial effort to get to their polling places on Election Day (or before, in those places where there was early voting). Not surprisingly, proximity to home made a difference in whether a student voted. Eighty-five percent of those living within 30 minutes of their home claimed to have voted, compared to 78 percent of those who were one-half to two hours away and 75 percent of those who were more than two hours away.¹⁸

The results for our measure of student mobility are somewhat less certain. When examined at the bivariate level, students who transferred between colleges voted as frequently as those who attended only one college. As we shall see, however, there is suggestive evidence from the multivariate setting that transferring between colleges makes a significant difference.

Consistent with beliefs that science, math, and engineering majors would be less interested in politics, we found the lowest turnout rates among this group (73 percent). Somewhat surprisingly, turnout among social science students was not significantly higher (76 percent), brought down by very low turnout among psychology majors (65 percent, $N = 54$).¹⁹

Distance from home and transferring to another college can be thought of as costs; however, the traditional measure of the costs of voting in the United States is derived from the system of voter registration. Except for those in North Dakota, the only state that does not require registration, those seeking to vote must register by the date specified in state law. Despite the ambiguities in the laws with respect to where college students can or should register (O'Loughlin and Unangst, 2006), the variation in the interpretation and implementation of the various laws (Niemi, Hanmer, and Jackson, 2009), and the usual issue of meeting the registration deadline, the evidence suggests that college students did not find registering to vote especially problematic. When we asked about registration status, allowing respondents to report that "I tried to register but was unable to," less than 4 percent latched onto that answer choice. While proponents of easier registration might reasonably argue for improvement, we also found that

¹⁸Pacheco and Plutzer (2007) report that students who enrolled in a community college after high school voted at higher rates than students who immediately enrolled in a four-year school. It is likely that this surprising result is a function of distance from home.

¹⁹Social science majors are a diverse group that includes political scientists and economists, who are likely to be interested in politics but also aware of rational choice theory, and psychology majors, some of whom might take courses oriented more toward the natural sciences. We recognize that our results with respect to college major are less theory driven than other findings, but given the need for future research we believe the results are informative.

among those who were not registered or who were registered in their hometowns but went to school elsewhere, more than three-quarters said that if given a choice, they would prefer their hometown. Thus, the idea that barriers were in place keeping large numbers of college students from registering in their college towns misconstrues what students want and misrepresents the experience they report.²⁰

When we examine the closing date for registration, the traditional measure of registration costs, we find that this hurdle was one that students were able to clear. To account for the ability of some students to register at home or at college, we measured closing date as the lesser of the home-state and college-state closing dates. In a bivariate logistic regression, the effect of closing date on turnout cannot be distinguished from zero. This result holds when using alternative specifications (college-state or home-state closing date) on the entire sample as well as the subsample of students who went to college out of state. Interestingly, turnout was not especially high for those whose home or college states allowed Election Day registration.

Did students in so-called battleground states vote more frequently than those in states that were strategically less important in the 2004 campaign? Yes (see results below). But for college students, this kind of question has an additional ramification. That is, students who go to an out-of-state school have the unique opportunity of deciding in which of two states they might register. The question thus arises: Do students who come from a noncompetitive state but attend school in a battleground state choose to register at college? And if the situation is reversed, do students register at home? Journalistic accounts suggest that they do (Schworm, 2004; Gray and Seymour, 2004), but we sought more definitive evidence in our survey.²¹

Anticipating possible strategic behavior, we followed up our basic registration question by asking students where they were registered and whether they recently changed the location of their registration. A simple cross-tab with these responses yields evidence of strategic registrations (Table 2). The first row of Table 2 serves as a baseline. For these students, strategic reg-

²⁰Nevertheless, whether students should be allowed to register in their college towns and whether some are prevented from doing so or strongly encouraged not to do so remain important questions. More frequent registration of college students on their campuses might have symbiotic effects that heighten overall turnout. Our point here is simply that the numbers of students who are discouraged from voting by structural factors is probably not very great.

²¹Registration itself—which often takes place well before the presidential race heats up—is not affected by whether a student lives in a battleground state. In any event, the question here is *where*, not whether, students are registered. Battleground states are those that were defined as such by the Harvard Institute of Politics prior to the election. Using expectations rather than results from the election to define which states would be battleground states is appropriate given that our interest is in capturing the information environment in which students actually made their choices. Although our concern is with the extent to which behavior was strategic, we recognize that such behavior might arise from the initiative of the students or through the forces of mobilization. Sorting out the catalyst is beyond the scope of this article.

TABLE 2
Strategic Choices of Where to Register Among College Students

Strategic Registration Possible? ^a	Is Registered in Hometown	Was Registered in Hometown, Now Registered at School	Is Registered (for the First Time) at School	Was Registered at School, Now Registered in Hometown	Total (N)
No ^b	65.4	16.2	15.5	2.9	100.0% (853)
Yes	81.6	15.8	0.0	2.6	99.8% (38)
College state (only) is battleground	38.5	28.8	30.8	1.9	100.0% (52)

^aWith respect to the vote in the presidential election.

^bCombines three categories: (1) home and college town are in the same state; (2) home and college town are in different states but neither was a battleground state; (3) same as (2) but both were battleground states.

istration was not possible; that is, their home and college were in the same state, or their home state and college state were different, but neither or both were presidential battleground states. Students in the other two categories had a strategic choice (assuming they were not prevented from registering in their college town). The impact of these varying opportunities on their choice of where to register is evident. When only their home state was competitive, a higher percentage registered in their home state, and not one of these 38 students registered for the first time at school. When only their college state was competitive, many fewer remained registered in their home state, and nearly twice as many switched their registration to their college town or registered for the first time at school.²² Practically speaking, the impact of this strategic behavior was not large, as only a small number of students had such a tactical choice. But the evidence that they took advantage of this opportunity is clear.

Putting it All Together: A Multivariate Model of Turnout Among College Students

We have reviewed a number of characteristics—traditional and new—that are related to higher and lower levels of turnout, at least at the bivariate level. What remains is to put many of these factors together into a single model of turnout.²³ We choose variables to represent the types of explanations given above. We begin with traditional demographic characteristics, but we retain only gender, as the others proved to be questionable theoretically and, as expected, unrelated empirically (results available upon request). From the set of factors tapping psychological engagement, we use two variables: frequency of political discussions and strength of partisanship.²⁴ Reflecting the mobilization factor, we add a single variable indicating whether and how students were contacted by a political party.²⁵ We also add factors relevant specifically to college students: the distance from their college town to their home; a dummy variable for transfer students; a dummy variable for students majoring in science, math, or engineering; and to capture strategic behavior, a variable indicating whether the student's home state, college

²²Using a multiple comparison test, the difference between no strategic choice and home state only is not statistically significant, but the other two comparisons (home vs. college state only and no choice vs. college state only) are each significant at $p = 0.000$, all using the Bonferroni adjustment.

²³Given the similarity of registration and turnout among college students, we focus on turnout. This, plus the well-known problems with finding good identification restrictions and the sensitivity of such models to core assumptions, makes a selection model in the vein of Timpono (1998) problematic (Achen, 2008).

²⁴Using frequency of following the campaign in place of political discussions yields nearly identical results.

²⁵Both mail and in-person contacts, when entered individually, show an effect, though less than when the two are combined.

state, or both were battleground states. We account for structural costs of voting common to students and nonstudents alike by including a variable for registration closing date, though measured to account for the strategic choice some students have. We estimate two models; in the second model, we include a variable indicating whether the student reported voting previously.²⁶

As the dependent variable for turnout is dichotomous, we use logistic regression (see Table 3). All coefficients but that for closing date and transfer status (in Model 1 of Table 3) are statistically significant at conventional levels, most at the 0.05 level or below. More importantly, as evidenced by the column showing the predicted effects, each of these statistically significant variables has a substantively significant effect on the probability of voting.

Our voting model is quite obviously nontraditional. The usual demographic factors were of no relevance apart from gender, where, holding all other variables constant, women were predicted to have turnout rates about 9 percentage points higher than men. Hypothesis 1 thus receives strong support. When the traditional demographics are included, there is little change in the coefficients on the other variables. Based on the theoretical expectations discussed above, the variables we leave out of Table 3 include youth characteristics along with parents' household income and a traditional mobility question, proxies for parental engagement.²⁷ The evidence shows clearly that neither individual nor parental demographics are good predictors of turnout among college students. Note also that if year in school (freshman, sophomore, etc.) is included instead of age or along with age, year in school and all the other demographic variables, except gender, are statistically insignificant. Moreover, the other results barely change.

Unlike demographics, psychological engagement was important. Political party mobilization was surprisingly important as well, both in its frequency (shown above) and its potential impact; being contacted by one method (in person or mail) is predicted to boost turnout by about 10 percentage points and being contacted both in person and by mail is predicted to raise turnout by a total of over 15 percentage points.²⁸ Hypothesis 2 thus receives strong support as well.

²⁶Since the same variables are likely to have been determinants of students' initial turnout, this model yields conservative estimates of their effect, a point supported by increases in most of the remaining coefficients when previous vote is excluded.

²⁷We do not have a direct measure of parental engagement or education but believe these to be reasonable proxies. Although one might worry that students with more highly educated parents travel further to college, thus obscuring the effect of distance, we do not view this as problematic; the effect of distance barely changes once we control for parental income, and a separate analysis shows that the effect of distance is roughly the same for all income levels.

²⁸It is well known that those who are contacted are already more likely to vote. This casts some doubt on the effect of mobilization estimated from nonexperimental studies. The inclusion of having previously voted in the model, a strong predictor of being mobilized, helps alleviate this concern (see Goldstein and Rideout, 2002). As can be seen from Table 3, the effect of mobilization changes very little when a control for having previously voted is

TABLE 3
Estimated Effects of Traditional and College-Specific Factors on the Probability of Voting Among College Students

	Model 1			Model 2		
	b	se	p	b	se	p
Demographics						
Female	0.550	0.15	0.000	0.543	0.15	0.000
Psychological Engagement						
Frequency of discussing politics	0.246	0.07	0.000	0.198	0.07	0.003
Strength of partisanship	0.494	0.08	0.000	0.493	0.08	0.000
Party Mobilization						
In person and/or mail contacts	0.648	0.12	0.000	0.591	0.13	0.000
College-Specific Factors						
Distance from hometown	-0.130	0.05	0.017	-0.120	0.06	0.030
Transfer student	-0.256	0.20	0.201	-0.423	0.21	0.041
Major (science, math, eng.)	-0.290	0.16	0.076	-0.289	0.17	0.082
Home or college state a battleground in 2004	0.305	0.16	0.054	0.289	0.16	0.071
Structural Costs						
Latest registration closing date (home or college state)	-0.008	0.01	0.330	-0.007	0.01	0.358
Prior voting						
Student previously voted	—	—	—	0.942	0.19	0.000
Constant	-1.108	0.43	0.010	-1.171	0.43	0.007
N	1163			1160		
Log likelihood	-545.1			-530.7		

NOTE: The predicted effects are calculated as follows: for dummy variables the effect is calculated as the difference in the predicted probability when setting the value to 0 and then 1, holding all other variables at their actual values (effect shown with the same sign as the coefficient); for all other variables, the effect is calculated as the difference in the predicted probability when setting the value to the median and then the value that represents a one standard deviation shift in the direction that would increase turnout (all values rounded to nearest observable value), holding all other variables at their actual values (effect is shown as positive, as the shift was in the direction that would increase turnout). For example, changing the closing date from the median of 28 days to 18 days (standard deviation = 10.19) results in a predicted increase in turnout of just over 1 percentage point.

Even more telling, however, was the addition to the model of factors relevant specifically to college students. The distance between a student's college town and hometown contributed significantly to the frequency of voting. Mobility in the form of transferring between colleges also made a substantial difference in the probability of voting. Though we are less certain of what exactly is at work with the variable representing student majors, it is also clear that students in some fields voted less frequently than others. Finally, our estimates suggest that going to school and/or living in a battleground state increased turnout by roughly 5 percentage points. Only the closing date for registration, our measure of structural costs tailored to college students' ability to choose registration locations, was substantively small in both models and statistically could not be distinguished from zero.²⁹ Overall, Hypothesis 3 is strongly supported. Student-specific factors make a substantial difference in the likelihood that college students will vote—even after taking account of factors more traditionally included in turnout models.

As a concluding note, we observe in Model 2 of Table 3 that there is a large effect (13 percentage points) associated with having previously voted. This is consistent with recent work demonstrating that voting is habitual (Plutzer, 2002; Green and Shachar, 2000).³⁰

Conclusion

We began this project because we anticipated that college students are different from the rest of the electorate in a number of respects and, thus, to study their behavior, new data and a new approach were needed. They are mostly young, which suggests that their turnout should be low. But they are

included. The result is also robust to other model specifications. The literature has yet to develop models seeking to account for an endogenous relationship between mobilization and participation. Our attempts to do so proved unfruitful as the models either failed to converge or showed an extreme sensitivity to model specification. As Goldstein and Rideout (2002) explain, that experimental work confirms the importance of mobilization (see, e.g., Green and Gerber, 2004) suggests that mobilization be included in models of turnout; however, we agree with their recommendations to include a variable for having previously voted and to put more stock in the direction of the effect (positive) than in the magnitude of the effect. Note also that the effect of mobilization is strong and statistically significant regardless of whether students live on or off campus.

²⁹Our measures of closing date vary considerably, showing patterns similar to what one finds when adding this information to the CPS.

³⁰This result holds when age is controlled for; thus, this variable is not simply picking up the effect of age or the larger number of opportunities to vote among older students. The coefficient on transfer status is substantially closer to 0 in Model 1 of Table 3 as the transfer coefficient soaks up the influence of having previously voted; while turnout among those who previously voted is nearly identical for transfers and nontransfers, among those who had not previously voted, turnout among transfers was substantially lower than turnout for nontransfers. Note also that the results presented in Table 3 are not sensitive to accounting for clustering with respect to state or college.

becoming highly educated, which suggests the opposite. They are in some ways highly mobile, yet they often register at a place where they have lived for years. There is some ambiguity about where they can and should register, and inherent in this is an opportunity for some to choose their place of registration strategically. They are at a time in their lives and are living in institutions that make political party mobilization both more and less inviting.

The results reflect these differences from traditional turnout models. The usual demographic factors were of little relevance. Only gender was important, with college women voting at a higher rate than college men. Motivational factors and mobilization, in contrast, operated in the same way as with other adults. Students interested in politics, and those with strong partisan feelings, registered and voted in greater numbers. Those who were contacted by the parties—a surprisingly large proportion—voted more often. Additionally, college-specific factors were at work. Particularly important was how far a student lived from home; those who lived closest were most likely to get to the polls. Transferring between colleges suppressed turnout, and students majoring in math, science, and engineering voted less often. One additional variable affected where students registered, as well as whether they voted. Those who found themselves able to register in a battleground state by strategically picking their hometown or their college town tended to do so.

In one respect, at least, this examination of college students provides a sunny picture of both the present and future. Despite their age and in the face of a variety of costs, students turned out at a relatively high rate (though not so high as reported, of course). But, turnout did vary across individuals and contexts. Although one can easily craft normative arguments in favor of making voting easier for college students, our results are consistent with recent work showing that reducing further the costs of voting is not likely to have much effect on turnout (Hanmer, 2009; Ansolabehere and Konisky, 2006; Brown and Wedeking, 2006; Highton, 2004).

We have made progress toward understanding the political behavior of an important and growing segment of the electorate and our study opens up a new avenue of research on young voters and why they vote (or fail to vote). With respect to college students, questions related to location are perhaps at the top of the list. Why do some students decide to register in their hometowns, while others seek to register in their college towns? How widespread a factor is strategic registration? Also, do colleges themselves play a role in encouraging, or subtly discouraging, students from voting? What about mobilization? What explains which students were contacted? How well do the parties mobilize students? Do they mobilize those who vote absentee as well as on campus? Do they mobilize not only their supporters, but those who support the opposition as well? How does involvement in various social networks influence attitudes and behavior? And then, what do our findings suggest for noncollege youth and for students in community colleges and those who attend part-time?

Political scientists have given little thought to whether theories of turnout that apply to all adults are suited to those in their first few years of adulthood, or to the applicability of the measures employed in studies of turnout. In these senses, our study represents only a beginning. Its larger contribution, perhaps, lies in suggesting new approaches to the study of young people and how and when they become part of the voting public. For example, social network analysis might be used to understand better the behavior and attitudes of students and nonstudents alike; and given the place of colleges as socializing institutions, it might turn out that college students represent an excellent population on which to test a broad range of social hypotheses. Some of our ideas might also be applicable to other populations (e.g., members of the military). As a first step, we hope that the growing number of surveys of young people incorporate a sufficient number of college students and ask questions specific to their circumstances.

Appendix: Sampling Details and Variable Coding

Phone numbers were categorized as school, commuter, or home numbers. Those listed as school numbers were drawn from 2003–2004 directories; selecting only from current-year directories would have limited coverage because not all published directories are available early in the school year. At the same time, commuter and home numbers were only available from 2004–2005 directories, so it was necessary to sample from these files in order to reach students who lived outside of school housing. Survey Sampling was unable to provide information about coverage of published directories. However, we do not believe that the factors that influence turnout differ based on whether the school decides to publish its directory or not.

We imposed controls, based on data from the National Center for Education Statistics (2002:Table 181), for the proportion of completed interviews for freshmen (32 percent), sophomores (22 percent), juniors (22 percent), seniors (20 percent), and fifth-year students (4 percent) (each \pm 2 percent). We excluded students who were less than 18, as they are legally minors and would require parental permission. A few 25 year-olds were erroneously interviewed.

Variable Coding

Dependent Variable. (0) did not vote, (1) voted

Independent Variables

- Gender: (0) male, (1) female
- Discuss politics: (1) a few times a year or less, (2) about once a month, (3) a few times a month, (4) about once a week, (5) almost every day

- Strength of partisanship: (1) independent, (2) leaning partisan, (3) weak partisan, (4) strong partisan
- Contacted by a political party: (0) no, (1) in person or by mail, (2) both in person and by mail; mail includes regular mail and email
- Distance from hometown: (1) less than 30 minutes, (2) 30–60 minutes, (3) 1–2 hours, (4) 2–3 hours, (5) more than 3 hours
- Transfer: (0) student has not transferred colleges, (1) student has transferred colleges (median = 0)
- Major is science, mathematics, or engineering: (0) no, (1) yes
- Battleground state: (0) neither home nor college town was a battleground state, (1) home or college town or both were battleground states; battleground states were Arkansas, Arizona, Florida, Iowa, Maine, Minnesota, Missouri, New Hampshire, New Mexico, Nevada, Ohio, Oregon, Pennsylvania, Tennessee, Washington, West Virginia, and Wisconsin
- Closing date: number of days before the election that registration ends, set to the lesser of the college- and home-town closing dates
- Voted previously: (0) no, (1) yes
- Age: in years, 18–24
- Black: (0) no, (1) yes
- Employment: hours per week worked
- Mobility (time lived in hometown): (1) less than a year, (2) 1–2 years, (3) 3–4 years, (4) 5 years or longer
- Parents' household income: (1) less than \$50K, (2) \$50K–\$99.9K, (3) \$100K or over

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