Cooperative Congressional Election Study

Guide for
2014 Vote Validation Data

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1 Introduction

The Cooperative Congressional Election Study (CCES) is a biennial online large sample survey conducted by YouGov that includes both a pre-election and post-election wave. Every iteration of the CCES since 2008 includes vote validation conducted in cooperation with Catalist, a progressive voter file firm that matches CCES respondents to their registration and voting records. This guide will describe the validation variables included in the 2014 CCES, how to interpret these variables and how to use them in conjunction with self-reports of registration and turnout. The 2014 CCES has a total sample of 56,200 respondents.

For more information about the Catalist matching process of the CCES please see Ansolabehere and Hersh (2010).

2 Vote Validation Variables

Vote validation for the 2014 CCES includes five (5) vote validation variables, which are listed in this section: (1) matched, (2) voterstatus, (3) e2014gvm, (4) e2014pep, (5) e2014pvm.

The "matched" variable indicates whether a respondent within the 2014 CCES was matched to the Catalist voter file; 66%[1] of respondents were matched to a record. Only matched respondents have a verified record of turnout or non-participation in the 2014 General Election. Non-matched respondents appear as missing values in all of the vote validation variables but the "matched" variable. Section 4 of this guide will discuss how to interpret non-matched respondents in light of vote validation accuracy.

Validated voter registration status is measured with the "voterstatus" variable. Note that this is the individual's voter registration status at the time of the match, which happens in June of the year following the election. Most matched respondents in the 2014 CCES have active voter registration records (87%[2]). Some matched respondents had been dropped from voter rolls, had inactive voter registration, or are listed as "multipleAppearances." The multiple appearances code means that the individual was located by Catalist in a one state but was registered to vote in a different state. This typically happens because somebody has filed a change of address form with the post office but has not yet changed their voter registration to a new state. Finally, some matched respondents are confirmed as unregistered.

The "e2014gvm" variable measures mode of participation in the 2014 General Election. All respondents with a value for this variable are validated voters, and missing values correspond to respondents with no record of participation. Confirmed non-voters should be defined as matched respondents with no record of voting (i.e. with a missing value for "e2014gvm"). The "e2014pvm" variable measures mode of participation in the 2014 congressional primary elections, and "e2014pep" indicates whether the primary voter participated in the Democratic or Republican primaries. However, not all states record which party's primary a voter participated in, so there are values of "e2014pep" for only a subset of people who have a vote record on "e2014pvm."

[1] This quantity represents the unweighted percent of 2014 CCES respondents who were matched to Catalist.

[2] This quantity represents the unweighted percent of matched respondents in the 2014 CCES with an active registration record.

matched	Catalist - Panelist matched to voter file	
1	Matched to voter file	37,085
2	Not matched to voter file	19,115

voterstatus	Catalist - Voter status	
	active	32,341
	dropped	1,030
	inactive	556
	multipleAppearances	269
	unregistered	2,889

e2014gvm	Catalist - 2014 General election voting method	
	absentee	3,220
	earlyVote	3,045
	mail	3,019
	polling	8,707
	unknown	7,318

e2014pvm	Catalist - 2014 Primary election voting method	
	absentee	2,643
	earlyVote	1,546
	mail	1,192
	polling	4,625
	unknown	3,758

e2014pep	Catalist - 2014 Primary election party	
	DEM	2,738
	REP	3,367

3 Registration and Turnout Self-Report Variables

CCES respondents self-report their registration in both the pre- and post-election waves of the survey. The "votereg" and "votereg_post" variables measure self-reported registration, but the most consequential of these two variables is the post-election item. Only those respondents who self-report "Yes" to the "votereg_post" question are asked the turnout self-report question, namely "CC401".

The turnout self-report question, "CC401", is asked in the post-election wave of the CCES, and has five response options. Four of those response options indicate non-participation (1 through 4) and only one response option indicates participation in the 2014 General Election (5-"I definitely voted in the Midterm Election on November 4th.").

Those respondents who indicate that they are not registered to vote by answering "No" to the "votereg_post" question should be considered *self-reported non-voters* for all purposes of analysis of self-reported turnout among 2014 CCES respondents. Researchers should combine self-reported non-registered respondents and those who selected categories 1 through 4 in the turnout self-report question in order to identify all *self-reported non-voters*. Only those who selected category 5 of "CC401" are *self-reported voters*.

Please note that all respondents from North Dakota are asked the turnout self-report question no matter their response to the registration self-report questions because this state does not require registration for participation.

votereg	Voter Registration Status	
1	Yes	49,337
2	No	6,058
3	Don't Know	805

votereg_post	Voter Registration Status	
1	Yes	44,066
2	No	4,433
3	Don't Know	389
.	NA	7,312

CC401	Turnout	
1	I did not vote in the election this November.	4,024
2	I thought about voting this time - but didn't.	1,695
3	I usually vote, but didn't this time.	2,443
4	I attempted to vote but did not or could not.	910
5	I definitely voted in the Midterm Election on November 4th.	34,928
.	NA	12,200

4 Using Vote Validation with Self-Reports

There are three possible ways to measure turnout in the 2014 CCES using the validation variables. Two use only the "e2014gvm" vote validation variable while the third uses this variable in conjunction with self-reported registration (votereg_post) and self-reported turnout (CC401). The STATA code below represents all three specifications.

STATA Code for 2014 CCES Validated Turnout

```
*2014 CCES Validated Turnout
use "~/CCES14_Common_Content_Validated.dta", clear

* including all non-matched as nonvoters N=56,200
gen voter=1 if e2014gvm !=""
replace voter=0 if e2014gvm ==""

* excluding all non matched N=37,085
gen voter2=1 if e2014gvm !=""
replace voter2=0 if matched==1 & e2014gvm==""

* including only non matched respondents
* who are self-reported nonvoters N=43,407
gen voter3=1 if e2014gvm !=""
replace voter3=0 if matched==1 & e2014gvm==""
replace voter3=0 if matched==2 & votereg_post ==2
replace voter3=0 if matched==2 & CC401<5
```

1. **Un-matched as non-voters.**The first specification defines *voters* as respondents with a validated voting record no matter their mode of participation, and defines *non-voters* as both matched non-voters and non-matched respondents. This specification retains the integrity of the full CCES sample, no missing values are created. The justification for the second approach is the fact that the most common reason that Catalist will not have a record for an individual is because that individual is not registered to vote. Indeed, rates of self-reported non-registration and non-voting are much higher among un-matched respondents than among those for whom there is a match.

2. **Only matched non-voters as non-voters.** The second specification defines *non-voters* as only matched non-voters. This specification reduces the CCES sample and results in turnout estimates that are larger than those in the first specification. However, this specification increases the level of certainty in the identification of non-voters in the CCES, because there could possibly be actual voters among non-matched respondents.

3. **Matched non-voters and self-reported non-voters as non-voters.** The third specification defines *non-voters* as (1) matched non-voters, (2) non-matched respondents who

reported not being registered to vote in the "votereg_post" question, and (3) non-matched respondents who are self-reported non-voters in the "CC401" question. This definition excludes non-matched respondents who are self-reported voters (these individuals would be coded as missing). This definition assumes that self-reported non-voters are honest about their non-participation because there is no incentive to go against the democratic norm of participation.

4.1 Vote Validation Accuracy

How do these different approaches compare in terms of estimating aggregate turnout rates? Here we provide an accuracy analysis comparing state-by-state turnout estimates from Catalist vote validation of the 2014 CCES with VAP[3] turnout estimates from the United States Elections Project (USEP)[4].

Figures 1 and 2 present turnout accuracy plots for Catalist vote validation of the 2014 CCES. Estimates of CCES validated turnout rates from the 50 states and the District of Columbia are plotted with 95% confidence intervals. The 45 degree line in each plot represents VAP turnout or "actual turnout"; the closer the estimates are to "actual turnout" the more accurate the validated turnout estimate. Figure 1 shows that validated turnout estimates that include non-matched respondents (method 1) are closer to VAP turnout. Estimates in Figure 2 show that excluding non-matched respondents from estimates of validated turnout result a much larger overestimation of turnout (method 2). Again, this is because many non-voters do not have records in the Catalist database.

Though the plots in Figures 1 and 2 are informative, Mean Square Error (MSE) statistics can provide more a precise measurement of the discrepancy between CCES validated turnout and USEP VAP turnout. Interpretation of this statistic is quite simple. The closer to zero the better, meaning there is a smaller distance between the estimates and the true value. The MSE for CCES validated turnout including non-matched respondents as non-voters is 0.0239 and the MSE for validated turnout excluding non-matched respondents is 0.1301. The latter statistic is much larger than the former, suggesting that defining non-matched respondents in the CCES as *non-voters* is more accurate than excluding them from analysis.

[3] Voting Age Population

[4] McDonald, Michael P. 2017. "2014 November General Election Turnout Rates" United States Elections Project. April 11,2017. http://www.electproject.org/2014g

Figure 1. Turnout Accuracy Including Non-Matched Respondents

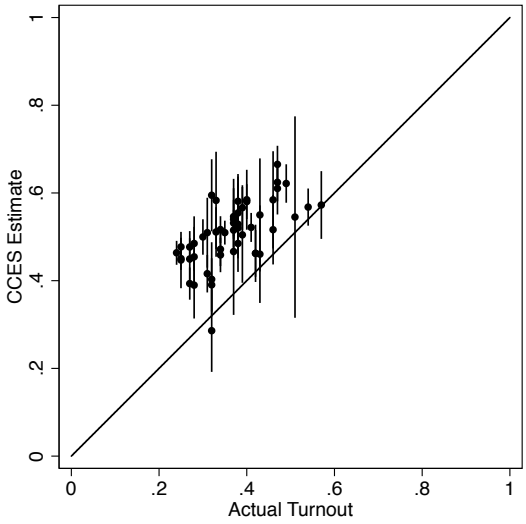

Figure 2. Turnout Accuracy Excluding Non-Matched Respondents

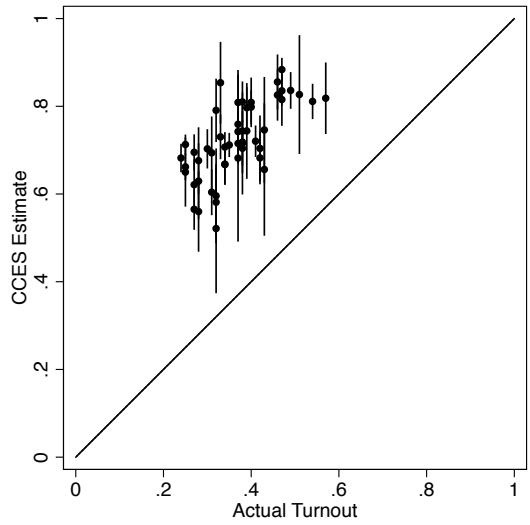

Figure 3 shows that the third method (treating matched non-voters and un-matched self-reported non-voters are non-voters) produces validated turnout estimates that are worse on average than the first method, but better than method 2. The MSE for this third specification is 0.0852 .

Still, though it is likely that most non-matched respondents are actual non-voters there could be actual voters among them. It is at the discretion of the researcher how to treat these non-matched respondents when studying turnout among CCES respondents.
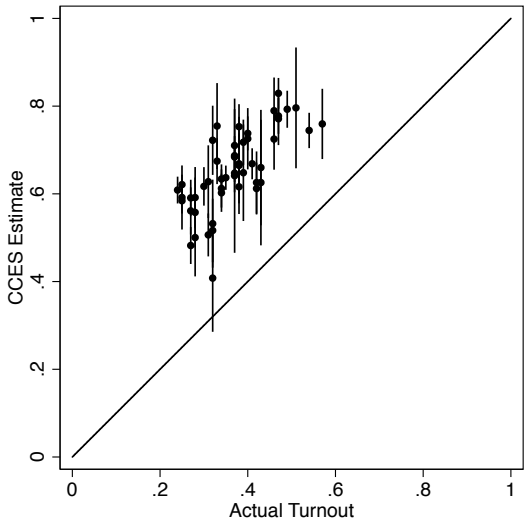
Figure 3. Turnout Accuracy Including Matched Non-voters and Non Matched Self-Reported Non-voters