

## Turning Out the Youth: The Effect of Electoral Institutions on Youth Voter Turnout Rates

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### Abstract

Youth turnout was at record highs in the United States in the 2018 midterm election. However, the voting rate of the 18-24 year old demographic was uneven across the US states. What causes this variation in youth turnout rates? I argue that the electoral laws in a state can explain this phenomenon. In particular, I argue that same day voter registration and younger pre-registration ages can incentivize youth turnout. I test my claims using data from the 2016 and 2018 national elections, and find partial support for my claims. My findings have important implications for the operation of democracy and suggests avenues for future elections.

### 1. Introduction

In 2018, the US saw the highest youth turnout rate in recent history, with 53.4% turnout<sup>1</sup>. However, there was significant variation across the states. For example, Wyoming had a 20.6% youth turnout; while Virginia had 60.1%. What explains this variation in youth turnout across the states? This question is critical for understanding the future of US elections. The 18-24 year old demographic typically votes at much lower rates than do other age groups. However, if they turned out at higher rates, 18-24 year olds could determine the results of local, state, and national elections in many states. Given how polarized and competitive American elections are currently, this demographic will likely be pivotal moving forward.

I argue that the electoral institutions or rules of states can either incentives or depressed youth turnout in the states. First, I argue that same day voter registration, which allows voters to register to vote on Election Day, can increase youth turnout by reducing the costs to voting and collapsing a two-step process into one. Further, I argue that states with younger pre-registration ages should also have higher rates of youth voting. Pre-registration at younger ages reduces the cost of voting and encourages youth to start paying attention to politics sooner.

To test these claims, I use data on youth turnout and state election laws from the 2016 and 2018 national elections. I find partial support for my hypothesis. Both pre-registration and same day voter registration have the anticipated effects. However, neither effect reaches the level of statistical significance. That being said, substantively, the results support my hypotheses and suggest directions for further research into policy effects on youth turnout.

In what follows, I first review the extant literature on voter turnout, in general and youth voting. I then advance a theoretical argument to explain the variation in youth turnout. Next, I discuss my empirical strategy and results. I conclude with some thoughts about the implications of my findings and suggestions for future work.

### 2. Literature Review

There are many factors that influence state-level voter turnout in the US. First, there are demographic and socio-economic factors at play. For example, extant research shows that states with higher levels of income inequality and

higher rates of poverty tend to have depressed levels of voter turnout<sup>2</sup>. In addition, the racial and ethnic makeup of a state can affect turnout. States with large minority populations tend to have lower overall voter turnout rates, as racial and ethnic minorities often face financial hardship, which makes voting on a Tuesday difficult<sup>3</sup>. Further, these populations have faced a history of discrimination at the polls and thus may be disenchanted with the electoral system.

Additionally, there are structural or institutional factors that can affect turnout. This includes how competitive a state's elections are. Given how the Electoral College is designed, some states are deemed battleground states and more pivotal than others in presidential elections. Similarly, the drawing of congressional districts can affect perceived or actual competitiveness in House races. Previous research documents that voting in states that are perceived to be more competitive tends to occur at higher rates<sup>4</sup>. There are also barriers to voting in some states, which can depress turnout. In particular, voter ID laws can affect the decisions or ability of potential voters to turnout<sup>56</sup>. Voter ID laws add an additional burden on voters and often stipulate the kinds of identification that will be accepted. Some argue that the selectivity in permitted IDs depresses turnout among certain groups<sup>7</sup>.

Early voting in states, in contrast, tends to increase voter turnout in states<sup>8</sup>. Early voting allows voters to cast their ballots at their convenience and provides more opportunity for those who work full time on weekdays and for hourly wages to cast their ballot. Further, same day registration, which allows voters to vote the same day they cast their ballot, has been found to be one of the more effective ways to lower the cost of voting and increase voter turnout in the states<sup>9</sup>.

All these factors may have an impact on youth vote turnout across the states, in addition to aggregate turnout. In line with Grumbach<sup>10</sup>, I argue that institutional features of elections in each state can affect youth incentives to vote. In particular, I examine the effects of pre-registration and same day voter registration.

### 3. Theory

Building from the work of Anthony Downs on the calculus of voting<sup>11</sup>, I assume that voters are rational and that voting in the US is largely a function of the cost of voting, as well as the democratic benefit of voting. The costs of voting include the time, effort, and resources necessary to vote. I assume that when costs are high, people are less likely to turnout. The democratic benefit refers to the feeling of civic duty one gets from casting their ballot. I assume that when this is high, voters are more likely to vote. However, there is reason to believe that the cost to vote is particularly high and the democratic benefit is particularly low for young voters.

First, voting in the US is really a two-step process; it requires registration and then casting a ballot. This makes voting costlier than it would be otherwise. In particular, registration can be an obstacle to voting that affects youth voters more than others. Young people, particularly those between 18 and 24 years of age, tend to be much more mobile than other voters. Youth voters move a lot more than other voters due to attending college and getting jobs in other cities or states. Every time a potential voter moves, they need to register to vote at the new address, which can be time consuming and not a priority. Most states do not have online registration and require paper forms, which is less convenient. Further, college students who live on campus face difficulties filling out voter registration forms more than do other populations of voters filling out those same forms. The forms require residential street addresses, and many students do not know their actual dorm addresses, since most colleges and universities give students PO Boxes to which to send their mail and packages. On top of all this, most states have deadlines by which one has to register in order to vote, which are easy to miss.

In addition, voting itself can be costly to youth voters. Election Day is on a Tuesday, when they may be in school or at work. This inconvenience is exacerbated by the fact that the youth population often feels like politicians and parties do not represent them or the issues they care about. The youth also do not have much experience voting yet, and thus it is not habitual for them. For these reasons, youth voters likely have a lower democratic benefit from voting, as well as higher perceived costs.

I argue that political and electoral rules of states will further affect the youth calculus to vote. In particular, I argue that certain policies can lower the costs to voting and/or foster civic mindedness in ways that particularly influence whether or 18-24 year olds will vote. First, the pre-registration rules of states can affect young voter turnout. Some states allow youth to register to vote at the age of 16, even though they are not eligible to cast a vote until they age of 18. These laws typically allow 16 year olds to register to vote while they are getting their driver's license at the Department of Motor Vehicles. As such, youth voters need not seek out and submit the form themselves, which lowers the cost of registering. Allowing younger people to register also allows the youth to develop habits of being involved in politics early. Since they have a two year span of knowing that they are already registered and that they will be able to vote in the next couple of years, it incentivizes youth to pay attention to what is going on with current events and

politics generally. Even though the youths at the age of 16 and 17 cannot vote, these rules get them into civic-mindedness early. They are still in high school at this age and are likely learning about government and civics, which makes them more aware of what is going on, as well. When young people register to vote at the age of 18 or later, they may have already graduated high school and started pursuing careers or bachelor's degrees. This means they may have forgotten their high school civic lessons and have less time to get informed or into the habit of following politics. As such I hypothesize:

H1: States with lower ages for pre-registration should have higher youth turnout rates.

Another institution that can lower the cost of voting is same-day voter registration, which is simply the ability to register to vote the same day you cast your ballot. Some states do this at the polling locations, and some have it where you can travel to the city/county office and register right before you go to the polls, but still on the same day. Same day voter registration can lower the cost of voting, especially for young people who are voting and registering for the first time. The reason that same day voter registration would lower the cost for young people more than others is that if one has to register to vote every time they move, this puts a burden on those who move the most, such as young people. But, if they register when they vote, the burden is lessened. Since registering to vote is not always on the forefront of the minds of young people when they are transitioning to a new school, job, or residence, having the ability to do the two-step process to vote all at one time will incentivize more young people to vote. As such, my second hypothesis is:

H2: States with same day voter registration will have higher youth turnout than do other states.

#### 4. Empirics

I conduct a quantitative statistical analysis of youth voter turnout across the US States. I will be focusing on the 2016 and 2018 elections, to capture variation in state-level turnout in both presidential and midterm elections. The unit of analysis is the state-year, since I am examining the effects between states and between years. My analysis includes all states, except for North Dakota. North Dakota is not included, as it does not require citizens to register to vote, rendering them difficult to compare to other states on the metrics of interest.

My dependent variable will be the youth voter turnout rate by state per election. When looking at "youth", I will be looking at the age bracket of 18-24 year olds. For each state's voter turnout rate for youth voters, I use data provided by Grumbach<sup>12</sup>. The minimum youth voter turnout rate across the United States was Wyoming in 2018, with a voter turnout of 20.6%. In contrast, Virginia, in 2016, had the highest youth voter turnout in the United States with about 60.1%. The average across all states is 37.7%. Figure 1 shows the distribution of youth voter turnout throughout the United States, showing that most states fall between 34% and 40% in youth voter turnout.

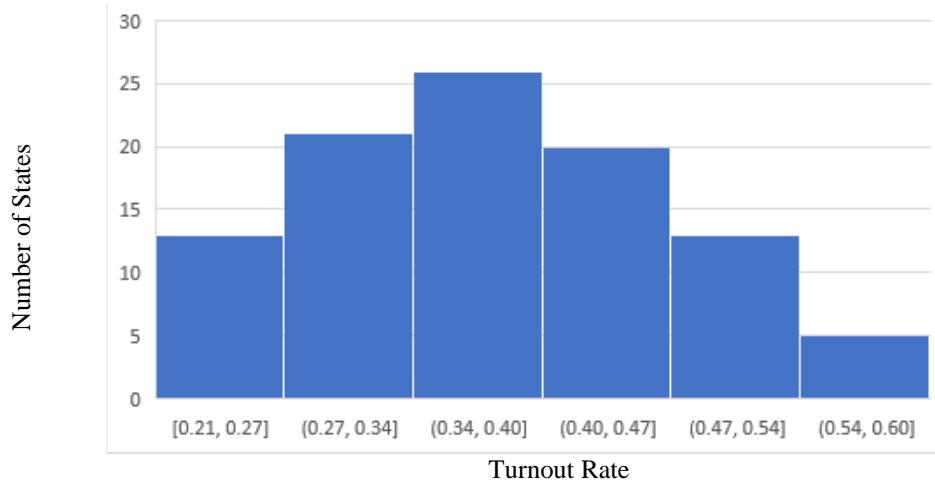


Figure 1. Youth Voter turnout

This figure shows the distribution of youth turnout rates across the states in 2016 and 2018.

For my first hypothesis my independent variable of interest is the preregistration age for each state. I coded this by reading the laws of each state. There is a good amount of variation throughout the United States. Some states legislate concrete ages for pre-registration, while some define it relative to the upcoming election. I chose to code any states that allow you to register if you will be 18 by the next election as allowing one to register at 17. For example, the preregistration law for Ohio says, “If you’re 17 and will be 18 on or before the general election, you can register to vote”<sup>13</sup>. Other laws were straight forward by specifying a specific age for registration, such as North Carolina simply stating, “You must be at least 16 to register to vote”<sup>14</sup>. Table 1 below shows the differences in preregistration ages across different states. Most states allow youth to pre-register between the age of 17 and 18.

Table 1: Distribution of Pre-Registration Rates Across the States

Ages	16	17	17.5	17.75	17.83
# of States	11	33	3	4	1

These figures show that most states allow registration at the age of 17 or older. However, 11 states allow it at the age of 16.

For my second hypothesis, my independent variable is whether or not a state has same day registration. The variable, provided by Grumbach<sup>15</sup>, is coded as 1 for states that allow you to register to vote on the same day and 0 otherwise. Throughout all 49 states in the analysis, 34% offer same day voter registration. For example, North Carolina offers same day voter registration during the early voting period. In this window, North Carolina residents can register the same day they vote. On the other hand, South Carolina does not offer same day voter registration, so one has to register to vote 25 days before the election.

I also control for other factors that may affect voter turnout in the states. First, the poverty rate in a state could have a negative effect on voter turnout since, if you are working a full time job to make ends meet monthly, you may not be able to take off work and go vote on a random Tuesday. The minimum poverty rate in the United States in this data set is Utah with an 8.3% rate. The maximum, on the other hand, is Mississippi with a poverty rate of 22.5%. The average is 13.9% country wide.

Another control variable is the percent of the population that is white within a certain state. White citizens tend to turn out to vote at higher rates, as there are fewer barriers, or perceived barriers, to their voting. As such, youth turnout should be higher in states with larger white populations. The largest percentage of white people in state is 97% in Maine. The smallest is 24% within Hawaii, due to its large native population. The average across the United States is 75%.

Thirdly, a control that is important when talking about voter turnout, especially for youth voters, is voter ID laws. Voter ID laws could decrease the amount of voters that turnout due to the fact that they do not have access to an approved ID. Sixty-one percent of states have some type of Voter ID law in place, with 39% not having any type of voter ID law. North Carolina was counted in the 61% of states with ID laws within this study in 2018.

Whether or not a state has early voting can also affect youth turnout. Early voting increases voter turnout since people have the option of voting during a period of multiple days, usually including weekends, rather than having to miss work or school to go vote on election day, a Tuesday. Thirty-six percent of the 49 states have some form of early voting, including North Carolina.

Finally, I control for the competitiveness of a state. Higher perceived competitiveness should have a positive effect on turnout due to voters thinking that their vote matters more in terms of determining the outcome. I measure the competitiveness of a state based on the results of the previous presidential election, in this case 2012. I coded a state as competitive if Mitt Romney received between 45% and 55% of the vote. If the vote margin fell within that range, we can assume that the state was competitive, since there was a narrow window between Obama and Romney. Fifteen of the forty-nine states are considered competitive, including North Carolina.

## 5. Analysis

I conducted a regression analysis to rest my hypotheses of interest. The results are displayed in Table 2.

Table 2: Regression Results

	Coefficient	Standard error	Lower 95	Upper 95
Intercept	0.5938	0.2267	0.1433	1.0443
Pre-registration age	-0.0186	0.0137	-0.0459	0.0087
Same Day Voter Registration	0.0237	0.0126	-0.0070	0.0544
Early voting	-0.0419	0.014	-0.0700	-0.0139
Voter ID Law	0.0023	0.013	-0.024	0.0289
Presidential election	0.1162	0.0125	0.0913	0.1411
Poverty rate	-0.17	0.21	-0.61	0.25
% White	0.0710	0.0551	-0.0385	0.1805
Competitive	0.0526	0.0139	0.0249	0.0803

The directions for the coefficients are as predicted for Pre-registration and Same Day Voter Registration, with the surprising direction of Early Voting. These directions show support for my hypotheses.

Hypothesis 1 held that lower pre-registration ages should increase youth voter turnout. The coefficient on the variable in Table 2 shows support for this claim. Pre-registration does have a negative effect, showing that the later that youth voters are able to register to vote, the lower their voter turnout rates. For each additional year of age, we expect a 1.8% decrease in voter turnout. The effect is in the anticipated direction, and while a 1.8% effect might not seem large, it can make the difference in an election outcome. The effect is not statistically significant, however, so I cannot reject the null hypothesis of no effect.

Hypothesis 2 held that there should be a positive relationship between same day voter registration and youth turnout. Indeed, the coefficient on this variable in Table 2 confirms this. When moving from a state without same day voter registration to one with it, we should expect a 2.4% increase in turnout. This is a good sized effect for a simple procedural change. The result, however, does fall short of statistical significance.

In terms of control variables, early voting did not perform as expected. The results show a decrease in youth voter turnout in states that have some sort of early voting. This conflicts with the literature around early voting and thus merits more exploration. It could be a function of the small data set (98 observations) analyzed here.

When looking at Voter ID laws, the effect is quite small. States with voter ID laws are estimated to have 0.2% higher turnout than those without. The effect is not statistically significant. This is an interesting phenomenon, however, that some scholars such as Erikson and Minnite<sup>16</sup> have seen within their data sets as well, where voter ID laws have little to no effect within state-level voter turnout rates.

I did find substantive significance and statistical significance in youth voter turnout when looking at Presidential election years and non-Presidential election years. There is an 11.6% jump in youth voter turnout in presidential election years relative to midterm years. This is to be predicted since youth voters probably hear a lot more about the election during presidential election years and feel like it matters more as well.

The poverty rate coefficient indicates that we can expect a 17% decrease in youth turnout when going from no poverty to complete poverty. However, this is not a realistic shift. Instead, it is more reasonable to show that a .1 (or 10%) increase in poverty is associated with a 1.7% decrease in youth turnout. However, it is not statistically significant. The percent of the population that is white has a positive effect on turnout, but this also was not statistically significant. Finally, I examined the effect of competitiveness in US states, we expect turnout in a competitive state to be 5.3% higher than in a non-competitive state. This is a large effect and is statistically significant.

Taken together, I find some support for the hypotheses of interest. While the coefficients on pre-registration age and same day voter registration were not statistically significant, both were in the expected direction. Further, both had substantive significance, meaning that these factors could have an important impact on youth turnout.

## 6. Conclusion

When looking at youth voter turnout, there are a lot of factors that could affect the number of youth voters that turnout to vote. I examined the effect of registration rules on this outcome of interest. I found that same day registration rules and younger pre-registration ages can possibly foster greater levels of youth turnout. While the effects were not statistically distinguishable from zero, they can still be substantively meaningful. The implications of large youth voter turnout can be vast across the United States. The populations that turnout in large numbers have the ability to make policy decisions and put representatives in Congress and in the White House. Even though I only saw a 2.4% increase for same day voter registration and 1.8% increase for pre-registration, with the close election that the United States has been seeing in the past couple of election cycles, these effects could make a difference. When states implement these rules, there may be a switch in control of government, or at the least, a more democratic system of government with more people and populations voting.

Further, the results suggest areas for future research. First, these effects should be examined over a large period of time and in state races, as well. The data set used here was relatively small and a more robust sample could be informative. Further, the statistically significant and negative effect on the early voting variable raises questions. It seems counter-intuitive that granting greater access to the polls would depress turnout. This should be explored in greater detail, finally, the inconclusive results around voter ID requirements are also interesting and warrant more examination.

Understanding the factors that influence turnout, especially youth turnout, is key to fostering a healthy democracy. If simple policy changes at the state-level can improve voting rates, advocacy for these changes should be at the forefront of the political conversation. Same day registration and pre-registration may be good places to start.

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