SDR Increases Turnout of Young Voters

Can election reform improve turnout among young people?

Prior studies have thoroughly investigated the effect of specific voting reforms, such as vote by mail, absentee voting, early voting, and 'motor voter' laws.

Other research has investigated differences in voter participation across age groups.

However, there has been less focus on how voting reforms may affect age groups differently.

This paper argues that same day registration laws are especially likely to improve voter turnout among young people.

Why?

SDR laws lowers the cost of the registration process to young potential voters.

SDR laws should make voting less costly for these young voters by combining registering and voting into a single act. They expect that early voting (EV) and other laws focused on registration are unlikely to increase turnout rates for young people.

Because such laws as EV and no-fault absentee voting make voting easier for those registered, but it does not reduce the cost of registration itself.

Hypothesis:

They hypothesize that these post-registration laws will be less effective than SDR in increasing turnout among young people.

Data:

```
fips_codes <- read.csv("fips_codes_website.csv")
data <- readRDS("policy_data_updated.RDS")
ev <- read.csv("Early Voting Coding - Sheet1.csv")
fowler <- read.dta("fowler_replication_data.dta", convert.factors = F)
cps <- read.csv("cps_00021.csv")
```

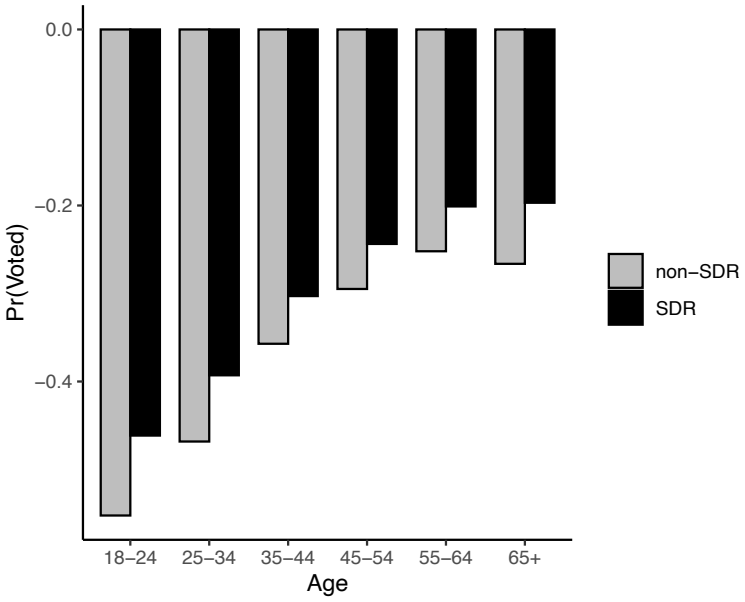
Independent variable: Vote turnout

Dependent variable: Same Day Registration, Early Votes Age

Assumptions:

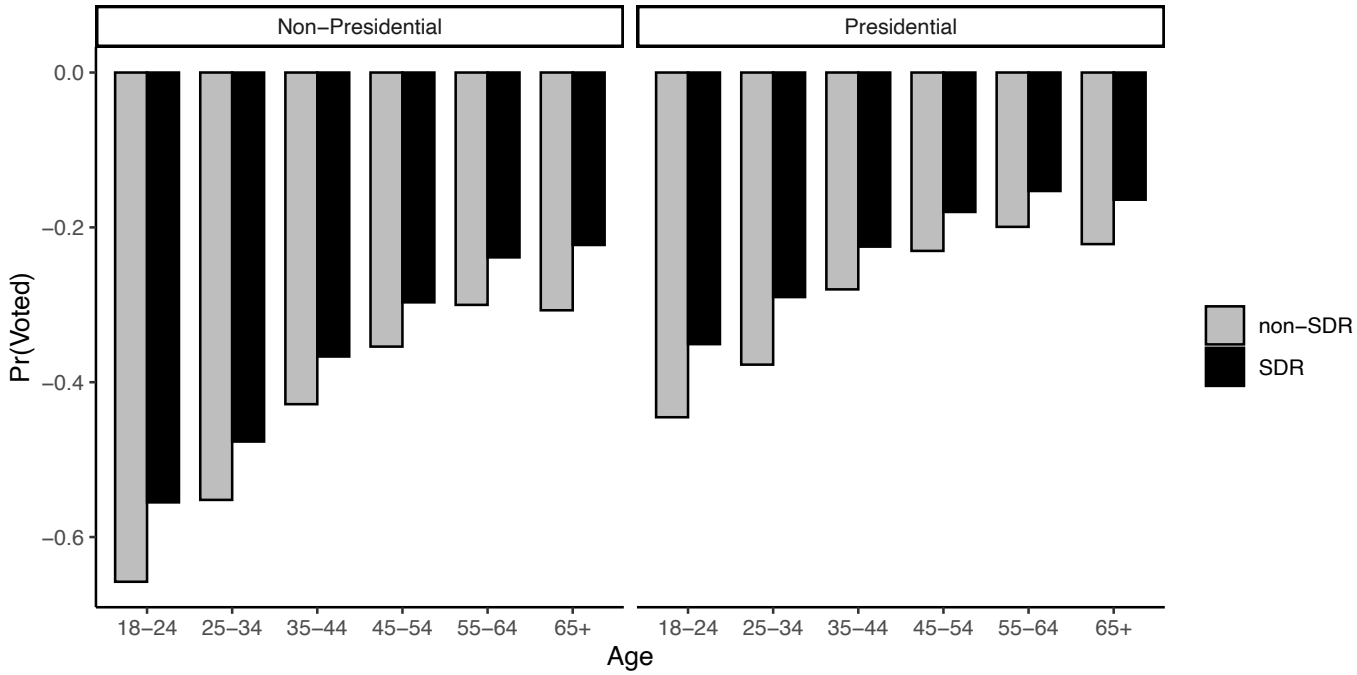
- Linearity: The relationship between X and the mean of Y is linear.
- Homoscedasticity: The variance of residual is the same for any value of X.
- Independence: Observations are independent of each other.
- Normality: For any fixed value of X, Y is normally distributed.

Descriptive averages of turnout by age and SDR laws:



The descriptive averages of turnout by age and SDR. The probability of voting for 18-24 year-olds increases under SDR, but for 55-64 year-olds and for people 65 and over a smaller distinction is observed.

Turnout by age and SDR law for presidential and non-presidential :



The descriptive averages of turnout by age and SDR for presidential and non-presidential. The probability of voting for 18-24 year-olds increases under SDR, but for 55-64 year-olds a smaller distinction is observed. It is important to note that a bigger increase is observed for presidential elections.

Individual SDR interacting with Age

```
indiv_sdr <- lm(voted ~ sdr*age_group18.24 +
                        sdr*age_group25.34 +
                        sdr*age_group35.44 +
                        sdr*age_group45.54 +
                        sdr*age_group55.64 +
                        factor(race) + sex + faminc + educ + factor(year) +
    factor(state), se_type="stata",
                       cps)
```

	Dependent variable:	
	voted	
	(1)	(2)
sdr	-0.003	0.012
	(0.012)	(0.016)
age_group18.24	-0.421***	-0.363***
	(0.005)	(0.006)
age_group25.34	-0.325***	-0.215***
	(0.004)	(0.006)
age_group35.44	-0.223***	-0.102***
	(0.004)	(0.006)
age_group45.54	-0.149***	-0.043***
	(0.004)	(0.006)
age_group55.64	-0.067***	0.006
	(0.004)	(0.005)
sdr:age_group18.24	0.057***	0.021*
	(0.009)	(0.010)
sdr:age_group25.34	0.026***	0.0002
	(0.007)	(0.014)
sdr:age_group35.44	0.012	-0.014
	(0.009)	(0.016)
sdr:age_group45.54	0.004	-0.015
	(0.007)	(0.012)
sdr:age_group55.64	-0.007	-0.015
	(0.006)	(0.010)
Constant	0.260***	0.606***
	(0.012)	(0.010)

Presidential and non-presidential

```
presidential_years <- c
    (1976,1980,1984,1988,1992,1996,2000,2004,2008,2012,2016)


ols_2 <- lm(voted ~ sdr*age_group18.24 +
                sdr*age_group25.34 +
                sdr*age_group35.44 +
                sdr*age_group45.54 +
                sdr*age_group55.64 +
                factor(race) + sex + faminc + educ + presidential_year + factor(
    year) + factor(state),
             cps[cps$presidential_year==1,])

ols_4 <- lm(voted ~ sdr*age_group18.24 +
                sdr*age_group25.34 +
                sdr*age_group35.44 +
                sdr*age_group45.54 +
                sdr*age_group55.64 +
                factor(race) + sex + faminc + educ + presidential_year + factor(
    year) + factor(state),
             cps[cps$presidential_year==0,])
```

	Dependent variable:	
	voted	
	(1)	(2)
sdr	-0.013	-0.002
		(0.013)
age_group18.24	-0.376***	-0.462***
	(0.006)	(0.008)
age_group25.34	-0.276***	-0.368***
	(0.004)	(0.005)
age_group35.44	-0.192***	-0.250***
	(0.004)	(0.004)
age_group45.54	-0.132***	-0.165***
	(0.004)	(0.005)
age_group55.64	-0.063***	-0.071***
	(0.003)	(0.004)
sex	0.036***	0.013***
	(0.002)	(0.002)
faminc	0.009***	0.009***
	(0.0002)	(0.0002)
educ	0.023**	0.022***
	(0.0004)	(0.0004)
sdr:age_group18.24	0.086***	0.040***
		(0.012)
sdr:age_group25.34	0.048***	0.016
		(0.009)
sdr:age_group35.44	0.025***	0.005
		(0.009)
sdr:age_group45.54	0.010***	0.003
		(0.009)
sdr:age_group55.64	-0.003	-0.010

Early Voting interacting with Age

```
indiv_ev <- lm(voted ~ early_voting_narrow*age_group18.24 +
                       early_voting_narrow*age_group25.34 +
                       early_voting_narrow*age_group35.44 +
                       early_voting_narrow*age_group45.54 +
                       early_voting_narrow*age_group55.64 +
                       factor(race) + sex + faminc + educ + factor(year) +
    factor(state),
                     se_type="stata",
                     cps)
```

	Dependent variable:
	voted
early_voting_narrow	0.005
	(0.008)
age_group18.24	-0.440***
	(0.006)
age_group25.34	-0.326***
	(0.004)
age_group35.44	-0.217***
	(0.004)
age_group45.54	-0.143***
	(0.004)
age_group55.64	-0.056***
	(0.003)
sex	0.023***
	(0.002)
faminc	0.009***
	(0.0002)
educ	0.023***
	(0.0004)

early_voting_narrow:age_group18.24	0.037***
	(0.008)
early_voting_narrow:age_group25.34	-0.015*
	(0.006)
early_voting_narrow:age_group35.44	-0.029***
	(0.005)
early_voting_narrow:age_group45.54	-0.029***
	(0.005)
early_voting_narrow:age_group55.64	-0.035***
	(0.004)
Constant	0.262***
	(0.012)