

**At Home or On Campus?
How Duke Students Decide Where to Register to Vote**

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Abstract

Before they ever step into the voting booth, eligible Duke students must first decide whether to register at their permanent home address or their Duke address in North Carolina. 84 Duke students were surveyed to assess what factors play a role in the registration decision and whether the competitiveness of elections was among the most important factors. Four qualitative interviews were also conducted to collect quotes and anecdotes to highlight the trends found through the survey.

Students who rated their home state as Not Competitive at All were the most likely to vote in North Carolina. No matter the competitiveness of their home state or major, survey respondents valued the competitiveness of elections as more important in their registration decision than the importance of registering where it is easiest. Students' political engagement was positively correlated with a likelihood to register strategically, while lower levels of political engagement was associated with registering in their state where the process is easiest. Major and academic area of study were not found to significantly affect registration decisions and the factors that were most important.

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When Jane Doe stepped foot on Duke's campus as a freshman, she had never voted in an election, despite turning 18 earlier that year. She hadn't even registered until a representative from a campus organization stood up in her summer school class with voter registration forms for anyone who needed one. As she accepted the form, Jane had a decision to make: should she register to vote here in North Carolina or instead register to cast her ballot back in her home state?¹

Jane knew she wanted to vote, but she had yet to take the step to officially register. Her failure to register before enrolling in college did not come from an ignorance to politics. If anything, she experienced quite the opposite. "We do talk about politics a lot. I think my [high] school is very active, and you do protest about things," she said. "People were very vocal about voting, and I think I grew up in a place where voting was something I had to do. I remember my dad saying that if you don't vote then you can't complain about it." With the voter registration form in her hand, Jane easily came to her decision. She was going to vote in North Carolina.

Jane considers her home state not competitive, and the competitiveness in North Carolina for the 2020 presidential election accounted for "probably like 80%" of her decision to register at her Duke address. While she doesn't quite see North Carolina as a swing state yet, the mixed results over the last few election cycles were convincing enough to choose North Carolina. But even as a North Carolina voter, Jane's attention and political interests remain back home:

I don't consider North Carolina home. I think it's more temporary, so I don't care as much about the long-term things. One example of that would be [the last important state election,] I was actually wishing I was still registered [in my home state] so I could vote. It didn't end up being a big issue but that's one thing that made me I wish I could switch back because I care about [my home state's] politics.

¹ This introduction is based on an interview conducted with a Duke student for this project. To protect the individual's identity, their home state and any references that could be used to identify the student's home state are not included.

When she could not participate in her home state's elections, Jane Doe witnessed firsthand the consequences of strategic voter registration. While for the 2020 election, she gained the opportunity to vote in a state that was decided by less than 1% of the vote (Wasserman et al., n.d.), she consequently lost her electoral voice in the state where her primary political interests lie.

Like Jane Doe, every Duke student will experience at least one presidential and numerous midterm and local election cycles during their typical four years of undergraduate study. For those eligible to vote in the United States, they too must weigh their own priorities and decide in which state or district to make their voices heard. This paper was born from the belief that these choices not only offer an interesting avenue of inquiry but could have significant consequences on the American democratic process. College students, through their decisions on where to register, may have the power to change the results of election and to subsequently alter the trajectory of American politics.

I. Introduction

Young voters, ages 18-29, make up roughly 17% of the American electorate (Beadle et al., 2020). Unlike any other demographic of American voters, college students face a unique choice when deciding where to cast their ballot. While some students choose to use their home address when registering and vote by-mail, students have the choice to register to vote in their college towns, assuming they meet the state's residency requirements for registration (Niemi et al., 2009). While most American voters make their electoral choices on the ballot, students who attend universities and colleges outside of their hometown must first choose which state's and district's elections they will participate in. Young voters have the opportunity to sway local, state

and potentially national elections through their ability to strategically vote in the elections of their choosing.

With its recent electoral history and emergence as a battleground state, North Carolina provides one of the best examples to analyze student registration choices. Having gone for a Democrat once and Republican three times over the last four presidential elections, North Carolina can be considered battleground for Democrats and Republicans alike. While Donald Trump carried in the state in 2016, Democrats were hopeful that Joe Biden might flip North Carolina back to blue. Along with the presidential election, the Senate race in 2020 between incumbent Thom Tillis (R-NC) and Democrat Cal Cunningham was one of the closely watched races in the country. Supporters of both candidates spent over a combined 223 million dollars on advertising, making the race one of the most expensive in Senate history (Evers-Hillstrom & Morrill, 2020). No matter their home state, Duke students, who are eligible to vote and at least 18 years old, had the opportunity to register and then vote in these high-profile, competitive races in North Carolina. This project examines whether competitiveness matters to Duke students and how many students chose to register in North Carolina. With a greater understanding of how students make electoral choices, campus voting groups and organizations can better address the needs of students seeking to register, either at home or school.

While student turnout and the factors that keep students from voting are frequently studied by political scientists (Harder & Krosnick, 2008; Holbein & Hillygus, 2020; Niemi & Hamner, 2010), little research exists to examine the decision-making process students undergo when selecting the address from which they register to vote. The purpose of this project is to fill this gap and determine the factors that student weigh in making their choice to register in one location over the other. Where students register to vote has important implications for scholars

and politicians alike. Research shows that almost all who register to vote follow through by casting a ballot (Erikson, 1981). Knowing how students choose their place of registration and what factors dictate this choice may provide insight into where students will eventually vote. By using both surveys to produce quantitative results along with interviews to highlight students' decisions in their own words, I have produced a comprehensive analysis of how Duke students decide where to register.

i. Research Question

The primary research question for this project is: **how do Duke students decide where to register to vote and what factors play a role in this decision?**

From this main questions, three sub-categories of questions are derived based on students' characteristics such as major and political engagement. First, what percentage of Duke students are strategically registering to vote and how does competitiveness influence this decision? Second, how does the simplicity and ease of registration processes affect where students choose to register? And third, does a student's level political engagement or area of study affect their registration choices and the factors that influence them?

II. Background

Young people have consistently voted at lower rates than older Americans, a trend that scholars have long sought to explain (Beadle et al., 2020; Holbein & Hillygus, 2020; Niemi & Hamner, 2010). Typical demographic variables that are indicators of turnout in adult voters such as race, education, employment and mobility are not associated with turnout in college students (Niemi & Hamner, 2010). The decision to vote can be considered a low-cost, low-benefit choice: it takes relatively little time and effort to vote, and voters rarely see a significant impact directly

from their vote (Aldrich, 1993). When both costs and benefits are low to the voter, small factors that only slightly alter the cost or benefits to voting may be the difference between turning out and not (Aldrich, 1993). Because being registered to vote is the best predictor for whether citizens vote in presidential elections (Erikson, 1981), changes in costs or benefits to registration could similarly influence where a student registers. For this project, it is important to recognize the seemingly small shifts in the costs or benefits to student voters may dictate their choice as to where to register.

i. Costs of Registration and Voting

The body of literature on college-aged voters primarily focuses on electoral reforms and programs that lower the costs of voting for students. For young voters, reforms that lower the costs of registering boost turnout more effectively than reforms that lower the cost of voting (Holbein & Hillygus, 2020). Same day registration, online registration and preregistration have been shown to increase turnout among student voters, while absentee and early voting showed little effect (Holbein & Hillygus, 2020). These reforms may increase the number of students who register to vote but it is unclear if students find the registration process onerous: only a small percentage of college students self-reported that they faced difficulties and were unable to register or vote (Niemi & Hamner, 2010). Difficulty with the registration process is not the only factor affecting students' registration choices.

College students who were contacted by a political party are far more likely to vote than those who were not, suggesting an awareness of upcoming elections and their implications encourages students to vote (Niemi & Hamner, 2010). Early deadlines may prevent voters, who only become interested in politics when the election is only a few days or weeks away, from registering at all (Harder & Krosnick, 2008). In states with early registration deadlines, those

more invested in politics and motivated to vote are more likely to register (Harder & Krosnick, 2008). Early registration deadlines may force students to register in a state whose deadline has not passed.

Every presidential election is different from the previous one, and 2020 was no exception. In the midst of the COVID-19 pandemic, states and localities changed election rules to account for the difficulties of voting during a global health crisis. While students may have not returned to their college campuses for in-person instruction, analyses of state laws suggests that students could still register to vote in their college state, even if they were not on campus for the fall 2020 semester (Hanmer et al., 2020). The exception is first-year or transfer students who had never lived in their college towns. Like any new registration, these students are ineligible to register in their college towns without ever residing there (Hanmer et al., 2020). The effects of COVID-19 and changes to voting rules that may have made registration easier or harder for Duke students in 2020. While this project only looks at voter registration for the 2020 election, a comparison with past or future elections could illuminate the effects of COVID-19 on student registration trends.

ii. Benefits of Strategic Choice and Competitive Elections

This project seeks to build upon an analysis of the 2004 federal election that found that when given the choice to register in a competitive state, students strategically chose to register in a battleground state rather than a less competitive state (Niemi & Hamner, 2010). The researchers defined the battleground states themselves and did not record students' perceptions of the competitiveness of their home and college states. While the numbers show a likelihood among students to choose the more competitive state (Niemi & Hamner, 2010), this project will better examine how students view the political environment themselves. Student perceptions of

competitiveness in a state or district may vary dramatically from a measurement like the Cook Partisan Voting Index or true election results. Individual perceptions likely drive decisions if competitiveness is a factor. Perceptions likely vary among students and understanding perceptions compared to reality may be especially relevant for students who do not regularly pay attention to politics. In addition to a different methodology, this project provides a more up-to-date analysis that is necessary to understand the 2020 election and how Duke students chose to register. The American political landscape and society as a whole is dramatically different than in 2004 and we should not assume that college students in 2004 behave the same as students today.

In a competitive election, voters have a higher chance of casting the single vote that sways the election in the event of a tie, suggesting the perceived benefits of participating in a more competitive election are greater than a blowout. While it is highly unlikely one vote will be the difference, voters may feel their vote matters more when the race is close. Competitive elections are typically correlated with higher voter turnout (Aldrich, 1993; Cox & Munger, 1989; Harder & Krosnick, 2008). However, there is a divide among scholars as to what exactly drives higher turnout when elections are closer: a higher level of interest from voters or increased resources spent by campaigns when races are close. The “strategic politician” theory argues that political parties and strategists direct resources to campaigns where races are close, thus raising the level of awareness and engagement of voters (Aldrich, 1993). These investments may include “get-out-the-vote efforts” that lower the costs of voting and therefore boost turnout (Aldrich, 1993). This theory is supported by an analysis from the 1982 U.S House elections where campaign expenditures led to increased turnout (Cox & Munger, 1989). But in the same year, when campaign spending and activities were controlled for, more competitive races saw an

increase in turnout by voters (Cox & Munger, 1989). While campaign expenditures may boost turnout, there is also evidence that suggest a response from voters to more competitive elections that is not attributable to increased spending.

Voters are also more likely to take on greater costs and overcome certain barriers to voting when elections are close. In more competitive races, the perceived benefits of voting outweigh the costs of voting enough to maintain high turnout despite a sudden increases in costs (Fraga & Hersh, 2011). Using a natural experiment, scholars compared turnout rates in competitive and noncompetitive localities with the random condition of election-day rainstorms (Fraga & Hersh, 2011). Fraga and Hersh concluded that small increases in costs only impact noncompetitive races. When faced with the unexpected cost of weathering a rainstorm to vote, voters in competitive races remained determined to cast their ballot (2011).

iii. *Academic Interests and Student Voting Behavior*

Variation in students' political engagement and academic interest likely will affect their voting behavior. The literature suggests that engaging social science coursework is associated with greater participation in elections and that college major may impact the likelihood that a student registers and votes (Hillygus, 2005; Niemi & Hamner, 2010). Hillygus found that pre-college verbal skills, as evident by SAT scores, and the selection of social science courses both had effects on voter participation (2005). The effects were independent, suggesting that the selection of a social science curriculum is not wholly dependent on verbal skills and that social sciences course do effect voting behavior. This increase in electoral participation with a social science curriculum is consistent with findings that students who regularly talked about politics were far more likely to vote than those who did not (Niemi & Hamner, 2010). Depending on their academic and personal interests, students may approach voter registration differently.

iv. Hypotheses

Costs

H₁: *Students who are less politically engaged will be more likely to minimize the cost of registration by choosing to register in the state that they feel has the least burdensome registration process. Students unfamiliar with candidates and the competitiveness of their state's elections will be more susceptible to small increases in the costs of registering.*

H₂: *Strategic choice and competitiveness are more important factors in choosing registration location than the ease of the process for students who major in Social Sciences than for students who major in other disciplines.*

Observable Implications:

- 1) Lower levels of political engagement will be positively correlated with students choosing the location with the easier registration process.
- 2) Students with less political engagement will rate the importance of registering where it is easiest as a more important factor than students with greater political engagement.

Benefits

H₃: *Students who are more politically engaged will be more likely maximize the perceived benefits of their vote by registering strategically in the state that is more competitive and where their vote will matter more. More politically engaged students see more benefits in participating in competitive races and will be less affected by the costs of registration when choosing.*

H₄: *If they are able to register strategically, students who major in Social Sciences will be more likely to register strategically than students who major in other disciplines. Students with an academic interest in politics may perceive a greater benefit from voting in a more competitive election.*

Observable Implications:

- 1) Higher level of political engagement will be positively correlated with strategic registration for presidential races.
- 2) Social Science majors will rank competitiveness as more important than the ease of registering on the survey.

III. Methodology

To investigate how students choose where to register to vote, I used both quantitative and qualitative methods to better understand the decision-making process and determine what percentage of students strategically register. This project focuses primarily on the quantitative results as few Duke students were interviewed but provides a framework for future qualitative research that may build upon the statistical results in Chapter IV.

i. Quantitative Survey

The data and analysis for this project comes from a quantitative survey, conducted from October 8 through October 17, 2021. 99 Duke undergraduate students participated in the survey on their voter registration behaviors and preferences. There was no limit or cutoff for the sample size but rather the sample was constrained by the limited time available to collect responses. Responses that were not completed or where questions were skipped were not included in this analysis, leaving a sample size of 82 participants. An online survey provided the best strategy for reaching a wide range of Duke students across different majors. I hoped to avoid my own biases by surveying a sample of students beyond those whom I know. Students could complete the survey on their personal laptops or cellphones, creating easy access to the survey. Using

responses from the survey, I identified trends among students from different states, with different majors, or with varying levels of political engagement.

The survey was distributed using the online platform Qualtrics, guaranteeing anonymity for respondents. Students were not asked to provide their names or contact information to participate in the survey. All participants were required to consent to their participation in the survey and to affirm their status as Duke undergraduate students. The survey link was distributed using online platforms such as Facebook and Instagram, as well as posters on Duke's campus with QR codes.

The survey took about ten minutes for participants to complete. The survey was kept to such a short length to minimize the number of participants who did not complete the survey or answer the final questions. A short length was important to minimize survey fatigue, as I feared students who do not care about voting would fail to complete every question. For this study in particular, it is important to collect data that accurately represents students' views on voting, even if they are not politically engaged or invested in the voting process.

Because they did not have the option for strategic choice in the 2020 presidential and senatorial election, participants from North Carolina were only asked to evaluate the competitiveness of their home congressional district and the congressional district of their Duke address. For portions of this analysis, permanent residents of North Carolina are not included in the sample because data was not collected on their perceived competitiveness in elections where they have no strategic choice.

Statistical analysis for this project was conducted using JASP, an interface for R Studio. Three statistical models—multiple linear regression, Pearson's correlations, and t-tests—were used to identify relationships and draw conclusions from survey responses. Descriptive statistics such

as the mean, median, standard deviation and standard error were also calculated to compare findings across different sub-categories of students.

ii. Qualitative Interviews

At this project's conception, I hoped to complete a comprehensive qualitative analysis with interviews to compliment the data gathered from the survey. Unfortunately, due to time restraints and a poor response rate to requests be interviewed, only four interviews were conducted. From these interviews, quotes and anecdotes were pulled and interwoven into the introduction and conclusion of this paper to illustrate the trends in the data.

Participants were asked to sit for a fifteen-minute interview to gain a more nuanced perspective of their choices to register to vote. Interviews were conducted over Zoom in accordance with COVID-19 precautions. Participants were asked to describe any influences that affected where they registered to vote. Where statistical analysis fails to explain causation or identify factors outside of the survey questions, interviews were used to understand the decision-making process in the students' own words.

The original goal was to randomly select ten students from those willing to be interviewed to be a part of the qualitative study. The final question of the survey led participants to a separate form where they could provide their email address. Participation in the interview was optional, and participants' emails and identities were not linked to their survey responses. Because fewer than ten survey respondents were willing to be interviewed, all participants who provided their contact information were emailed to participate in an interview. Nine participants contacted but only four responded to the request to schedule a Zoom interview. Due to the limited size, interview responses fail to demonstrate generalizable trends among all Duke students.

Nonetheless, anecdotes such as the story of Jane Doe in the introduction illustrate the implications of competition and factors explored in this paper.

iii. *Variable Selection*

a. Political Engagement Score

A three-category measure was used to assess participants’ level of political engagement. Based on their interest in politics, consumption of political news, and participation in any four political activities, political engagement scores were created on a scale from 2-12. Participants were asked if they had attended a political rally or event, donated to a campaign or candidate, volunteers for a political campaign, or been a member of an on-campus political group sometime in the last two years. Table 1 shows the three categories and responses used to calculate political engagement.

Table 1: Political Engagement Score Variable	
Political Engagement Score (2-12)	Interest in Politics (1) Not interested at all (2) Not that interested (3) Somewhat interested (4) Very Interested
	Political News (1) Almost never (2) A few times a month (3) A few times a week (4) Almost everyday
	Political Activities (1) Attended a political rally or event (1) Donated to a campaign or candidate (1) Volunteered for a political campaign (1) Been a member of an on campus political group

b. Perceived Competitiveness Score (PCS)

Respondents were asked to evaluate the competitiveness of the elections in their home state or district for President, the Senate and the House of Representatives. Participants rated the competitiveness in their home state and North Carolina on a scale from 1-5. Home state was defined as the location of a student’s current, permanent address. Competitiveness was left undefined, so participants were free to interpret the question without being influenced. The

Perceived Competitiveness Score (PCS) was calculated by finding the difference between the ratings students gave to the state they registered to vote in and the state they chose to forgo registration. A positive PCS represents a student who votes in the more competitive of the two states while a negative score shows voting in the less competitive state. While a positive competitive score does not prove that students chose to purposely register strategically, a negative score shows strategic choice was not the dominating factor when registering to vote. A competitiveness score of zero represents no perceived difference in competitiveness for a student's home state and North Carolina. North Carolina permanent residents were not included in PCS calculations.

c. True Competitiveness

The true competitiveness of presidential elections was determined by the margin of victory in 2020 for Joe Biden or Donald Trump in each state. Because this project was conducted almost a year after the 2020 election, participants may have been familiar with the results in their home state. The ultimate results of the election, rather than predictions in the days preceding Election Day, likely influenced how participants evaluated competitiveness. For this reason, election results were used to categorize the true competitiveness of state to determine any differences between student perceptions and reality.

States were sorted into five categories based on the margin of victory as shown in Table 2: greater than 15%, between 10-15%, between 5-10%, between 1-5% and less than 1%. These five ranges correspond with the five competitiveness scores participants were asked to choose from when survey.

1: Not Competitive At All	Alabama, Arkansas, California, Connecticut, Delaware, District of Columbia, Hawaii, Idaho, Illinois, Indiana, Kentucky, Louisiana, Maryland, Massachusetts, Mississippi, Missouri, Montana, Nebraska, New Jersey, New York North Dakota, Oklahoma, Oregon, Rhode Island, South Dakota, Tennessee, Utah Vermont, Washington West Virginia, Wyoming
2: Slightly Competitive	Alaska, Colorado, Kansas, New Mexico, South Carolina, Virginia
3: Somewhat Competitive	Iowa, Maine, Minnesota, New Hampshire, Ohio, Texas
4: Competitive	Florida, Michigan, Nevada, North Carolina, Pennsylvania
5: Very Competitive	Arizona, Georgia, Wisconsin

(Wasserman et al., n.d.)

IV. Data Analysis and Results

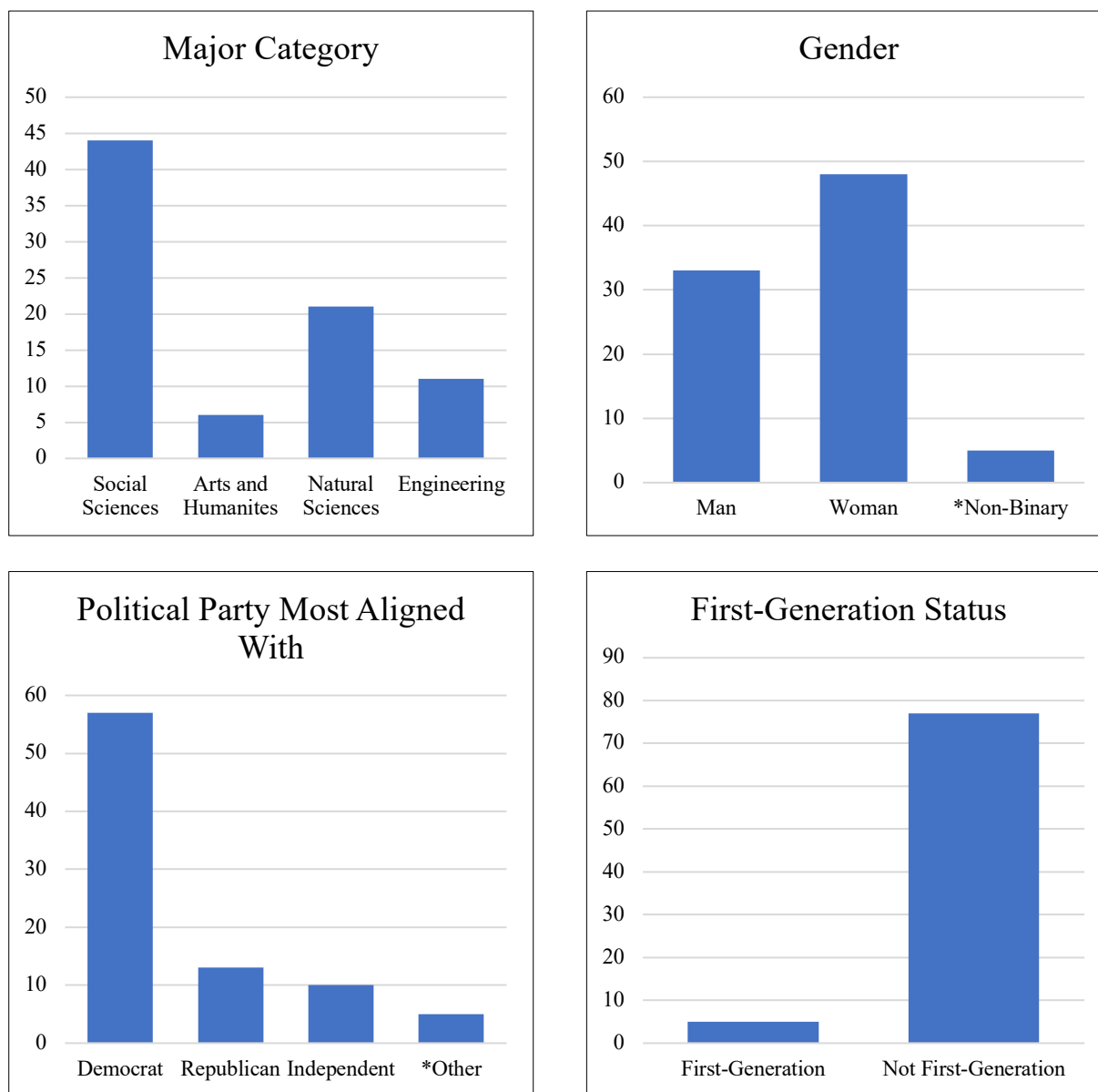
i. Description of Sample

After cleaning the data for incomplete responses and participants who were not Duke students or not eligible to vote in the United States, 82 responses were used for statistical analysis. Figure 1 illustrates the breakdown of the sample by four demographic questions: major category, gender, political party students most aligned with, and first-generation status. Fewer than five students identified as non-binary or aligned with a party categorized as “other.” The exact numbers of respondents in this category is not shown to protect the anonymity of such students.

Based on the number of degrees conferred in 2020, this sample is a close match to the larger Duke population when divided by major (U.S. Department of Education, 2020). 52% of Duke students are Social Sciences majors, and 54% of this sample identified as a Social Science majors. 22% of Duke students are Natural Sciences majors and 9% are Arts & Humanities. This sample is 26% Natural Sciences majors and 7% Arts & Humanities majors. Engineering majors at Duke make up 16% of the student population and 13% of this sample. Major category and its

influence on voter registration was the focus for this analysis but other demographic information may have an impact on students' decisions. More research is needed to assess how gender, political affiliation, and first-generation status may affect voter registration trends.

Figure 1: Demographic Breakdown of Survey Sample



This project focuses on registration decisions based on competitiveness rather than demographics, so it is necessary to divide respondents by the competitiveness of their home states. Table 3 describes the distribution of respondents among the five true competitiveness

categories defined in Chapter III. While the 2020 election results would define North Carolina as a competitive state, responses from North Carolina are listed separately due to the inability of these participants to register to vote in any other state. Nonetheless, North Carolina residents still have the choice to register at their permanent address or their Duke address. For these students, Table 3 shows the percentage of students who are registered at their home address compared to Duke's congressional district.

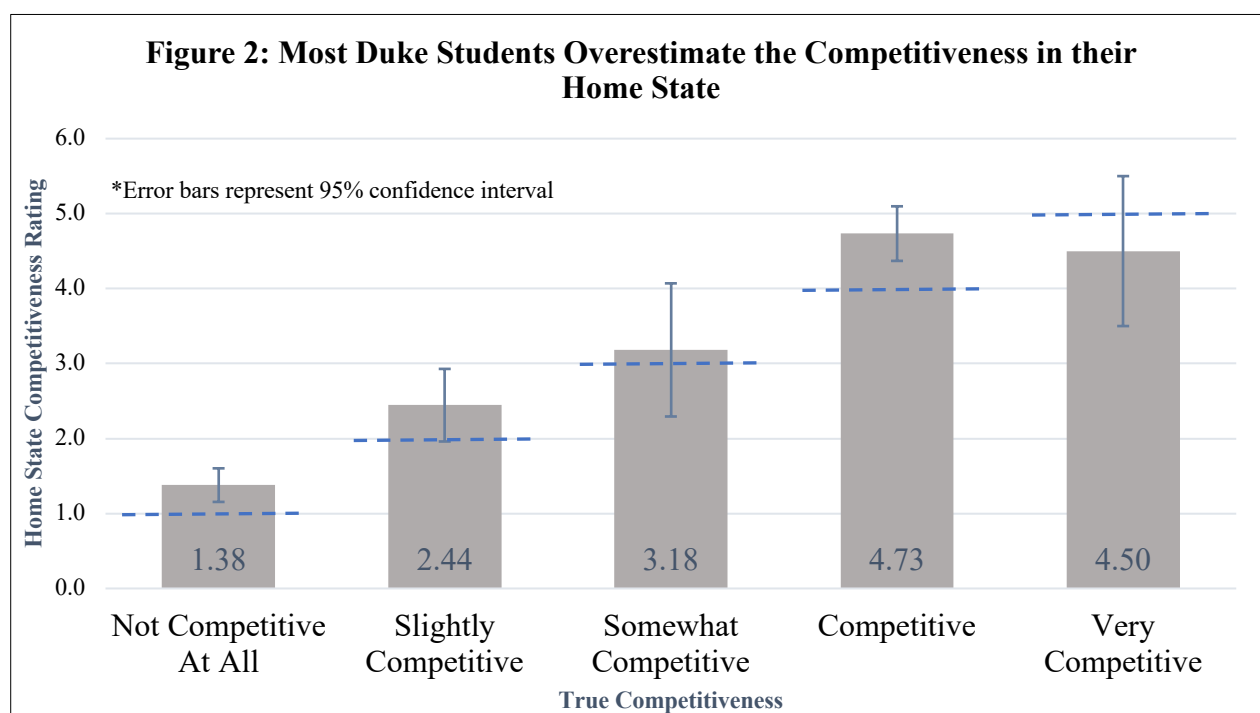
Table 3: Respondents by True State Competitiveness

True Home State Competitiveness	n	% Registered at Home Address	% Registered at Duke Address
Not Competitive At All	37	49%	51%
Slightly Competitive	9	78%	22%
Somewhat Competitive	11	64%	36%
Competitive	15	87%	13%
Very Competitive	<5	100%	0
North Carolina	8	63%	37%
Total	82	63%	37%

As expected, due to the large number of U.S. states where the presidential elections won by wide margins, almost half of the respondents have permanent residences in states that are Not Competitive at All. Participants from states that are considered Not Competitive at All chose to register to vote at their Duke addresses at a much higher rate compared to participants from states with any other level of competitiveness. Of students from states with any degree of competitiveness, only about 21% chose to register at their Duke address, significantly less than the 51% of students from Not Competitive states. While the role of strategic choice cannot be assessed from only these basic counts, there is a clear difference in behavior among students from states not considered competitive.

ii. *Students' Perceptions Compared to True Competitiveness*

While election results and other ratings from scholars serve can serve as a benchmark to compare the competitiveness of states, I am far more interested in how students perceive the competitiveness in their home states. If strategic choice is indeed an important factor in the decision-making process, it is students perceived notions and assumptions about their home states that drive this decision, not the exact tally of votes. Figure 2 illustrates students' perceptions of competitiveness compared to the true competitiveness determined by the 2020 results.



On average, participants overestimated the competitiveness of elections in their home states, with the exception of those from Very Competitive states such as Arizona, Georgia and Wisconsin. The most significant discrepancy comes from students who permanently reside in Competitive states, where the average overestimation is 0.73. For states that are classified as Not Competitive at All and Competitive, the 95% confidence interval lies above the true

competitiveness rating, meaning the average rating for these states is greater than the true competitiveness. I cannot be as confident for Slightly Competitive, Somewhat Competitive, and Very Competitive states that the average rating is different from the true competitiveness.

With such a small sample size from these Very Competitive states, the data does not give any conclusive evidence that students are misinterpreting the true competitiveness of the presidential election in their state. Unfortunately, these Very Competitive states are the most under-represented category of students, yet the electoral implications of their registration decisions matter the most with regards to their potential to swing elections. More research is needed identify if students from these most competitive states are truly underestimating the competitiveness.

While 2020 election results serve as an interesting comparison, this survey did not define competitiveness for participants, leaving the interpretation up to each individual. Evaluating the competitiveness of their home states differently from the true election results is not necessarily good nor bad but the differences highlight the need to analyze perceptions rather than raw election results. Figure 2 provides evidence that strategic choice should be analyze using student's perceptions, as opposed to researcher-designated categories such as those used in earlier research (Niemi & Hamner, 2010). For the remainder of this analysis, I used perceived competitiveness as reported by students to provide a more accurate description of strategic choice.

iii. Perceived Competitiveness of Home States and Registration Decisions

With the evidence from Figure 2 that students may see the electoral landscape differently than reality, we should instead look deeper at how Duke students rated their home states from their own point of views.

Table 4: A greater percentage of students register at home when they perceive their home state to be competitive.

Perceived Competitiveness Rating of Home State	n	% Registered at Home Address	% Registered at Duke Address
Not Competitive At All	30	37%	63%
Slightly Competitive	10	80%	20%
Somewhat Competitive	15	73%	27%
Competitive	<5	100%	0
Very Competitive	17	88%	12%
Total	74	64%	36%

Table 4 shows the divergence in registration behavior between students who perceive their home state to Not be Competitive at All and those who perceive some competitiveness. Students who feel their home state is Not Competitive at All chose to vote in North Carolina at a rate nearly double that of all students who participated in this survey. Almost a quarter of respondents rated their home states as Very Competitive despite the 2020 election results suggesting that very few live in truly Very Competitive states. Despite having to vote by-mail or travel out of North Carolina to vote in-person, a majority of respondents chose to register in their home state.

Table 5: Students from Not Competitive At All states registered in the more competitive state at the highest rate.

Perceived Competitiveness Rating of Home State	n	% Registered in More Competitive State	% Registered in Less Competitive state	% that rate States with Equal Competitiveness
Not Competitive At All	30	63%	37%	0
Slightly Competitive	10	20%	80%	0
Somewhat Competitive	15	13%	60%	27%
Competitive	<5	50%	50%	0
Very Competitive	17	41%	12%	47%
Total	74	41%	41%	16%

When students were divided by whether they voted in the more competitive state, less competitive state, or rated both states equally, no respondents felt both their home state or North Carolina were both Not Competitive at All or Slightly Competitive. The greatest percentage of students who voted in the more competitive state were those who rated their home state as Not Competitive at All. In Table 5, we see that the lowest percentage of students voting in the more competitive state reside in a state they rated as only Slightly Competitive. A small difference in competitiveness from Not Competitive at All to Slightly Competitive is associated with a significant shift in the percentage of students who vote in the more competitive state. A large majority of survey respondents had the opportunity for strategic registration as only 16% rated their home state and North Carolina as equally competitive. An equal number of respondents voted in the more competitive state and the less competitive state, begging the question, what led some students to strategically register and others to not.

iv. Perceptions of North Carolina Competitiveness

Strategic choice and Perceived Competitiveness Score are not only dependent on how students rated their home states but also their ratings of North Carolina. PCS relies on the perceptions of both states in relation to one and another, and dramatic differences in how students rate North Carolina decreases the validity of PCS a measure of strategic choice. When the average rating of North Carolina was compared between those who registered at their home address and those who registered at their Duke address, there were no significant differences. The mean rating of North Carolina in the presidential election was 4.191 for students who registered at home and 4.184 for students who registered at their Duke address. The ratings for the North Carolina Congressional races were also similar, with the mean competitiveness for the senatorial race being 3.915 for at home voters and 3.630 for Duke address voters. For the House

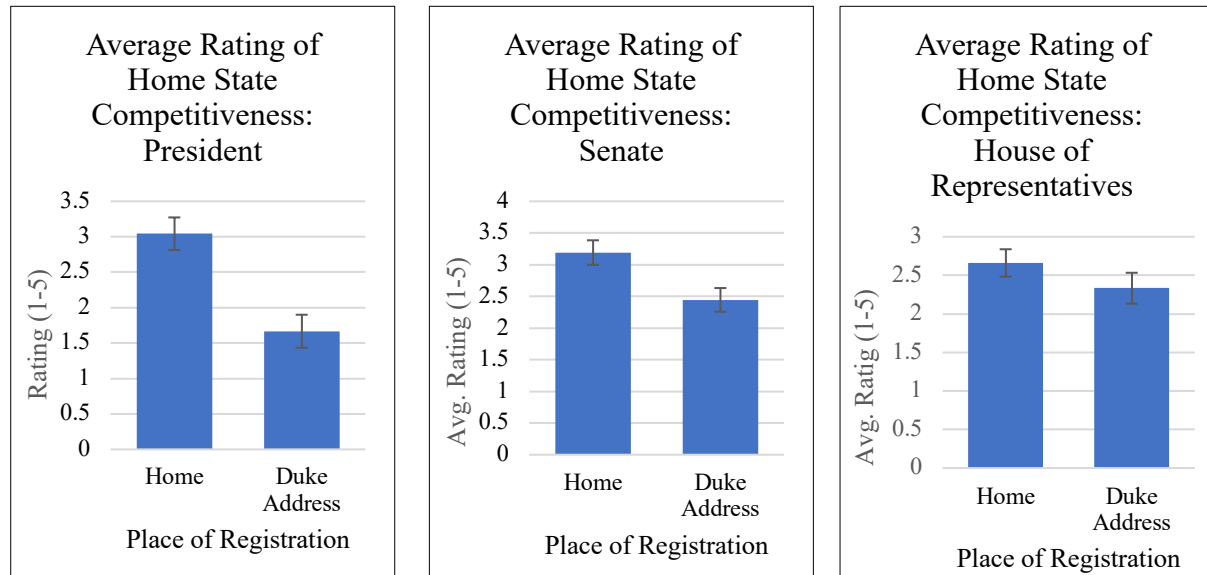
of Representative races, the ratings were 3.043 and 2.926. An independent sample t-test was used to confirm that the perception of North Carolina competitiveness was not dramatically different depending on where students choose to vote. As Table 6 shows, I found no statistical significance in the average ratings of North Carolina elections between students who vote at home and those who vote in North Carolina ($p = 0.824$, $p = 0.160$, $p = 0.699$).

Table 6: Students who vote at home do not rate North Carolina any differently than those who vote in North Carolina.

	t	df	p
NC Competitiveness: President	0.223	72	0.824
NC Competitiveness: Senate	1.418	72	0.160
NC Competitiveness: House of Rep.	0.388	72	0.699

Note. Student's t-test.

If competitiveness plays a role in students' choice of registration location, we should then expect to see differences in how students rate the competitiveness of their home states, depending on where they are registered. I found these differences in both the descriptive statistics and through t-tests in Figure 3 and Table 7. Students who registered at their home addresses rated the presidential election in their home state more competitive by over 1 point compared to students who registered at their Duke address. These students rated their home states' election at 1.66. Students who registered at home also rated their senatorial races more competitively, with an average of 3.191 trumping an average of 2.44 for students who vote at Duke. As shown by the overlapping error bars in Figure 3 and the t-test results in Table 8, the difference between the average ratings of House of Representative races is not statistically significant ($p = 0.227$).

Figure 3: Average Ratings of Home State Elections

When comparing the competitiveness ratings for students' home states, both a Student's and Welch's t-test were run to combat a possible violation of the equal variance assumption when only a Student's test was used. For both tests, I found p-values less than 0.05 for the competitiveness ratings for the presidential and senatorial elections, showing the mean ratings for these elections are statistically significantly different for those who vote at home and those who vote at their Duke address ($p = <0.001$, $p = 0.007$).

Table 7: T-tests confirm that students who vote in their home states rate their home states differently than those who vote at their Duke address.

	Test	Statistic	df	p
Home State Competitiveness: President	Student	3.923	72.000	< .001*
	Welch	4.210	65.938	< .001*
Home State Competitiveness: Senate	Student	2.550	72.000	0.013*
	Welch	2.770	67.636	0.007*
Home State Competitiveness: House of Representatives	Student	1.167	72.000	0.247
	Welch	1.219	61.722	0.227

*p-value < 0.05

In finding statistically significant differences in how students who vote at their home address and students who vote at their Duke address, PCS is confirmed as a logical variable for quantifying strategic choice. Students perceive their home states to be different and thus, we should look to see why they choose differently when registering to vote. Sections v., vi., vii., and viii. present data regarding this project's four main hypotheses regarding strategic choice, political engagement, ease of voting and academic major. These findings are then discussed in detail in Chapter V.

v. Political Engagement and Registration Difficulty

Participants were asked to judge whether their home state or North Carolina had an easier registration process. For the Pearson's correlation in Table 8, registering in the state where it is easiest was represented by 1 while voting in the state where registration is more difficult was coded as -1.

Table 8: Political Engagement is negatively correlated with registering in the state where it is easiest.

Variable		Registered in State that was Easiest	Importance of Voting Where it is Easiest
Political Engagement	Pearson's r	-0.288	-0.045
	p-value	0.011*	0.699

Note. Conditioned on variables: Importance of Competitiveness, Importance of Being Registered Before Duke, Preference for By-Mail Voting, Preference for In-person voting, Parental Influence

*p-value < 0.05

When all other factors tested are held constant, there is a moderate relationship between political engagement and registering the state where the registration process was easiest. The negative relationship represents the higher a student's political engagement, the more likely they are to register in the more difficult state. On the other hand, students with lower levels of

political engagement are more likely to register in the state where it is easiest. This correlation, with a Pearson's r of -0.288 was found to be statistically significant ($p = 0.011$).

The relationship between political engagement and importance of registering where it is easiest is very weak at -0.045. Unlike the relationship with registering in the state that is easiest, the relationship between political engagement and the importance of ease is not statistically significant ($p = 0.699$). While students with lower level of political engagement tend to register in the state where the process is easiest, it cannot be concluded that these less politically engaged students weigh voting where it is easiest as significantly more important than their more politically engaged peers.

In addition to correlations to identify factors that influenced respondents' tendencies to register where it is easiest, a linear regression model was created to understand the interactions of important factors. When a Backward Stepwise method was used to eliminate variables that were not statistically significant, the variables that best predict voting where it is easiest were political engagement and the importance of voting where it was easiest. The resulting model was $F(2,79) = , p < 0.01$) with an R^2 of 0.123.

Model 1

$$\text{Registered in State that is Easiest} = 0.331 - 0.071 \{ \text{Political Engagement Score} \} + 0.117 \{ \text{Importance Voting Where is it Easiest} \}$$

For Model 1 and Table 8, registering a state that is easiest was coded as 1 while registering in the state that was not was coded as -1. An increase in political engagement by one unit corresponds with a decrease in registering where it is easiest by 0.071. With the opposite effect, registering where it is easiest increases by 0.117 with an increase in the importance of voting where it is easiest by one unit. 12% of the variation among respondents is explained by Model 1.

vi. Political Engagement and Strategic Choice

The aforementioned Perceived Competitiveness Score (PCS) measures the degree to which a registration choice is strategic. A very positive PCS shows a competitive-maximizing decision; a student chooses to register in a state that is significantly more competitive than the alternative. A very negative score shows the opposite, where a student forgoes registration in a state in favor of a much less competitive one.

The relationship between PCS and political engagement is moderate and positive for all three elections. An increase in political engagement is correlated with an increase in PCS. The relationship is strongest for the presidential election, with correlation of 0.258 while senatorial PCS is slightly less at 0.245. Unlike the Presidential and Senatorial PCS, the PCS for House races does not have a statistically significant correlation with political engagement ($p = 0.128$).

Table 9: PCS for Presidential and Senatorial Elections is positively correlated with Political Engagement

Variable		Political Engagement Score
PCS President	Pearson's r	0.258
	p-value	0.032*
PCS Senate	Pearson's r	0.245
	p-value	0.043*
PCS House	Pearson's r	0.185
	p-value	0.128
Votes in More Competitive State (Presidential only)	Pearson's r	0.233
	p-value	0.081
Importance of Competition	Pearson's r	0.173
	p-value	0.133

Note. Conditioned on variables: Importance of Being Registered Before Duke, Preference for By-Mail Voting, Preference for In-person voting, Parental Influence, Importance of Voting Where it's Easiest

*p-value < 0.05

When the measurement for strategic choice is changed to a binary to show whether a student voted in a more or less competitive state, the correlation between political engagement and voting in the more competitive state for the presidential election is 0.233. Voting in a more competitive state was coded as 1 while voting in the less competitive state was coded as -1. Therefore, a positive relationship indicates that an increase in political engagement is associated with a likelihood to register in a more competitive state. However, the relationship between political engagement and the binary of voting in the more competitive state is not statistically significant ($p = 0.081$).

A greater correlation between PCS and political engagement ($r = 0.258$) compared to the binary of voting in the more competitive state and political engagement ($r = 0.233$) represents a stronger relationship when a measure for strategic choice takes into account the variation of competitiveness. Political engagement is more closely tied to strategic choice when different degrees of strategic registration are measured. When PCS is used, a positive correlation shows that an increase in political engagement is associated with a *more* strategic choice. The binary is only indicative of whether a student makes *a* strategic choice or not.

vii. The Importance of Competitiveness as a Factor

When the five other tested factors were held constant, a greater Perceived Competitiveness Score for all three elections was positively correlated with the importance of competition in a student's registration decision. For the presidential and senatorial elections, the correlations were statistically significant ($p = <0.001$, $p = 0.040$). There is a strong relationship of 0.435 between the importance of competitiveness as a factor and perceived competitiveness score for President while the relationship for the Senate is weaker at 0.248.

Table 10: PCS is correlated with the importance of competition in registration decisions.

Variable	Importance of Competitiveness	
PCS President	Pearson's r	0.435
	p-value	< .001*
PCS Senate	Pearson's r	0.248
	p-value	0.040*
PCS House of Representatives	Pearson's r	0.103
	p-value	0.402
Votes in More Competitive State for President	Pearson's r	0.047
	p-value	0.703

Note. Conditioned on variables: Importance of Being Registered Before Duke, Preference for By-Mail Voting, Preference for In-person voting, Parental Influence, Importance of Voting Where it's Easiest

When a binary variable of whether students voted in the more competitive state or less competitive state, a very weak and not statistically significant relationship was found with the importance of competitiveness ($p = 0.703$). Unlike with political engagement, where the relationships with PCS and the importance of competition were very similar, the correlation is very close to 0 for voting in the more competitive state. Table 10 shows an increase in the importance of competition is associated with an increase in Presidential and Senatorial PCS but not a likelihood to register in the more competitive state. Similar to the relationship between political engagement and PCS, the greater importance of competitiveness is associated with a *more* strategic registration choice.

To assess the degree to which different factors influence students' decisions, a linear regression model was created to predict Presidential PCS. In addition to the six self-reported factors, political engagement and voter method score were tested using a Backwards Stepwise method to achieve a model that best predicts the data. When variables that are not statistically significant were removed, the resulting model was $F(3,70) = 5.554$ $p < 0.006$ with an R^2 of 0.304.

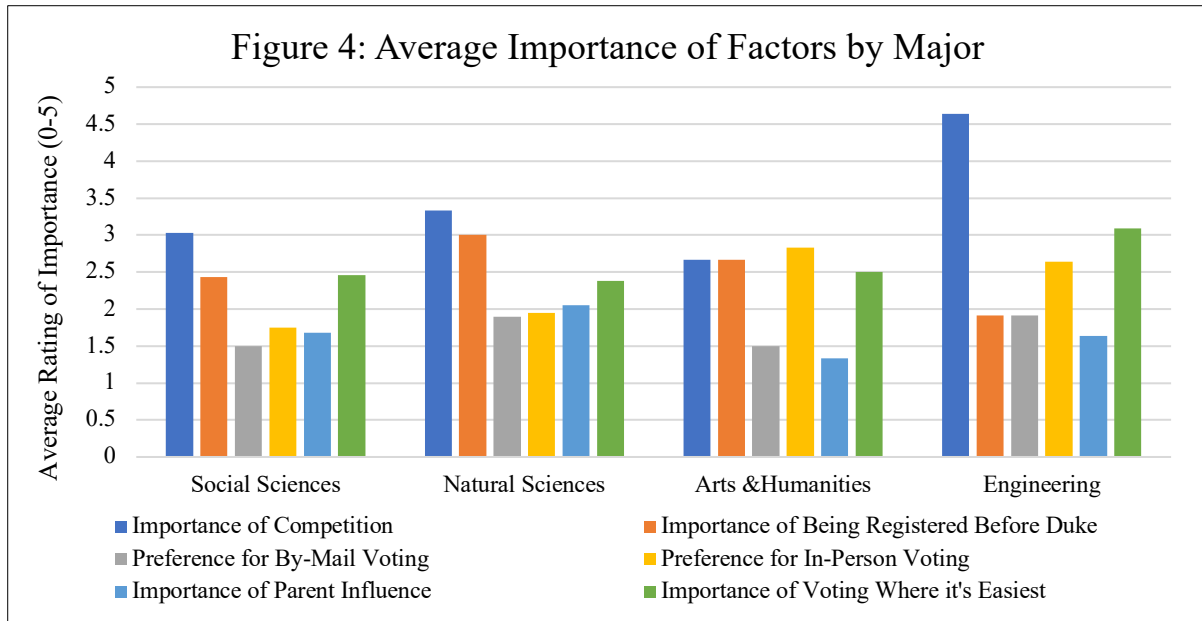
Model 2

$$\text{Presidential PCS} = -2.559 + 0.643 \{ \text{Importance of Competitiveness} \} - 0.404 \{ \text{Importance of Being Registered Before Duke} \} + 0.231 \{ \text{Political Engagement Score} \}$$

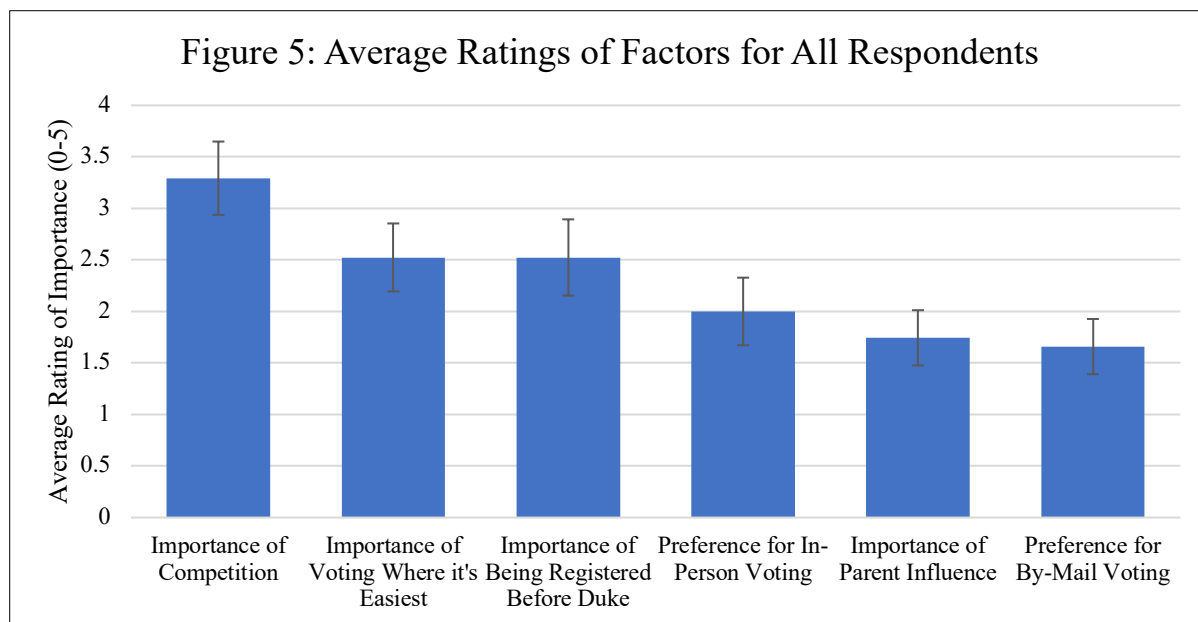
Presidential PCS increased by 0.643 for each additional unit of importance of competitiveness and 0.231 for each additional point of political engagement. PCS decreased by 0.404 for each additional unit of importance of being registered at Duke. The R^2 value of .304 indicates that the model can explain slightly more than 30% of the variation among Perceived Competitiveness Scores from this sample.

viii. Major and Factors Influencing Registration

When the average rankings of the six factors are compared across the four academic major categories, the importance of competition in elections was ranked the as the most important factor for Social Sciences, Natural Sciences and Engineering majors. Respondents ranked factors on a scale from 0-5, with 5 being an extremely important factor. For Arts & Humanities majors, the importance of competition ranks second behind the preference for in-person voting. The differences in these average rankings for Arts & Humanities majors were not statistically significant.

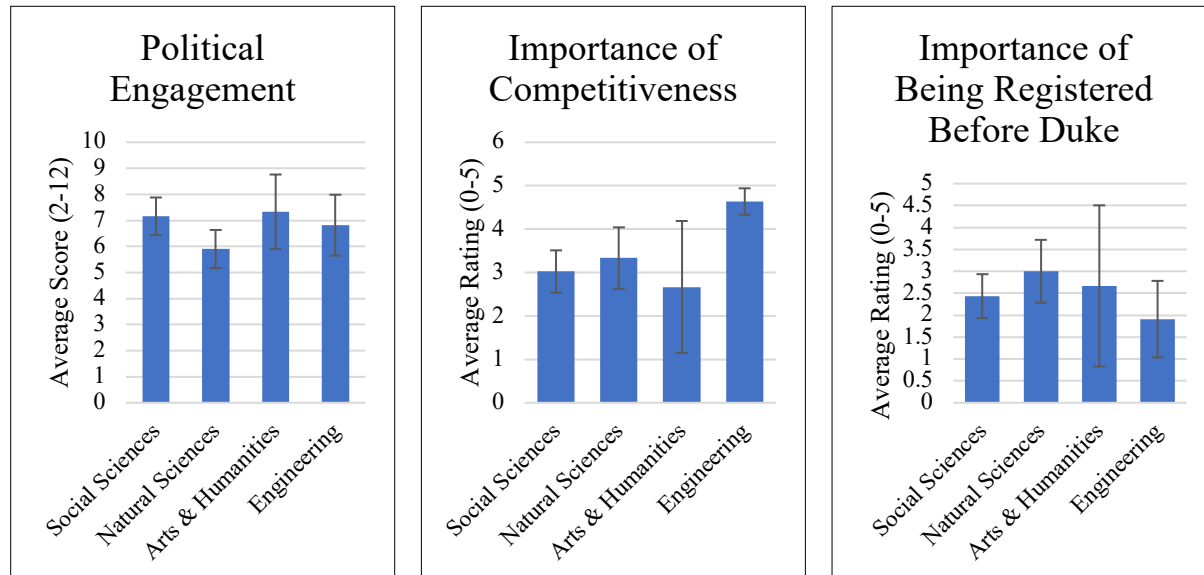


With students divided by major in Figure 4, it is difficult to compare factors because most of the means were not found to be statistically different from one another. Sample size greatly hinders the ability to compare the average rankings; the averages for Social Sciences majors represents 44 students, while only six Art & Humanities majors make up this sample. While this sample is reflective of the larger Duke population, the small size of each major categories makes comparisons difficult to find confidence in. But when these factors are compared to each other for the entire sample, a clearer ranking of the six factors can be found.



The importance of competition is the most important factor for respondents when determining where they choose to register, as shown in Figure 5. While the ordering for the remaining five factors is unclear due to the overlapping of the 95% confidence intervals, we can also conclude that the average rating for the importance of being registered before Duke and the importance of voting where it's easiest is greater than the average rating for the preference for by-mail voting.

When the three best predictors of PCS, as established in Model 2, are broken down by major, there is no statistically significant differences among majors for average political engagement or the importance of being registered before Duke. The 95% confidence intervals are overlapping as shown in Figure 6, meaning I cannot draw any significant conclusions from the averages by major. Engineering students rate competitiveness in elections are more important than students in all other major categories. This average rating of 4.636 is statistically significant when comparing it to the averages of Social Sciences, Natural Sciences and Arts & Humanities major.

Figure 6: Average Ratings by Major for Predictors of PCS

Engineers stand out as the majors who value competitiveness the most but without other statistically significant results, not much else can be concluded about the variation between major categories for political engagement, the importance of competitiveness and the importance of being registered before Duke. The uneven distribution of all three major categories makes comparisons by averages difficult. There may also be variation within major category that was not observed through this survey. Major category was used instead of individual majors to lessen the chance that students could be identified from their survey responses. It is possible that major category is too broad, and specific majors provide better insights into how academic interests influence registration.

Major category was also included as an independent variable in a linear regression model to assess whether area of study is a strong predictor of Presidential PCS. When major is included as a factor in this new linear regression model in addition to political engagement, the Importance of Competitiveness, and the Importance of Being Registered before Duke, a model of $F(6, 67) = 5.988, p < 0.001$ and an $R^2 = 0.349$ is produced.

Model 3

$$\begin{aligned} \text{Presidential PCS} = & -2.251 + 0.658 \{ \text{Importance of Competitiveness} \} - 0.380 \{ \text{Importance of} \\ & \text{Being Registered Before Duke} \} + 0.233 \{ \text{Political Engagement Score} \} - 0.724 \{ \text{Natural} \\ & \text{Science major} \} - 0.479 \{ \text{Arts \& Humanities major} \} + 1.321 \{ \text{Engineering major} \} \end{aligned}$$

For Model 3, Social Sciences major is the default. The y-intercept of -2.251 represents the effect of being a Social Sciences major on the predicted PCS. Compared to Social Science majors, the predicted Presidential PCS is lesser by 0.724 for Natural Science majors, by 0.479 for Arts & Humanities majors, and greater by 1.321 for Engineering majors. While the Importance of Competitiveness and the Importance of Being Registered before Duke have a p-value less than 0.05, the estimates for all four major categories are not statistically significant.

V. Discussion and Conclusion

This project confirms that competitiveness, as perceived by Duke students, plays a role in where students register to vote. Unlike previous studies where competitiveness was defined by researchers (Niemi & Hamner, 2010), perceived competitiveness was used to assess strategic registration to account for students' tendency to overestimate the competitiveness of the presidential election in their home states (Figure 1). The inconsistency between true competitiveness and perceived competitiveness found in this project confirmed a theme found throughout my interviews where participants were admittedly uncertain of how competitive their home state and North Carolina were. As one student explained, "I don't know this for a fact, but I used to think that they were both pretty competitive would go back and forth. I guess I used to think that [my home state] was competitive but we usually go blue, and then that North Carolina

was competitive but would usually go red. I honestly don't know. I just thought they were both kind of competitive.”

But even with these discrepancies between perceptions and true election results, Duke students value competitiveness more than all other tested factors when considering where to register. Political engagement is related to PCS and the importance of voting where it is easiest. While greater political engagement is associated with students' making a more strategic registration choice, it is also associated with a likelihood to vote where registration is most difficult. Interestingly, in contradiction to previous research on academic study and voting behavior (Hillygus, 2005; Niemi & Hamner, 2010), I did not find evidence that shows Social Sciences majors favoring strategic choice or being more politically engaged. In fact, Engineering majors values competitiveness as more important than any other major.

i. Primary findings and hypotheses

H₁: Students who identify themselves as less politically engaged will be more likely to minimize the cost of registration by choosing to register in the state that they feel has the least burdensome registration process.

I found evidence that supports Hypothesis 1 with regards to the relationship between political engagement and registering in the state where the process is easiest. The negative correlation of -0.288 in Table 8 shows that an increase in political engagement is associated with a likelihood to vote in the state with a more onerous process. Consistent with the low-cost, low-benefit nature of voting, students who are not invested in politics are more likely to register where it is easiest. Likewise, more politically engaged students seem more likely to tolerate a more difficult registration process.

Knowing whether students register in a state with an easier process does not tell us to what degree the ease of registration actually impacts registration decisions. When students were asked if the ease of registration was important in their decision, there was a very weak relationship with political engagement. Without evidence that the importance of the ease of registration is related to political engagement, I cannot prove that students with lower levels tend to register in the easier state because the registration process is easier. An alternative explanation is that more politically engaged students are more aware of the different registration processes in North Carolina and their home states, while less politically engaged students are only familiar with the state that they register in. Without a comparison, less politically engaged students may default to rating the state they register in as easiest, leading to the relationship found in Table 8. More evidence is needed to identify the root of the relationship between political engagement and registering where it is easiest.

H₂: Strategic choice and competitiveness are more important factors in choosing registration location than the ease of the process for students who major in Social Sciences than for students who major in other disciplines.

For all four major categories, the average rating for the importance of competition was greater than the importance of voting where it is easiest. But there is no significant difference between Social Sciences, Natural Sciences or Arts & Humanities with regards to the importance of competition. Engineering majors did rate the importance of competition greater than all other major categories, contradicting Hypothesis 2 which posits that Social Sciences majors would find competitiveness more important. When the average ratings for the importance of voting where it is easiest are compared, there is no statistically significant difference among any of the four major categories to draw a conclusion for the greater Duke population. Due to the small

sample of non-Social Sciences majors from this survey, there may be differences among majors that were not detected from this survey. A larger sample and a smaller confidence interval would provide better evidence if there were no relationship while this sample simply fails to show one.

While this survey did not produce statistically significant results that support Hypothesis 2, there was a noticeable difference between the importance of competition and voting where it is easiest across all major categories. Duke students across the board seem to care more about competition, and when linear regression was used, the importance of voting where it is easiest did not have a significant impact on PCS and strategic choice.

H₃: Students who identify themselves as more politically engaged will be more likely maximize the perceived benefits of their vote by registering strategically in the state that is more competitive and where their vote will matter more.

When isolated from all other tested factors, I found a positive relationship between political engagement and PCS for all three elections, with the presidential and senatorial being statistically significant. As shown in Table 9, a greater level of political engagement is consistent with a higher PCS, which supports Hypothesis 3. The linear regression model created from only statistically significant factors also supports the notion that a higher level of political engagement leads to a greater PCS.

When a correlation was found between political engagement and voting in the state that is more competitive, the relationship is almost identical to that with Presidential PCS, as shown in Table 9. While this relationship lacks statistical significance, the similarities suggest that PCS and the binary characterization of voting in the more or less competitive are related to political engagement in the same way. No matter the degree to which a registration choice is strategic, as

measured by PCS, a higher level of political engagement is associated with a likelihood to register in a more competitive state.

Identifying causation in this relationship is difficult from this analysis alone. It is possible that students, because they have chosen to register in a more competitive state, have a heightened interest in politics and consume more political news. In this case, a greater PCS leads to a higher level of political engagement, which is the opposite relationship from Hypothesis 3. But in finding a statistically significant relationship between political engagement and PCS, there is a clear relationship between the two. More research is needed to definitely establish political engagement as the causality for strategic choice.

H4: If they are able to register strategically, students who major in Social Sciences will be more likely to register strategically than students who major in other disciplines.

With the addition of major to the linear regression model that predicts PCS, there is not a significant effect that suggests academic area of study is a strong predictor of strategic choice. For Natural Sciences and Arts & Humanities majors, the effect is a PCS score lesser than Social Science majors by less than one. A shift to an Engineering major has a more dramatic effect, with the predicted PCS being over 1.3 points greater. Without statistical significance, I cannot conclude that major is a good predictor of PCS.

While these findings do not support Hypothesis 4, in combination with the results for Hypothesis 2, we are seeing that registration decisions are being shaped by factors outside of a student's major. I hypothesize that this is due to the political climate on Duke's campus. In the wake of the 2020 election, there was a campus-wide emphasis on voting and political participation from student organizations and the university as a whole. All students received numerous emails and other forms of communication on when and how to register to vote. In an

environment where political participation is such a focus, it is possible that students had the same information and were making similar registration decisions, regardless of major. A comparison of these results to another election year or perhaps a midterm election where turnout depressed may offer better insight to the impacts of major on voter registration.

ii. Limitations and Avenues for Future Research

With a sample size of only 82 undergraduate students, this paper is not sufficient to prove conclusively trends and correlations for the entire Duke student body population. However, even from a small sample, the evidence suggests that among students who permanently reside in non-competitive states, strategic choice plays some role in dictating their place of registration. While there are cases where statistical significance was achieved, a larger sample size would provide more confidence in the generalizability of these conclusions to all Duke undergraduates. The paper points to the presence of strategic choice as a factor in voter registration decisions but the overall effect and impact require additional research. The qualitative elements of this paper can be used as a starting point for future research on the decision-making process utilized by college students.

The focus of strategic choice in presidential elections leaves much unknown about voters who do not have the option to register in a different state. By using Duke University as the control location for this paper, the conclusions fail to encapsulate the competitiveness of North Carolina compared to other U.S. States. We lack data on how North Carolina residents view the competitiveness in their home state and with no comparison to another state, little can be determined about the difficulty of registering and voting for these permanent residents.

With data from one, small private university in North Carolina, this paper serves as a starting point for additional research into the voting behaviors of college students across the

country. Millions of young, eligible voters cross state borders every year to attend colleges and universities, providing a large swarth of voters whose behaviors and preferences remain relatively unresearched. This project can be replicated on college campuses of different sizes, private or public, around the country to see if strategic choice is universally important for college students. If the importance of competitiveness shown from just this small sample is reflective of all college voters, there may be massive implications if students were mobilized to vote in more competitive states. The electoral impacts of students changing their voting registration from one state to another should be study to understand if student voters are indeed changing results through their registration decisions.

iii. Conclusion and Recommendations

This project establishes that the competitiveness of the presidential election, either in a student's home state or in North Carolina, had an effect on where Duke students registered to vote in 2020. While efforts from on-campus groups tend to focus on helping students with registration and making the process less burdensome, new initiatives targeting students' interests in competitiveness may encourage higher rates of registration and voter turnout. Especially in midterm elections where turnout is significantly less, college students may be more motivated to vote if the competitiveness of Congressional races are better publicized.

Campaign organizers should also utilize the incentive of competition to mobilize young voters in target elections. Whether the candidates are a Democrats or Republicans, competitiveness can be leveraged by both parties to not only boost turnout but encourage college students to register in states or Congressional districts that are up for grabs. In elections that are decided by only a thousand of votes, a well-organized effort to change college students' voter registration could be the deciding factor.

VI. References

- Aldrich, J. H. (1993). Rational Choice and Turnout. *American Journal of Political Science*, 37(1), 246–278. <https://doi.org/10.2307/2111531>
- Beadle, K., Booth, R. B., Cohen, A., de Guzman, P., Wood, B. F., Hayat, N., Kawashima-Ginsberg, K., Keese, S., Kiesa, A., Junco, R., Lanzilla, K., Lundberg, K., Medina, A., & Soherr, L. (2020). *Election Week 2020: Young People Increase Turnout, Lead Biden to Victory*. CIRCLE: Center for Information & Research on Civic Learning and Engagement. <https://circle.tufts.edu/latest-research/election-week-2020>
- Cox, G. W., & Munger, M. C. (1989). Closeness, Expenditures, and Turnout in the 1982 U.S. House Elections. *The American Political Science Review*, 83(1), 217–231. <https://doi.org/10.2307/1956441>
- Erikson, R. S. (1981). Why Do People Vote? Because They Are Registered. *American Politics Quarterly*, 9(3), 259–276. <https://doi.org/10.1177/1532673X8100900301>
- Evers-Hillstrom, K., & Morrill, J. (2020, October 13). *North Carolina Senate race blows away spending records*. OpenSecrets News. <https://www.opensecrets.org/news/2020/10/north-carolina-senate-2020-outside/>
- Fraga, B., & Hersh, E. (2011). Voting Costs and Voter Turnout in Competitive Elections. *Quarterly Journal of Political Science*, 5(4), 339–356. <https://doi.org/10.1561/100.00010093>
- Hanmer, M. J., Niemi, R. G., & Jackson, T. H. (2020). College Student Registration and Voting in the Time of COVID-19. *Election Law Journal: Rules, Politics, and Policy*, 19(3), 363–373. <https://doi.org/10.1089/elj.2020.0664>

- Harder, J., & Krosnick, J. A. (2008). Why Do People Vote? A Psychological Analysis of the Causes of Voter Turnout. *Journal of Social Issues*, 64(3), 525–549.
- Hillygus, D. S. (2005). The MISSING LINK: Exploring the Relationship Between Higher Education and Political Engagement. *Political Behavior*, 27(1), 25–47.
<https://doi.org/10.1007/s11109-005-3075-8>
- Holbein, J. B., & Hillygus, D. S. (2020). *Making Young Voters: Converting Civic Attitudes into Civic Action*. Cambridge University Press.
- Niemi, R. G., & Hamner, M. J. (2010). Voter Turnout Among College Students: New Data and a Rethinking of Traditional Theories. *Social Science Quarterly*, 91(2), 301–323.
- Niemi, R. G., Hamner, M. J., & Jackson, T. H. (2009). Where Can College Students Vote? A Legal and Empirical Perspective. *Election Law Journal*, 8(4).
- Department of Education (2020). Integrated Postsecondary Education Data System (IPEDS): Duke University. *Institute of Education Sciences, National Center for Education Statistics*. <https://nces.ed.gov/collegenavigator/?q=duke&s=all&id=198419>
- Wasserman, D., Sophie, rews, Saenger, L., Cohen, L., Flinn, A., & Tatarsky, G. (n.d.). *2020 Popular Vote Tracker*. The Cook Political Report. Retrieved October 13, 2021, from <https://cookpolitical.com/2020-national-popular-vote-tracker>

Appendix A: Survey Sample

Are you an undergraduate student at Duke University?

- Yes (1)
- No (2)

Skip To: End of Survey If Are you an undergraduate student at Duke University? = No

In which category would you characterize your primary major?

- Social Sciences (1)
- Natural Sciences (2)
- Arts & Humanities (3)
- Engineering (4)

In which U.S. state or District of Columbia is your permanent home address?

▼ Alabama (1) ... Wyoming (52)

What is your gender?

- Man (1)
- Woman (2)
- Non-binary (3)
- Prefer to not answer (4)
- Prefer to self-describe (5) _____

Are you a first-generation student?

- Yes (1)
- No (2)

Some people are very interested in politics while other people can't stand politics, how about you? Are you...

- Not interested in politics at all (4)
- Not that interested in politics (3)
- Somewhat interested in politics (2)
- Very interested in politics (1)

How often do consume political news or information?

- Almost never (4)
- A few times a month (3)
- A few times a week (2)
- Almost everyday (1)

Have you participated in any of these activities in the last two-years? (Select all that apply)

- Attended a political rally or event (1)
- Donated to a campaign or candidate (2)
- Volunteered for a political campaign (3)
- Been a member of an on campus political group (4)

Do you identify as a Democrat, Republican or Independent?

- Democrat (1)
- Republican (2)
- Independent (3)
- None of the above (4)

With which party do you typically agree with most?

- Democratic (1)
- Republican (2)
- Independent (3)
- Other (4) _____

Are you registered to vote in the United States?

- Yes (1)
- No (2)

Skip To: End of Survey If Are you registered to vote in the United States? = No

Are you registered to vote at your permanent home address or your Duke (on- or off-campus) address in North Carolina?

- Home address (1)
- Duke address (2)

Were you registered to vote at your permanent home address before coming to Duke?

- Yes (1)
- No (2)

Did you vote in the November 2020 Election?

- Yes (1)
- No (2)

Before the 2020 Election, had you voted in any previous elections?

- Yes, I have voted in previous elections. (1)
- No, 2020 was my first time voting. (2)

Display This Question:

If 50 States, D.C. and Puerto Rico = North Carolina

How competitive is the election for the U.S. House of Representative for the district of your permanent home address?

- 1: Not Competitive At All (1)
- 2 (2)
- 3: Somewhat Competitive (3)
- 4 (4)
- 5: Very Competitive (5)

Display This Question:

If 50 States, D.C. and Puerto Rico = North Carolina

How competitive is the election for the U.S. House of Representative for the district of your Duke address?

- 1: Not Competitive At All (1)
- 2 (2)
- 3: Somewhat Competitive (3)
- 4 (4)
- 5: Very Competitive (5)

Display This Question:

If 50 States, D.C. and Puerto Rico = District of Columbia

How competitive is the election for President in Washington D.C?

- 1: Not Competitive At All (1)
- 2 (2)
- 3: Somewhat Competitive (3)
- 4 (4)
- 5: Very Competitive (5)

Display This Question:

If 50 States, D.C. and Puerto Rico = District of Columbia

How strongly do you agree with the following statements?

It is important to me to vote in an election for U.S. Senate.

- 1: Not Important at all (1)
- 2 (2)
- 3: Somewhat Important (3)
- 4 (4)
- 5: Very Important (5)

It is important to me to vote in an election for a voting member of the U.S. House of Representative.

- 1: Not Important at All (1)
- 2 (2)
- 3: Somewhat Important (3)
- 4 (4)
- 5: Very Important (5)

Display This Question:

If 50 States, D.C. and Puerto Rico != North Carolina

And 50 States, D.C. and Puerto Rico != District of Columbia

Which state, your home state or North Carolina, do you think was more competitive for the 2020 Presidential election?

Home state (1)

North Carolina (2)

Display This Question:

If 50 States, D.C. and Puerto Rico != North Carolina

And 50 States, D.C. and Puerto Rico != District of Columbia

How competitive is the election for President in your home state?

1: Not Competitive at All (1)

2 (2)

3: Somewhat Competitive (3)

4 (4)

5: Very Competitive (5)

Display This Question:

If 50 States, D.C. and Puerto Rico != North Carolina

And 50 States, D.C. and Puerto Rico != District of Columbia

How competitive is the election for the U.S. Senate in your home state?

1: Not Competitive at All (1)

2 (2)

3: Somewhat Competitive (3)

4 (4)

5: Very Competitive (5)

Display This Question:

If 50 States, D.C. and Puerto Rico != North Carolina

And 50 States, D.C. and Puerto Rico != District of Columbia

How competitive is the election for the U.S. House of Representative for the district of your permanent home address?

- 1: Not Competitive at All (1)
- 2 (2)
- 3: Somewhat Competitive (3)
- 4 (4)
- 5: Very Competitive (5)

Display This Question:

If 50 States, D.C. and Puerto Rico != North Carolina

How competitive is the election for President in North Carolina?

- 1: Not Competitive at All (1)
- 2 (2)
- 3: Somewhat Competitive (3)
- 4 (4)
- 5: Very Competitive (5)

Display This Question:

If 50 States, D.C. and Puerto Rico != North Carolina

How competitive is the election for U.S. Senate in North Carolina?

- 1: Not Competitive at All (1)
- 2 (2)
- 3: Somewhat Competitive (3)
- 4 (4)
- 5: Very Competitive (5)

Display This Question:

If 50 States, D.C. and Puerto Rico != North Carolina

How competitive is the election for U.S. House of Representative for the district of your Duke address?

- 1: Not Competitive at All (1)
- 2 (2)
- 3: Somewhat Competitive (3)
- 4 (4)
- 5: Very Competitive (5)

How important were the following factors when deciding where to register to vote?

	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)	Not applicable (0)
The competitiveness in my home state or North Carolina (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being registered at home before coming to Duke (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preference for in-person voting (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preference for voting-by-mail (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parental influence (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voting where it is easiest (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In which state, your home state or North Carolina, do you think it is easier to register or to vote?

	Home state is easier (1)	North Carolina is easier (2)	Neither is easier (3)	Not sure (4)
Register to Vote (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vote in Election (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How strongly do you agree or disagree with the following statements?

I prefer to vote in-person.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

I prefer to vote by-mail or absentee.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Display This Question:

If Did you vote in the November 2020 Election? = Yes

How did you vote in the 2020 election? In-person or by-mail?

- In-person (1)
- By-mail (2)

On the whole, what is the most important issues that you think the President and Congress should address?

- Job creation / improve economy (1)
- Wages / Incomes / Minimum wage (2)
- Immigration reform (3)
- K-12 education / schools (4)
- Health care (5)
- Terrorism / ISIS / Foreign Policy (6)
- House / Affordable housing (7)
- College affordability (8)
- Corruption in government / Special interests (9)
- Racism and race relations (10)
- Climate change / Global warming / Environment (11)
- Abortion / Women's reproductive health (12)
- Taxes / Government spending (13)
- Criminal justice reform / Police issues (14)
- Something else (15) _____

Appendix B: Interview Guide

Thank you. First I have some questions about when you registered to vote.

1. What state are you from?
2. In what state are your registered to vote?
 - 2a. *If North Carolina (but not from North Carolina):* Were you registered in your home state before switching your registration to North Carolina?

2b. *If Yes*: What factors led you to change your registration to North Carolina?

3. How important is voting to you? Do you think your individual vote matters?
4. What was the process of registering to vote like for you?
5. How difficult would you describe your experience registering to vote was?
 - 5a. If registering was easier, would you consider changing your registration to North Carolina?
6. What is your major at Duke?
7. What led you to choose [Social Science major]?
 - a. *If about politics*, did you have the same interest in politics before coming to Duke?
8. Do you have a preference for voting by-mail or voting in-person?
 - 8a. Why do you prefer one over the other?
 - 8b. How did this preference influence where you choose to register to vote?

Thank you. Now I am going to ask some question about you home state.

9. What was the attitude around politics and voting like in your family before coming to Duke?
10. How would you describe your interest in politics in high school?
 - 9a. How has this changed since you have come to Duke?
11. Who encouraged you to register to vote?
 - 10a. What role did your parents play in your decision to register to vote?
12. How would you describe the competitiveness of elections in [home state]?
 - 11a. How did you consider this when deciding where to register to vote?
 - 11b. How does North Carolina compare to the competitiveness of [home state]?

Thank you. My final questions are about Duke and North Carolina.

13. Can you describe any interactions you have had with on-campus groups on the topic of voting registration?
 14. Have you ever considered switching your voter registration to North Carolina?
 - 13a. What kinds of factors would lead you to change your registration to North Carolina?
 - 13b. Has anyone ever tried to convince you to register to vote in North Carolina?
 15. How would you describe your interest in politics in North Carolina compared to politics in [home state]?
- 14a. Why do you think you have more interest in politics in North Carolina or [home state]?