Pace University
DigitalCommons@Pace

Honors College Theses | Pforzheimer Honors College

2019

Voting Behavior Among Young Adults: An Analysis of Youth Voters and how Behavioral Economic Concepts can be Applied to Increase Young Voter Turnout

Heather Hall
Pace University

Follow this and additional works at: https://digitalcommons.pace.edu/honorscollege_theses

 Part of the Behavioral Economics Commons

Recommended Citation
Hall, Heather, "Voting Behavior Among Young Adults: An Analysis of Youth Voters and how Behavioral Economic Concepts can be Applied to Increase Young Voter Turnout" (2019). *Honors College Theses*. 256.
https://digitalcommons.pace.edu/honorscollege_theses/256

This Thesis is brought to you for free and open access by the Pforzheimer Honors College at DigitalCommons@Pace. It has been accepted for inclusion in Honors College Theses by an authorized administrator of DigitalCommons@Pace. For more information, please contact nmcguire@pace.edu.

Voting Behavior Among Young Adults: An Analysis of Youth Voters and how Behavioral Economic Concepts can be Applied to Increase Young Voter Turnout

Abstract:
This research paper examines factors that influence young adult voter behavior during the 2016 presidential election. Data was derived from the Current Population Survey, controlled for individuals ages 18 to 24. The cross-sectional data from the random sample of 8,433 people were then used to estimate the marginal probit regression model that tested certain voting factors' impact on the probability to vote. Gender, education, race, and age were control variables in the model. The study focuses on different methods of registration, household income, and the duration of residence. The results found that registering to vote via the internet, registration drives, and at school are statistically significant and increase the probability of voting among young people more than other methods. Additionally, I introduce behavioral economic concepts, such as framing, anchoring, herding, etc., that could be applied to certain significant factors to increase young voter turnout. This allows further research to be conducted on the impact behavioral economics could have when targeting significant voting behavior factors.

Author: Heather Hall
Advised by: Dr. Joseph Morreale and Lindsey Lee

Table of Contents

Introduction……..3

Literature Review……6

Theoretical Analysis……14

The Results……16

Discussion & Recommendations……...20

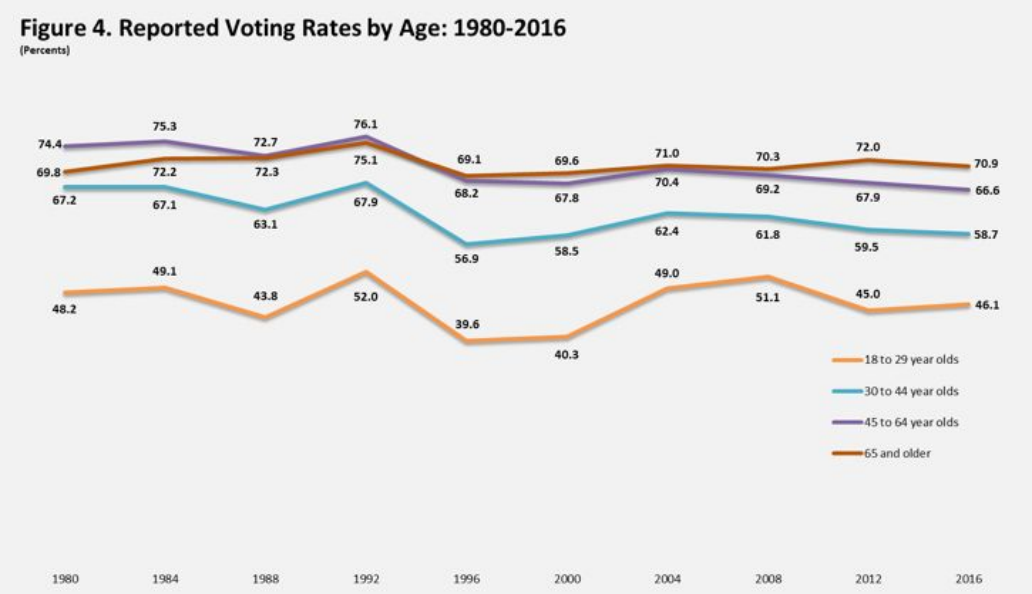
Conclusion……24

Appendix……26

References……37

Introduction

The presidential election of 2016 had poor voter turnout, especially among young adults. Yet, youth are heavily affected by policy changes politicians make. The implications of nonvoting pose a threat to human values, policy making, and democracy in the United States. My research in this paper seeks to answer these questions: What factors discourage youth to vote? And what behavioral economic concepts could be implemented to increase voter turnout? Persuading young people to exercise their right to vote and to make more rational decisions towards voting will aid the issue of their presence in presidential elections.



Source: US Census Bureau.(2017)

Only about 50% of registered young people ages 18 to 29 voted in the 2016 election which was not a large variation from the presidential election of 2012. Moreover, about 50% were not even registered, making for only 25% voting of the practical pool. Voting among young adults matters because they constitute as the future

voters and are a major subset of the electorate (CIRCLE 2016). Since the act of voting is habit-forming, young people must engage in the polls early on.

It is imperative to raise awareness about the factors that cause young people not to vote so that they may take action and encourage themselves to vote. There have been various studies that have attempted to explain why people participate in elections, but none take into account behavioral approaches. Rationality is questioned when voters have the ability and right to vote, but choose not to. Just because young people are eligible to vote, does not mean they will actually do so. When the "paradox of nonvoting" (believing that one vote does not have a great effect on the outcome) is mentioned, it can be rebutted with the expected utility theory, which applies because the choice (to vote) is not between one alternative or another, but rather between contributing to the advancement of one alternative over another (Mackie 2011). This analysis seeks to examine other non-traditional economic concepts that investigate how the youth behave and how they can be indirectly persuaded to participate in the polls.

Traditional economic theory assumes all people are rational, individual choices are derived from expected utility theory, and that people analyze and update their decisions based on new information. Rational behavior refers to people who make choices to optimize their benefits, assuming people would like to be better off instead of worse off (Staff 2018). Irrational behavior refers to people who fail to weigh the costs and benefits of certain decisions they make and use snap judgments, emotions, and other externalities when making those decisions. Behavioral economics is the study of when and why people actually behave. It addresses the assumption that all people

behave rationally and deems it unrealistic. This behavior can be shaped by the level of fairness, justice, and other factors that affect decision making and judgment.

Behavioral economics states that people are in fact irrational or at least non-rational in their decision making most of the time. A misconception that is made about behavioral economics is that it focuses on controlling people's behavior, but it is focused more on identifying common systematic mistakes that people make and why they make them bridge the gap between intention and action. Behavioral economics incorporates the psychological aspects of decision making by accounting for the emotional characteristics of human judgment. Since behavioral economics is a fairly new mindset even for economists to grasp, there is a gap in research about its concepts and voting behavior. Although there have been many psychological studies performed to try to understand the reasons behind voting, the implementation of specific behavioral strategies may increase youth attendance at the polls and ameliorate the issue of nonvoting. Recent studies reveal that the effects of behavioral economics has a great impact on an individual's decisions by using positive reinforcements and indirect suggestions, both of which could be considered as heuristics.

In the 2016 presidential election, the existence of heuristics, cognitive shortcuts that simplify decisions, to persuade voters was prevalent. This idea of instantaneous correctness towards political issues spread across the nation, and some may say divided it. In my own opinion, Donald Trump used three biases of heuristics that apply to behavioral economics: overconfidence, belief perseverance, and confirmation. Throughout his campaign, he was definitely more confident than correct, but maybe that

helped him win over people that were looking for a change. At times, he would pick facts that were only useful in his favor and ignore other factors that might have influenced voters against him. Additionally, he would rationalize negative facts about his opponent, such as the email scheme with Hillary Clinton. Maybe if people recognized these biases that challenged their thinking by recognizing each candidate's flaws, the election might have seen different results. This all stems from the way each campaign was framed to steer voters in the candidate's direction. Generally, political candidates want to persuade voters to elect them. But, what if similar behavioral economic approaches could be applied to the nonvoting community to increase young voter turnout?

The purpose of this paper is to determine the factors that encourage and discourage young voters and propose behavioral economic solutions to increase turnout rates by targeting nonvoters. With the upcoming presidential election in 2020, this is an imperative issue that should be addressed.

Literature Review

Factors of Voting:

The amount of available research on voting factors attempts to understand why people choose to vote or not. The top three reasons that to understand people ages 18 to 24 years old did not vote in the presidential 2016 election was because they disliked candidates or campaign issues, they were too busy or had a conflicting schedule, or they were simply uninterested (US Census Bureau 2016). This indicates that young people do not understand their influence at the pools. Young people who chose to not

vote for reasons like these need to be encouraged to vote for their own benefit. Additionally, information efficacy[1] among young voters was impacted by gender, election news, and peer communication in the 2012 U.S. presidential election (Muralidharan 2015). In other words, young people's level of knowledge and confidence in that knowledge is affected by those three factors.

An individual's decision considers the motivation to vote, the ability to vote, and the difficulty to vote. Krosnick (2008) psychologically explains that the motivation to vote can correlate with strong preferences for a certain candidate or the belief of civic duty. The ability to vote depends on the information provided and the capability of a voter to comprehend this information. Lastly, the difficulty to vote derives from voter registration requirements that vary by state and availability of polling locations. For those who are frequently moving, such as young people, can reduce their motivation to vote since it is difficult to obtain information about registering in most states. Krosnick (2008) emphasized that there is more than one factor causing poor voter turnout and all factors are focused on a person's motivation for voting, ability to voting, and difficulty of voting. For this reason, Krosnick (2008) performed an analysis indicating that demographic factors, such as education, income, age, gender, and race, social factors, such as marital status and group solidarity and characteristics of a particular election have an enormous effect on voter turnout. Plutzer (2002) agrees with Krosnick by stating that all costs of voting are magnified when the youth decide whether or not to vote in their first election. These costs include never participating in the various registration processes,

1 Information efficacy is a concept that describes the extent to which individuals have sufficient confidence in their level of political information or knowledge to participate in the political process (Kaid).

not knowing the location of their polling place, and not fully understanding the candidates' differences on policy issues.

Encouraging people to vote is imperative since many studies have shown that it is habitual. Plutzer (2002) states that all voters begin as non-voters and must overcome the passivity of non-voting to become habitual voters. However, becoming habitual has to start earlier than the legal voting age. Thomas and Mcfarden (2010) conducted a study about how high school extracurricular activities affect voter participation. Their results displayed that a number of high schools activities are positively related to voting in early adulthood and a low rate of involvement is related to lower voter turnout among youth. Students may learn political engagement from these activities because of the perception that members can work together to affect their environment, what Bandura (2001) calls "collective efficacy." Thomas and Mcfarden (2010) suggest that "Schools can create environments that encourage extracurricular involvement, and teacher leadership of such activities, through funding and policy. They can also discourage extracurriculars through neglect." Influencing habitual behavior before the legal voting age may be a solution to increase the voter turnout of young voters. The study by Bogard, Sheinheit, and Clarke (2008) focused on university-based programs for college-aged voters resulted in a positive relationship with increasing voter registration and participation. One of these programs, Day of Dialogue, had a larger effect than the others since it was a multi-perspective, one-day undergraduate conference regarding issues facing the nation held three weeks before the presidential election.

Furthermore, the flourishing role of social influence and contagion has been shaping people's behaviors, tastes, and actions when analyzing voting behavior. Studies have shown that political socialization, which is "a developmental process by which adolescents acquire cognitions, attitudes, and behaviors related to their political environment" (Atkin 1978), influences observational learning and political viewpoints. Braha (2017) conducted research regarding "voting contagion" and found that social interaction among young voters and social limitations influences uncommitted voter choices. Social limitation, or voting contagion, in this case, is defined as voters being influenced by the behavior of others. Thaler (2012) suggests, "people have a strong tendency to go along with the status quo or the default option." The methodology Braha (2017) used includes data from presidential elections from 1920 to 2012 and the results show the effect of external forces, one being the social contagion that influences voting. The effects of social contagion is shaping political behavior on a large scale with inherent implications upon democracy and policy, making it extremely important to examine. This means that since young people rely on others when making decisions on whether to vote and who to vote for, it creates a type of bias within the political environment. Further research is necessary to examine the positive and negative effects of young voter social behavior.

Furthermore, Plutzer (2002) stated that young voters' friends cannot assure them that voting has been easy, enjoyable or satisfying since they have limited knowledge about voting. Because young people are easily influenced by others around them in society, if the majority of people in their setting do not vote then they will also be less

inclined to. On the contrary, the effects of peer influence may be used to increase voter participation through the use of social media. Currently, young people and political candidates, namely Donald Trump, have a huge presence on Twitter. Young individuals who are ignorant to the nation's issues could be informed through social media platforms and influenced by their peers if they are interested in politics. Although young voters may not be able to distinguish between fact and fiction on social media, it may spark their interest for further research on the topics being discussed. This method of "voter contagion" can either have a positive or negative impact on democracy and policy, but it is worth considering when analyzing youth voting.

Behavioral Economics

The definition of behavioral economics is a method of economic analysis that applies psychological aspects of human behavior to decision-making. Rodgers, Fox, and Gerber (2012) conclude that "behavioral approaches" play an increasingly prominent role in research on political communications and on best practices among political professionals.

In the study by Rodgers, Fox, and Gerber (2012), the authors explain that traditional economists conceive voting as "a quasi-rational decision made by self-interested individuals." They assume that people rationally weigh the trouble they might go through to vote against the probability of the effect of their vote in the overall election. However, this is a problematic mindset and clearly traditional economic models cannot fully rationalize the reasoning of voting. Caplan (2008) agrees, "Voter

irrationality is precisely what economic theory implies once we adopt introspectively plausible assumptions about human motivation." He also states that ignorance and irrationality among voters are argued to be the reason why democracy fails and addresses the behavioral aspect of the motivation being voting, painting a more realistic picture of democracy than traditional economists.

Furthermore, nudges are used to implement behavioral concepts. Thaler (2012) defines a "nudge" as any small feature that influences behavior. To add to that, he explains that there are and should be certain influencers, which he refers to as choice architects. These choice architects may be political candidates or other people trying to increase voter turnouts. Thaler (2012) uses a simple example to explain how choice architects nudge people to make certain decisions. One example was in the environment of a buffet-style eating place. These choice architects choose where to put the coffee, the salads, the burgers, the desert, etc. Certain architects would put salads on the way to the burger sections, to try to influence a healthier choice.

The power of behavioral economics was already evident in the latest presidential election. Donald Trump's target audience felt what they had to offer was not valued anymore and the availability of jobs was being taken by immigrants (Hoban 2018). The feeling of no longer being "counted" can be explained by the behavioral economics concept of reciprocity, where one group perceived itself to be treated unfairly. Trump also utilized one of the most popular behavioral economics concepts of loss aversion, which is defined as the pain of losing is more powerful than the pleasure of gaining. He used loss aversion by allowing his audience to believe that this was their only chance to

recover their social and financial status (Gohmann 2017). In this case, Trump and his campaign managers were acting as choice architects using techniques to persuade voters to vote for him.

Moreover, “framing,” which is a type of nudge, determines our choices, preferences, and tastes. To exemplify, people will be more influenced by a sign that says “improve our schools” rather than “raise our taxes.” Framing works because most people are intuitive thinkers and passive decision makers (Thaler 2012). Moreover, the use of cookies on a web browser is a perfect example of how framing is used. Cookies track what people search and then present advertisements that are more likely to entice the viewer to click on their advertisement. The cookies themselves are framing the way people view their browser while surfing the internet. Framing is a strategic concept, usually used in marketing, that influences people’s decisions.

Many comparisons in other areas could be made when brainstorming specific behavioral solutions for the lack of voter turnout. For example, Bhargava, Loewenstein, and Sydnor (2015) conducted a study concluding that health insurance plans are too complicated and the majority of people choose plans that make them have fewer benefits. This displays irrationality when it comes to decision making among individuals. In response, Chetty (2015) proposed that simplifying the set of options given to specifically those with low socioeconomic status can improve their health insurance plan decisions. By simplifying the complex information, people have a better chance of choosing a plan that optimizes their benefits. Relating it back to voting, the difficulty of registering is one of the major issues preventing youth voting. This concept of

simplification could be applied to certain methods of registering since they vary by state. With the simplified knowledge of how to register, young people could be more likely to understand and choose what registration method works best for them. This could inherently increase voter registration and turnout among young adults overall.

Similarly, Bettinger (2012) discusses another example of providing simplified information and assistance when applying to college, including applying for the Free Application for Federal Student Aid (FAFSA). Bettinger concluded that by doing this, it can increase college attendance among low-income people. Chetty (2015) adds to her point by emphasizing that assistance methods are much more cost-effective at the margin than existing policy tools, such as grants or loans. As mentioned previously, if people between the ages of 18 and 24 were given more information and assistance regarding registering to vote and voting, there would be an increase in turnout. Interventions during school, whether they be before people are of legal voting age or after, could expand the knowledge of young people that are unsure of the steps needed to vote or unsure of the importance of voting. To take it a step further, additional information about specific political parties' policy proposals and beliefs can be provided in schools to assist students' decision making. Although there might be controversy to implement this at school, especially after the 2016 election, the importance of and benefits that come from informing the youth outweigh problems that may arise. In order for this to work, there has to be an unbiased exchange of each candidates' proposals to lessen the chance of arguments among students.

The further research being conducted on youth voting should be considered to be of great importance. Within the literature, one can see that there are many factors that persuade the youth to vote or not to vote, such as demographics and social involvement and interaction. Additionally, it emphasizes the habitual nature of voting and why we should encourage the young to vote. Additional studies offer behavioral approaches to voting behavior, which is the basis of the revolutionary action that needs to be implemented. All of the studies have contributed to the several reasons why young adults tend to be discouraged to vote.

This analysis will examine these reasons and will determine what could be done to influence the issue of nonvoting among young adults. The purpose of this research is to (1) identify factors that discourage the youth from voting in the United States and (2) measure the scope of the causal relationships found to (3) propose behavioral economic policy perspectives and solutions needed to persuade young people to understand the importance of voting and how to do so.

Theoretical Analysis

The data on young voter turnout was constructed in the following manner. The Current Population Survey (CPS) derives from the monthly microdata of the United State Labor Force Survey. The CPS includes demographic information, employment data, and supplemental data, such as voter registration which makes it imperative to this study. I estimated my equation through specifying independent variables and their standard error terms. It was important for me to develop a model that shows statistically significant variables to indicate what factors impact voting. Relying on past research, I

carefully chose each variable to analyze what factors could assist young people to make a habit of voting. I focus on the different methods of registration to discover which one will have the greatest impact on voting amongst young people, how long a young person has been living in their residence, and how much household income they make. Unfortunately, there was no relevant data available to analyze how civically engaged young people to vote. Using the data that was available, I estimated an equation to determine the factors that affect voter turnout of individual ages 18 to 24 to be the following:

$$personvoted = \beta_0 + \beta_1 age + \beta_2 internetreg + \beta_3 mailreg + \beta_4 regdrive + \beta_5 dmvreg +$$
$$\beta_6 schoolreg + \beta_7 newinc0000 - \beta_8 male - \beta_9 hispanic - \beta_{10} nhblack - \beta_{11} nhother +$$
$$\beta_{12} empstatus - \beta_{13} highschool + \beta_{14} fullcoll + \beta_{15} duration$$

All of my variables are dummy variables except for *newinc0000, age,* and *duration.* Where *personvoted* is my dependent variable and depicts if the person voted in the presidential election. The data will show 0 if the individual did not vote and 1 if the individual did vote. Therefore, any independent variable will be compared to those who did vote in the 2016 election. A*ge* is a continuous variable that represents the age of the individual, which is limited to those between 18 to 24. I infer that as young people get older, they will be more likely to vote because of their increase in knowledge and interest might increase as they age. The variable *internetreg* includes those who registered to vote online, *mailreg* includes those who registered to vote via mail, *regdrive* includes those who registered to vote at a registration drive, *dmvreg* includes those who registered at the department of motor vehicle, and *schoolreg* includes those

who registered to vote at school, hospital, or on campus. I believe that identifying which method of registering that attracts more young people is important to indicate. Amongst young people, I intend for internet registration and school registration to have the most impact on voting. The continuous variable, *newinc0000,* is the dollar amount of family household income divided by $10,000 to normalize the data. I assume that the more money young people make, the more interested and educated they will be, making them more inclined to vote. The gender variable *male* denotes if the individual identifies as a male and the female variable is omitted. I expect males to vote less than women due to historical voter turnout trends. The race variable, *hispanic* represents if the individual is hispanic, *nhblack* represents those who identify as non-hispanic black, *nhother* represents those who do not identify as hispanic, non-hispanic black, or non-hispanic white. I expect them all to be negatively associated with voting because generally, white people vote more often. The variable *nhwhite* was omitted in the analysis to compare the other race-related variables to it. The variable, *empstatus* identifies the individuals that are employed and is compared to those who are unemployed. The variable *highschool* includes the individuals that received a highschool diploma or GED and *fullcoll* represent those that are enrolled in a college or university as full-time students. I expect college student will be more likely to vote and individual's that did not pursue higher education to be less likely to vote. The continuous variable, *duration,* is the number of years lived at an individual's current residence. Past research has indicated that people who move around a lot are less likely to vote, so I

expect that the longer young people live in one residence, the more inclined they are to vote.

The variables that I am focusing closely on for my model are income, registration method, and duration of residency. According to the literature, coming from a higher income family relates to higher voter turnouts among young adults. Additionally, the amount of time spent at one residence was noted in the literature to significantly impact whether a person votes or not and I want to see if this is true for young people. I had to omit a civic engagement variable due to lack of data, but the literature indicated that if people are more participative in their community or school, that they are more likely to vote. I wanted to focus on the different registration methods to add to past research because if it is known what registration method young people participate more in, then we can make certain behavioral policy decisions based off of the results. The race-related variables are included to see which groups of people policy can target to persuade them to vote.

Although only individuals ages 18 to 24 are included in this study, it is important to examine if it still has a marginal impact on voting or not. My reasoning for including employment status and education variables is based on the assumption that these variables would influence people to be more likely to vote. In the 2016 presidential election, the United States had their first female candidate, Hillary Clinton. This could indicate interesting results when examining the gender variable in my equation. Whether these assumptions are correct or incorrect, it is still important to test their significance in my model.

The Results

My model for the November 2016 presidential election included 8,433 observations, each being an individual who completed the Current Population Survey. I tested my model two ways, using marginal probit regression and linear regression, but both of the results were extremely similar. Since my dependent variable and most of my independent variables have a binary outcome, it is logical to use probit model. However, to determine how much of the variation among the variables is explained, I examine the linear regression model as well.[2]

In addition to testing my model for the 2016 election, I have also tested my model for every presidential election, which occurs every four years, since 2000. The varied results might tell a story of the reasons that young people have not been voting.

2 See Appendix for the comparison of the linear regression model and the marginal probit model, which consists of the coefficients and standard errors for the 2016 presidential election.

	2016	2012	2008	2004	2000
	personvoted				
age	0.0187***	0.0168***	0.0212***	0.0156***	0.0266***
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)
internetreg	0.497***	0.486***	omitted		
	(0.016)	(0.023)			
mailreg	0.444***	0.435***	0.463***	0.492***	0.453***
	(0.019)	(0.017)	(0.014)	(0.015)	(0.026)
regdrive	0.449***	0.392***	0.385***	0.451***	0.508***
	(0.031)	(0.030)	(0.024)	(0.020)	(0.024)
dmvreg	0.355***	0.377***	0.367***	0.408***	0.348***
	(0.014)	(0.013)	(0.014)	(0.014)	(0.016)
schoolreg	0.434***	0.398***	0.415***	0.387***	0.366***
	(0.018)	(0.017)	(0.015)	(0.016)	(0.022)
newinc0000	0.00713***	0.00697***	0.00568***	0.00957***	0.0168***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
male	-0.0525***	-0.0547***	-0.0403***	-0.0367***	-0.0388***
	(0.010)	(0.009)	(0.010)	(0.009)	(0.009)
hispanic	-0.0826***	-0.0639***	-0.122***	-0.194***	-0.146***
	(0.013)	(0.013)	(0.014)	(0.011)	(0.011)
nhblack	(0.004)	0.123***	0.0927***	0.009	(0.003)
	(0.016)	(0.015)	(0.015)	(0.015)	(0.015)
nhother	-0.0975***	-0.0733***	-0.115***	-0.152***	-0.164***
	(0.017)	(0.018)	(0.019)	(0.017)	(0.016)
empstatus	0.0659***	0.0673***	0.0869***	0.0672***	0.0573***
	(0.010)	(0.010)	(0.010)	(0.009)	(0.010)
highschool	-0.0354***	-0.0871***	-0.0492***	-0.0378***	-0.0466***
	(0.011)	(0.011)	(0.011)	(0.010)	(0.010)
fullcoll	0.119***	0.112***	0.133***	0.136***	0.113***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
duration	0.0159***	0.0202***	0.0183***	0.0191***	0.0198***
	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)
_cons	-0.174***	-0.149***	-0.184***	-0.105**	-0.408***
	(0.056)	(0.055)	(0.056)	(0.050)	(0.052)
N	8433	9031	8062	9486	8533
R-sq	0.2400	0.2400	0.2500	0.2870	0.2290
adj. R-sq	0.2390	0.2390	0.2480	0.2860	0.2280
Standard errors in parentheses					
* p<0.1, ** p<0.05, *** p<0.01					

Regressions were tested positive for heteroskedasticity. The table shows normalized numbers that were corrected.

The main interest of this study is to uncover what factors affect the voting behavior of young adults. With this information, policymakers could then take alternative approaches to focus on the young adults who do not vote. After applying my model, the adjusted R squared for 2016 indicates that my chosen independent variables only describe 24 percent of the young people that voted in that election. This comes to no surprise since most of the variables were dummy variables and suggests that there are other factors that contribute to young voter behavior not included in my model. Yet, most variables were significant and some of their coefficients agreed with their theorized signs.

When focusing on the 2016 presidential election, the following are significant variables at the 99 percent level that contribute to the decision to vote or not amongst young people. It is important to remember that my dependent variable, *personvoted* goes from 0 to 1, so all of the variables' coefficients explain the probability impacts between 0 and 1. After analyzing the regression results, it can be concluded that for every additional year in age, the probability of young adults voting increases by .0187 percentage points. If young people register to vote using the internet, the probability of them voting increases by .497 percentage points when compared to other methods of registering not included in my study. Excluding the 2016 and 2012 presidential election, the variable *internetreg* was omitted because before that there was not a way to register to vote online. Furthermore, the probability of voting goes up by .444 percentage points when young adults register to vote via mail when compared to other methods of

registration. To add to that, if young people register to vote at a registration drive, the probability of them voting increases by .449 percentage points and if they register at the department of motor vehicle, the probability increases by .335 percentage points when compared to other methods of registration not included in my study. If young people register to vote at school, the probability of voting goes up by .434 percentage points when being compared to other methods of registering. This makes sense because usually if people register to vote, they are more likely to vote in the sequential election.

Regarding income, for every additional $10,000 the probability that young people will vote increases by 0.00713 percentage points. This result was surprising because I assumed those who make more money are more likely to vote, which is true in this case, but I assumed the percent would be higher and have a larger impact. Similarly, young people that are employed, the probability of them voting increases by .0659 percentage points than those who do not work from ages 18 to 24.

Young men are .0525 percentage points less likely to vote than young women and one can argue that this could be biased since the 2016 election has Hillary Clinton as a running candidate. However, the past elections that I examined also show that males are less likely to vote than females in this age range.

Furthermore, the regression results show that a growing number of young Hispanics have not been voting as the coefficients decrease from election to election. However, in 2016, the probability of young Hispanic voters decreases by .0826 percentage points in relation to young non-Hispanic white people. Young non-Hispanic black people, the probability to vote was proved insignificant when compared to

non-Hispanic white people. What was really surprising was that in the 2008 and 2012 elections, non-Hispanic black people's probability to vote increased and was significant. This may be due to the fact that Barack Obama was the leading Democratic candidate in the 2008 and 2012 elections. The question still remains: why was young non-Hispanic black people's behavior insignificant in the 2000 and 2016 elections when compared to non-Hispanic white people? Another logical reason could be because there were not as many non-Hispanic black people that voted in 2016 and more people of this race took the survey in 2012 and 2008. Young people of other races and who are not Hispanic are .0975 percentage points less likely to vote when compared to non-Hispanic white people.

The probability of young people voting decreases by .0354 percentage points if they just graduated from high school or have a GED equivalent when compared to individuals that didn't finish high school and individuals that furthered their education. This is an interesting result because I previously assumed if people are more educated they are more likely to vote, but this might not always be the case. Those who did not finish high school were not included in my study, but I assume that this group of young people are less likely to vote than those who did finish high school. On the contrary, the probability of voting among young people who are full-time college students increases by .119 percentage points when compared to young people who are not full-time college students. This sheds a light on the fact that young people who are more educated are more likely to vote. Additionally, for every one year increase in the duration of residency, the probability of voting rises by .0159 percentage points. This

outcome agreed with past research and my assumption that the longer a young person lives at one residence, the more likely they are to vote.

After analyzing all these variables against young adults who voted, I wanted to see if this is true for those who did not vote. If 0 included individuals that voted and 1 included individuals that did not vote when regarding the *personvoted* variable, all the same independent variables are significant and their coefficients would have the opposite sign. This means that these variables would have a similar effect on the youth's decision not to vote.

Discussion & Recommendations

When comparing the 2016 presidential election with the other election years included in my study, there is not much of a difference seen amongst the results. The fact that they stayed consistent over the past sixteen years is the very reason why it is so important to address. Young people entering the voting population gain the constitutional right to vote and to elect a president that can represent their values. The regression results indicate that men, Hispanics, races other than white, and high school graduates are the young people that need to be targeted when discussing what methods can be implemented to increase voter turnout. These variables were deemed negative and significant which means they are the discouraged young voters. Additionally, young individuals who are able to register to vote through the internet are more likely to vote. Targeting specific methods of voting to make them less difficult, could increase voter turnout and possibly make it habit from a young age.

Since isolating some of the factors that affect the decision to vote among young people, the question remains: What should we do about it? Knowing that people make subconscious decisions based on available alternatives, policymakers can nudge young people who are new to voting to do so by utilizing behavioral economic concepts such as using default options. It can be assumed from my study that high school students have a lack of information when it comes to how voting impacts their lives, the policies debated, and the candidates themselves, causing them not to vote when they become of age.

Holding information sessions at school could help mitigate this issue and should be done throughout the four years of high school. Implementing informative sessions, such as Day of Dialogue from Bogard's, Sheinheit's, and Clarke's (2008) study, is extremely beneficial to students to learn about national and international issues that the country is facing and how their vote influences the future. High school seniors are soon to be graduated and will be of voting age. Having these young people be automatically registered to vote unless checked "no" when attending these sessions or even applying for colleges or graduation could increase voter registration and voting in general. This default option of automatic registering is already in place at the Department of Motor Vehicles and the data proved that this theory works. The combination of increased knowledge about voting and the incentive and easiness of automatically being registered could encourage more young people to vote. Another benefit that could result from this habit of being educated about current political issues, is that the interest of these issues could follow some students to college and increase voter turnout in the

long run. The literature suggests that voting is habitual and starting to vote at a younger age is crucial.

Furthermore, my study shows that a lot of young people register to vote at school or at a registration drive. Although a majority of colleges have registration drives, the problem is that people are unaware that they can register at school, especially if they attend large universities. This is where the behavioral economic concept of anchoring could be useful. No matter if a school is small or large, there is one place on every campus where most students go to, the cafeteria. This is why that if the school holds a registration drive, then it should be in front of the cafeteria and have information about the candidates and their policy proposals. Other places that these drives could take place could be the front door to the main buildings on campus or near sports fields when there are games. Depending on the type of school in a specific area, there are many intuitive places that these registration drives could be held to increase the interest in voting and persuading the young to vote.

To relate this back to the idea of “voter contagion,” the behavioral economic concept of herding applies. Herding means people tending to follow what other people do. In the context of voting, this could be a fantastic way to encourage young voters. Since non-white young people are less likely to vote than non-Hispanic white people, this poses a great opportunity for the minority youth to gain a following. Having young advocates from similar races could persuade other young people to vote by informing them of how the election candidates relate to their values. For example, the current president Donald Trump has strong views against immigration, so hypothetically a

young Hispanic voter who feels passionately about immigration probably would not vote for him. If this young Hispanic voter spreads the word about his policies and contrasts his policies with those of the other candidates, then it may spark interest among young people from similar backgrounds. These concepts could be applied to the young non-Hispanic black community as well. Although my results for 2016 proved to be insignificant, there must be a reason why they were for prior election years. No matter what the reason is, there is no harm in focusing on young non-Hispanic black people to encourage them to vote. In today's world, young adults can share their opinions through social media. Social media gives every young person regardless of race a platform to voice their view on current issues and politics and people who concur will express it with a like or comment. This is already a form of herding and could be heavily influential when it comes to rallying young adults to vote.

To add to that, internet use among the youth is extremely high and this could be used as an advantage to increase the availability of information about where and how to register to vote. My model indicates that those who use the internet to register are very likely to vote. However, if individuals are unaware of the fact that they can register online or are not allowed to, it might dissuade them from trying to register at all. When the time to register arrives, there should be advertisements on social media websites to educate people in general on where they can register and vote to increase young voter turnout. This way society can frame what the youth population focuses on while they scroll. Additionally, since young people ages 18 to 24 usually do not live in one place for a long time and may move to a different state, the voting awareness that derives from

information on the internet will be extremely helpful with increasing registration information and voting poll location knowledge.

To target the young male population to vote, I have a more cynical behavioral approach. The behavioral economic theory of loss aversion states that psychologically people try to prevent losses more than try to make gains. If young males are aware that young women vote more than them, it may result in an increase male turnout at the polls simply because they do not want to “lose” to women. Raising awareness could be difficult to implement, but using social media platforms could be a key avenue to spreading the word.

All this being said, there needs to be more research done on this topic. Unfortunately, there was a lack of relevant data regarding civic engagement among young people. Since the literature explains that the more involved young people are, whether it is volunteering or participating in extracurriculars at school, could impact their decision to vote there should be more studies focused on this.

Additionally, I believe Krosnik (2008) was correct with his conclusion that voting depends on an individual’s motivation to vote, ability to vote, and difficulty of voting. If people implement behavioral economic concepts to each of these, I assume that young voter turnout will increase.

Conclusion

The results of my model portray a small explanation about what encourages and discourages young people to vote. I concluded that those who are males, non-white,

and high school graduates are three groups of young people who are less likely to vote and therefore should be nudged to do so. I also discovered that new methods of registering, like using the internet, at school, and at registration drives, increase the probability of voting among young people. Using the behavioral economic concepts, such as anchoring, framing, default options, loss aversion, and herding, political actors and other choice architects can encourage these groups of young people to make not only the decision to vote but a rational decision on who to vote for. Strategically placing registration locations, framing what young people look at on social media, and automatically registering students to vote are some ways that we could increase the turnout amongst young adults.

As the presidential election of 2020 approaches, it is imperative that people take action now to persuade the youth how important it is to vote. After the 2016 election, predictions are being made that young people will be more engaged in politics and exercise their right to vote. This momentum must be sustained no matter who the candidates are, and we must not allow young people to be discouraged to vote. This proved to be true in the 2018 Congressional midterm election where the young voter turnout rose ten percent from 2014 (CIRCLE 2018). This being said, further research needs to be conducted to isolate more factors that affect young voting behavior. This includes conducting experiments of my suggestions and other recommendations related to behavioral economic concepts. Further research could also be conducted about the young non-Hispanic black community over time to identify the reason for the fluctuations in their probability to vote that I saw in my study.

After the next presidential election, there will be a new pool of young voters that need to be analyzed. Not only do the presidential candidates need to know how to persuade young people to vote for them, but we need to know how to rally the youth to care about voting in general and voting for what they value because it affects them greatly.

Appendix

Comparison of Linear Probability Model and Probit Marginal Effects for 2016 after heteroskedasticity test.

	(1)	(2)
	personvoted	
	Linear Regression	Marginal Probit Effects
age	0.0187***	0.0182***
	(0.00252)	(0.00257)
internetreg	0.497***	0.469***
	(0.01570)	(0.01870)
mailreg	0.444***	0.403***
	(0.01880)	(0.02010)
regdrive	0.449***	0.408***
	(0.03140)	(0.03560)
dmvreg	0.355***	0.306***
	(0.01380)	(0.01150)
schoolreg	0.434***	0.388***
	(0.01790)	(0.01770)
newinc0000	0.00713***	0.00704***
	(0.00112)	(0.00112)
male	-0.0525***	-0.0536***
	(0.00959)	(0.00951)
hispanic	-0.0826***	-0.0819***
	(0.01280)	(0.01350)
nhblack	(0.00361)	(0.00317)

	(0.01560)	(0.01550)
nhother	-0.0975***	-0.0964***
	(0.01670)	(0.01780)
empstatus	0.0659***	0.0670***
	(0.01030)	(0.01030)
highschool	-0.0354***	-0.0335***
	(0.01070)	(0.01070)
fullcoll	0.119***	0.114***
	(0.01100)	(0.01060)
duration	0.0159***	0.0157***
	(0.00268)	(0.00269)
_cons	-0.174***	
	(0.05580)	
N	8433	8433
R-sq	0.24	
adj. R-sq	0.239	
Standard errors in parentheses		
* p<0.1	** p<0.05	*** p<0.01

Descriptive data for 2016 presidential election:

```
summarize personvoted age  internetreg mailreg regdrive dmvreg schoolreg newin
duration
```

Variable	Obs	Mean	Std. Dev.	Min	Max
personvoted	10827	.3980789	.4895245	0	1
age	10827	21.0653	2.011808	18	24
internetreg	10827	.0599427	.2373917	0	1
mailreg	10827	.0479357	.2136401	0	1
regdrive	10827	.0155168	.1236018	0	1
dmvreg	10827	.1346633	.3413794	0	1
schoolreg	10827	.0596657	.2368773	0	1
newinc0000	10827	6.181299	4.664275	.25	15
male	10827	.5051261	.4999968	0	1
hispanic	10756	.1898475	.3921986	0	1
nhblack	10827	.1097257	.312562	0	1
nhother	10827	.1000277	.3000508	0	1
empstatus	10827	.5762446	.4941754	0	1
highschool	10827	.3058096	.4607707	0	1
fullcoll	10827	.3461716	.4757707	0	1
duration	8465	2.970821	1.979792	.5	5

Linear Regression

Source	SS	df	MS		
Model	505.832434	15	33.7221622	Number of obs	= 8433
Residual	1602.2999	8417	.190364727	F(15, 8417)	= 177.15
				Prob > F	= 0.0000
Total	2108.13234	8432	.250015695	R-squared	= 0.2399
				Adj R-squared	= 0.2386
				Root MSE	= .43631

personvoted	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
age	.0186814	.0025805	7.24	0.000	.0136229	.0237398
internetreg	.4974169	.018374	27.07	0.000	.4613993	.5334345
mailreg	.4443551	.020319	21.87	0.000	.4045248	.4841854
regdrive	.4487173	.0344229	13.04	0.000	.38124	.5161945
dmvreg	.3546847	.013149	26.97	0.000	.3289095	.38046
schoolreg	.4335016	.0185354	23.39	0.000	.3971675	.4698356
newinc0000	.0071289	.0011279	6.32	0.000	.0049179	.0093399
male	-.0525153	.009572	-5.49	0.000	-.0712788	-.0337519
hispanic	-.082555	.0134204	-6.15	0.000	-.1088623	-.0562477
nhblack	-.0036083	.0156464	-0.23	0.818	-.0342792	.0270625
nhother	-.097457	.017586	-5.54	0.000	-.1319299	-.062984
empstatus	.0658983	.0103854	6.35	0.000	.0455404	.0862562
highschool	-.0353869	.0108101	-3.27	0.001	-.0565774	-.0141964
fullcoll	.1188657	.0108514	10.95	0.000	.0975942	.1401371
duration	.0159325	.0027014	5.90	0.000	.0106371	.0212279
_cons	-.1742948	.0577841	-3.02	0.003	-.2875658	-.0610238

Marginal Probit Effect

```
. margins, dydx(*) post

Average marginal effects                        Number of obs   =       8433
Model VCE    : OIM

Expression   : Pr(personvoted), predict()
dy/dx w.r.t. : age internetreg mailreg regdrive dmvreg schoolreg newinc0000 male hisp
```

	dy/dx	Delta-method Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0182492	.0025703	7.10	0.000	.0132115	.023287
internetreg	.4686337	.0187413	25.01	0.000	.4319015	.5053659
mailreg	.4026463	.0201269	20.01	0.000	.3631983	.4420942
regdrive	.4077165	.0355566	11.47	0.000	.3380268	.4774061
dmvreg	.3057599	.0114656	26.67	0.000	.2832876	.3282321
schoolreg	.3879366	.0177496	21.86	0.000	.353148	.4227251
newinc0000	.0070374	.0011199	6.28	0.000	.0048424	.0092324
male	-.0535918	.0095088	-5.64	0.000	-.0722287	-.034955
hispanic	-.0818663	.0135069	-6.06	0.000	-.1083394	-.0553932
nhblack	-.0031706	.0155434	-0.20	0.838	-.0336351	.0272939
nhother	-.0964368	.0177745	-5.43	0.000	-.1312743	-.0615994
empstatus	.0669913	.0103273	6.49	0.000	.0467501	.0872325
highschool	-.0335282	.0107453	-3.12	0.002	-.0545886	-.0124677
fullcoll	.1142125	.0106241	10.75	0.000	.0933897	.1350353
duration	.015717	.0026853	5.85	0.000	.010454	.0209801

2012 Regressions:

```
.
. summarize personvoted age  internetreg mailreg regdrive dmvreg schoolreg ne
> tatus highschool fullcoll duration
```

Variable	Obs	Mean	Std. Dev.	Min	Max
personvoted	11390	.3827919	.4860895	0	1
age	11390	21.03011	1.981402	18	24
internetreg	11390	.0262511	.1598882	0	1
mailreg	11390	.0554873	.2289389	0	1
regdrive	11390	.0202809	.1409659	0	1
dmvreg	11390	.1218613	.3271399	0	1
schoolreg	11390	.0643547	.2453945	0	1
newinc0000	11390	5.712232	4.488321	.25	15
male	11390	.4951712	.4999986	0	1
hispanic	11390	.1803336	.384482	0	1
nhblack	11390	.1107112	.3137879	0	1
nhother	11390	.0882353	.2836492	0	1
empstatus	11390	.5582968	.4966117	0	1
highschool	11390	.2730465	.4455441	0	1
fullcoll	11390	.3397717	.4736524	0	1
duration	9031	2.959728	2.052689	.1	5

```
. regress personvoted age internetreg mailreg regdrive dmvreg schoolreg newincUUUU
> us highschool fullcoll duration
```

Source	SS	df	MS
Model	540.633336	15	36.0422224
Residual	1712.48592	9015	.189959614
Total	2253.11926	9030	.249514868

```
Number of obs =    9031
F( 15,  9015) =  189.74
Prob > F      =  0.0000
R-squared     =  0.2399
Adj R-squared =  0.2387
Root MSE      =  .43584
```

personvoted	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
age	.0167704	.002537	6.61	0.000	.0117972	.0217435
internetreg	.4863463	.0260976	18.64	0.000	.4351892	.5375035
mailreg	.4346571	.0184045	23.62	0.000	.3985801	.4707342
regdrive	.3916991	.0294401	13.30	0.000	.3339898	.4494085
dmvreg	.3772183	.0131442	28.70	0.000	.3514526	.4029839
schoolreg	.3977552	.0173317	22.95	0.000	.3637811	.4317293
newinc0000	.0069685	.0011469	6.08	0.000	.0047204	.0092166
male	-.0546703	.0092473	-5.91	0.000	-.0727971	-.0365436
hispanic	-.0638613	.0132772	-4.81	0.000	-.0898876	-.037835
nhblack	.1233814	.0153756	8.02	0.000	.0932417	.1535211
nhother	-.0733015	.0176356	-4.16	0.000	-.1078713	-.0387318
empstatus	.06732	.0098901	6.81	0.000	.0479332	.0867069
highschool	-.0871471	.0107826	-8.08	0.000	-.1082834	-.0660108
fullcoll	.1119141	.0104071	10.75	0.000	.0915138	.1323144
duration	.0201958	.0025462	7.93	0.000	.0152047	.0251869
_cons	-.1492034	.0561018	-2.66	0.008	-.2591756	-.0392312

```
. margins, dydx(*) post

Average marginal effects                        Number of obs   =       9031
Model VCE    : OIM

Expression   : Pr(personvoted), predict()
dy/dx w.r.t. : age internetreg mailreg regdrive dmvreg schoolreg newinc0000 male
               highschool fullcoll duration
```

	Delta-method dy/dx	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0162628	.0025268	6.44	0.000	.0113103	.0212153
internetreg	.4553433	.0279582	16.29	0.000	.4005463	.5101404
mailreg	.3940506	.0179609	21.94	0.000	.358848	.4292533
regdrive	.3451958	.0287301	12.02	0.000	.2888858	.4015058
dmvreg	.332526	.0115854	28.70	0.000	.3098191	.3552329
schoolreg	.3555446	.0165215	21.52	0.000	.3231632	.3879261
newinc0000	.0067202	.0011348	5.92	0.000	.004496	.0089443
male	-.053026	.0091773	-5.78	0.000	-.0710131	-.0350389
hispanic	-.0645643	.0134403	-4.80	0.000	-.0909068	-.0382219
nhblack	.1255727	.0154336	8.14	0.000	.0953234	.155822
nhother	-.0709408	.0176345	-4.02	0.000	-.1055039	-.0363778
empstatus	.066484	.00985	6.75	0.000	.0471783	.0857897
highschool	-.0845229	.0107298	-7.88	0.000	-.105553	-.0634928
fullcoll	.1082729	.0101447	10.67	0.000	.0883897	.128156
duration	.0198314	.0025239	7.86	0.000	.0148846	.0247781

2008 Regressions:

```
.
. summarize personvoted age  internetreg mailreg regdrive dmvreg schoolre
> tatus highschool fullcoll duration
```

Variable	Obs	Mean	Std. Dev.	Min	Max
personvoted	11512	.4403231	.4964475	0	1
age	11512	20.998	2.034729	18	24
internetreg	11512	0	0	0	0
mailreg	11512	.0687109	.2529729	0	1
regdrive	11512	.0313586	.1742925	0	1
dmvreg	11512	.1155316	.3196763	0	1
schoolreg	11512	.0763551	.265577	0	1
newinc0000	9491	5.598317	4.288811	.25	15
male	11512	.5010424	.5000206	0	1
hispanic	11512	.1633079	.3696624	0	1
nhblack	11512	.1103197	.3133014	0	1
nhother	11512	.0810459	.2729174	0	1
empstatus	11512	.5886901	.4920926	0	1
highschool	11512	.2999479	.4582547	0	1
fullcoll	11512	.3271369	.4691881	0	1
duration	9258	2.842705	2.042796	.1	5

```
. regress personvoted age internetreg mailreg regdrive dmvreg schoolreg newinc0
> us highschool fullcoll duration
note: internetreg omitted because of collinearity
```

Source	SS	df	MS
Model	498.822009	14	35.6301435
Residual	1499.51302	8047	.186344354
Total	1998.33503	8061	.247901629

Number of obs	= 8062
F(14, 8047)	= 191.21
Prob > F	= 0.0000
R-squared	= 0.2496
Adj R-squared	= 0.2483
Root MSE	= .43168

personvoted	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
age	.0212404	.0025704	8.26	0.000	.0162018	.0262791
internetreg	0	(omitted)				
mailreg	.4634695	.0172009	26.94	0.000	.4297513	.4971876
regdrive	.3850752	.0249387	15.44	0.000	.3361889	.4339616
dmvreg	.3665445	.0140476	26.09	0.000	.3390077	.3940814
schoolreg	.4151345	.016943	24.50	0.000	.3819218	.4483473
newinc0000	.0056813	.0012617	4.50	0.000	.0032081	.0081544
male	-.0403499	.0096962	-4.16	0.000	-.0593569	-.0213429
hispanic	-.1224713	.0146147	-8.38	0.000	-.1511198	-.0938228
nhblack	.0926682	.0162869	5.69	0.000	.0607417	.1245947
nhother	-.1153431	.018707	-6.17	0.000	-.1520136	-.0786725
empstatus	.0869364	.010358	8.39	0.000	.066632	.1072407
highschool	-.0491574	.0109694	-4.48	0.000	-.0706602	-.0276546
fullcoll	.1325434	.0110541	11.99	0.000	.1108746	.1542122
duration	.0182756	.0026709	6.84	0.000	.0130399	.0235113
_cons	-.1837257	.0570352	-3.22	0.001	-.2955294	-.0719221

```
. margins, dydx(*) post

Average marginal effects                        Number of obs   =       8062
Model VCE    : OIM

Expression   : Pr(personvoted), predict()
dy/dx w.r.t. : age internetreg mailreg regdrive dmvreg schoolreg newinc0000 male hi
               highschool fullcoll duration
```

	dy/dx	Delta-method Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0208222	.0025404	8.20	0.000	.0158431	.0258012
internetreg	0	(omitted)				
mailreg	.454601	.0184574	24.63	0.000	.4184253	.4907768
regdrive	.3407039	.0250329	13.61	0.000	.2916403	.3897674
dmvreg	.3263907	.0128721	25.36	0.000	.3011618	.3516197
schoolreg	.3884873	.0171379	22.67	0.000	.3548975	.422077
newinc0000	.005503	.001253	4.39	0.000	.0030471	.0079588
male	-.0414346	.0096052	-4.31	0.000	-.0602604	-.0226088
hispanic	-.1187543	.0146396	-8.11	0.000	-.1474474	-.0900611
nhblack	.1021154	.0167495	6.10	0.000	.0692871	.1349438
nhother	-.1097885	.0184244	-5.96	0.000	-.1458997	-.0736773
empstatus	.0871859	.0102285	8.52	0.000	.0671383	.1072334
highschool	-.0456517	.0107742	-4.24	0.000	-.0667688	-.0245346
fullcoll	.1288426	.0107821	11.95	0.000	.10771	.1499752
duration	.0181786	.0026281	6.92	0.000	.0130276	.0233297

2004 Regressions:

```
.
. summarize personvoted age  internetreg mailreg regdrive dmvreg schoolreg ne
> tatus highschool fullcoll duration
```

Variable	Obs	Mean	Std. Dev.	Min	Max
personvoted	12215	.4275072	.4947371	0	1
age	12215	21.00016	2.018702	18	24
internetreg	12215	0	0	0	0
mailreg	12215	.0641015	.2449437	0	1
regdrive	12215	.041097	.1985227	0	1
dmvreg	12215	.1113385	.3145638	0	1
schoolreg	12215	.0750716	.2635177	0	1
newinc0000	10303	4.871224	3.985896	.25	15
male	12215	.5009415	.5000196	0	1
hispanic	12215	.1501433	.3572264	0	1
nhblack	12215	.1050348	.3066108	0	1
nhother	12215	.0725338	.2593803	0	1
empstatus	12215	.6211216	.4851276	0	1
highschool	12215	.2994679	.4580437	0	1
fullcoll	12215	.3145313	.4643479	0	1
duration	10869	2.666947	2.037394	.1	5

```
  regress personvoted age internetreg mailreg regdrive dmvreg schoolreg newinc0000
> us highschool fullcoll duration
ote: internetreg omitted because of collinearity
```

Source	SS	df	MS
Model	678.831639	14	48.4879742
Residual	1689.3657	9471	.178372474
Total	2368.19734	9485	.24967816

```
Number of obs =    9486
F( 14,  9471) =  271.84
Prob > F      =  0.0000
R-squared     =  0.2866
Adj R-squared =  0.2856
Root MSE      =  .42234
```

personvoted	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
age	.0155636	.0023089	6.74	0.000	.0110376	.0200896
internetreg	0	(omitted)				
mailreg	.4923453	.0169943	28.97	0.000	.4590328	.5256578
regdrive	.4505101	.0207526	21.71	0.000	.4098306	.4911896
dmvreg	.4079642	.0134419	30.35	0.000	.3816152	.4343132
schoolreg	.3867985	.0159902	24.19	0.000	.3554542	.4181428
newinc0000	.0095712	.0012499	7.66	0.000	.0071212	.0120213
male	-.0367026	.0087524	-4.19	0.000	-.0538592	-.019546
hispanic	-.1938234	.0129302	-14.99	0.000	-.2191693	-.1684775
nhblack	.0094482	.0152405	0.62	0.535	-.0204265	.0393228
nhother	-.1517764	.0170531	-8.90	0.000	-.185204	-.1183487
empstatus	.0672154	.0094475	7.11	0.000	.0486962	.0857346
highschool	-.0377856	.0098492	-3.84	0.000	-.0570921	-.0184792
fullcoll	.1364335	.0101816	13.40	0.000	.1164754	.1563916
duration	.0191	.002474	7.72	0.000	.0142504	.0239496
cons	-.1054029	.0513304	-2.05	0.040	-.2060214	-.0047844

```
. margins, dydx(*) post

Average marginal effects                        Number of obs   =       9486
Model VCE    : OIM

Expression   : Pr(personvoted), predict()
dy/dx w.r.t. : age internetreg mailreg regdrive dmvreg schoolreg newinc0000 male his
               highschool fullcoll duration
```

	dy/dx	Delta-method Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0152327	.0023	6.62	0.000	.0107247	.0197406
internetreg	0	(omitted)				
mailreg	.4632955	.0179656	25.79	0.000	.4280836	.4985074
regdrive	.4016137	.02071	19.39	0.000	.3610229	.4422045
dmvreg	.3506666	.0120434	29.12	0.000	.3270619	.3742712
schoolreg	.3325899	.0151197	22.00	0.000	.3029559	.3622239
newinc0000	.0092981	.0012368	7.52	0.000	.0068741	.0117221
male	-.036163	.0087061	-4.15	0.000	-.0532268	-.0190993
hispanic	-.203378	.0135377	-15.02	0.000	-.2299114	-.1768447
nhblack	.0110095	.0150851	0.73	0.465	-.0185567	.0405758
nhother	-.1446276	.0169814	-8.52	0.000	-.1779104	-.1113447
empstatus	.0675551	.009421	7.17	0.000	.0490903	.0860199
highschool	-.0352723	.0097418	-3.62	0.000	-.0543659	-.0161787
fullcoll	.1278778	.0097687	13.09	0.000	.1087314	.1470242
duration	.0187565	.0024394	7.69	0.000	.0139754	.0235377

2000 Regressions:

```
.
. summarize personvoted age  internetreg mailreg regdrive dmvreg schoolreg n
> tatus highschool fullcoll duration
```

Variable	Obs	Mean	Std. Dev.	Min	Max
personvoted	10657	.3294548	.4700373	0	1
age	10657	20.96125	2.009105	18	24
internetreg	10657	0	0	0	0
mailreg	10657	.0296519	.169633	0	1
regdrive	10657	.0275875	.1637954	0	1
dmvreg	10657	.1095993	.3124043	0	1
schoolreg	10657	.0502017	.2183713	0	1
newinc0000	9219	3.837523	2.415194	.25	7.5
male	10657	.4882237	.4998848	0	1
hispanic	10525	.151924	.3589643	0	1
nhblack	10657	.1179506	.3225648	0	1
nhother	10657	.0635263	.2439187	0	1
empstatus	10657	.6534672	.4758877	0	1
highschool	10657	.2986769	.4576993	0	1
fullcoll	10657	.303181	.4596543	0	1
duration	9627	2.646515	2.022978	.1	5

```
. regress personvoted age internetreg mailreg regdrive dmvreg schoolreg newinc000
> us highschool fullcoll duration
note: internetreg omitted because of collinearity
```

Source	SS	df	MS
Model	454.777738	14	32.4841241
Residual	1530.5463	8518	.179683764
Total	1985.32404	8532	.232691519

Number of obs	= 8533
F(14, 8518)	= 180.78
Prob > F	= 0.0000
R-squared	= 0.2291
Adj R-squared	= 0.2278
Root MSE	= .42389

personvoted	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
age	.0265783	.0024392	10.90	0.000	.0217969	.0313597
internetreg	0	(omitted)				
mailreg	.4528307	.0255755	17.71	0.000	.4026964	.5029649
regdrive	.5083629	.0258574	19.66	0.000	.457676	.5590497
dmvreg	.3482582	.01424	24.46	0.000	.3203442	.3761721
schoolreg	.3656568	.0203486	17.97	0.000	.3257687	.405545
newinc0000	.0167738	.0022179	7.56	0.000	.0124261	.0211215
male	-.0387692	.0092633	-4.19	0.000	-.0569275	-.0206108
hispanic	-.1456412	.0133479	-10.91	0.000	-.1718064	-.119476
nhblack	-.0028396	.0150303	-0.19	0.850	-.0323027	.0266234
nhother	-.1639526	.0192015	-8.54	0.000	-.2015922	-.126313
empstatus	.0573289	.0102695	5.58	0.000	.0371982	.0774596
highschool	-.0465909	.0103805	-4.49	0.000	-.0669391	-.0262426
fullcoll	.1129859	.0108712	10.39	0.000	.0916757	.134296
duration	.019784	.0026502	7.46	0.000	.0145888	.0249791
_cons	-.4082055	.0539146	-7.57	0.000	-.5138911	-.3025199

References

Atkin, C. K., & Gantz, W. (1978). Television News and Political Socialization. *Public Opinion Quarterly, 42*(2), 183. doi:10.1086/268442

Bandura, A. (2001, 02). Social Cognitive Theory: An Agentic Perspective. *Annual Review of Psychology, 52*(1), 1-26. doi:10.1146/annurev.psych.52.1.1

Bettinger, E., Long, B. T., Oreopoulos, P., & Sanbonmatsu, L. (2009, 09). The Role of Simplification and Information in College Decisions: Results from the H&R Block FAFSA Experiment. doi:10.3386/w15361

Bhargava, S., Loewenstein, G., & Sydnor, J. (2015). Do Individuals Make Sensible Health Insurance Decisions? Evidence from a Menu with Dominated Options. doi:10.3386/w21160

Bogard, C. J., Sheinheit, I., & Clarke, R. P. (2008). Information They Can Trust: Increasing Youth Voter Turnout at the University. *PS: Political Science & Politics, 41*(03), 541-546. doi:10.1017/s1049096508080724

Braha, D., & Aguiar, M. A. (2017). Voting contagion: Modeling and analysis of a century of U.S. presidential elections. *Plos One, 12*(5). doi:10.1371/journal.pone.0177970

Caplan, B. (2008). *The myth of the rational voter: Why democracies choose bad policies*. Princeton Univ. Press.

CIRCLE Staff at Jonathan M. Tisch College of Civic Life at Tufts University. (2016) Young Voters in the 2016 General Election. Online. Retrieved from: https://civicyouth.org/wp-content/uploads/2016/11/CIRCLE-Full-Exit-Poll-Analysis_Final.pdf

CIRCLE » Young People Dramatically Increase their Turnout to 31%, Shape 2018 Midterm Elections. (2018). Retrieved from https://civicyouth.org/young-people-dramatically-increase-their-turnout-31-percent-shape-2018-midterm-elections/

Chetty, R. (2015). Behavioral Economics and Public Policy: A Pragmatic Perspective. doi:10.3386/w20928

Gohmann, T. (2017) How Donald Trump Won the Election: A Behavioral Economics Explanation. Retrieved from http://www.behavioraleconomics.com/how-donald-trump-won-the-election-a-behavioral-economics-explanation/

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. doi:10.1111/j.1540-4560.2008.00576.x

Hoban, B. (2018). Do immigrants "steal" jobs from American workers? Retrieved from https://www.brookings.edu/blog/brookings-now/2017/08/24/do-immigrants-steal-jobs-from-american-workers/

Kaid, L. L. (n.d.). Political Information Efficacy. *Encyclopedia of Political Communication*. doi:10.4135/9781412953993.n511

Mackie, G. (2011). Why It's Rational to Vote. *Rationality, Democracy, and Justice,* 21-49. doi:10.1017/cbo9781107588165.005

Muralidharan, S., & Sung, Y. (2015). Direct and Mediating Effects of Information Efficacy on Voting Behavior: Political Socialization of Young Adults in the 2012

U.S. Presidential Election. *Communication Reports, 29*(2), 100-114. doi:10.1080/08934215.2015.1064537

Plutzer, E. (2002). Becoming a Habitual Voter: Inertia, Resources, and Growth in Young Adulthood. *American Political Science Review, 96*(01), 41-56. doi:10.1017/s0003055402004227

Rogers, T., Fox, C. R., & Gerber, A. S. (2012). Rethinking Why People Vote:. *The Behavioral Foundations of Public Policy,* 91-107. doi:10.2307/j.ctv550cbm.11

Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles, and J. Robert Warren. Integrated Public Use Microdata Series, Current Population Survey: Version 6.0 [dataset]. Minneapolis, MN: IPUMS, 2018. https://doi.org/10.18128/D030.V6.0

Sunstein, C. R., & Thaler, R. H. (2012). *Nudge: Improving Decisions About Health, Wealth and Happiness*. Penguin.

Thomas, Rueben J.& McFarland, Daniel A. (2010) *Joining Young, Voting Young: The Effects of Youth Voluntary Associations on Early Adult Voting.* Working Paper #73. CIRCLE Staff at Jonathan M. Tisch College of Civic Life at Tufts University.

Staff, I. (2018). Rational Behavior. Retrieved from https://www.investopedia.com/terms/r/rational-behavior.asp

US Census Bureau. (2018). Data. Retrieved from https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-580.htm

US Census Bureau. (2017). Voting in America: A Look at the 2016 Presidential Election. Retrieved from

https://www.census.gov/newsroom/blogs/random-samplings/2017/05/voting_in_america.html